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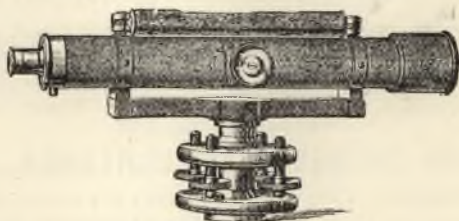
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| „ 12 | .. | £12 | „ |

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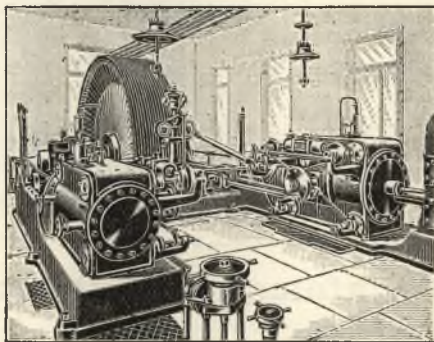
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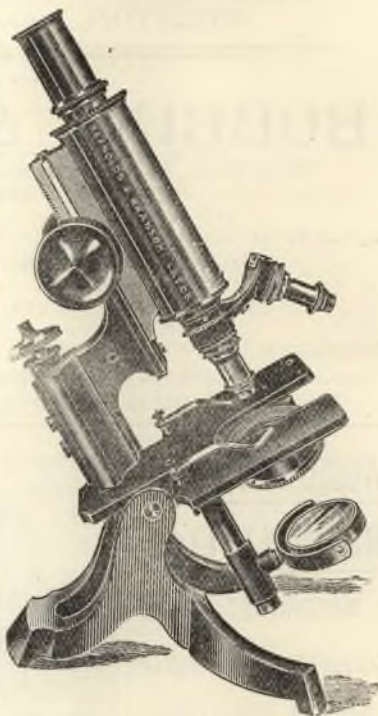
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CALENDAR, 1905-6

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1905



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ALMANAC, 1905-6.

OCTOBER, 1905.

| | | |
|----|----|--|
| 1 | S | |
| 2 | M | First Term begins—Admission of students, Faculties of Arts, Science and Technology. |
| 3 | Tu | Admission of students, Faculties of Arts, Science and Technology. Entrance examination for new students in Faculties of Arts, &c., at 2 p.m. |
| 4 | W | Evening classes begin. |
| 5 | Th | |
| 6 | F | |
| 7 | S | |
| 8 | S | |
| 9 | M | |
| 10 | Tu | |
| 11 | W | Meeting of Finance Committee. |
| 12 | Th | |
| 13 | F | |
| 14 | S | |
| 15 | S | |
| 16 | M | |
| 17 | Tu | |
| 18 | W | Meeting of Council |
| 19 | Th | |
| 20 | F | Meeting of Board of the Faculty of Medicine. |
| 21 | S | |
| 22 | S | |
| 23 | M | |
| 24 | Tu | |
| 25 | W | Meeting of Board of the Faculty of Arts. |
| 26 | Th | Meeting of Board of the Faculties of Science and Technology. |
| 27 | F | |
| 28 | S | |
| 29 | S | |
| 30 | M | |
| 31 | Tu | Last day for entering for the Supplementary Final examination for B.A. and B.Sc. |

NOVEMBER, 1905.

| | | |
|----|----|---|
| 1 | W | Meeting of Senate. |
| 2 | Th | |
| 3 | F | Admission of Yorkshire College to Victoria University, 1887. |
| 4 | S | |
| 5 | S | |
| 6 | M | |
| 7 | Tu | |
| 8 | W | Meeting of Finance Committee. |
| 9 | Th | |
| 10 | F | |
| 11 | S | |
| 12 | S | |
| 13 | M | |
| 14 | Tu | |
| 15 | W | Meeting of Council. |
| 16 | Th | |
| 17 | F | Meeting of Board of the Faculty of Medicine. |
| 18 | S | |
| 19 | S | |
| 20 | M | |
| 21 | Tu | |
| 22 | W | Meeting of Board of the Faculty of Arts. |
| 23 | Th | |
| 24 | F | |
| 25 | S | |
| 26 | S | |
| 27 | M | |
| 28 | Tu | |
| 29 | W | |
| 30 | Th | Meeting of Board of the Faculties of Science and Technology. |

DECEMBER, 1905.

| | | |
|----|----|--|
| 1 | F | |
| 2 | S | |
| 3 | S | |
| 4 | M | |
| 5 | Tu | |
| 6 | W | Meeting of Senate. |
| 7 | Th | |
| 8 | F | |
| 9 | S | |
| 10 | S | |
| 11 | M | |
| 12 | Tu | Supplementary Final examination for B.A. and B.Sc. begins. |
| 13 | W | Meeting of Finance Committee. |
| 14 | Th | |
| 15 | F | Terminal Examinations in Faculties of Arts, Science and Technology begin. Meeting of Board of the Faculty of Medicine. |
| 16 | S | |
| 17 | S | |
| 18 | M | |
| 19 | Tu | |
| 20 | W | Meeting of Council. |
| 21 | Th | First Term in Faculties of Arts, Science and Technology, and School of Medicine ends. |
| 22 | F | |
| 23 | S | |
| 24 | S | |
| 25 | M | Christmas Day. Library closed till January 2. |
| 26 | Tu | |
| 27 | W | |
| 28 | Th | |
| 29 | F | |
| 30 | S | |
| 31 | S | |

JANUARY, 1906.

| | | |
|----|----|---|
| 1 | M | |
| 2 | Tu | Library re-opened. |
| 3 | W | Second Term in the School of Medicine begins. |
| 4 | Th | |
| 5 | F | |
| 6 | S | |
| 7 | S | |
| 8 | M | |
| 9 | Tu | |
| 10 | W | Second Term in Faculties of Arts, Science and Technology begins. Meeting of Finance Committee. |
| 11 | Th | |
| 12 | F | |
| 13 | S | |
| 14 | S | |
| 15 | M | |
| 16 | Tu | |
| 17 | W | Meeting of Council. |
| 18 | Th | |
| 19 | F | Meeting of Board of the Faculty of Medicine. |
| 20 | S | |
| 21 | S | |
| 22 | M | |
| 23 | Tu | |
| 24 | W | Meeting of Board of the Faculty of Arts. |
| 25 | Th | Meeting of Board of the Faculties of Science and Technology. |
| 26 | F | |
| 27 | S | |
| 28 | S | |
| 29 | M | |
| 30 | Tu | |
| 31 | W | |

FEBRUARY, 1906.

| | | |
|----|----|---|
| 1 | Th | |
| 2 | F | |
| 3 | S | |
| 4 | S | |
| 5 | M | |
| 6 | Tu | |
| 7 | W | Meeting of Senate. |
| 8 | Th | |
| 9 | F | |
| 10 | S | |
| 11 | S | |
| 12 | M | |
| 13 | Tu | Meeting of Finance Committee. |
| 14 | W | |
| 15 | Th | Meeting of Board of the Faculty of Medicine. |
| 16 | F | |
| 17 | S | |
| 18 | S | |
| 19 | M | |
| 20 | Tu | |
| 21 | W | Meeting of Council. |
| 22 | Th | Meeting of Board of Faculties of Science and Technology. |
| 23 | F | |
| 24 | S | |
| 25 | S | |
| 26 | M | |
| 27 | Tu | |
| 28 | W | Last Day of Application for the 1851 Exhibition Scholarship. Meeting of Board of the Faculty of Arts. |

MARCH, 1906.

| | | |
|----|----|--|
| 1 | Th | Last day for entering and for payment of fees for M.A. and M.Sc. Examinations, and for application for Litt.D. and D.Sc. |
| 2 | F | |
| 3 | S | |
| 4 | S | Meeting of Senate. |
| 5 | M | |
| 6 | Tu | |
| 7 | W | |
| 8 | Th | |
| 9 | F | |
| 10 | S | Meeting of Finance Committee. |
| 11 | S | |
| 12 | M | |
| 13 | Tu | |
| 14 | W | |
| 15 | Th | |
| 16 | F | Terminal Examinations in Faculties of Arts, Science and Technology begin. Meeting of Board of the Faculty of Medicine. |
| 17 | S | |
| 18 | S | Meeting of Council. Second Term in Faculties of Arts, Science and Technology ends. |
| 19 | M | |
| 20 | Tu | |
| 21 | W | |
| 22 | Th | |
| 23 | F | |
| 24 | S | Second Term in the School of Medicine ends. |
| 25 | S | |
| 26 | M | |
| 27 | Tu | |
| 28 | W | |
| 29 | Th | |
| 30 | F | |
| 31 | S | |

APRIL, 1906.

| | | |
|----|----|---|
| 1 | S | |
| 2 | M | |
| 3 | Tu | |
| 4 | W | |
| 5 | Th | |
| 6 | F | |
| 7 | S | |
| 8 | S | |
| 9 | M | |
| 10 | Tu | |
| 11 | W | Meeting of Finance Committee. |
| 12 | Th | |
| 13 | F | GOOD FRIDAY. University closed. |
| 14 | S | University closed. |
| 15 | S | EASTER DAY. |
| 16 | M | University closed. |
| 17 | Tu | University closed. |
| 18 | W | Meeting of Council. |
| 19 | Th | |
| 20 | F | Victoria University Charter granted 1880. |
| 21 | S | |
| 22 | S | |
| 23 | M | Third Term in the School of Medicine begins. |
| 24 | Tu | Third Term in Faculties of Arts, Science, and Technology begins. |
| 25 | W | The Charter of the University received Royal Assent, 1904. Meeting of Board of the Faculty of Arts. Examination for Evening Textile Scholarships. |
| 26 | Th | Meeting of Board of the Faculties of Science and Technology. |
| 27 | F | |
| 28 | S | City and Guilds Institute Examination. |
| 29 | S | |
| 30 | M | City and Guilds Institute Examination. |

MAY, 1906.

| | | |
|----|----|---|
| 1 | Tu | City and Guilds Institute Examination. Last day for entering and for payment of Fees for the June Degree Examinations. Last day for entering for the Entrance, Salt, Textile Day, and Infirmary Scholarships. |
| 2 | W | City and Guilds Institute Examination. Meeting of Senate. |
| 3 | Th | City and Guilds Institute Examination. |
| 4 | F | |
| 5 | S | City and Guilds Institute Examination. |
| 6 | S | |
| 7 | M | |
| 8 | Tu | |
| 9 | W | Meeting of Finance Committee. |
| 10 | Th | |
| 11 | F | |
| 12 | S | |
| 13 | S | |
| 14 | M | |
| 15 | Tu | Examination for Salt, Craven and Textile Day Scholarships begins. |
| 16 | W | Meeting of Council. |
| 17 | Th | |
| 18 | F | Meeting of Board of the Faculty of Medicine. |
| 19 | S | |
| 20 | S | |
| 21 | M | |
| 22 | Tu | |
| 23 | W | Meeting of Board of the Faculty of Arts. |
| 24 | Th | |
| 25 | F | |
| 26 | S | |
| 27 | S | |
| 28 | M | |
| 29 | Tu | |
| 30 | W | |
| 31 | Th | Meeting of Board of the Faculties of Science and Technology. |

JUNE, 1906.

| | | |
|----|----|---|
| 1 | F | |
| 2 | S | Last day for entering for the July Matriculation Examination about this date. |
| 3 | S | WHIT-SUNDAY. |
| 4 | M | Recess. University closed. |
| 5 | Tu | Recess. University closed. |
| 6 | W | Meeting of Senate. |
| 7 | Th | |
| 8 | F | |
| 9 | S | |
| 10 | S | |
| 11 | M | Examinations for degrees in Arts, Law, Science and Technology begin. |
| 12 | Tu | |
| 13 | W | Meeting of Finance Committee. |
| 14 | Th | |
| 15 | F | |
| 16 | S | |
| 17 | S | |
| 18 | M | |
| 19 | Tu | |
| 20 | W | Meeting of Council. |
| 21 | Th | |
| 22 | F | Meeting of Board of the Faculty of Medicine. |
| 23 | S | |
| 24 | S | |
| 25 | M | |
| 26 | Tu | |
| 27 | W | Meeting of Board of the Faculty of Arts. |
| 28 | Th | Meeting of Board of the Faculties of Science and Technology. |
| 29 | F | |
| 30 | S | Third Term in Faculties of Arts, Science and Technology ends. Degree Day. |

JULY, 1906.

| | | |
|----|----|---|
| 1 | S | |
| 2 | M | |
| 3 | Tu | |
| 4 | W | |
| 5 | Th | |
| 6 | F | |
| 7 | S | |
| 8 | S | |
| 9 | M | |
| 10 | Tu | |
| 11 | W | Meeting of Finance Committee. |
| 12 | Th | |
| 13 | F | Third Term in the School of Medicine ends. |
| 14 | S | |
| 15 | S | Opening of the Yorkshire College Buildings by the Prince and Princess of Wales, 1885. |
| 16 | M | |
| 17 | Tu | |
| 18 | W | Meeting of Council. |
| 19 | Th | |
| 20 | F | |
| 21 | S | |
| 22 | S | |
| 23 | M | |
| 24 | Tu | |
| 25 | W | |
| 26 | Th | |
| 27 | F | |
| 28 | S | |
| 29 | S | |
| 30 | M | |
| 31 | Tu | |

AUGUST, 1906.

| | | |
|----|----|-----------------------------------|
| 1 | W | |
| 2 | Th | |
| 3 | F | |
| 4 | S | |
| 5 | S | |
| 6 | M | BANK HOLIDAY. University closed. |
| 7 | Tu | |
| 8 | W | |
| 9 | Th | |
| 10 | F | |
| 11 | S | |
| 12 | S | |
| 13 | M | |
| 14 | Tu | |
| 15 | W | Library closed until September 3. |
| 16 | Th | |
| 17 | F | |
| 18 | S | |
| 19 | S | |
| 20 | M | |
| 21 | Tu | |
| 22 | W | |
| 23 | Th | |
| 24 | F | |
| 25 | S | |
| 26 | S | |
| 27 | M | |
| 28 | Tu | |
| 29 | W | |
| 30 | Th | |
| 31 | F | |

SEPTEMBER, 1906.

| | | |
|----|----|---|
| 1 | S | Last day for entering for the Supplementary Intermediate examination in Arts, Science and Medicine. Last day for entering for the September Matriculation Examination about this date. |
| 2 | S | |
| 3 | M | Library re-opened. |
| 4 | Tu | |
| 5 | W | |
| 6 | Th | |
| 7 | F | |
| 8 | S | |
| 9 | S | |
| 10 | M | |
| 11 | Tu | |
| 12 | W | |
| 13 | Th | |
| 14 | F | |
| 15 | S | |
| 16 | S | |
| 17 | M | |
| 18 | Tu | Supplementary Intermediate examination in Arts, Science, and Medicine about this date. |
| 19 | W | |
| 20 | Th | |
| 21 | F | |
| 22 | S | |
| 23 | S | |
| 24 | M | |
| 25 | Tu | |
| 26 | W | |
| 27 | Th | |
| 28 | F | |
| 29 | S | |
| 30 | S | |

OCTOBER, 1906.

| | | |
|----|----|---|
| 1 | M | First Term begins. Admission of Students, Faculties of Arts, Science, and Technology. Admission of Students, Faculties of Arts, Science, and Technology. |
| 2 | Tu | |
| 3 | W | |
| 4 | Th | |
| 5 | F | |
| 6 | S | |
| 7 | S | |
| 8 | M | |
| 9 | Tu | |
| 10 | W | |
| 11 | Th | |
| 12 | F | |
| 13 | S | |
| 14 | S | |
| 15 | M | |
| 16 | Tu | |
| 17 | W | |
| 18 | Th | |
| 19 | F | |
| 20 | S | |
| 21 | S | |
| 22 | M | |
| 23 | Tu | |
| 24 | W | |
| 25 | Th | |
| 26 | F | |
| 27 | S | |
| 28 | S | |
| 29 | M | |
| 30 | Tu | |
| 31 | W | |

THE UNIVERSITY OF LEEDS

THE CHARTER

EDWARD VII, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith. To all to whom these presents shall come, greeting.

Whereas by Charter of Her Late Majesty Queen Victoria, dated 20th April, 1880, the Victoria University was founded and constituted having its seat in the City of Manchester.

And whereas the Owens College, Manchester, was thereby constituted a College in the University and provision was made that other Colleges might from time to time be admitted as Colleges in the University in the manner and subject to the conditions therein prescribed.

And whereas the University College, Liverpool, was by resolution of the Court of the University admitted as a College of the University on the 5th November, 1884, and The Yorkshire College, Leeds, was by resolution of the said Court admitted as a College in the University on the 3rd November, 1887, but no other College has been so admitted.

And whereas the said University College, Liverpool, has presented to Us in Our Council a humble Petition under the Common Seal of that College praying us to erect a University within the City of Liverpool.

And whereas the Owens College, Manchester, has presented to Us in Our Council a humble Petition under the Common Seal of that College praying that a new or supplemental Charter may be granted so as to constitute and continue the Victoria University as a University in Manchester without association with any College except the Owens College.

And whereas the Yorkshire College, Leeds, has presented to Us in Our Council a humble Petition under the Common Seal of that College, praying Us to erect a University having its seat in Leeds.

And whereas we have taken the said Petitions into Our Royal consideration and are minded to accede thereto.

Now therefore know ye that We, by virtue of Our Royal Prerogative and all other powers in that behalf enabling us of Our Special Grace certain knowledge and mere motion by these presents Do for Us, Our Heirs and Successors, grant, will, direct, and ordain as follows :

I. There shall be from henceforth for ever in Our said City of Leeds a University of the name and style of "The University of Leeds," which shall be and continue one body politic and corporate with perpetual succession and a common seal and with full power and capacity by and in such name to sue and be sued and to do all other lawful acts whatsoever and with full power and capacity, subject to the restrictions herein set forth, without any further licence to all persons and corporations to assure and to the University to take, by gift or otherwise purchase and hold and also to grant demise or otherwise dispose of real and personal property.

II. The University shall have the powers following :

1. To grant and confer Degrees and other academic distinctions to and on persons who shall have pursued an approved course of study in the University and shall have passed the examinations of the University under conditions laid down in its Statutes or Ordinances. Provided that degrees representing proficiency in technical subjects shall not be conferred without proper security for testing the scientific or general knowledge underlying technical attainments.

2. To admit graduates of other Universities to Degrees of equal or similar rank in the University.

3. To confer Degrees of the University on any persons who hold office in the University as Professors, Readers, Lecturers, or otherwise, or who shall have carried on independent research therein, or on any persons who, at the date of this Our Charter, are Associates of the Yorkshire College.

4. To grant Diplomas, Licentiateships, Certificates, or other distinctions to persons who have pursued a course of study approved by the University under conditions laid down by the University.

5. To confer Honorary Degrees, or other distinctions on approved persons.

Provided that all Degrees and other distinctions shall be conferred and held subject to any provisions which may be made in reference thereto by the Statutes, Ordinances, or Regulations of the University.

6. To provide for instruction in such branches of learning as the University may think fit, and also to make provision for research and for the advancement and dissemination of knowledge.

7. To examine and inspect schools and other educational institutions, to grant Diplomas and other Certificates, and to provide such lectures and instruction for persons not members of the University as the University may determine.

8. To accept the examinations and periods of study passed by students of the University at other Universities or places of learning as equivalent to such examinations and periods of study in the University as the University may determine, and to withdraw such acceptance at any time.

Provided that in no case shall the University confer a Degree in Medicine or Surgery upon any person who has not attended in the University during two years at least courses of study recognised for such Degree, or for one of the other Degrees of the University.

9. To affiliate other Colleges or institutions or branches or departments thereof, or to admit the members thereof to any of the privileges of the University, and to accept attendance at courses of study in such Colleges or institutions in place of such part of the attendance at courses of study in the University, and upon such terms and conditions and subject to such regulations as may from time to time be determined by the University.

10. To co-operate by means of joint boards or otherwise, with other Universities and Authorities for the

conduct of Matriculation examinations, for the examination and inspection of schools and other academic institutions and for such other purposes as the University may from time to time determine.

11. To enter into any agreement with the Yorkshire College for the incorporation of that College in the University, and for taking over its property and liabilities, and, if necessary, to promote a Bill in Parliament to confirm or carry out any such agreement.

12. To enter into any agreement with any other institution for the incorporation of that institution in the University and for taking over its property and liabilities, and for any other purpose not repugnant to this Our Charter.

13. To enter into any agreement with the Victoria University of Manchester or with the University of Liverpool for the division or apportionment of any of the moneys, endowments, or property of the Victoria University, with due regard to the local origin of any particular foundation, to the wishes of the Donors, and other special circumstances, and for reference to an Arbitrator in case of difference.

14. To institute Professorships, Assistant Professorships, Readerships, Lectureships, Teacherships, and any other offices required by the University, and to appoint to such offices. Also to institute and award Fellowships, Scholarships and Exhibitions and Prizes.

15. To license Halls for the residence of students.

16. To do all such other acts and things whether incidental to the powers aforesaid or not, as may be requisite in order to further the objects of the University as a Teaching and Examining Body, and to cultivate and promote Arts, Science, and Learning.

III. It shall be the duty of the University to co-operate, by means of a Joint Board or otherwise, with the Victoria University of Manchester and the University of Liverpool for the regulation and conduct of Matriculation examinations, including the conditions of exemption therefrom. Statutes of the University shall prescribe and regulate the constitution

and duties of the said Joint Board, the appointment and continuance in office of the members thereof, the filling of vacancies among the members, and all other matters relative to the Joint Board which it may be thought are proper to be so regulated and prescribed.

Visitor

IV. We, Our Heirs and Successors, Kings and Queens of the Kingdom and Dominions aforesaid, shall be and remain the Visitor and Visitors of the University through the Lord President of our Council for the time being, and in the exercise of the Visitorial Authority We and Our Heirs and Successors shall have the right from time to time and in such manner as We or They shall think fit to direct an inspection of the University, its buildings, laboratories, and general equipment, and also of the examination, teaching, and other work done by the University.

Authorities of the University

V. The Authorities of the University shall be the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Court, the Council, the Senate, the Faculties, the Boards of Faculties, and the Convocation. There shall be a Treasurer and other proper officers of the University.

The Chancellor

VI. The Chancellor shall be the Head and Chief Officer of the University and President of its Court, Council, and Convocation, and shall, except as otherwise hereby provided, confer Degrees. He shall hold office during his life or until his resignation or until his removal for good cause by the Visitor at the instance of the Court.

Our right trusty and entirely beloved Cousin and Councillor, George Frederick Samuel, Marquis of Ripon, Knight of Our Most Noble Order of the Garter, Doctor of Laws, shall be the first Chancellor of the University.

His successors from time to time shall be elected by the Court on the nomination of the Council of the University.

The Pro-Chancellor

VII. In the absence of the Chancellor, or pending a vacancy in the office of Chancellor, or during the Chancellor's inability to act, the Pro-Chancellor shall exercise all the functions of the Chancellor, except the conferring of Degrees, and shall, if present, preside at any meetings of the Court and Council. Our trusty and well-beloved Arthur Greenhow Lupton, Chairman of the Council of the Yorkshire College, shall be the first Pro-Chancellor of the University, and shall hold his office for one year. Subsequent appointments to the said office shall be made annually by the Court on the nomination of the Council.

The Vice-Chancellor

VIII. The Vice-Chancellor shall be ex-officio Chairman of the Senate. In the absence of the Chancellor the Vice-Chancellor shall confer Degrees, except as otherwise hereby provided.

Our trusty and well-beloved Nathan Bodington, Principal of the Yorkshire College, Doctor of Letters, shall be the first Vice-Chancellor of the University, and shall hold such office for such term or terms and subject to such conditions as may from time to time be determined by the Council.

His successors from time to time shall be appointed by the Court on the nomination of the Council and shall hold such office for such term or terms and subject to such conditions as may from time to time be determined by the Council.

The Pro-Vice-Chancellor

IX. Subject to the Statutes and Ordinances of the University, and in the absence of the Vice-Chancellor, the Pro-Vice-Chancellor may act as Vice-Chancellor. The Pro-Vice-Chancellor shall from time to time be appointed by the Council from among the members of the Senate.

The Court

X. The Court shall be the governing body of the University and shall direct the form, custody, and use of the Common Seal, and shall have power to regulate and

determine all matters concerning the University, and generally shall exercise all the powers and discretions of the University, except as otherwise provided by this Our Charter or by the Statutes.

The Court shall have power by Statute to increase or diminish the number of its members, by increasing or diminishing the number to be nominated or appointed by the persons or bodies possessing the right of nomination or appointment, or by adding representatives of other bodies, or in any other manner.

The Statutes set forth in the Schedule hereto annexed shall be the first Statutes of the University under this Our Charter. The Court may amend, add to, or repeal the Statutes for the time being in force (including those set forth in the Schedule hereto), but no such amendment, addition, or repeal shall be valid or operative until allowed by Us or by a Committee of Our Council.

Ordinances may be made by the Court for the regulation of all matters not required by this Our Charter to be dealt with by Statute.

Provided (1) that it shall not be lawful for the Court, by any Statute or otherwise, to adopt or impose on any person any test whatever of religious belief or profession in order to entitle him to be admitted as a Professor, Teacher, Student, or Member of the University, or to hold office therein, or to graduate thereat, or to enjoy or exercise any privilege thereof.

Provided (2) that any Statute or Ordinance made by the Court be not repugnant to the laws of this Realm or to the general objects of this Our Charter.

Provided (3) that Statutes or Ordinances relating to Degrees, studies, and examinations shall not be adopted without report from the Senate.

Provided (4) that no change shall be made in any Statute or Ordinance altering the status, powers, or constitution of any of the Authorities of the University until such Authority shall have had an opportunity of pronouncing an opinion upon the proposed change.

The Court shall have power to confer Degrees in absentia by a resolution of the Court, but save as aforesaid all Degrees shall be conferred by the Chancellor or in his absence by the Vice-Chancellor or Pro-Vice-Chancellor.

The Court shall have power to deprive any Graduate of the University who shall have been convicted of a crime or offence, or shall, in the opinion of the Court, have been guilty of scandalous conduct, of any Degree or Degrees conferred by the University and of all privileges enjoyed by him as such Graduate aforesaid.

The acts of the Court shall not be invalidated by any vacancy among its Members.

XI. Every Statute or alteration of a Statute, and every Ordinance or alteration of an Ordinance relating to any of the matters following, that is to say :

- (a) The titles of Degrees,
- (b) The establishment of new Degrees,
- (c) The periods of residence and study in the University or in any affiliated or recognised institution required for Degrees,
- (d) The conditions under which Degrees higher than the Degree of Bachelor in any faculty are to be granted,
- (e) The courses for medical Degrees and the subjects of examinations,

shall before such Statute or alteration of a Statute shall be allowed and before such Ordinance or alteration of an Ordinance shall become operative and have effect be communicated to the Victoria University of Manchester and the University of Liverpool, and if within one month after the receipt of such communication notice of objection thereto shall have been given by the said Universities or either of them the question so arising shall be considered by a Joint Committee of the three Universities, and in default of agreement any of the said Universities may within one month make a representation in regard thereto to Us or to a committee of Our Council, and, in the event last mentioned, such Statute or Ordinance or alteration therein shall not become operative and have effect until allowed by Us or by such Committee.

Statutes of the University shall prescribe and regulate the constitution and appointment of the said Joint Committee and all other matters relating to the said Committee which it may be thought are proper to be so prescribed and regulated.

The Council

XII. The Council shall be the Executive Body of the University and may exercise and do such of the powers, authorities, and things by this Our Charter granted to or authorised to be done by the Court, as are, or shall from time to time be assigned to the Council by Statute or by the Court, except the election of Members of the Court to be Members of the Council.

The Court shall have power by Statute to increase or diminish the number of the Council, by increasing or diminishing the number to be nominated, elected, or appointed by the persons or bodies possessing the right of nomination or appointment, or by adding representatives of other bodies, or in any other manner.

The Council shall have power to draft Statutes and Ordinances as and when they see fit, and to submit the same to the Court for consideration and enactment.

The acts of the Council shall not be invalidated by reason of any vacancy among its members.

The Senate

XIII. The constitution of the Senate shall be determined by Statute.

The Senate shall, subject to the Statutes and Ordinances of the University, and subject also to review by the Court, have the control and general regulation of the instruction and education within the University and shall have power to discuss and pronounce an opinion on any matter whatsoever relating to the University and such other powers and duties as may be conferred upon it by Statute or Ordinance.

Faculties

XIV. The University shall include the Faculties of Arts, Science, Medicine, and Technology, and such other Faculties

(whether formed by the sub-division of an existing faculty or by the creation of a new faculty or otherwise) as may from time to time be constituted by Statute.

The constitution and powers of the several Faculties shall be determined by Statute.

Such Boards of Faculties shall be appointed by the Council as the Council may from time to time determine; the members of each Board (the numbers of whom shall be in the discretion of the Council) shall be appointed by the Council from among members of one or more Faculties, or from among the External Examiners of the University.

Convocation

XV. The Convocation shall consist of the Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Members of the Senate, the Lecturers, and the registered Graduates of the University.

The Court shall have power to fix the conditions of registration and to prescribe the annual or other fees, or a composition therefor which shall be necessary for registration.

The Chancellor, if present, shall preside at the Meetings of Convocation.

Powers of Convocation

XVI. Convocation shall have the following powers:

To elect its own Chairman, who shall, in the absence of the Chancellor, preside at its Meetings.

To elect representatives as Members of the Court and Council.

To discuss and pronounce an opinion on any matter whatsoever relating to the University, including any matters referred to them by the Court or the Council.

To prescribe the mode of conducting the proceedings of Convocation and of registering the same, and of reporting the same to the Court, Council, or Senate, or any of them.

To enter into communication directly with the Court, Council, or Senate on any matter affecting the University.

Regulations as to Procedure

XVII. The Court, the Council, the Senate, the Faculties, the Boards of Faculties, and Convocation respectively may from time to time make regulations for governing their respective proceedings, subject to this Our Charter and to the Statutes and Ordinances of the University.

The Treasurer

XVIII. Our trusty and well-beloved Sir John Barran, Baronet, Treasurer of the Yorkshire College, shall be the first Treasurer of the University, and shall hold his office for one year. Subsequent appointments to the said office shall be made annually by the Court.

Members of the University

XIX. The Members of the University shall be the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Treasurer, the Members of the University Court, the Professors, Emeritus Professors, Assistant Professors, Readers, Lecturers and Demonstrators, and such other Teachers of the University as the Court may determine, the Members of the Faculties, the holders of such other University offices as the Council may from time to time determine, the Wardens or other chief officers of Halls of Residence licensed by the University, Fellows, Graduates, and Undergraduates of the University.

The Undergraduates of the University shall be such persons attending lectures, or receiving instruction in the University as shall have matriculated under the Statutes.

Advisory Committees

XX. The Council may from time to time appoint Advisory Committees, consisting of members of the University, and also, if the Council shall think fit, of persons who are not members of the University, and may delegate to such Committees such duties as it thinks fit as regards financial, administrative, or other matters affecting the University or any particular Faculty or Department, or the management or supervision of any buildings or property of the University.

Examiners and Examinations

XXI. All examinations held by the University shall be conducted in such manner as the Statutes and Ordinances shall prescribe, provided that at least one external and independent examiner shall be appointed by the Council for each subject or group of subjects forming part of the course of studies required for University degrees, but this proviso shall not apply to examinations for admission or entrance to the University.

Provided that in case of a vacancy occurring in or during any examination or of other emergency the Vice-Chancellor shall have power to appoint a substitute for that examination.

General Provisions

XXII. All the Degrees and courses of study of the University shall be open to women, subject to such conditions and regulations as the Court may prescribe, and women shall be eligible for any office in the University and for membership of any of its constituent bodies, and in the present Charter words implying the male sex shall be held to include the female, unless the context clearly shows the meaning to be otherwise.

XXIII. The University may from time to time found and endow Fellowships, Scholarships, Exhibitions, and other Prizes for which funds or property may, by bequest, donation, grant, or otherwise be provided, and may make regulations respecting the same and the tenure thereof, but, except as aforesaid, and except by way of prize, reward, special grant, or remuneration for services rendered or to be rendered, in the past, present, or future respectively, the University shall not make any gift, division or bonus in money unto or between any of its members.

XXIV. In addition to the buildings, lands, and premises of the University for the time being used and occupied for the immediate purposes thereof, the University shall have power to hold lands, tenements, and hereditaments of an annual value not exceeding in the aggregate, at the time or respective times of the acquisition of the same, the sum of £50,000.

XXV. The University may demand and receive such fees as the Court may from time to time appoint.

XXVI. The Court may from time to time alter, amend, or add to these presents by a Special Resolution in that behalf, and such alteration, amendment or addition shall, when allowed by Us, our Heirs, or Successors, or by any Committee of our Most Honourable Privy Council, or otherwise as We or They shall think fit, become effectual so that these presents shall thenceforward continue and operate as though they had been originally granted and made as so altered, amended, or added to. This Article shall apply to this Charter as altered, amended, or added to in any manner aforesaid.

XXVII. A Special Resolution is a Resolution passed at one meeting of the Court and confirmed at a subsequent meeting, held not less than one calendar month, nor more than three calendar months after the former, provided that the Resolution be passed at each meeting by a majority of not less than three-fourths of the Members of the Court present and voting thereon.

XXVIII. In this Our Charter "Statutes" means the Statutes set forth in the Schedule hereto and any Statutes altering, amending, adding to, or repealing the same or any of them which may hereafter be made and may be allowed by Us in Council, or by a Committee of Our Council.

"Ordinances" means Acts of the Court under the powers conferred by this Our Charter to which Our further sanction is not hereby or by Statute required.

"Regulations," except when otherwise required by the context, means Regulations made pursuant to this Our Charter or the Statutes.

XXIX. Our Royal Will and pleasure is that this Our Charter shall always be construed and adjudged in the most favourable and beneficial sense for the best advantage of the University, and the promotion of the objects of this Our Charter as well in all our Courts as elsewhere notwithstanding any non-recital, mis-recital, uncertainty or imperfection herein.

THE SCHEDULE

STATUTES

I.

The University Court

(a)

The University Court (hereinafter called the Court) shall consist of the following persons, viz. :

1. *Ex-officio* members, The Chancellor, the Pro-Chancellor, the Vice-Chancellor, and the Treasurer.

2 All present members of the Council of the Yorkshire College ; all future members of the University Council, during their tenure of office ; all present Perpetual and Life Governors of the College ; and all future Donors of £1,000 to the University. If a donation of £1,000 be made by a company, society, or partnership firm, one member thereof may be nominated by the Donors as a member of the Court.

Six representatives of the Clothworkers' Company of London.

One representative of the Skinners' Company of London.

One representative of the Drapers' Company of London.

One representative of the Trustees of William Akroyd's Foundation.

One representative of the West Yorkshire Coal Owners' Association.

One representative of the Yorkshire Board of Legal Studies.

3. Representatives of Public Authorities, viz. :

Six from the County Council of the West Riding of Yorkshire.

Two from the County Council of the North Riding of Yorkshire.

Two from the County Council of the East Riding of Yorkshire.

Four from the Council of the County Borough of Leeds.

Two from the Council of the County Borough of Bradford.

One from the Council of the County Borough of York.

One from the Council of the County Borough of Hull.

One from the Council of the County Borough of Halifax.

One from the Council of the County Borough of Huddersfield.

One from the Council of the County Borough of Middlesbrough.

One from the Council of each of such other County Boroughs to be created in future as may be approved by the Court.

4. Representatives of the University :

Ten from the Faculties.

Representatives (not exceeding five in all) of the Convocation, viz :—one representative for every hundred members up to 500.

5. Representatives of other Institutions, viz. :

Representatives of such Affiliated Institutions as the Court may determine, and

One representative of the Victoria University of Manchester.

One representative of the University of Liverpool.

One representative of such other English University as the Court may determine.

6. Representatives of Schools :

Eight representatives of the Head Masters and Mistresses of Secondary Schools in Yorkshire, such representatives to be appointed by the Court.

7. Other Governors :

Three persons appointed by the Crown.

Ten persons elected by co-optation by the Court.

Except as otherwise by the Charter provided, and subject to the Statutes of the University, the Court may determine all matters relating to the nomination, appointment, and election of members of the Court and Council, and their respective periods or terms of office, and all other matters relating to the constitution of the Court and Council.

(b)

The Court shall have power to delegate its functions to the Council except as otherwise provided, and to delegate to the Senate the power to award degrees other than *ad eundem* Degrees, Degrees conferred on persons who hold office in the University, and Honorary Degrees.

The periods during which members of the Court respectively shall hold office shall be as follows :

The Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Treasurer, and all future members of the University Council shall hold office during the time they occupy the positions named respectively.

All present members of the Council of the Yorkshire College, and all present Perpetual and Life Governors of the Yorkshire College, and all future donors of £1,000 to the University, and the persons nominated by the donors in the case of donations of £1,000 made by a company, society, or partnership firm, shall hold office for their respective lives, or until resignation.

All other members mentioned in clause (a) 2 above, and all members mentioned in clause (a) 3 above, shall hold office for one year from the date of appointment. Members mentioned in clause (a) 4 shall hold office for two years from the respective dates of appointment, and five of such members, to be selected by lot or otherwise as the court shall determine, shall retire in each year. Provided that if a representative of a Faculty ceases to be a member of that Faculty he shall cease to be a member of the Court. Members mentioned in clause (a) 5 and 6, shall hold office for two years from the respective dates of appointment. Members mentioned in clause (a) 7 shall hold office for five years from the

respective dates of appointment, but of the members appointed by co-optation two, to be selected by lot or otherwise as the Court shall determine, shall retire each year.

All retiring members shall be eligible for re-appointment or re-election.

Appointees or representatives need not be members of the bodies appointing.

Any member of the Court may resign such membership at any time by letter addressed to the Registrar of the University.

Any casual vacancy occurring by resignation, incapacity, or death among the appointed or representative or co-opted members shall be filled up as soon as convenient by the person or body which appointed or co-opted the member whose place has become vacant. If such member was a member for a term of years the person appointed to supply his place shall be a member of the Court for the remainder of that term.

Fifteen members of the Court shall form a quorum, and, until the above-mentioned representative members have been appointed, the other members shall form the Court.

II.

The University Council

(a) The University Council (hereinafter called the Council) shall consist of the following persons, namely:—

The Chancellor, the Pro-Chancellor, the Vice-Chancellor, and the Treasurer.

Two representatives of the West Riding County Council.

One representative of the North Riding County Council.

One representative of the East Riding County Council.

Two representatives of the County Borough of Leeds.

One representative of the County Borough of Bradford.

One representative of the Council of the County Borough of York.

One representative of the Council of the County Borough of Hull.

One representative of the Council of the County Borough of Halifax.

One representative of the Council of the County Borough of Huddersfield.

One representative of the Council of the County Borough of Middlesbrough.

Two representatives of the Clothworkers' Company of London.

Five representatives to be elected by the Faculties of the University.

One member to be elected by Convocation.

One member to be nominated by the Crown.

Twelve members to be elected by the Court. Provided, nevertheless, that at first such of the present members of the Council of the Yorkshire College as have been elected thereto by the Board of Governors of the College shall take the place of the said twelve members; and of such members of the Council of the Yorkshire College four, to be selected by lot or otherwise as the Council may determine, shall retire every three years until the number of such members has been reduced to twelve or less; and on the number of such members being reduced to less than twelve the Court shall have power to appoint any other person or persons to make up such number to twelve. So soon as the number of such members shall have been reduced to twelve or less, the members of the Council of the Yorkshire College who at that time remain members of the Council, together with such appointee or appointees of the Court as aforesaid, shall hold office for the period and be subject to the provisions as to retirement hereinafter mentioned, as if all such members and appointees as aforesaid had been elected members of the Council by the Court on the day when such number as aforesaid was reduced to twelve or less.

The members of the Teaching Staff who are members of the Council, however elected (including the Vice-Chancellor), shall not exceed one fifth of the whole Council.

(b) The periods during which the members of the Council respectively shall hold office shall be as follows :

The Chancellor, the Pro-Chancellor, the Vice-Chancellor and the Treasurer shall hold office for the time during which they occupy the positions named respectively.

All other members of the Council shall hold office for one year from the date of appointment, except as otherwise hereinbefore provided and except members elected by the Court, who shall hold office for three years (four, to be selected by lot or otherwise as the Council shall determine, retiring each year), and except the person appointed by the Crown, who shall hold office for five years.

All retiring members shall be eligible for re-appointment or re-election.

Appointees or representatives need not be members of the bodies appointing.

Any member of the Council may resign such membership at any time by letter addressed to the Registrar of the University.

Any casual vacancy occurring by resignation, incapacity, or death among the appointed or representative members shall be filled up as soon as convenient by the person or body which appointed the member whose place has become vacant. If such member was a member for a term of years the person appointed to supply his place shall be a member of the Council for the remainder of that term.

Seven members of the Council shall form a quorum, and until the above named representative members have been elected, the other members shall form the Council.

III.

Powers of the Council

Subject to the provisions made in the Charter and Statutes, the Council shall have the following powers :

To nominate the Pro-Chancellor and the Vice-Chancellor.

To elect Professors of the University, and either to elect or to delegate to the Senate the election of any academic officers of the University other than Professors.

To elect a Registrar and other officers of the University for such periods and under such conditions as may be determined by the Council.

To institute Professorships, Assistant Professorships, Readerships, Lectureships, or other teaching offices, after giving the Senate the opportunity of reporting thereon.

To abolish or hold in abeyance, after giving the Senate the opportunity of reporting thereon, any Professorship, Readership, or other academic office in the University.

To draft Statutes and Ordinances as and when it sees fit and submit the same to the Court. Provided that any Statute or Ordinance relating to courses of study shall not be adopted without giving the Senate the opportunity of reporting thereon.

To make regulations for any purposes for which regulations are or may be authorised to be made.

To govern, manage, and regulate the finances, accounts, investments, property, business, and all affairs whatsoever of the University, and for that purpose to appoint Bankers, Deputy-Treasurers, and any other officers or agents whom it may seem expedient to appoint.

To invest any moneys belonging to the University, including any unapplied income in such stocks, funds, fully paid shares or securities as the Council shall from time to time think fit, whether authorised by the general law for the investment of trust moneys or

not, and whether within the United Kingdom of Great Britain and Ireland or not or in the purchase of freehold, copyhold, or leasehold hereditaments in the United Kingdom, including rent charges, or chief rents, with the like power of varying such investments from time to time by sale and re-investment or otherwise.

To sell, buy, exchange, lease, and accept leases of real and personal property on behalf of the University.

To provide the buildings, premises, furniture, and apparatus and other means needed for carrying on the work of the University.

To enter into, vary, carry out, and cancel contracts on behalf of the University. Any contract entered into on behalf of the University may be made in any manner authorised by law for the making of contracts by or on behalf of Companies incorporated under the Companies' Acts, 1862 and 1867.

IV.

Powers of the Vice-Chancellor

The Vice-Chancellor shall have the sole power of suspending or dismissing any offending student, subject to the right of appeal to the Visitor. He shall exercise general supervision over the educational arrangements of the University, regulate the admission of students, and maintain the discipline of the University, for which he shall be responsible to the Council.

V.

The Senate

The Senate of the University shall consist of the Vice-Chancellor and the Professors of the University, and of such other members of the Boards of Faculties hereinafter mentioned as the Court may, after report from the Senate, appoint, provided that the number of such other members appointed shall not exceed three, and that they shall hold office for such term only as the Court shall determine.

The Professors of the University within the meaning of the Charter shall include those persons who shall be appointed by the Council as such, and also the Professors

of the Yorkshire College at the date of the Charter, who shall hold their Professorships upon the same conditions as those upon which they held them at the date of the Charter, until such conditions shall be modified or altered by the Council.

The Senate shall have the following powers :

To make and submit to the Council, after report from the Board or Boards of Faculties concerned, all regulations for giving effect to the Statutes and Ordinances of the University relating to courses of study.

To appoint Internal Examiners after report from the Board or Boards of Faculties concerned.

To recommend External Examiners for appointment by the Council after report from the Board or Boards of Faculties concerned.

To report to the Council, after report from the Board or Boards of Faculties concerned, on all Ordinances relating to courses of study.

To report to the Council on Statutes or Ordinances or proposed changes of Statutes or Ordinances.

To report on any matter referred to or delegated to them by the Court or the Council.

To discuss and declare an opinion on any matter whatsoever relating to the University.

To appoint on delegation of the Council, Readers, Lecturers, and other academic officers of the University not being Professors.

To formulate and modify or revise, subject to the control of the Council, schemes for the organisation of Faculties of Arts, Science, Medicine, Technology, and any other Faculties of the University, and to assign to such Faculties their respective subjects ; also to report to the Council as to the expediency of the establishment at any time of other Faculties, or as to the expediency of the abolition, combination, or subdivision of any Faculties.

To fix, subject to any conditions made by the Founders which are accepted by the Court, the times

and mode and conditions of competition for Fellowships, Scholarships, and other Prizes, and to award the same.

To do such other acts and things as the Court shall authorise.

No new Degree shall be established or other distinction of Honour or Merit adopted until the Senate has had an opportunity of reporting thereon.

VI.

Faculties

Each of the Faculties shall respectively consist of:—

1. The Professors assigned thereto by the Council.
2. Such Lecturers, Assistant Lecturers, and other teachers of the University as may be appointed to the Faculty by the Council on the recommendation of the Senate.
3. Such other persons as may be appointed by the Council of the University on the recommendation of the Senate.

Each of the Faculties shall have the power of electing a representative or representatives on the Court and Council of the University, but in the event of the number of Faculties being so increased that the members of the staff elected by them would exceed the proportion limited as hereinbefore expressed, the Council shall decide by what Faculties or combinations of Faculties the election shall be made.

Each Faculty shall have the power of presenting recommendations and reports to the Senate upon all matters connected with the subjects of study embraced by the Faculty.

The Faculty of Arts shall, until otherwise provided by Statute, include Economics and Law.

The Faculty of Technology shall, until otherwise provided by Statute, include Agriculture, Dyeing, Engineering, Leather Industries, Mining, and Textile Industries.

The Vice-Chancellor shall be a member of each of the several Faculties and Boards of Faculties.

There shall be a Dean of each Faculty elected by that Faculty, or otherwise as the Council shall direct. He shall preside at the meetings of the Faculty and hold office during such period and with such powers as shall be determined by Statute or Ordinance, and shall be eligible for re-election.

VII.

Powers of the Boards of Faculties

The Boards of Faculties respectively shall have the powers following :—

To regulate, subject to the control of the Senate, the teaching and study of the subjects assigned to the Board in question.

To make recommendations as to the appointment of Examiners.

To report to the Senate on Ordinances and Regulations dealing with courses of study for degrees and other distinctions, and on any questions relating to the work of the respective Faculties.

To deal with any matter referred or delegated to them by the Senate.

VIII.

Convocation

A Register shall be kept containing the names of all persons who are members of Convocation according to the provision made by the Charter.

The Register shall be conclusive evidence that any person whose name appears therein at the time of claiming to vote in Convocation is entitled to vote, and that any person whose name does not appear therein is not so entitled.

A meeting of Convocation shall be summoned at least once in every year and at such other times as Convocation may by its by-laws determine.

A meeting of Convocation may be called by the direction of the Chairman, and shall also be called on the requisition in writing of at least twenty members.

IX.

Auditor

The Court shall annually appoint an Auditor, who shall be a member of the Institute of Chartered Accountants of England and Wales, or of the Incorporated Society of Accountants and Auditors, in the active practice of his profession, who shall receive such remuneration as may from time to time be determined by the Court.

Acceptance of office by an Auditor shall be deemed to carry with it an undertaking by the Auditor to the University that every certificate given by him, or passing of accounts by him, implies that he has satisfied himself by full and careful investigation (made by himself or agents, for whom he undertakes to be responsible) by every reasonable means within his power, and after the exercise of due professional skill, that the statements in the certificate are true and accurate, and that any accounts certified or passed are complete, true, and accurate.

X.

Committee for considering objections by the Universities at Manchester and Liverpool

The Joint Committee to be constituted pursuant to Clause XI of the Charter for considering objections made by the Victoria University of Manchester and the University of Liverpool to proposed Statutes and Ordinances, shall consist of nine members, three to be appointed by each University.

The Joint Committee shall be convened by the Registrar of the Victoria University of Manchester.

XI.

Committee for considering objections to proposed Statutes and Ordinances of the University of Sheffield

Any Committee to be constituted for considering objections made by any of the Universities in Manchester, Liverpool and Leeds to proposed Statutes and Ordinances of the University of Sheffield shall consist of twelve members, three to be appointed by each of the said Universities.

Such Committee shall be convened by the Registrar of the Victoria University of Manchester.

Additional
Statute
adopted by
the Court on
May 19, 1905,
and allowed
by His
Majesty
in Council
July 11, 1905.

XII.

Regulation and conduct of the Matriculation examination

As amended
by the Court,
May 19, 1905
and allowed
by His
Majesty
in Council,
July 11, 1905

The conditions and subjects of the Matriculation examination, which constitutes the entrance to the Degree courses of the University, together with the exemptions and variations from it, shall be regulated by a Joint Board as constituted in the following clauses of this section.

The Joint Board shall consist of eighteen members, five to be annually elected by each of the Universities in Manchester, Liverpool, and Leeds, and, unless by agreement between all the four Universities it shall be otherwise determined, three by the University in Sheffield, with power to co-opt persons of educational experience to the number of three.

When any change in the regulations regarding the Matriculation examination is carried in the Joint Board by a majority consisting of less than two-thirds of the members who are present, the question at issue shall be referred to each of the four Universities, which shall each then nominate two additional members on the Board for the purpose. The decision of the Board so constituted shall be final.

The Board shall send annual reports to each University.

The regulations of the Board regarding the Matriculation examination shall not affect the power of each University to admit students to such classes and courses as it may think fit.

The four Universities shall contribute to the expenses of the Joint Board in such proportions as may be hereafter determined.

Provided that this Statute shall continue and be in force for seven years from the date of its approval by His Majesty in Council.

XIII.

Periods of Study before Graduation

The period of study necessary to qualify any student for graduation shall not be less than three years, all of which shall be subsequent to the date at which the student passes the Matriculation examination.

This Clause shall come into operation not later than October 1st, 1906.

In the case of the Yorkshire College, and in the event of any other College or Institution, or any branch or department thereof, becoming affiliated to the University within six months from the date of the Charter, the University may accept attendance which commenced on or subsequent to the First day of October, 1903, at courses of study in the Yorkshire College or in such other College or Institution in place of attendance at courses of study in the University for the same period.

XIV.

Definitions

In these Statutes—

“Statutes” means the Statutes of the University.

“Ordinances” means Ordinances made pursuant to the Charter or Statutes.

“Regulations” means Regulations made pursuant to the Charter or Statutes.

In witness whereof We have caused these Our Letters to be made Patent.

Witness Ourself at Westminster the twenty-fifth of April in the Fourth Year of Our Reign.

By Warrant under the King's Sign Manual.

MUIR MACKENZIE.



AN ACT

To merge the Yorkshire College in the University of Leeds and to transfer all the property and liabilities of the Yorkshire College to the University of Leeds and for other purposes.

(Royal Assent, 24th June 1904.)

Preamble WHEREAS the Yorkshire College was in the year one thousand eight hundred and seventy-eight constituted and incorporated under the Companies Acts 1862 and 1867 as an Association not for profit with the object of founding endowing and maintaining in the county of York a College or Colleges and by means thereof and otherwise of promoting the education of persons of both sexes and in particular of providing instruction in such sciences and arts as are applicable or ancillary to the manufacturing mining engineering and agricultural industries of the county of York and in ancient and modern languages history and literature medicine surgery law logic moral philosophy and other branches of education and with such other subordinate objects as are in the Memorandum of Association of the said College mentioned :

And whereas by Royal Charter dated the twentieth day of April one thousand eight hundred and eighty the Victoria University was constituted and founded having its seat in the city of Manchester with power to confer degrees and other distinctions except in medicine or surgery unless and until authority in that behalf should be given by further Charter or by Act of Parliament which authority was given by a supplemental Charter dated the twentieth day of March one thousand eight hundred and eighty-three :

And whereas in the year one thousand eight hundred and eighty-seven the Yorkshire College was admitted as a College in the Victoria University :

And whereas by Royal Charter dated the fifteenth day of July one thousand nine hundred and three it is provided that the Victoria University shall henceforth be called and known as the Victoria University of Manchester and (among

other things) that on the grant of a Charter establishing a university having its seat in Leeds or elsewhere in Yorkshire the Yorkshire College shall cease to be a College of the Victoria University of Manchester :

And whereas on the Petition of the Yorkshire College a Charter was on the twenty-fifth day of April one thousand nine hundred and four granted by His Majesty constituting in the city of Leeds a university by the name and style of the University of Leeds with faculties of Arts Science Medicine and Technology and such other faculties as may from time to time be constituted by the statutes of the University and with power to grant degrees and to do all acts and things which may be requisite in order to further the objects of the University as a teaching and examining body and to cultivate and promote art science and learning :

And whereas the Yorkshire College has consequently ceased to be a College in the Victoria University of Manchester and the governing body of the Yorkshire College are desirous and it is expedient that the College should be merged in the University of Leeds and that all its property and liabilities should be transferred to and vested in the last-named University :

And whereas it is expedient to empower the University of Leeds to hold examinations under Section 3 of the Medical Act 1886 and to elect a representative on the General Council mentioned in Section 7 of the same Act :

And whereas the objects of this Act cannot be attained without the authority of Parliament :

MAY IT THEREFORE PLEASE YOUR MAJESTY

That it may be enacted and be it enacted by the King's Most Excellent Majesty by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled and by the authority of the same as follows (that is to say) :

1. This Act may be cited as the "University of Leeds Short title. Act, 1904."

2. On the passing of this Act the Yorkshire College shall be by virtue of this Act dissolved and cease to exist and all property real and personal of every description (including things in action) and all rights and privileges of the Yorkshire College which immediately before that date belonged Dissolution of Yorkshire College and transfer of property to University of Leeds.

to or were vested in that College shall be by virtue of this Act without any conveyance or other instrument transferred to and vested in the University of Leeds for all the estate and interest therein of the Yorkshire College and shall be applied to the objects and purposes for which the University of Leeds is incorporated.

Transfer of liabilities.

3. On the passing of this Act all debts and liabilities of the Yorkshire College shall by virtue of this Act be transferred and attached to the University of Leeds and shall thereafter be discharged and satisfied by that University.

Saving for agreements deeds actions &c.

4. All agreements awards contracts deeds and other instruments and all actions and proceedings and causes of action or proceedings which immediately before the passing of this Act were existing or pending in favour of or against the Yorkshire College shall continue and may be carried into effect enforced and prosecuted by or in favour of or against the University of Leeds to the same extent and in like manner as if the University of Leeds instead of the Yorkshire College had been party to or interested in the same respectively.

Adjustment of property and liabilities &c.

5. (1) The Council of the Victoria University of Manchester the Council of the Owens College Manchester and the Council of the University of Liverpool or any of them may by agreement with the Council of the University of Leeds adjust and settle all questions arising with respect to any endowments property powers privileges authorities debts liabilities obligations or expenses in which the parties to the agreement are interested and also with respect to any examinations degrees and other University and College matters.

(2) An agreement under this section may provide for the transfer retention division apportionment or commutation of any endowments property debts liabilities or obligations and for a payment being made by any party to the other or others in respect of any such transfer retention division apportionment or commutation or in respect of the salary or remuneration of any officer or person and generally may make as between the parties to the agreement any provisions necessary or proper for carrying into effect the purposes of this Act.

(3) In default of agreement on any such question as aforesaid or so far as such agreement does not extend the question shall be referred to a single arbitrator to be nominated by the Lord President of His Majesty's Council on the application of any party and his award may provide for any matter for which an agreement might have provided. And subject as aforesaid the provisions of the Arbitration Act 1889 shall apply.

6. All professors and other members of and persons attached to or associated with the teaching staff of the Yorkshire College and all salaried or paid officers and servants of the Yorkshire College shall hold as nearly as practicable the same offices and places in the University of Leeds as they held in the said College immediately before the passing of this Act and upon the same terms and conditions unless and until the Council of the University shall otherwise decide.

Saving for existing officers of Yorkshire College.

7. Any power or right of the Yorkshire College or of the Council Senate or other members of that College as such to appoint or nominate a member of the governing body of any educational charitable or other institution shall on the passing of this Act be transferred to and may be exercised by the Council of the University of Leeds.

Transfer of powers to nominate members of certain governing bodies.

8. The University of Leeds is hereby empowered to hold qualifying examinations in medicine surgery and midwifery for the purpose of registration under the Medical Acts as if the University had been a University in the United Kingdom legally qualified at the passing of the Medical Act 1886 to grant diplomas in medicine and surgery and the provisions of Part I of that Act shall be read and have effect accordingly.

Power of University of Leeds to hold examinations under 49 and 50 Vict. c. 48.

9. The Council of the University of Leeds shall be entitled to choose one representative to be a member of the General Council constituted by the Medical Acts and Section 7 of the Medical Act 1886 shall be read and have effect as if the University of Leeds had been expressly included therein.

Power of University of Leeds to choose representative on General Medical Council.

10. Section 7 of the Mortmain and Charitable Uses Act 1888 shall be read and have effect as if the words "and the University of Leeds" were therein inserted after the words "Victoria University."

Application of Section 7 of Mortmain &c. Act 1888 (51 and 52 Vict. c. 42).

Construction
of bequests
in favour of
Yorkshire
College.

11. Any will deed or other document whether made or executed before or after the passing of this Act which contains any bequest gift or trust in favour of the Yorkshire College shall on and after the passing of this Act be read and have effect as if the University of Leeds were therein named instead of the Yorkshire College.

As to the
Charitable
Trusts Acts.

12. The Charitable Trusts Acts 1853 to 1894 shall not extend to the University of Leeds or to any college or hall therein.

Copy of Act
to be
registered.

13. The Council of the University of Leeds shall deliver to the Registrar of Joint Stock Companies a printed copy of this Act and he shall retain and register the same and if such copy is not so delivered within three months from the passing of this Act the University of Leeds shall incur a penalty not exceeding two pounds for every day after the expiration of those three months during which the default continues and any member of the said Council who knowingly and wilfully authorises such default shall incur the like penalty. Every penalty under this section shall be recoverable summarily.

There shall be paid to the Registrar by the University of Leeds on such copy being registered the like fee as is for the time being payable under the Companies Act 1862 on registration of any document other than a Memorandum of Association.

Costs of
Act.

14. The costs charges and expenses of and incidental to preparing and obtaining this Act shall be defrayed by the University of Leeds out of income or of the capital of the property by this Act transferred to the University or if the Council of the University think fit out of money to be raised by sale or mortgage of some part of the said property.

An Act to extend the privileges of the Graduates of the University of Leeds.

(Royal Assent, 15th August, 1904.)

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :—

1. Wherever any office is or shall be open to graduates of the Universities of Oxford, Cambridge, and London, and of the Victoria University of Manchester, or wherever any privilege or exemption has been or shall be given by any Act of Parliament or regulation of any public authority to graduates of the Universities of Oxford, Cambridge, and London, and the Victoria University of Manchester, graduates of the University of Leeds having the degree which would be a qualification if it had been granted by the University of Oxford, Cambridge, or London, or the Victoria University of Manchester, may become candidates for and may hold any such office and shall be entitled to all such privileges as fully as graduates of any of the last-mentioned universities.

Extension of privileges of graduates of Leeds University.

2. This Act may be cited as the Leeds University Act, 1904.

Short title.

ORDINANCES

made by the Court in accordance with the provisions of
Clauses X and XI of the Charter

I. AFFILIATED COLLEGES AND INSTITUTIONS

(May 18, 1904.)

1. Colleges and Institutions, or parts thereof, may be admitted to affiliation after report by the Senate. The Senate, before recommending the affiliation of any such College or Institution, shall satisfy itself:

(a) That the College or Institution has attained a satisfactory standard of educational efficiency for the purposes for which affiliation is sought, and is established on a permanent basis.

(b) That the majority of regular students in such College or Institution are of the age of sixteen years.

2. In the case of any affiliated College or Institution, or of any part of such College or Institution recognised for the purposes of this clause, students who have attained the age of seventeen years, and have passed the Matriculation Examination of the University, or are exempt therefrom, shall be allowed to attend at any such College or Institution a part or the whole of a course of study, approved by the Senate of the University as exempting from such courses of study in the University as the Court may approve, provided that in no case shall the University confer a degree upon any person who has not attended in the University during two years at least the courses of study which have been recognised for such degree.

3. The Council shall, after a report from the Senate, determine the privileges to which the students of any such affiliated College or Institution shall be admitted.

4. Any College or Institution desiring to avail itself of the foregoing Ordinance shall

(a) Make provision for the representation of the University on the body which determines the annual plan of study, in so far as it concerns the courses submitted for the approval of the University;

(b) Submit for the approval of the Senate of the University Day courses of study, whose duration, scope, and standard shall be equivalent to the corresponding courses of the University.

5. The University shall inspect from time to time the buildings and equipment for teaching provided in any such College or Institution, and shall satisfy itself as to the qualifications of any teacher therein appointed to conduct the courses offered in place of University courses.

6. The Council, after a report from the Senate, shall be entitled at any time to withdraw any privileges which may have been granted to any College or Institution under these Ordinances, and to remove the said College or Institution from affiliation.

II. DEGREES IN ARTS

(July 3, 1905.)

1. The degrees in Arts shall be :

Bachelor of Arts (B.A.)

Master of Arts (M.A.)

Doctor of Letters (Litt.D.).

Degree of Bachelor of Arts

2. The degree of Bachelor of Arts shall be conferred either as an Ordinary degree or as a degree with Honours.

3. All candidates for the degree of Bachelor of Arts shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

Ordinary Degree of Bachelor of Arts

4. The complete course of study for the Ordinary degree of Bachelor of Arts shall be divided into two parts, called respectively the Intermediate course and the Final course.

5. Every candidate shall be required to pass two examinations, the Intermediate and the Final.

6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.

7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to

present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the separate Examination committee concerned, may determine.

8. Candidates who have failed at a Final examination may present at the June examination of the following year those books and periods in which they have already been examined.

9. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

Intermediate Course and Examination

10. Every candidate shall be required, after passing the Matriculation examination, to attend during one academic year approved courses of study in five subjects, and to pass in each of the subjects selected, viz.:

- i, ii. Two languages from the following list: Greek, Latin, French, German, one of which must be Greek or Latin.
- iii. *Either* (a) English Literature ; *or* (b) History (Ancient or Modern).
- iv. *Either* (a) Logic ; *or* (b) Mathematics ; *or* (c) one of the following Natural Sciences : Physics, Chemistry, Geology.
- v. English Language or any subject under i, ii, iii, iv not already selected, provided that no candidate may take (a) both Ancient and Modern History, (b) two Natural Sciences.

The examination in each modern language shall include an oral examination.

Final Course and Examination

11. Every candidate shall be required to attend approved courses of study in three principal subjects and one subsidiary subject, and to pass in each of the subjects

selected. The same subject may not be taken both as a principal and as a subsidiary subject. An essay paper shall be set for all candidates at the Final examination.

12. The course of study in each principal subject shall extend over two academic years, and the course of study in the subsidiary subject shall extend over one academic year.

13. The principal subjects shall be selected from the following list: Greek, Latin, French, German, English Language and Literature, History, Philosophy, Economics, Education, Pure and Applied Mathematics. Every candidate shall be required to take as a principal subject one of the following: Greek, Latin, French, German. The examination in each modern language shall include an oral examination.

14. The subsidiary subjects shall be selected from the following list: English Literature, History, Philosophy, Economics, Education, Pure Mathematics, Applied Mathematics. The course of study in a subsidiary subject may be taken either in the first or second year of the Final course.

15. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in June of that year for examination in such subsidiary subject. Part of the examination in Education, to be defined by Regulation, may also be taken at the end of the first year of the Final course.

Degree of Bachelor of Arts with Honours

1. Candidates for the degree of Bachelor of Arts with Honours shall, except as hereinafter stated, be required to furnish certificates of having attended courses of instruction approved by the University and extending over not less than three academic years in one of the Honours Schools of the University hereafter enumerated.

2. Every candidate for the degree of Bachelor of Arts with Honours shall be required to present himself for examination at the end of the third or fourth academic year from the time when he has entered upon one of the courses of instruction approved by the University for such degree, unless he shall present a medical certificate of illness satisfactory to the Senate.

3. Candidates for the degree of Bachelor of Arts with Honours may present themselves for examination in any of the following Honours Schools on furnishing certificates of having pursued, to the satisfaction of the Senate, the courses required for such Honours Schools in the University, viz. :

Classics

English Language and Literature

Modern Languages and Literatures

History

Philosophy

Economic and Political Science.

4. Candidates who have passed the Final examination for an Ordinary degree of Bachelor of Arts may, with the sanction of the Senate and on furnishing certificates of having attended, during the academic year following such Final examination for the Ordinary degree, the third year's, or, during the two academic years following such Final examination, the second and third years' courses approved by the University for any one of its Honours Schools, present themselves for examination for the degree of Bachelor of Arts with Honours in such School.

5. No candidate for a degree of Bachelor of Arts with Honours shall be admitted more than once to examination in the same Honours School ; but students who have passed the Final examination in any of the Honours Schools may be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University.

Provided that in the said other Honours School selected, candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

6. Names of candidates who have passed the examination for the degree of Bachelor of Arts with Honours shall be published in such form as to distinguish the Honours

School in which severally they may have passed ; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.

Degree of Master of Arts

1. Registered Bachelors of Arts shall be entitled to be admitted to the degree of Master of Arts on payment of the proper fee, when of three years' standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.

2. Bachelors of Arts who have graduated with Honours are not required to present themselves for any further examination for the degree of Master of Arts.

3. Bachelors of Arts who have obtained the Ordinary degree are required to satisfy the Examiners in a further examination on *one* of the following subjects: Languages, English, History, Philosophy, Political Economy. Certificates of attendance are not required.

4. The names of candidates who have passed the further examination for the degree of Master of Arts shall be arranged in alphabetical order without distinction of classes.

Degree of Doctor of Letters

Registered Masters of Arts of the University who shall be deemed by the Council, on a report furnished by the Senate after considering a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning, shall be entitled to be admitted to the degree of Doctor of Letters at the expiration of not less than six years from the date of admission to the Bachelor's degree.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of Faculties, also require candidates to pass such examination as it may from time to time determine.

III. DEGREE IN COMMERCE

(July 3, 1905.)

1. The degree in Commerce shall be that of Bachelor of Commerce (B. Com.).

2. All candidates for the degree of Bachelor of Commerce shall be required to have passed the Matriculation examination, with at least one modern foreign language as one of the subjects, and thereafter to have pursued approved courses of study for not less than three academic years.

3. The complete course of study for the degree of Bachelor of Commerce shall be divided into two parts, called respectively the Intermediate course and the Final course.

4. Every candidate shall be required to pass two examinations, the Intermediate and the Final.

5. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.

6. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee for the degree of Bachelor of Commerce, may determine.

7. All students shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

Intermediate Course and Examination

8. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in five subjects, viz. :

- i. Economics : the outlines of the economic history of England in the Nineteenth Century, and the general elementary principles of Economics.
 - ii. The economic geography of the British Empire.
 - iii. A modern foreign language (French or German).
- 14, v. *Two* of the following :

A second modern foreign language (French or German, whichever of the two has not been offered under iii).

Mathematics.

European History from 1763.

and to pass in each of the subjects offered. The examination in each modern foreign language shall include an oral examination.

Final Course and Examination

9. Every candidate shall be required, except as provided in clause 10, to attend approved courses of study, extending over two years, and to pass an examination in each of the following principal subjects :

- i. Economics : comprising (a) advanced general Economics (b) a special economic subject.
- ii. A modern foreign language (French or German).
- iii. A second modern foreign language (French or German, whichever of the two has not been offered under ii).
- iv. Accountancy.

The examination in each modern foreign language shall include an oral examination. An essay shall also form part of the examination.

10. For the second modern foreign language *or* for Accountancy candidates may substitute *two* of the following, studied each for one year as a subsidiary subject :

- (a) The economic geography of the principal foreign countries.
- (b) Commercial Law.
- (c) Accountancy (unless Accountancy has already been offered as a principal subject).

Candidates may take the course of study in a subsidiary subject in the first year of the Final course, and present themselves at the end of that year for examination in such subject.

IV. DEGREES IN LAW

(March 8, 1905.)

The degrees in Law shall be :

Bachelor of Laws (LL.B.)

Doctor of Laws (LL.D.).

Degree of Bachelor of Laws

1. All candidates for the degree of Bachelor of Laws are required to have matriculated and to have passed the Matriculation examination or to have graduated in this or some other University of the United Kingdom.

2. The examination for the degree of Bachelor of Laws shall be divided into two parts, called respectively the Intermediate and the Final examination.

Intermediate Examination

3. The names of candidates who have passed the Intermediate examination shall be published in two divisions.

4. Candidates before entering for the Intermediate examination are required to furnish certificates of having attended an approved course of study in the University in each subject which they present for examination.

5. Candidates presenting themselves for the Intermediate examination for the degree of Bachelor of Laws are required to satisfy the examiners in :

- i. Roman Law
- ii. The Law and Custom of the English Constitution
- iii. Jurisprudence
- iv. Logic *or* Political Economy *or* Ancient History.

Provided that any candidates who are already graduates of some other University within the United Kingdom, or are graduates in Arts, Science, or Medicine of this University, shall not be required to attend classes or to be examined in Logic or Political Economy or Ancient History.

Final Examination

6. Candidates presenting themselves for the Final examination for the degree of Bachelor of Laws are required to satisfy the examiners in :

- Real and Personal Property
- The Principles of the Law of Contract
- The Principles of the Law of Torts

The Principles of Equity.

One of the following :

Succession

Trusts

Bankruptcy

Crimes.

Candidates for a place in the First division must offer themselves for examination in *one* of the following :

International Law

Constitutional Law

Conflict of Laws.

7. Candidates for the Final examination are required to present certificates of having attended, during two years after passing the Intermediate examination, courses of instruction in the Department of Law of the University for not less than five hours a week in one of such years, and four hours a week in the other of such years, provided that students who have been called to the bar or who have been admitted on the rolls as solicitors, and students who are reading in the chambers of a barrister or who are articled to a solicitor, may be admitted to this examination on presenting certificates of having attended courses in Law in the University for three hours a week during two years after the date of passing the Intermediate examination.

8. Candidates who are already graduates in some other Faculty and desire to proceed to the Final examination after two instead of three years' attendance on classes in the Law department of the University must attend in the first of such years the classes for the Intermediate examination and during the first and second years classes in English Law for three hours a week. Candidates may, however, in place of one or two hours a week in the first year attend one or two additional hours a week in the second year.

9. Candidates who offer themselves for examination in any of the special subjects of International Law, Constitutional Law, Conflict of Laws, are required further to present a certificate of having attended a course in the University in one of such special subjects.

10. Graduates of this or any other University of the United Kingdom in any other Faculty may proceed to the

Final examination after two instead of after three years' study in the Law department of the University, and will be examined in subjects i, ii, and iii only of the Intermediate examination.

11. The names of candidates who have passed the Final examination shall be published in three divisions in alphabetical order.

V. DEGREES IN SCIENCE

(July 3, 1905.)

1. The degrees in Science shall be :—
Bachelor of Science (B.Sc.)
Master of Science (M.Sc.)
Doctor of Science (D.Sc.).

Degree of Bachelor of Science

2. The degree of Bachelor of Science shall be conferred either as an Ordinary degree or as a degree with Honours.

3. All candidates for the degree of Bachelor of Science shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

Ordinary Degree of Bachelor of Science

4. The complete course of study for the Ordinary degree of Bachelor of Science shall be divided into two parts, called respectively the Intermediate course and the Final course.

5. Every candidate shall be required to pass two examinations, the Intermediate and the Final.

6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.

7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee concerned, may determine.

8. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

9. Every candidate who has not passed in French or German at the Matriculation examination must show at the Final or some previous examination during his course that he has a reading acquaintance with French or German.

10. The proficiency of candidates in laboratory work may be determined by inspection of their laboratory note books and the consideration of terminal or sessional reports from their laboratory teachers. Candidates may also be called upon to undergo a special practical examination at the Intermediate and Final stages of the Degree course.

It shall always be in the power of the External Examiner to impose a practical or *viva voce* examination on such occasions as he may think desirable.

Intermediate Course and Examination

11. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in three subjects (one of which must be Mathematics or Physics) selected from the following:

Mathematics

Physics

Chemistry

Biology

Geology,

and to pass in each of the subjects selected.

Candidates who propose to take an Applied Science (see section 16) in the Final course must pass in the subjects of the Intermediate course specified in section 21.

12. Every candidate is further required, at some time during his course, to take an additional subject at the Intermediate standard, selected from the following: Greek, Latin, French, German, English Literature, English Language, Ancient or Modern History, Logic, Economics,

Economic Geography, Mathematics, Physics, Chemistry, Biology, Geology. In the case of candidates taking an Applied Science as a principal subject at the Final course (section 21 below), this list is increased by the addition of Applied Mechanics and General Engineering.

13. A descriptive essay relative to the scientific or technical work of the candidates will be set as part of the Intermediate examination, and will be examined by the teachers of English in co-operation with the Head of the Scientific department concerned, and in the event of a student failing in this portion of the Intermediate examination, he shall be permitted to take it again at the end of any succeeding term.

Final Course and Examination

14. Every candidate will be required to attend approved courses of study either in two principal subjects, or in one principal subject and two subsidiary subjects, provided that the same subject shall not be taken both as a principal and a subsidiary subject. One of the subjects selected must be Mathematics, Physics, Chemistry, or an Applied Science.

In the Final examination there will be included, for translation into English, passages in French and German relating to the principal subject or subjects of a candidate's degree course.

15. The course of study in each principal subject shall extend over at least two years beyond the Intermediate standard, and the course of study in a subsidiary subject shall extend over at least one year beyond the Intermediate standard.

Principal Subjects

16. The principal subjects shall be selected from the following lists:

Pure Sciences:

Mathematics
Physics
Chemistry
Zoology
Botany
Physiology
Geology.

Applied Sciences:

Mechanical Engineering
Civil Engineering
Electrical Engineering
Mining Engineering
Agriculture
Applied Chemistry (Colour Chemistry and
Dyeing)
Applied Chemistry (Chemistry of Leather
Manufacture).

Every candidate taking Physics as a principal subject is required to have passed in Mechanics at the Matriculation examination, or to satisfy the Professor of Physics that he possesses an adequate knowledge of the subject.

In the event of Physiology being chosen as a principal subject, the second principal or the two subsidiary subjects shall be chosen from among the following: Physics, Chemistry, Zoology, Botany. In any case, six months' instruction in Human Anatomy will be required.

Every candidate taking an Applied Science as a principal subject is required to pursue one of the courses specified in section 21.

Subsidiary Subjects

17. The subsidiary subjects shall be selected from the following list:

Pure Mathematics
Applied Mathematics
Physics
Chemistry
Zoology
Botany
Physiology
Geology
Human Anatomy
Bacteriology
Education (including the teaching of
Elementary Science).

Pure and Applied Mathematics cannot be taken together as subsidiary subjects.

18. The following subjects shall rank as subsidiary subjects in connection with courses where Mechanical or

Civil or Electrical or Mining Engineering is taken as a principal subject :

Mechanical Engineering
Civil Engineering
Electrical Engineering
Mining Engineering.

19. The course of study in the subsidiary subjects may be taken either in the first or second year of the Final course.

20. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in the following June for examination in such subsidiary subject. When Education is taken as a subsidiary subject, part of the examination may be taken at the end of each of the two years of the Final course. Candidates who fail to satisfy the examiners in such parts of the Final examination as they have taken at the end of the first year of their Final course shall be required to repeat this part of the examination at a subsequent June examination.

Courses for candidates taking an Applied Science

21. Candidates selecting an Applied Science as a principal subject are required to attend courses of study and to present themselves for examination in definite subjects, as specified below :

Mechanical Engineering :

Intermediate—Mathematics, Physics, and Chemistry ;
additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Mechanical Engineering ;
subsidiary subjects, Mathematics, and either Physics or Civil or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

Civil Engineering :

Intermediate—Mathematics, Physics and Chemistry ;
additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Civil Engineering ; subsidiary subjects, Mathematics, and either Geology or Mechanical or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Geology.

Electrical Engineering :

Intermediate—Mathematics, Physics, and Chemistry ; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Electrical Engineering ; subsidiary subjects, Mathematics, and either Physics or Mechanical or Civil or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

Mining Engineering :

Intermediate—Mathematics, Physics, and Chemistry ; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Mining Engineering ; subsidiary subjects, two of the following : Mathematics, Geology, Mechanical, or Electrical Engineering, but candidates shall produce certificates of having satisfactorily attended prescribed courses of study in each of these four subjects.

Agriculture :

Intermediate—Physics, and two of the following : Chemistry, Biology, Geology ; together with an additional subject at Intermediate standard.

Final—Agriculture, as principal subject, together with one of the pure sciences specified under section 16 above as the second principal subject, or two of the pure sciences specified under section 17 as subsidiary subjects.

Applied Chemistry (Colour Chemistry and Dyeing) :

Intermediate—Mathematics, Physics, and Chemistry ; additional subject at Intermediate standard, General Engineering.

Final—Two principal subjects, viz : Colour Chemistry and Dyeing, and Chemistry.

Candidates presenting Applied Chemistry (Colour Chemistry and Dyeing) may not present this subject until the end of the fourth year of study. Such Candidates may take the examination in Chemistry at the end of the third year.

Applied Chemistry (Chemistry of Leather Manufacture):

Intermediate—Three of the following: Mathematics, Physics, Chemistry, Biology, and an additional subject at Intermediate standard (see section 12).

Final—Two principal subjects, viz: Chemistry of Leather Manufacture, and Chemistry.

Candidates presenting Applied Chemistry (Chemistry of Leather Manufacture) may not present this subject until the end of the fourth year of study. Such candidates may take the Examination in Chemistry at the end of the third year.

Degree of Bachelor of Science with Honours

1. The degree of Bachelor of Science with Honours will be awarded in the following subjects:

Mathematics
Physics
Chemistry
Zoology
Botany
Physiology
Geology
Civil Engineering
Mechanical Engineering
Electrical Engineering
Mining Engineering
Applied Chemistry (Chemistry of Leather Manufacture)
Applied Chemistry (Colour Chemistry and Dyeing)
Agriculture.

2. Candidates will be required to present certificates of attendance upon approved courses of study extending over three or four years, as defined under the regulations for each Honours School. Such certificates of attendance shall only be granted when the candidate has regularly attended to the work of the classes and has acquitted himself satisfactorily at the class examinations.

3. Candidates are required to pass the Intermediate examination for the Ordinary degree, including the additional subject, but attendance upon University classes recognized for this examination is not compulsory, and it is not obligatory to pass simultaneously in all the subjects of the examination.

Candidates will be excused the Intermediate examination in any subject which they are presenting at a more advanced standard.

4. Candidates are required to attend the recognized classes, and to pass in the two principal (or one principal and two subsidiary) subjects of the Final examination for the Ordinary degree (as specified in the regulations for each Honours School), but it is not obligatory to pass simultaneously in all the subjects of the examination.

5. A special examination in connection with each Honours School will be held at the end of the course of study. Candidates who have prosecuted research may be excused part of this examination.

6. Candidates who have passed the examination for the Ordinary degree of Bachelor of Science may (during the succeeding year or the two years immediately succeeding) proceed with the course of study in an Honours School.

7. No candidate for a degree of Bachelor of Science with Honours shall be admitted more than once to examination in the same Honours School, except under special conditions approved by the Senate; but the course shall in no case exceed four years, except in cases of illness, when a medical certificate satisfactory to the Senate will be required.

8. Students who have passed the Final examination in any of the Honours Schools shall be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University, provided that in the said other Honours School selected, candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

9. Candidates who have passed the Second M.B. examination may, with the sanction of the Senate, and on furnishing certificates of having during the academical year following such Second M.B. examination attended the third year's, or during the two academical years following such Second M.B. examination of having attended the second and third year's course approved by the University for one of its Honours Schools in Science, present themselves for examination for a B.Sc. degree with Honours in such school.

10. Names of candidates who have passed the examination for the degree of Bachelor with Honours will be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.

Degree of Master of Science

1. The degree of Master of Science is conferred, on payment of the proper fee, upon registered Bachelors of Science, when of three years' standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.

2. Bachelors of Science who have graduated with Honours are not required to present themselves for any further examination for the degree of Master of Science.

3. Bachelors of Science who have obtained the Ordinary degree are required to satisfy the Examiners in a further examination in *one* of the following subjects: Mathematics, Physics, Chemistry, Zoology, Botany, Physiology, Geology, Mechanical, Civil, Electrical, Mining Engineering, Applied Chemistry (Colour Chemistry and Dyeing), Applied Chemistry (Chemistry of Leather Manufacture), and Agriculture. Certificates of attendance are not required.

4. The names of candidates who have passed the further examination for the degree of Master of Science are arranged in alphabetical order without distinction of classes.

5. Candidates who have prosecuted research, and who give satisfactory evidence thereof by the presentation of a thesis, may be excused part of the examination.

Degree of Doctor of Science

1. The degree of Doctor of Science is conferred by the University upon registered Masters of Science of the University who shall be deemed by the Council, on a report furnished by the Senate after considering a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of the Faculties, also require candidates to pass such an examination as it may from time to time determine.

2. A Master of Science of the University may make application for the degree of Doctor of Science in the sixth, or any subsequent year from the date of his admission to the Bachelor's degree.

3. Such application shall be made in writing to the Registrar and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any memoir, whether in type or in manuscript, which the applicant may desire to submit in support of the application.

4. If the application be approved by the Council, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelor's degree.

VI. DEGREES IN MEDICINE AND SURGERY

(July 3, 1905.)

The degrees in Medicine and Surgery shall be :

Bachelor of Medicine and Bachelor of Surgery
(M.B. and Ch.B.)

Doctor of Medicine (M.D.)

Master of Surgery (Ch.M.).

Degrees of Bachelor of Medicine and Bachelor of Surgery

1. Candidates for the degrees of Bachelor of Medicine and of Surgery are required to present certificates showing that they will have attained the age of twenty-one years on the day of graduation, and that they have attended courses

of instruction approved by the University extending over not less than five years, two of such years at least having been passed in the University subsequently to the date of passing the First examination.

2. Candidates for the degrees of Bachelor of Medicine and of Surgery are required to satisfy the Examiners in the several subjects of the following examinations, entitled respectively:

The Matriculation examination, or such other examination as may have been recognised by the University in its stead; the First examination; the Second examination; the Final examination.

First Examination

3. The First examination shall consist of two parts :

PART I. Physics

Chemistry.

PART II. Biology.

Candidates will be allowed to pass the two parts separately.

4. Candidates, before presenting themselves for the First examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the Matriculation examination.

5. Candidates who have passed the Intermediate examination for the degree of Bachelor of Science in Chemistry, Physics, and Biology, will, on payment of the required additional fee, be regarded as having passed the First examination for the degrees of Bachelor of Medicine and Bachelor of Surgery.

6. The names of candidates who have satisfied the Examiners in either part of the First examination shall be published in alphabetical order.

Second Examination

7. The Second examination shall consist of two parts :

PART I. Anatomy

Physiology.

PART II. Materia Medica

Pharmacy.

Candidates will be allowed to pass the two parts separately.

8. Candidates before presenting themselves for the Second examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the First examination.

9. The names of candidates who have satisfied the Examiners in either part of the Second examination shall be published in alphabetical order.

Final Examination

10. The subjects of the Final examination are as follows :

- i. Pharmacology and Therapeutics
- ii. Pathology and Bacteriology
- iii. Forensic Medicine and Toxicology and Public Health
- iv. Obstetrics and Gynæcology
- v. Surgery : Systematic, Clinical and Practical
- vi. Medicine : Systematic and Clinical, including Mental Diseases and Diseases of Children.

Candidates may either present themselves in all the six subjects of examination on the same occasion, or may pass the examination in two parts, the first part consisting of two or three of the Subjects i, ii, and iii; the second part consisting of the remaining subjects.

11. Candidates who fail to satisfy the Examiners in the first part must either present themselves again in the subjects as selected, or in all the three subjects of the first part, or in all the six subjects of examination.

12. Candidates, before presenting themselves for the first part or the second part of the Final examination, are required to have passed the Second examination, and to furnish certificates of having attended courses of instruction, in accordance with the Regulations of the University.

13. Candidates for the first part of the examination must have completed the eleventh term of medical study in accordance with the Regulations of the University.

Candidates for the second part of the examination, or for the whole examination, must have completed the fifth year of medical study in accordance with the Regulations of the University.

14. The names of candidates who have satisfied the Examiners in the first part of the Final examination shall be published in alphabetical order.

15. The names of candidates who have satisfied the Examiners in all the subjects of the Final examination, and are recommended for degrees, shall be published as follows :

1. Those awarded First Class Honours
2. Those awarded Second Class Honours
3. Those who have satisfied the Examiners.

The names shall be in alphabetical order in each case

Degree of Doctor of Medicine

1. No candidate shall be admitted to the degree of Doctor of Medicine unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees.

2. Candidates for the degree of Doctor of Medicine are required to present a dissertation, and, if the dissertation be accepted, to pass an examination. The dissertation, of which the subject must previously have received the approval of the Board of the Faculty of Medicine, must embody the results of personal observations or original research, either in some department of medicine or of some science directly related to medicine, provided always that original work, published in scientific journals, or in the Proceedings of learned societies, or separately, shall be admissible in lieu of or in addition to a dissertation specially written for the degree. Candidates will be required to write a short extempore essay on some topic connected with medicine, and to answer questions on the history of medicine. They will also be examined orally on the dissertation or other work submitted. Any candidate may be exempted from a part or the whole of the examination if the Board of the Faculty so decide. No candidate will be admitted to the degree unless his application, after report from the Board of the Faculty of Medicine, shall have been accepted by the Senate.

3. The names of candidates who have been approved for the degree of Doctor of Medicine shall be published in alphabetical order.

Degree of Master of Surgery

1. No candidate shall be admitted to the degree of Master of Surgery unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees.

2. Every candidate, before presenting himself for the examination for the degree of Master of Surgery, is required to have graduated as Bachelor of Medicine and Bachelor of Surgery, and to furnish certificates of attendance in accordance with the Regulations of the University.

3. The subjects of examination are as follows :

Surgical Anatomy

Surgery

Operative Surgery

Clinical Surgery

Ophthalmology

Pathology and Bacteriology.

4. The names of candidates who have satisfied the Examiners shall be published in alphabetical order.

VII. DIPLOMAS

(March 8, 1905)

Diplomas in the following subjects shall be granted by the University to students who pursue prescribed courses of study and pass prescribed examinations : Coal Mining ; Commerce ; Dyeing ; Education ; Engineering, (1) Civil, (2) Electrical, (3) Mechanical ; Leather Manufacture ; Public Health ; Textile Industries, (1) Textile Design and Cloth Finishing, (2) Woollen and Worsted Spinning, (3) Textile Manufacturing.

The Council is empowered to make from time to time Regulations under which such diplomas shall be awarded.

The award of diplomas under the provisions of this Ordinance is delegated to the Senate

VIII. RECOGNITION OF VICTORIA UNIVERSITY COURSES AND EXAMINATIONS

(March 8, 1905)

(a) The Senate, or any Committee of the Senate appointed for that purpose, is hereby empowered to recognise courses of study pursued and examinations passed by students of the Yorkshire College or of the University of Leeds in the Victoria University or the Victoria University of Manchester prior to January 1, 1905, as equivalent to corresponding courses and examinations in the University of Leeds.

(b) The Senate, or any Committee of the Senate appointed for that purpose, is hereby also empowered to make such concessions in exemption from examinations and from attendance on courses of study, as may be required to place a past or present student of the University or of the Yorkshire College, who has been admitted thereto before 1st October, 1904, in as favourable a position in the above respects as if he had become or had continued to be a student of the Victoria University or of the Victoria University of Manchester.

(c) A student of the Yorkshire College, who before December 31, 1904, has passed a Final examination of the Victoria University or of the Victoria University of Manchester, for the Bachelor's degree in the Faculty of Arts, Science, Law, or Medicine shall be entitled to be admitted to the Bachelor's degree of the University of Leeds; and if he has been admitted to the Bachelor's degree of the Victoria University or the Victoria University of Manchester he shall be entitled to proceed to the higher degrees of the University of Leeds on the same conditions as if he had graduated in this University.

IX. RECOGNITION OF COURSES AND EXAMINATIONS OF OTHER RESIDENTIAL UNIVERSITIES

(March 8, 1905)

(a) Subject to the provisions of the Charter and Statutes, the Senate, or any Committee of the Senate appointed for that purpose, is hereby empowered to allow members of

any University, in which residence is required as a condition of graduation, or members of any University who have attended courses of study at some College or other place of learning which is affiliated or associated with such University, after Matriculation at the University of Leeds, and presentation of certificates of conduct satisfactory to the Senate or Committee, to count such periods of residence passed by them at such other University as equivalent to such periods of residence at the University of Leeds as the Senate or Committee may determine, provided that no degree of this University shall be conferred on any such person unless he shall have pursued an approved course of study in this University extending over at least two years, and shall have passed the Final examination for such degree.

(b) Undergraduates of other Universities who have been admitted, under this Ordinance, as members of this University may be allowed to count examinations passed by them at such other Universities as equivalent to such examinations or portions of examinations other than the Final examination of this University as the Senate, or any Committee of the Senate appointed for that purpose, may from time to time determine.

X. FEES

(March 8, 1905)

The Council is hereby empowered, after giving the Senate an opportunity of reporting thereon, to appoint such Registration, Examination, Class, Laboratory, and other fees to be paid by students and others as the Council may from time to time determine, and to increase, reduce, or abolish the same.

XI. REGULATIONS FOR EXAMINATIONS

(March 8, 1905)

Subject to the provisions of the Charter, Statutes, and Ordinances of the University, the Council is hereby empowered to adopt regulations, or to delegate to the Senate the making of regulations, as to the subjects, times, modes, and standards of the examinations.

XII. ADMISSION TO EXAMINATIONS*(March 8, 1905)*

Before admission to any examination candidates must pay the examination fee. The admission of all students to the examinations of the University shall be subject to the approval of the Vice-Chancellor.

XIII. EXTERNAL EXAMINERS*(March 8, 1905)*

The Council is hereby empowered to appoint, on the recommendation of the Senate, such External Examiners on such conditions as to tenure of office, remuneration, and otherwise as it may from time to time determine.

XIV. PRIZES*(March 8, 1905)*

The Council is hereby empowered, upon report from the Senate, to institute such class and other prizes as it may from time to time determine, and to vary their value and to abolish the same.

XV. EXAMINATION OF SCHOOLS, AND EXTENSION LECTURES*(March 8, 1905)*

The Senate is hereby empowered to examine and inspect schools and other educational institutions, and to provide lectures and instruction for persons not members of the University under such Regulations as the Council may from time to time adopt. The Senate is empowered to award certificates in connection with lectures and instruction for persons not members of the University.

XVI. TENURE OF OFFICE OF DEANS OF FACULTIES*(March 8, 1905)*

Deans of Faculties shall be elected for periods not exceeding two years at a time.

**XVII. TENURE OF OFFICE OF ADDITIONAL
MEMBERS OF THE SENATE.**

(March 8, 1905)

Such additional Members of the Senate of the University as may be appointed by the Court under Statute V. shall be appointed for one year only, but shall be re-eligible at the end of each year.

REGULATIONS**AS TO ACADEMIC DRESS**

All Hoods to be of a Green shade, combined with Black, White, Scarlet, or with one another, to produce the variations required for the several Degrees.

For the B.A. Degree, a self-coloured Hood of Dark Green shade.

For the B.Sc. Degree, a self-coloured Hood of Middle Green shade.

For the LL.B. Degree, a self-coloured Hood of Light Green shade.

For the M.B. Degree, Hood of Dark Green, lined with Light Green.

All Bachelors' Hoods to be lined.

For the M.A. Degree, Dark Green Hood, with White Lining.

For the M.Sc. Degree, Middle Green Hood, with White Lining.

For the M.Ch. Degree, Dark Green Hood, edged with Light Green, and lined with White.

Bachelors' and Masters' Hoods to be of the single or Oxford pattern.

Doctors' Gowns, Hoods, and Caps.—The Doctor's Gown to be of Scarlet, with facings and sleeve linings of the shade of Green distinctive of his faculty. The Hood to be of Scarlet, lined with the distinctive shade or shades of Green. The Full Dress Cap to be of the usual pattern, with a Gold Cord, and a lining of the shade of Green distinctive of the faculty.

1925-26 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1926-27 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1927-28 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1928-29 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1929-30 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1930-31 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1931-32 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1932-33 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1933-34 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

1934-35 1st Year - 1st Term - 1st Class - 1st Division - 1st Position

THE UNIVERSITY OF LEEDS

Visitor

His Majesty THE KING

Chancellor

The Most Honourable THE MARQUIS OF RIPON, K.G., LL.D.

Pro-Chancellor

ARTHUR GREENHOW LUPTON

Vice-Chancellor

NATHAN BODINGTON, M.A., Litt.D.,
Late and Hon. Fellow of Lincoln College, Oxford

Pro-Vice-Chancellor

Professor ARTHUR SMITHELLS, B.Sc., F.R.S.

Treasurer

Registrar

WILLIAM F. HUSBAND, LL.B.

THE COURT

The CHANCELLOR
The PRO-CHANCELLOR
The VICE-CHANCELLOR
The TREASURER

Members for Life

His Grace THE DUKE OF DEVONSHIRE, K.G., LL.D.
The Most Hon. THE MARQUIS OF RIPON, K.G., LL.D., Studley
Royal
The Right Hon. THE EARL OF ROSSE, LL.D., D.Sc., F.R.S.,
Womersley
The Right Hon. THE EARL OF HAREWOOD, LL.D., Harewood
The Right Hon. THE VISCOUNT MOUNTGARRET, Pateley Bridge
The Right Rev. THE LORD BISHOP OF GLOUCESTER
The Right Hon. LORD HERRIES, LL.D., Everingham
The Right Hon. LORD GRIMTHORPE
The Right Hon. LORD MASHAM, Swinton, Masham
The Right Hon. LORD KELVIN, O.M., D.Sc., F.R.S., London
The Right Hon. LORD ALLERTON, LL.D., F.R.S., Leeds
The Hon. JOHN HENRY SAVILE, Billericay, Essex
The Hon. RICHARD CLERE PARSONS, M.A., London
The Hon. Mrs. WHITTUCK, London
The Right Hon. ARTHUR HERBERT DYKE ACLAND, M.A., LL.D.,
Scarborough
The Right Hon. Sir SAVILE BRINTON CROSSLEY, Bart., Somerleyton,
Lowestoft
The Hon. W. GERVASE BECKETT, Leeds
The Hon. RUPERT EVELYN BECKETT, Leeds
The Hon. FRANCIS STANLEY JACKSON, B.A., Leeds
Sir JOHN WILLIAM RAMSDEN, Bart., Byram
Sir JAMES KITSON, Bart., D.Sc., M.P., Gledhow, Leeds
Sir FRANCIS SHARP POWELL, Bart., M.A., LL.D., M.P., Bradford
Sir JOHN NICHOLSON BARRAN, Bart., B.A., Leeds
Sir THOMAS BROOKE, Bart., Huddersfield
Sir ARTHUR TREDGOLD LAWSON, Bart., Leeds
Sir FREDERICK WILLIAM FISON, Bart., M.A., M.P., London
WILLIAM ACKROYD, Leeds
Prof. THOMAS CLIFFORD ALLBUTT, M.D., F.R.S., Cambridge
GEORGE APPELYARD, Southport
THOMAS WADE APPELYARD, Leeds
JOHN W. ARCHER, Bournemouth
RICHARD ARMITAGE, Lutterworth
ROBERT ARMITAGE, Farnley, Leeds
EDWARD BAINES, Windermere
TALBOT BAINES, B.A., Ham, Surrey

FREDERICK HORATIO BARR, Leeds
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| Professor J. H. CLAPHAM, M.A. | 1902 |
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| Professor B. M. CONNAL, M.A. | 1904 |
| Professor P. H. M. DU GILLON, O.d'A. | 1897 |
| Professor JOHN GOODMAN, M.Sc., M.Inst.C.E., M.I.Mech.E. | 1890 |
| Professor ARTHUR J. GRANT, M.A. | 1897 |
| Professor ARTHUR G. GREEN, M.Sc., F.I.C. | 1903 |
| Professor T. WARDROP GRIFFITH, M.D., C.M. | 1887 |
| Professor A. S. GRÜNBAUM, M.A., M.D., F.R.C.P. | 1904 |
| Professor PERCY F. KENDALL, M.Sc., F.G.S. | 1904 |
| Professor HARRY LITTLEWOOD, M.Sc., F.R.C.S. | 1905 |
| Professor LOUIS C. MIALI, D.Sc., F.R.S. | 1876 |
| Professor WALTER R. PHILLIPS, LL.M. | 1899 |
| Professor HENRY R. PROCTER, M.Sc., F.I.C. | 1896 |
| Professor W. RHYS ROBERTS, M.A., Litt.D. | 1904 |
| Professor LEONARD JAMES ROGERS, M.A., Mus.B. | 1888 |
| Professor ALBERT W. SCHÜDDEKOPF, Ph.D. | 1897 |
| Professor ROBERT S. SETON, B.Sc. | 1900 |
| Professor ARTHUR SMITHELLS, B.Sc., F.R.S. | 1885 |
| Professor WILLIAM STROUD, M.A., D.Sc. | 1885 |
| Professor GEORGE R. THOMPSON, B.Sc. | 1901 |
| Professor CHARLES E. VAUGHAN, M.A. | 1904 |
| Professor JAMES WELTON, M.A. | 1899 |
| Professor CHARLES J. WRIGHT, M.Sc., M.R.C.S. | 1888 |
| C. M. GILLESPIE, M.A. (<i>Annual Appointment</i>) | 1905 |

FACULTIES

Faculty of Arts

Dean of the Faculty

Professor GRANT

The VICE-CHANCELLOR

Professor PAUL BARBIER *fls.*, M.A., B-ès-L.

Professor J. H. CLAPHAM, M.A.

Professor B. M. CONNAL, M.A.

C. M. GILLESPIE, M.A.

Professor ARTHUR J. GRANT, M.A.

FREDERICK W. MOORMAN, B.A., Ph.D.

Professor WALTER R. PHILLIPS, LL.M.

Professor W. RHYS ROBERTS, M.A., Litt.D.

Miss H. ROBERTSON, B.A.

Professor ALBERT W. SCHÜDDKOPF, Ph.D.

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Professor JAMES WELTON, M.A.

Faculty of Science

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Professor SMITHELLS

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HARRY M. DAWSON, B.Sc., Ph.D.

ARTHUR R. DWERRYHOUSE, M.Sc., F.G.S.

Professor PERCY F. KENDALL, M.Sc., F.G.S.

Professor LOUIS C. MIALL, D.Sc., F.R.S.

Professor LEONARD JAMES ROGERS, M.A., Mus.B.

W. G. SMITH, B.Sc., Ph.D.

Professor ARTHUR SMITHELLS, B.Sc., F.R.S.

Professor WILLIAM STROUD, M.A., D.Sc.

T. H. TAYLOR, M.A.

FREDERICK B. WATSON, M.A., M.Sc.

Faculty of Medicine

Dean of the Faculty

Professor BIRCH

The VICE-CHANCELLOR

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Professor J. SPOTTISWOODE CAMERON, M.D., B.Sc.
 Professor HENRY JOHNSTONE CAMPBELL, M.D., F.R.C.P.,
 M.R.C.S.
 C. M. CHADWICK, M.A., M.D., F.R.C.P.
 Professor T. WARDROP GRIFFITH, M.D., C.M.
 Professor A. S. GRÜNBAUM, M.A., M.D., F.R.C.P.
 G. CONSTABLE HAYES, F.R.C.S., L.R.C.P.
 J. B. HELLIER, M.D., M.R.C.S.
 JOHN KAY JAMIESON, M.B., C.M.
 R. LAWFORD KNAGGS, M.A., M.D., M.C., F.R.C.S.
 W. BEVAN LEWIS, M.Sc., L.R.C.P., M.R.C.S.
 Professor HARRY LITTLEWOOD, M.Sc., F.R.C.S.
 B. G. A. MOYNIHAN, M.S., F.R.C.S.
 A. E. PEARSON, L.R.C.P.Ed., M.R.C.S.
 WALTER THOMPSON, F.R.C.S.
 EDMUND F. TREVELYAN, M.D.
 H. SECKER WALKER, M.Sc., F.R.C.S.
 EDWARD WARD, M.A., M.B., B.C.
 A. L. WHITEHEAD, M.B., B.S.
 Professor CHARLES J. WRIGHT, M.Sc., M.R.C.S.

Faculty of Technology

Dean of the Faculty

Professor GOODMAN

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 Professor ROBERTS BEAUMONT, M.Sc., M.I.Mech.E.
 CHARLES CROWTHER, M.A., Ph.D.
 Professor JOHN GOODMAN, M.Sc., M.Inst.C.E., M.I.Mech.E.
 Professor ARTHUR G. GREEN, M.Sc., F.I.C.
 THOMAS HOLLIS
 GEORGE D. A. PARR, M.Sc., M.I.E.E., A.M.I.Mech.E.
 ARTHUR G. PERKIN, F.R.S., F.I.C.
 Professor HENRY R. PROCTER, M.Sc., F.I.C.
 Professor ROBERT S. SETON, B.Sc.
 Professor GEORGE R. THOMPSON, B.Sc.

BOARDS OF FACULTIES

The Board of Arts

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 Professor ARTHUR J. GRANT, *Chairman*
 Dr. F. W. MOORMAN
 Professor WALTER R. PHILLIPS

Professor W. RHYS ROBERTS
 Miss H. ROBERTSON
 Professor LEONARD J. ROGERS
 Professor ALBERT W. SCHÜDDEKOPF
 Professor C. E. VAUGHAN
 Professor JAMES WELTON

The Board of Medicine

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 Professor H. JOHNSTONE CAMPBELL
 Professor JULIUS B. COHEN
 Professor T. WARDROP GRIFFITH
 Professor A. S. GRÜNBAUM, *Deputy-Chairman*
 Dr. J. B. HELLIER
 Mr. W. BEVAN LEWIS
 Professor H. LITTLEWOOD
 Professor L. C. MIALI
 Professor ARTHUR SMITHELLS
 Professor WILLIAM STROUD
 Dr. E. F. TREVELYAN
 Mr. H. SECKER WALKER
 Mr. EDWARD WARD
 Professor CHARLES J. WRIGHT

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 Professor L. C. MIALI
 Mr. G. D. A. PARR
 Professor HENRY R. PROCTER
 Professor LEONARD J. ROGERS
 Professor ROBERT S. SETON
 Dr. WILLIAM G. SMITH
 Professor ARTHUR SMITHELLS, *Chairman*
 Professor WILLIAM STROUD
 Professor GEORGE R. THOMPSON

CONVOCATION¹

The CHANCELLOR
 The VICE-CHANCELLOR
 The PRO-VICE-CHANCELLOR
 The MEMBERS OF THE SENATE
 The LECTURERS OF THE UNIVERSITY
 The REGISTERED GRADUATES OF THE UNIVERSITY

¹ The Register of Convocation is not yet complete.

REPRESENTATIVES OF THE UNIVERSITY ON COMMITTEES AND OTHER INSTITUTIONS

A. Joint Board for regulating the Matriculation Examination

| | |
|-----------------------|---------------------|
| The VICE-CHANCELLOR | Appointment Expires |
| Professor CONNAL | Dec. 31, 1905 |
| Professor MIALI | " |
| Dr. MOORMAN | " |
| Professor SCHÜDDEKOPF | " |

B. Court of the University of Sheffield

(Appointed by the Chancellor.)

| | |
|---------------------|----------------|
| The VICE-CHANCELLOR | Sept. 30, 1906 |
|---------------------|----------------|

C. The General Medical Council

| | |
|------------------------------|---------------|
| ¹ Professor BARRS | Oct. 19, 1907 |
|------------------------------|---------------|

D. Education Committees

| | | |
|---|--|---------------|
| West Riding - | The PRO-CHANCELLOR | March, 1906 |
| North Riding - | The VICE-CHANCELLOR | March 8, 1907 |
| East Riding - | Professor MIALI | |
| " | Professor WELTON | |
| Yorkshire Council for Agricultural Education | The Right Hon. A. H. D. ACLAND | |
| " | J. A. BROOKE | |
| " | The PRO-CHANCELLOR | |
| " | EDWIN WOODHOUSE | |
| City of York - | Professor CLAPHAM | Nov. 9, 1905 |
| Borough of Doncaster | J. A. CLAXTON, Headmaster of the Doncaster Grammar School | Nov. 9, 1905 |
| " Harrogate | Dr. MOORMAN | |

E. East, North, and West Riding Joint Examining Board

| | |
|---------------------|---------------|
| The VICE-CHANCELLOR | July 19, 1906 |
| Professor SMITHELLS | " |

F. Affiliated Institutions

| | | |
|--|------------------------|---------------|
| College of the Resurrection, Mirfield | Professor RHYS ROBERTS | Jan. 11, 1906 |
|--|------------------------|---------------|

G. Schools, etc.

| | | |
|-----------------------------|--|--------------------|
| Akroyd Foundation - | { ³ JOHN RAWLINSON FORD ³ The VICE-CHANCELLOR | July 19, 1910 " |
| Almondbury Grammar School - | ³ C. L. BROOK | Feb. 15, 1910 |
| Barnsley Grammar School | ³ G. BLAKE WALKER | Nov. 18, 1908 |

¹ Elected for 3 years. ² Elected for 4 years. ³ Elected for 5 years.

| | | |
|--|--|----------------|
| Bentham—Collingwood and Baynes Foundation | ² A. O. ALLEN | Nov. 18, 1908 |
| Beverley Grammar School | ³ A. W. PRIESTLEY, M.A., B.Sc., B.C.L. | Feb. 15, 1910 |
| Bishopside School (Ripon) | ² Dr. FRANCIS COLLINS | Nov. 18, 1907 |
| Bradford Girls' Grammar School | ² Miss H. ROBERTSON | Feb. 15, 1909 |
| Bridlington Grammar School | ³ C. G. WHEELHOUSE, LL.D., D.Sc., F.R.C.S. | July 16, 1907 |
| Coxwold Charity | ¹ H. M. DAWSON | July 19, 1908 |
| Dewsbury—Endowed Schools | ³ Professor CLAPHAM | Nov. 19, 1907 |
| Doncaster Grammar School | ¹ C. B. COOKE YARBOROUGH | July 19, 1908 |
| Drax Free School | ³ JOHN TAYLOR | July 15, 1908 |
| Giggleswick Grammar School | ³ Professor GRANT | March 18, 1908 |
| Hipperholme Grammar School | ³ W. H. AYKROYD | Feb. 18, 1908 |
| Ilkley Grammar School | ³ Professor PROCTER | Nov. 18, 1908 |
| Keighley—Drake and Tonson's Charity | ² C. M. GILLESPIE, M.A. | July 16, 1906 |
| Knaresborough Grammar School | ¹ J. A. EDDISON | Nov. 19, 1905 |
| Leeds Grammar School | ³ The VICE-CHANCELLOR | May 4, 1908 |
| Malton (Old) Grammar School | ¹ HUGH W. PEARSON | June 15, 1907 |
| Normanton Grammar School | ³ Professor SMITHELLS | June 18, 1908 |
| Northallerton Grammar School | ¹ WILLIAM BROWN | July 19, 1908 |
| Pickering Grammar School | ¹ Rt. Hon. A. H. DYKE ACLAND | Sept. 17, 1905 |
| Pontefract Grammar School | ³ Professor GRANT | March 19, 1907 |
| Sedburgh Grammar School | ³ Professor VAUGHAN | Feb. 15, 1910 |
| Skipton—Ermysted's Grammar School | ⁴ Professor PHILLIPS | Nov. 18, 1905 |
| Skipton Girls' Middle School | ³ Professor PHILLIPS | June 15, 1909 |
| Slaitwaite Grammar School | ¹ J. A. BROOKE, M.A. | June 15, 1907 |
| Sowerby-in-Halifax— Bairstow's Endowed School | ¹ J. A. BROOKE, M.A. | Feb. 15, 1908 |
| Tadcaster—Oglethorpe's Endowed School | ³ Professor ROGERS | Nov. 18, 1908 |
| Thornton-in-Bradford— Endowed Schools | ³ Dr. MOORMAN | Nov. 18, 1908 |
| Wakefield Grammar School | ³ Professor MIALl | Sept. 18, 1906 |
| York—St. Peter's School | ³ Rev. J. M. MARSHALL | Feb. 10, 1909 |

¹ Elected for 3 years.² Elected for 4 years.³ Elected for 5 years.⁴ Elected for 2 years.

PROFESSORS, LECTURERS, Etc.

FACULTY OF ARTS

Dean of the Faculty

PROFESSOR GRANT

- Classics** . . . *Professors*: W. RHYS ROBERTS, M.A.,
Litt.D., *late Fellow of King's College,*
Cambridge.
B. M. CONNAL, M.A., *Corpus Christi*
College, Oxford.
Assistant Lecturer: L. H. G. GREENWOOD,
B.A., *King's College, Cambridge.*
- English Language
and Literature** *Professor*: CHARLES E. VAUGHAN, M.A.,
Balliol College, Oxford.
Assistant Professor: FREDERIC W. MOOR-
MAN, B.A., *London, Ph.D., Strassburg.*
- French Language
and Romance
Philology** . . . *Professor*: PAUL BARBIER *fils*, M.A.,
London, B-ès-L., Paris.
Assistant Lecturer: RENÉ LECLÈRE,
L-ès-L., Caen.
- French Literature** *Professors*: P. H. M. DU GILLON, *Officier*
d'Académie; PAUL BARBIER *fils*,
M.A., *London, B-ès-L., Paris.*
- German Language
and Literature** *Professor*: ALBERT W. SCHÜDDEKOPF,
Ph.D., *Göttingen.*
Assistant Lecturer: CHARLES E. GOUGH,
University of Basle.
- History** . . . *Professor*: ARTHUR J. GRANT, M.A.,
King's College, Cambridge.
Assistant Lecturer: G. M. YOUNG, B.A.,
Balliol College, Oxford.
- Philosophy** . . . *Lecturer*: C. M. GILLESPIE, M.A., *Trinity*
College, Oxford.
- Economics** . . . *Professor*: J. H. CLAPHAM, M.A., *late*
Fellow of King's College, Cambridge.
Lecturer on Accountancy: W. H. SHAW, A.C.A.
- Education** . . . *Professor of Education and Master of Method*:
JAMES WELTON, M.A., *Gonville and*
Catus College, Cambridge.

- Education** . . . *Mistress of Method*: Miss HANNAH ROBERTSON, B.A., *London*.
Assistant Lecturer: W. P. WELPTON, B.Sc., *London*.
Assistant Mistress of Method:
 Miss E. L. MELVILLE, M.A., *Victoria*.
Teacher of Music, Reading and Elocution:
 T. J. HOGGETT, Mus.B., *Durham*.
- Law** : . . . *Professor*: WALTER R. PHILLIPS, LL.M.,
Trinity Hall, Cambridge.
Lecturer:
Lecturer in Law at Hull:
 WILLIAM H. OWEN, LL.B., *London*.

FACULTY OF SCIENCE

Dean of the Faculty

PROFESSOR SMITHELLS

- Mathematics** . . . *Professor*: LEONARD J. ROGERS, M.A.,
 Mus.B., *Balliol College, Oxford*.
Assistant Lecturer:
 FREDERICK B. WATSON, B.A.,
Cambridge, M.A., M.Sc., Durham.
- Physics** . . . *Cavendish Professor*: WILLIAM STROUD,
 M.A., D.Sc., *Balliol College, Oxford*.
Assistant Lecturer and Demonstrator:
 A. O. ALLEN, B.A., B.Sc., *London*.
Assistant Demonstrators:
 S. A. SHORTER, B.Sc., *Victoria and Leeds*.
 H. R. NETTLETON, B.Sc., *London*.
- Chemistry** . . . *Professor*: ARTHUR SMITHELLS, B.Sc.,
London and Victoria, F.R.S.
Lecturer in Physical Chemistry: HARRY M.
 DAWSON, B.Sc., *London and Leeds*,
 Ph.D., *Giessen*.
Assistant Lecturers and Demonstrators:
 W. LOWSON, B.Sc., *London and Leeds*,
 F.I.C.
 C. E. WHITELEY, M.Sc., *Victoria and Leeds*.
Demonstrator: W. H. PERKINS, B.Sc.,
Victoria.

**Organic
Chemistry**

Professor: JULIUS B. COHEN, B.Sc.,
Victoria, Ph.D., Munich.

Biology

Professor: L. C. MIALL, D.Sc., Leeds, F.R.S.
Assistant Lecturer in Botany: WILLIAM
G. SMITH, B.Sc., *St. Andrews, Ph.D.,*
Munich.

Assistant Lecturer and Demonstrator in Zoology:
T. H. TAYLOR, M.A., *Royal University*
of Ireland.

Assistant Lecturer and Demonstrator in Botany:
NORMAN WALKER.

Junior Demonstrator in Biology:

E. E. UNWIN, B.Sc., *Victoria and Leeds.*

Assistant and Keeper of the Insect Collections:
MISS SIMPSON.

Physiology

Professor: DE BURGH BIRCH, M.D., C.M.,
Edinburgh, F.R.S.E.

Demonstrator: R. VEITCH CLARK, M.A.,
B.Sc., M.B., Ch.B., *Edinburgh.*

Geology

Professor: PERCY F. KENDALL, M.Sc.,
Leeds, F.G.S.

Assistant Lecturer and Demonstrator:

A. R. DWERRYHOUSE, M.Sc., *Victoria*
and Leeds, F.G.S.

FACULTY OF TECHNOLOGY**Dean of the Faculty**

Professor GOODMAN

**Civil and Mechanical
Engineering**

Professor: JOHN GOODMAN, M.Sc.
Leeds, M.Inst.C.E., M.I.Mech.E.

Lecturer in Civil Engineering:

JAMES GILCHRIST, B.Sc.,
Edinburgh.

Assistant Lecturer and Demonstrator:

D. R. MACLACHLAN, B.Sc. *Glasgow.*

Demonstrators: HENRY S. MYERS, M.I.
Mech.E.

R. HOWARD DUNCAN, A.R.C.Sc.

- Electrical Engineering** . *Lecturer*: G. D. A. PARR, M.Sc., Leeds, M.I.E.E., A.M.I.Mech.E.
- Mining** . . . *Professor*: GEORGE R. THOMPSON, B.Sc., London.
Assistant: HERBERT PERKIN.
- Textile Industries** . *Professor*: ROBERTS BEAUMONT, M.Sc., Leeds, M.I.Mech.E.
Assistant Lecturer and Demonstrator: THOMAS HOLLIS.
Assistant: ALEXANDER YEWDALL.
Demonstrator in Pattern Analysis and Assistant Designer for Woollens and Worsted Fabrics: GEORGE WHOWELL.
Museum Assistant and Assistant Designer for Figured Fabrics: MISS BENTON.
Art Teacher: WILFRID FARLEY.
- Dyeing and Tinctorial Chemistry** *Professor*: ARTHUR G. GREEN, M.Sc., Leeds, F.I.C.
Lecturer and Research Assistant: ARTHUR G. PERKIN, F.R.S., F.I.C.
Assistant Lecturer and Demonstrator: A. B. STEVEN, B.Sc., London.
Museum Curator: Miss MARY MUSGRAVE.
- Leather Industries** . *Professor of Applied Chemistry (Chemistry of Leather Manufacture)*: HENRY R. PROCTER, M.Sc., Leeds, F.I.C.
Assistant Lecturer and Demonstrator: FERDINAND KOPECKY.
Demonstrator: HAROLD BRUMWELL.
- Agriculture** . . . *Professor*: ROBERT S. SETON, B.Sc., Edinburgh.
Lecturers in Agriculture: RICHARD W. HAYDON.
 CHARLES F. ARCHIBALD.
Assistant Lecturer and Demonstrator: J. G. STEWART, M.A., B.Sc., Aberdeen.
Lecturer on Agricultural Chemistry: CHARLES CROWTHER, M.A., Oxford, Ph.D., Leipzig.

- Agriculture** . . . *Lecturer in Veterinary Science:*
H. G. BOWES, F.R.C.V.S.
Lecturer and Demonstrator on Poultry:
FRED PARTON.
Instructors in Practical Horticulture:
THOMAS REDINGTON, F.R.H.S.
ALFRED GAUT, F.R.H.S.
Assistant: FRANK REDINGTON.
Instructress in Dairy Work: Miss ANNIE
D. MCKERROW.
Instructor in Farriery:
W. JONES ANSTEY.

FACULTY OF MEDICINE

Dean of the Faculty

Professor DE B. BIRCH

- Anatomy** . . . *Professor:* T. WARDROP GRIFFITH,
M.D., *Aberdeen*, M.R.C.P.
Demonstrator: J. KAY JAMIESON, M.B.,
C.M., *Edinburgh*.
Honorary Demonstrators: M. A. TEALE,
M.A., *Oxford*, M.R.C.S., L.R.C.P.
J. F. DOBSON, M.B., M.S., *London*,
F.R.C.S.
W. GOUGH, B.Sc., M.B., B.S.,
London, F.R.C.S.
- Physiology and
Histology** *Professor:* DE BURGH BIRCH, M.D., C.M.,
Edinburgh, F.R.S.E.
Demonstrator: R. VEITCH CLARK, M.A.,
B.Sc., M.B., Ch.B., *Edinburgh*.
- Pathology and
Bacteriology** *Professor:* ALBERT S. GRÜNBAUM,
M.A., M.D., *Cambridge*, F.R.C.P.,
D.P.H.
Demonstrator in Pathology: S. G. SCOTT,
M.A., B.M., *Oxford*.
Demonstrator in Bacteriology: R. SMEDLEY,
M.B. *Cambridge*, D.P.H.

- Pathology and Bacteriology** *Hon. Demonstrator in Surgical Pathology:*
R. LAWFORD KNAGGS, M.A.,
M.C., M.D., Cambridge, F.R.C.S.
- Surgery** *Professor:* H. LITTLEWOOD, M.Sc. Leeds,
F.R.C.S.
Lecturer on Practical and Operative Surgery:
- Medicine** *Professor:* A. G. BARRS, M.D., Edinburgh,
F.R.C.P.
- Obstetrics** *Professor:* C. J. WRIGHT, M.Sc., Leeds,
M.R.C.S.
Hon. Demonstrator: E. O. CROFT, M.D.
Durham, M.R.C.S., L.R.C.P.
- Gynæcology** *Lecturer:* J. B. HELLIER, M.D., London,
M.R.C.S.
- Materia Medica and Therapeutics** *Lecturer:* E. F. TREVELYAN, M.D., B.Sc.,
London, F.R.C.P.
Demonstrator of Practical Pharmacy:
J. H. GOUGH, Ph.C.
- Public Health** *Professor:*
J. SPOTTISWOODE CAMERON,
B.Sc., M.D., C.M., Edinburgh.
Hon. Demonstrator: A. E. PORTER, M.A.,
M.D., B.C., D.P.H., Cambridge.
- Forensic Medicine** *Professor:* H. J. CAMPBELL, M.D., London,
F.R.C.P.
Demonstrator of Practical Toxicology:
F. W. EURICH, M.D., C.M.,
Edinburgh.
- Ophthalmology and Otology** *Lecturer:* H. SECKER WALKER, M.Sc.
Leeds, F.R.C.S.
- Mental Diseases** *Lecturer:* W. BEVAN LEWIS, M.Sc.
Leeds, L.R.C.P., M.R.C.S.
- Vaccination** *Instructor:* A. T. BACON, L.R.C.P.E.,
M.R.C.S.

Emeritus Professors

JOHN EDWIN EDDISON, M.D.

A. W. MAYO ROBSON, D.Sc., F.R.C.S.

Clinical Lecturers

The following Members of the Honorary Staff of the Leeds General Infirmary:—

- Medicine** . . . Dr. A. G. BARRS, Dr. C. M. CHADWICK
(*Hon. Physicians*), Dr. T. WARDROP
GRIFFITH, Dr. E. F. TREVELYAN
(*Hon. Physicians with charge of Out-
patients*).
- Surgery** . . . Mr. F. WARD, Mr. W. H. BROWN,
Mr. H. LITTLEWOOD, Mr. R.
LAWFORD KNAGGS (*Hon. Surgeons*),
Mr. B. G. A. MOYNIHAN, Mr. W.
THOMPSON (*Hon. Assistant Surgeons*).
- Gynæcology** . . Dr. J. B. HELLIER (*Hon. Obstetric
Physician*).
- Ophthalmology
and Otology** Mr. H. SECKER WALKER, Mr. A. L.
WHITEHEAD (*Hon. Surgeons of the
Eye and Ear Department*), Mr. G.
CONSTABLE HAYES (*Hon. Assistant
Surgeon of the Eye and Ear Department*).
-
- Infectious Diseases.** Mr. E. A. PEARSON (*Medical Superinten-
dent Leeds City Fever and Small Pox
Hospitals*).

AFFILIATED COLLEGES.

The COLLEGE of the RESURRECTION, Mirfield (by resolution of the Court, May 18, 1904).

The TECHNICAL COLLEGE, Huddersfield (by resolution of the Court, July 3, 1905)

THE UNIVERSITY OF LEEDS

1905-1906

UNIVERSITY TERMS

The University Session, or academic year, is divided into three terms. The First Term begins Monday, October 2, and ends Thursday, December 21, 1905; the Second Term begins Wednesday, January 10, 1906, and ends Thursday, March 22, 1906; the Third Term begins Tuesday, April 24, and ends Saturday, June 30, 1906.

The academic year of the School of Medicine of the University begins Monday, October 2, 1905, and ends Friday, July 13, 1906. See p. 290.

ADMISSION OF STUDENTS

The classes and laboratories are open to men and women on the same terms. Special arrangements are made for the convenience of women students.

The Vice-Chancellor will admit students on Monday, October 2, from 9.30 a.m. to 12.30 p.m., and from 2 to 5 p.m., and on Tuesday, October 3, from 9.30 a.m. to 12.30 p.m., and from 2 to 5 p.m. The Professors and Lecturers will be present to confer with intending students and to give them advice respecting their courses of study. Women students are requested to consult the Mistress of Method as to their studies before presenting themselves to the Vice-Chancellor. The Registrar will be in attendance to receive the fees and register students whose courses of study have been approved by the Vice-Chancellor.

All students¹ (excepting those entering the Department of Agriculture² or the Coal Mining two years' course³ only) are expected to register their names on one of these days.

¹ For the arrangements as to admission of students in the School of Medicine, see page 290.

² The winter course in Agriculture begins Monday, October 16.

³ This course begins Monday, October 9 for first year students, and Tuesday, October 10 for second year students.

All students are required, prior to admission, to sign a declaration that they will observe the statutes, ordinances, and regulations of the University for the time being.

No day students will be admitted under the age of sixteen years. Applicants for admission who are under seventeen will be required to pass an Entrance examination¹ in the following subjects: (a) Arithmetic, including decimals and proportion; Algebra, to simple equations; Geometry, First Book of Euclid or the equivalent. (b) English Composition and Dictation. This examination will be dispensed with in the cases of applicants for admission who (a) have gained a scholarship or exhibition by open competition; or (b) have passed any public examination approved by the Vice-Chancellor; or (c) are presenting themselves for one or two lecture courses only, their entrance upon which without examination is approved by the Vice-Chancellor.

Candidates for admission to the University who are under nineteen years of age, and who have been at a school or other educational institution within one year of their application for admission, are required to produce a certificate of good conduct from the head of such institution.

All candidates for admission to the Engineering Department are required to pass an Entrance examination. (see p. 230.)

REGULATIONS TO BE OBSERVED BY STUDENTS

General

1. Every student is required, at the time of admission, to sign a declaration of obedience to the statutes, ordinances, and regulations of the University for the time being.

2. Students who do not return punctually at the beginning of the term are liable to be refused permission to keep the term. In case of delay in entering, due to illness or other unavoidable cause, a communication must be made to the Vice-Chancellor.

¹ The Entrance examination will be held on Tuesday, October 3, at 2 p.m. No candidate can be examined whose name has not been notified to the Registrar by the morning of Monday, October 2.

3. Students are required to keep the Vice-Chancellor and Registrar informed of their addresses, and any alteration of address must be communicated without delay.

4. Students are required to provide themselves with the text-books used in the classes which they attend, and with a copy of the University Calendar.

5. A student dismissed for idleness or misconduct will forfeit all fees and privileges.

6. Students are required to replace or repair any apparatus or other property destroyed or damaged by their fault.

7. In the case of the withdrawal from the University of a student during the Session, no claim to a return of fees is recognised.

8. The Students' Common Rooms are under the management of the University Union, and the Committee of the Union are empowered to impose fines in case of damage done to the property in their charge. An appeal against any decision of the Union may be made to the Senate.

Lectures

1. No student is permitted, except with the leave of the Vice-Chancellor, to attend any lecture course or laboratory work until he has received from the Registrar his Class Ticket, which must be presented to the Heads of the Departments in which he enters before his course of study is begun.

2. Students may be required to repeat courses of study which they have not diligently pursued. In such cases the full fees will have to be paid for the repeated course.

3. When a student is absent from illness or other unavoidable cause a written explanation must at once be sent to the Vice-Chancellor who will communicate it to the Heads of the Departments in which the student is attending. Students desiring leave of absence must obtain it from the Vice-Chancellor.

Vacations

The Senate desire it to be understood that study is expected from students during vacations. Arrangements are made by which the laboratories are open during a portion of the Long Vacation to students capable of

independent work. Application for admission must be made to the Heads of Departments, with whom the decision as to the suitability of students for admission rests. The scale of fees chargeable can be obtained at the Registrar's office.

In many cases the vacation time of students in technical departments can be most profitably employed in obtaining practical experience in works, and assistance to obtain admission to works will, so far as practicable, be given by the Professors. In other cases, before the vacation begins, Professors and Lecturers will be prepared to make recommendations to students as to the private study which should be carried on during the vacation in preparation for the next session.

FEES

All Fees are payable to the Registrar. Cheques may be made payable to "The University of Leeds."

1. Entrance Fee

In addition to class fees, each student attending any regular day class for which a fee of £1 1s. or upwards is charged, will be required to pay on entering the University a registration and library fee of £1 1s. Day students attending one or two courses of lectures only, may, if they prefer it, pay in lieu of the registration and library fee a sessional fee of 7s. for each class attended.

2. University Union Fee

The subscription (10s. 6d. per year) to the University Union is obligatory (with certain exceptions) on students attending the University for more than six hours per week, and is payable to the Registrar at the beginning of the session. This subscription entitles students to the use of the common rooms (which are supplied with the daily papers, current periodicals, &c.), to free instruction in the University gymnasium, and to the use of the athletic ground and tennis courts.

3. Lecture and Laboratory Fees

(a) General Regulations

The fees for lecture and laboratory courses are payable in advance. The Registrar will supply a Class Ticket

entitling the student to attend the courses for which fees have been paid: this Class Ticket must be presented by the student to the Professor or Lecturer whose courses he attends, before entering on the course. The fee for each course will be found appended to the syllabus of the course.

In the case of the withdrawal from the University of any student during the session, no claim to a return of fees is recognised.

Students who attend all the classes constituting the complete course required for a degree examination, or for a diploma of the University, or for the Associateship of the Institute of Chemistry, may compound for the lecture fees at a reduction of one tenth.

(b) *Lecture Fees*

The fee for each course of lectures is appended to the syllabus of the course.

Where a student for special reasons pays for only one or two terms, the following fees will as a rule be charged:

| Where the Fee for the Session is | | The Fee for Two Terms will be | | The Fee for One Term will be |
|--|-----|-------------------------------------|-----|------------------------------------|
| £ s. d. | | £ s. d. | | £ s. d. |
| 1 11 6 | ... | 1 5 0 | ... | 0 15 0 |
| 2 2 0 | ... | 1 15 0 | ... | 1 1 0 |
| 2 12 6 | ... | 2 2 0 | ... | 1 5 0 |
| 3 3 0 | ... | 2 12 6 | ... | 1 11 6 |
| 3 13 6 | ... | 2 17 6 | ... | 1 15 0 |
| 4 4 0 | ... | 3 3 0 | ... | 2 2 0 |
| 5 5 0 | ... | 4 4 0 | ... | 2 12 6 |

Where a class meets for two terms only, the fees will be as follows:

| Where the Fee for Two Terms is | | The Fee for One Term will be |
|-----------------------------------|-----|---------------------------------|
| £ s. d. | | £ s. d. |
| 1 1 0 | ... | 0 15 0 |
| 1 11 6 | ... | 1 1 0 |
| 2 2 0 | ... | 1 5 0 |
| 2 12 6 | ... | 1 11 6 |
| 3 3 0 | ... | 2 2 0 |
| 3 13 6 | ... | 2 5 0 |
| 4 4 0 | ... | 2 12 6 |
| 5 5 0 | ... | 3 3 0 |

(c) Laboratory Fees

The following are the fees payable for Laboratory and other practical work in each of the following departments, viz.: Physics, Chemistry, Biology, Geology, Engineering, Electrical Engineering, Mining, Textile Industries, Colour Chemistry and Dyeing, Chemistry of Leather Manufacture. Six hours are counted as one day:

| Days per Week. | | Fee for the Session. | | | Fee for Two Terms. | | | Fee for One Term. | | |
|-------------------|-----|-------------------------|----|----|-----------------------|----|----|----------------------|----|----|
| | | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| $\frac{1}{2}$ | ... | 3 | 3 | 0 | 2 | 12 | 6 | 1 | 11 | 6 |
| 1 | ... | 5 | 5 | 0 | 4 | 4 | 0 | 2 | 12 | 6 |
| $1\frac{1}{2}$ | ... | 7 | 7 | 0 | 5 | 15 | 6 | 3 | 3 | 0 |
| 2 | ... | 9 | 9 | 0 | 6 | 16 | 6 | 3 | 13 | 6 |
| $2\frac{1}{2}$ | ... | 11 | 11 | 0 | 7 | 17 | 6 | 4 | 4 | 0 |
| 3 | ... | 13 | 13 | 0 | 9 | 9 | 0 | 5 | 5 | 0 |
| $3\frac{1}{2}$ | ... | 15 | 15 | 0 | 11 | 0 | 6 | 5 | 15 | 6 |
| 4 | ... | 16 | 16 | 0 | 12 | 1 | 6 | 6 | 6 | 0 |
| $4\frac{1}{2}$ | ... | 17 | 17 | 0 | 12 | 12 | 0 | 6 | 16 | 6 |
| 5 | ... | 18 | 18 | 0 | 13 | 13 | 0 | 7 | 7 | 0 |
| $5\frac{1}{2}$ | ... | 19 | 19 | 0 | 14 | 3 | 6 | 7 | 17 | 6 |
| 6 | ... | 21 | 0 | 0 | 15 | 4 | 6 | 8 | 8 | 0 |

(d) Fees for Research Students

Persons desirous of pursuing original Research can be admitted, subject to certain regulations, to any of the University laboratories on reduced terms, which may be obtained on application to the Registrar. Applications for admission must be made to the head of the department concerned, and the admission is subject to the approval of the Council.

(e) Fees for Complete Courses

The fees for complete courses of lectures and laboratory work qualifying for degrees and diplomas vary according to the subjects taken. The following estimates are in most cases only approximate.

Matriculation. The cost to a student taking in the University the full course of lectures for the examination is about £19, inclusive of the Entrance and Union fees.

Degree of B.A. The fees for complete courses qualifying for the Intermediate, Final (Ordinary), and Honours examinations, amount to about £16 in each year, exclusive of the Entrance and Union fees.

Degree of LL.B. A composition fee of £8 8s. in each year ; composition fee covering the lectures for the degree and for the Solicitors' examination £10 10s. in each year. The Entrance and Union fees are not included.

Degree or Diploma in Commerce. About £18 in each year.

Diploma in Education. Composition fee of £10 10s., exclusive of Union fee.

Degree of B.Sc. The fees for complete courses qualifying for the Intermediate, Final (Ordinary), and Honours examinations, amount to about £25 in each year, exclusive of the Entrance and Union fees. If the courses taken include much laboratory work, the fees are somewhat higher.

Engineering, Electrical Engineering, Mining Departments. The fees for a full year's course amount to about £30.

Departments of Textile Industries, Colour Chemistry and Dyeing, Chemistry of Leather Manufacture. The fees for a full year's course amount to about £25.

Agriculture. Composition fees, for Winter Course £10, for Summer Course £5, inclusive of Entrance and Union fees.

School of Medicine. Composition fee for First examination in Medicine £26, exclusive of Entrance and Union fees. For composition fees for subsequent examinations see page 292.

4. Fees to be paid for Examinations

No fee will entitle to admittance to more than *one* examination.

The fees are as follows :

For the Matriculation examination, £2, and for each subsequent examination, £1.

For the Intermediate examination for the degrees of B.A., B.Sc., LL.B., £1 ; and for each subsequent examination, £1.

For the Final examination for the Ordinary degree of B.A., or B.Sc., or LL.B., £1 ; and for each subsequent examination, £1.

For the Final examination for the degree of B.A. or B.Sc., with Honours, £2.

For the examination for the degree of M.A. or M.Sc., £1.

For the First examination for the degrees of M.B. and Ch.B., £5 ; and for each subsequent examination, £2.

For the Second examination for the degrees of M.B. and Ch.B., £5 ; and for each subsequent examination, £2.

For the Final examination for the degrees of M.B. and Ch.B., £5; and for each subsequent examination, £2.

For the examination for the degree of Ch.M., £5.

For the examination for the diploma in Public Health, £5 5s. for each part, and for each subsequent examination in the same part, £3 3s.

For the examination for the diploma in Education, £2, and for each subsequent examination, £2.

On application for the degree of Doctor, £5.

5. Fees to be paid for admission to Degrees

The fees¹ for conferring degrees are as follows:

On conferring the degree of B.A., or B.Sc., or LL.B., £5.

On conferring the degree of M.A. or M.Sc., £5.

On conferring the degree of Ch.M., £5.

On conferring the degree of Doctor, £5.

UNIVERSITY LIBRARY

Hon. Librarian: Professor CLAPHAM

Librarian: Miss FANNY J. PASSAVANT

Assistant: Miss FLORENCE M. EKINS

Students are entitled to use the Library under the conditions laid down in the following rules

1. All registered students, *i.e.*, students who have paid the registration and library fee, or the sessional fee, Assisted Teachers on payment of the sessional fee of 7s., Occasional and Evening Students, and students attending Saturday Training Classes, on payment of a fee of 2s. 6d. per session, are entitled to the use of the Library, so long as they are in attendance upon classes in the University. At the beginning of each session students are required to show their class tickets to the Librarian before making any use of the Library.

2. Former students may apply to the Hon. Librarian for leave to use the Library. A fee of 2s. 6d. per session will be charged.

3. Associates of the Yorkshire College and former students who have become members of the University by donation are entitled to the use of the Library, subject to strict observance of rule 5.

4. The Library is open (a) daily during Term and the months of July and September from 9 a.m. to 5.30 p.m. (on Saturday from 9 a.m. to 12.45 p.m.); (b) during the Christmas and Easter vacations for three

¹ These do not apply to Honorary degrees.

hours daily. The Library will be closed during the second half of August, one week at Christmas, Good Friday, and the following Saturday, Monday, and Tuesday, and Whit-Monday and Tuesday.

5. No book shall be removed from the Library until an entry of issue has been made by the Librarian, and signed by the borrower.

6. Not more than three volumes, whether of the same or of different works, may be entered to the same person at one time.

7. Every book must be returned to the Library on or before the Saturday in the week following that in which it was taken out. A book may, however, be renewed from week to week until four weeks have elapsed since its first issue, provided that no application has been received in the meantime. The book must be brought to the Librarian for renewal unless an application has been made and granted on the day before the return of the book is due. After a book has been renewed for four weeks, it must remain in the Library one day before re-issue to the same person. *At the end of each term all books must be returned to the Library.*

8. A list of books of reference and others shall be drawn up by the Professors and Lecturers; and books, the names of which are entered on this list, either permanently or temporarily, may not be removed (except under rule 9) from the Library until after 5 p.m., and then only on condition that they be returned before 10 o'clock on the following morning.

9. Students provided with a written order from a Professor or Lecturer shall be entitled to take out books from the Reference Library, but books taken out under this rule must be returned to the Library before the person using them leaves the University buildings.

10. Any person borrowing a book under rule 8 or rule 9, and failing to return it by the time therein specified, shall be fined 2d. a day, and any person who does not comply with rule 7, shall be fined 1d. a day for every day a book is kept out after it ought to have been returned. A notice shall be posted to the borrower on the business day following the one on which the return of the book was due, informing him that a fine is being incurred.

11. No person shall be allowed to take a book out of the Library if he has in his possession any book which he has kept beyond the time allowed by the above regulations, or if any fine which he has incurred has not been paid.

12. No mark of any kind may be made in the Library books or periodicals. If a book has been in any way injured while in the possession of the person returning it, the Librarian will report the same to the Library Committee, who shall impose upon the said person a fine not exceeding the sum which will be required to make the damage good.

13. Library books and periodicals may not be used in the laboratories.

14. The Hon. Librarian has power to suspend the library privileges of any person who breaks the rules of the Library.

Students desiring to take out books for use in the vacations are required to procure a recommendation from a Professor or Lecturer. Printed forms for this purpose may be obtained from the Librarian.

REFECTORY

For the convenience of students, dinners are served daily in the University Refectory, from 12.30 to 2 p.m. Cold meats may also be obtained after the latter hour; tea, coffee, and other light refreshments up to 6 p.m. The Refectory is closed on Saturdays at 2 p.m.

Similar facilities are provided at the Refectory in the School of Medicine.

Term Tickets may be had on application to the Registrar, entitling students to dine at the Refectory, College Road, daily (except Saturdays) during the session. The cost of such tickets, which must be prepaid, is £6 10s. per session or £2 10s. per term for men students, and £5 10s. per session or £2 5s. per term for women students. * Places will be reserved for those who pay for their dinners by the term.

GYMNASIUM

Under the management of the University Union

Free to all members of the University Union.

The Gymnasium is reserved for the use of women students at suitable hours which, together with those arranged for other classes, will be announced at the beginning of the session.

LOCKERS FOR BOOKS

The use of a locker may be secured by the deposit of 2s. 6d. with the Hall Porter. A charge of 1s. per session will be made, the balance of the deposit money being repaid at the end of the session when the key is returned. A student will be charged for repairing any damage to the locker while in his possession, or for loss of keys, &c. Lockers are also provided for members of the Tennis Club, and may be used on the same terms as those for books, &c.

LODGING AND BOARDING HOUSES

A List of Lodging and Boarding Houses which have been inspected on behalf of the University will be supplied by the Registrar on application.

HALL OF RESIDENCE

Visitors :

N. BODINGTON, M.A., Litt.D., Vice-Chancellor
Professor DE BURGH BIRCH, M.D., F.R.S.E., Dean of the Faculty of
Medicine

THE REV. SAMUEL BICKERSTETH, D.D., Vicar of Leeds

THOMAS PRIDGIN TEALE, M.A., D.Sc., F.R.S.

Resident Warden :

HERBERT ROWE, Senior Hon. Surgeon, the Public Dispensary, Leeds.

Sub-Warden :

J. KAY JAMIESON, M.B., Demonstrator, Department of Anatomy

The object of the Institution is to supply students with the advantages of a common collegiate life, by providing a Hall of Residence similar to those which have been established in connection with the Victoria University of Manchester, with the Edinburgh University, and with some of the London Medical Schools.

The Hall of Residence has been erected upon a suitable site within five minutes' walk from the University, and is furnished with every attention to the health and comfort of the students. The accommodation consists of Dining Hall, Recreation Room, and other rooms for common use, and a separate room furnished as a private study and bedroom for each student. The charge is twenty-one guineas for each of the First and Second terms and eighteen guineas for the Third term for students in the Faculties of Arts, Science, and Technology, who keep a session of about 33 weeks; and twenty-three guineas a term for students in the School of Medicine, whose session lasts about 38 weeks.

Applications for admission should be sent to the Warden, Lyddon Hall, Virginia Road, Leeds, who may be seen at the Hall on any day between one and two o'clock.

ASSISTED STUDENTSHIPS FOR TEACHERS.

The Lords of the Committee of Council on Education pay three-fourths of the fees in the following Day classes, and one-half of those in the Evening classes, for a limited number of teachers engaged in science teaching.

Applications for this privilege must be made to the Secretary, Board of Education, South Kensington, not later than August 1 in each year.

I. Day Classes

Chemistry: Any of the lecture courses, not exceeding two in number; laboratory instruction for not less than half a day per week.

Physics: Lectures and laboratory as above.

Electrical Engineering: Lectures and Laboratory as above.

Zoology: The lecture courses, Elementary (including practical work), and Advanced.

Botany: The lecture classes, Elementary (including practical work), Advanced, and Agricultural (including practical work).

Biology: Laboratory, not less than one day per week; course in Nature Knowledge.

Mathematics: Any of the lecture courses, not exceeding two in number.

Agriculture: The lecture courses, first year (including practical work), and second year (including practical work).

Agricultural Chemistry: Any of the lecture courses, not exceeding two in number. Laboratory instruction for not less than half a day per week.

II. Evening Classes

Physics: Practical class.

Electrical Engineering: Any of the lecture classes, not exceeding two in number. Practical class.

Mathematics: Any of the lecture classes, not exceeding two in number.

For fees and other particulars of above classes see page 210, and following pages.

TECHNOLOGICAL EXAMINATIONS

The examinations of the City and Guilds of London Technical Institute are held in the University in April, May, or June every year. Students of the University and others are admitted to the examinations. Each candidate is required, when entering his name for the examination with the Local Secretary, to pay to the City and Guilds Institute a fee of 1s. for each subject in which he desires to be examined. In some few subjects a higher fee is charged. Money prizes, medals, and certificates are awarded by the Institute. Among the subjects of examination, the following may be mentioned as specially suitable to the technical students of the University:—Coal Tar Products, Gas Manufacture, Iron and Steel Manufacture, Leather Tanning, Dyeing (Silk, Wool, and Cotton), Bleaching and Printing, Textile Fabrics (Spinning and Weaving), Electrical Engineering, Mechanical Engineering, Mine Surveying. To obtain a Full Certificate in any of the above-mentioned Technological

subjects candidates will be required to pass the Institute's examination in the Honours grade and also, in general, an examination in one or more of the Science and Art subjects included in the *Regulations* of the Board of Education, the subjects to be chosen from those most closely allied to the subject taken by the candidate. The Institute will accept in lieu of the examination by the Board of Education a certificate from the University stating that the candidate has attended approved courses of instruction at the University in the Science subjects allied to the Technological subject in which the Full Certificate is claimed, and has passed a satisfactory examination in such Science subject. Candidates will also be qualified for the Full Technological Certificate who pass the Preliminary examination as well as the Ordinary and Honours examinations (written and practical) in any Technological subject for which such a full course is provided by the Institute. For further particulars see the Programme of the Institute (price, post free, 1s.).

Entries for the next examination will be received by the Local Secretary, Mr. G. R. Brench, University of Leeds, not later than Monday, March 12, 1906.

MATRICULATION EXAMINATION

The Matriculation examination is conducted by a Joint Board representing the Victoria University of Manchester, the University of Liverpool, the University of Leeds, and the University of Sheffield. All communications relating to this examination should be addressed to "The Secretary, Joint Matriculation Board, Owens College, Manchester."

Candidates for degrees in all the Faculties of the Universities are required to have passed the Matriculation examination.¹

The following regulation will come into operation not later than October 1st, 1906, and will apply to students in each of the Universities:

"The period of study necessary to qualify any student for graduation shall be not less than three years, all of which shall be subsequent to the date at which the student passes the Matriculation examination."

The Matriculation examination is held twice in each calendar year; in 1906 it will be held in July and September. The examination in July is also held at schools as a form examination. Information as to the conditions may be obtained from the Secretary to the Joint Board.

¹ For the Faculty of Medicine the following examinations are recognised in lieu of the Matriculation examination:

1. Graduation in this or some other University of the United Kingdom, provided that Latin has formed part of one of the Degree examinations.
2. London Matriculation.
3. Higher Certificate of the Oxford and Cambridge Schools Examination Board. Certificates must show that the candidate has satisfied the Examiners in Latin, Elementary and Additional Mathematics, English or History, and in two other subjects included among the subjects of the Matriculation examination, of which Greek or French or German shall be one.
4. Senior Oxford Locals (Honours). Certificates must show that the candidate has satisfied the Examiners in Latin, Pure Mathematics, English Essay, English History, and in two other subjects included among the subjects of the Matriculation examination, of which Greek or French or German or Spanish shall be one.
5. Senior Cambridge Locals (Honours). Certificates must show that the candidate has satisfied the Examiners in Latin, Euclid and Algebra, English Composition, and English History, and in two other subjects included among the subjects of the Matriculation examination, of which Greek or French or German or Spanish shall be one.

Provided that the subjects included in each of the above examinations shall include all the subjects required by the General Medical Council.

The Joint Matriculation Board has discretionary power to accept other examinations of at least equal standard from candidates for the Faculty of Medicine.

All grants of exemption are conditional upon payment of the Remission fee of 10s. 6d.

Arrangements will be made enabling candidates to take the examination at Manchester, Liverpool, Leeds, or Sheffield.

The names of candidates who have passed the Matriculation examination are published in two divisions, the names in each division being arranged in alphabetical order.

Candidates for the examination must apply to the Secretary of the Joint Board for a form of entry, which must be forwarded to the Secretary on or before June 2nd or September 1st respectively, accompanied by the proper fee.

The fee for the examination is £2; for each subsequent Matriculation examination, £1.

For full information as to the Matriculation examination see the Calendar of the Joint Matriculation Board, to be obtained from the Secretary.

Subjects of Examination

Candidates presenting themselves for the Matriculation examination are required to satisfy the Examiners in¹:

1. English Language or Literature, and English History
2. Mathematics
3. *Three* of the following, *one* of which must be a language
 - i. Greek
 - ii. Latin
 - iii. French
 - iv. German
 - v. Some other Modern Language approved by the Board²
 - vi. Elementary Mechanics
 - vii. Chemistry
 - viii. Geography *or* Natural History.

¹ Candidates for a degree in the Faculty of Medicine must satisfy the examiners in Latin, and *either* Greek *or* a modern language.

² Application for permission to present this must be made to the Secretary, Joint Matriculation Board, Owens College, Manchester, and the fee must be paid on or before March 1st of the year in question.

Details of Subjects

ENGLISH LANGUAGE, LITERATURE, AND HISTORY :

An English essay. *Either* (a) Elements of English grammar, including outlines of the general history of the English language; *or* (b) a set book or books in English literature. Outlines of English history.

MATHEMATICS :

Arithmetic. The elementary geometry of triangles, parallelograms, and circles, and of similar rectilinear figures.¹ Algebra to quadratic equations (inclusive), with the arithmetical and geometrical progressions and an elementary treatment of irrational quantities and of proportion.

GREEK :²

Either one prose and one verse book *or* passages from unprepared books, with grammar questions in each case. Grammar. Translation at sight of easy Greek passages into English.

LATIN :²

Either one prose and one verse book *or* passages from unprepared books, with grammar questions in each case. Grammar. Translation at sight of easy Latin passages into English. Translation of easy sentences from English into Latin.

FRENCH :²

Grammar (the questions in grammar will not involve more than accident and elementary syntax). Translation from two prescribed French books *or* passages from unprepared books, with grammar questions in each case. Translation at sight of French prose into English. Translation of English passages into French.

GERMAN :²

Grammar (the questions in grammar will not involve more than accident and elementary syntax). Translation from two prescribed German books *or* passages from unprepared books, with grammar questions in each case. Translation at sight of easy German prose into English. Translation of English sentences into German.

OTHER MODERN LANGUAGES³: details as for French and German.

¹ These subjects are covered by Euclid i, ii, iii, and vi. (1-19 and 33.)

² Candidates, in order to pass, must satisfy the Examiners in translation at sight and grammar.

³ Application for permission to present this must be made to the Secretary, Joint Matriculation Board, Owens College, Manchester, and the fee must be paid on or before March 1st of the year in question.

ELEMENTARY MECHANICS :

The elementary portions of statics, kinetics, and of the properties of liquids and gases, including : Laws of motion. Uniform acceleration. Composition and resolution of forces in one plane. Moments of forces. Work and energy. Centre of gravity. Uniform circular motion. Simple pendulum. Direct impact. Fluid pressure. Specific gravity. Boyle's Law.

ELEMENTARY CHEMISTRY :

General properties of matter. Chemical combination and decomposition. Preparation, classification, and chemical behaviour of the chief elements and their compounds, especially of the non-metals. The outlines of chemical theory.

GEOGRAPHY :

Physical Geography : The agents at work on and beneath the surface of the earth. Phenomena resulting from earth-heat. Distribution of land and water.

Political and Commercial Geography : Political and economic effects of natural features and conditions. Outlines of geography of the British Empire (including historical geography). Political and commercial geography of the United Kingdom.

NATURAL HISTORY :

A.—Botany : 1. The structure and mode of life of plants.

- (a) The elementary facts of the nutrition of green plants as shewn by simple experiments.
- (b) The form and function of roots, stems, and leaves.
- (c) The modifications of the vegetative organs in common British examples of water-plants, heath-plants, plants inhabiting dry places, climbing plants, insectivorous plants, and parasites.
- (d) The structure and function of a typical flower.
- (e) Modes of pollination of common flowers.
- (f) Modes of dispersal of seeds and fruits.
- (g) The structure of a seed and its mode of germination as seen in the maize, the bean, the melon, and other common seeds.
- (h) Vegetative reproduction of plants by bulbs, by tubers, and in other ways.

2. The classification of plants. The general characters of the following British natural orders : Liliaceæ, Gramineæ, Ranunculaceæ, Cruciferae, Leguminosæ, Rosaceæ, Primulaceæ, Labiatae, Compositæ, Umbelliferae, Cupuliferae.

B.—Zoology :

- (a) The general structure of a mammal ; knowledge of the chief features of the skeleton is expected.
- (b) The external form, mode of life and habits of the bat, cat, dog, sheep, horse, kangaroo, and whale.
- (c) The wing, feathers, beak, and foot of a bird. The flight of birds.

- (d) The nests and eggs of birds, as exemplified by two or three common British species. A fowl's egg. The place of formation of a chick : its nutrition and respiration while in the egg.
- (e) The general structure and life-history of a frog.
- (f) The general structure and mode of life of a fish.
- (g) The external features and mode of life of a snail, a cockroach, and an earth-worm.
- (h) The life-history of a moth or butterfly, and of a pond-snail.
- (i) One of the following groups :
 - i. (Marine animals). The general structure, mode of life, and life-history of a sea-anemone, a reef-forming coral, an oyster or edible mussel, a crab, a star-fish or sea-urchin.
 - ii. (Inland animals). The general structure, mode of life, and life-history of hydra, a pond-mussel, a crayfish, chironomus ('blood-worm,' 'harlequin-fly'), and a spider.

Books prescribed for 1906

GREEK, one book from each of (a) and (b) :

- (a) Xenophon, *Anabasis* iv ; Thucydides, Selections from book i as contained in Colson's *Rise of the Athenian Empire* (Macmillan).
- (b) Euripides, *Medea* (lines 1-95, 213-626, 764-822, 866-975, 1002-1080, 1116-1250, 1293-1388) ; Sophocles, *Ajax* (lines 1-370, 427-595, 646-1038).

LATIN, one selection from each of (a) and (b) :

- (a) Caesar, *de Bello Gallico* ii, iii ; or Cicero, *In Catilinam* ii, iii.
- (b) Vergil, *Georgic* iv, and *Eclogue* iv, or Horace, *Odes* iii.

FRENCH, (a) and one book from (b) :

- (a) La Fontaine, *Fables*, books vii and viii.
- (b) Théodore de Banville, *Gringoire*, comédie en prose (Hachette and Co.), pp. 1-48, or Georges Sand, *La petite Fadette* (Rivingtons).

GERMAN, (a) and one book from (b) :

- (a) Sybel, *Prinz Eugen von Savoyen*, ed. Buchheim, pp. 1-40 (Williams and Norgate).
- (b) Eichendorff, *Aus dem Leben eines Taugenichts*, ed. Osthaus, chapters 1 and 2 (Heath and Co.), or Goethe's *Knabenjahre*, ed. Cartmell, book i (Pitt Press).

ENGLISH, one selection from each of (a) and (b) :

- (a) (i.) Shakspeare, *As You Like It*, or (ii.) Shakspeare, *Coriolanus*, or (iii.) Pope, *Essay on Criticism*, and Palgrave, *Golden Treasury*, ed. Fowler, book iv.
- (b) (i.) Johnson, *Life of Pope*, or (ii.) Scott, *Old Mortality*, or (iii.) Macaulay, *Lives of Bunyan and Johnson*.

DEGREES, EXAMINATIONS, AND COURSES OF STUDY IN ARTS

1. The degrees in Arts shall be :

Ordinance.

Bachelor of Arts (B.A.)

Master of Arts (M.A.)

Doctor of Letters (Litt.D.).

DEGREE OF BACHELOR OF ARTS

2. The degree of Bachelor of Arts shall be conferred either as an Ordinary degree or as a degree with Honours.

3. All candidates for the degree of Bachelor of Arts shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

Ordinary Degree of Bachelor of Arts

N.B. Students who began their course for the degree under the scheme previously in force may obtain permission to complete their course according to the former regulations, as reprinted in pages 132 below.

4. The complete course of study for the Ordinary degree of Bachelor of Arts shall be divided into two parts, called respectively the Intermediate course and the Final course.

5. Every candidate shall be required to pass two examinations, the Intermediate and the Final.

6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.

7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following Supplementary examination, may be excused such part of the Supplementary examination as the combined examination committees, on report from the separate examination committee concerned, may determine.

8. Candidates who have failed at a Final examination may present at the June examination of the following year those books and periods in which they have already been examined.

9. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

Intermediate Course and Examination

10. Every candidate shall be required, after passing the Matriculation examination, to attend during one academic year approved courses of study in five subjects, and to pass in each of the subjects selected, viz. :

- i, ii. Two languages from the following list : Greek ; Latin ; French ; German ; one of which must be Greek or Latin.
- iii. Either (a) English Literature ; or (b) History (Ancient or Modern).
- iv. Either (a) Logic ; or (b) Mathematics ; or (c) one of the following Natural Sciences : Physics, Chemistry, Geology.
- v. English Language or any subject under i, ii, iii, iv not already selected, provided that no candidate may take (a) both Ancient and Modern History ; (b) two Natural Sciences.

The examination in each modern language shall include an oral examination.

Detailed subjects of study and of examination.

Regulations GREEK :

Prose composition. Translation at sight from Greek into English.
Prescribed books : portions from two authors, one prose and one verse, to be studied in their literary and linguistic aspects.

Books for 1906 : Demosthenes, *Olynthiacs* i, ii, iii ; Sophocles, *Ajax*.

LATIN :

Prose composition. Translation at sight from Latin into English.

Prescribed books : portions from two authors, one prose and one verse, to be studied in their literary and linguistic aspects.

Books for 1905 : Cicero, *pro Roscio Amerino* ; Vergil, *Georgics* i, ii.

FRENCH :

Prose composition. Syntax of the French language. Translation at sight from French into English. Prescribed books : two texts, one prose and one verse, to be studied in their literary and linguistic aspects.

Dictation, reading aloud and conversation in French.

Books for 1906 : Balzac, *Eugénie Grandet* ; Musset, *Les Nuits*.

GERMAN :

Prose composition. Syntax of the German language. Translation at sight from German into English. Prescribed books : two texts, one prose and one verse, to be studied in their literary and linguistic aspects. Dictation, reading aloud, and conversation in German.

Books for 1906 : Heine, *Prosa* (pp. 6-47, Clarendon Press edition) ; O. V. von Scheffel, *Der Trompeter von Säckingen* (pp. 1-62 Milner-Barry's edition).

ENGLISH LITERATURE :

A period of English Literature. Books prescribed for special study.

Period for 1906 ; 1630-1674.

Books for 1906 : Chaucer, *Knight's Tale* ; Shakespeare, *Macbeth* ; Palgrave, *Golden Treasury*, book ii ; Milton, *Paradise Lost*, i, ii ; Dryden, *Essay of Dramatic Poetry*.

ENGLISH LANGUAGE :

History of the English Language. Old and Middle English prose ; books and passages selected from works before the close of the Fourteenth Century.

Books for 1906 : Sweet's *Anglo-Saxon Primer* ; the reigns of Alfred and Edward the Elder in the *Anglo-Saxon Chronicles* (ed. Davis) ; *Ancren Riwele* (extracts in Sweet's Middle English Primer) ; Chaucer, *Knight's Tale*.

ANCIENT HISTORY :

Introduction to Ancient History, with special reference to selected periods of Greek and Roman History.

Periods for 1906 : Greek History, 500-399 B.C. ; Roman History, 218-134 B.C.

MODERN HISTORY :

A selected period of Modern History.

Period for 1906 : Modern European History from 1763.

LOGIC :

The elements of Deductive and Inductive Logic.

MATHEMATICS :

Trigonometry to the solution of triangles. The first principles of Analytical Geometry and the elements of the Differential Calculus, as applied to the tracing of graphs and the determination of maxima and minima ordinates. The Algebra required for the above subjects.

PHYSICS :

The properties of matter, the chief phenomena of Sound, Heat, Light, Electricity and Magnetism, treated in an elementary manner ; Practical Physics.

CHEMISTRY :

The general principles of Inorganic Chemistry and their application ; the elements of Organic Chemistry ; Practical Chemistry.

GEOLOGY :

General Physical and Stratigraphical Geology, and Geology in relation to the study of Geography.

Final Course and Examination**Ordinance.**

11. Every candidate shall be required to attend approved courses of study in three principal subjects and one subsidiary subject, and to pass in each of the subjects selected. The same subject may not be taken both as a principal and as a subsidiary subject. An essay paper shall be set for all candidates at the Final examination.

12. The course of study in each principal subject shall extend over two academic years, and the course of study in the subsidiary subject shall extend over one academic year.

13. The principal subjects shall be selected from the following list: Greek, Latin, French, German, English Language and Literature, History, Philosophy, Economics, Education, Pure and Applied Mathematics. Every candidate shall be required to take as a principal subject one of the following: Greek, Latin, French, German. The examination in each modern language shall include an oral examination.

14. The subsidiary subjects shall be selected from the following list: English Literature, History, Philosophy, Economics, Education, Pure Mathematics, Applied Mathematics. The course of study in a subsidiary subject may be taken either in the first or second year of the Final course.

15. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in June of that year for examination in such subsidiary subject. Part of the examination in Education, to be defined by Regulation, may also be taken at the end of the first year of the Final course.

Detailed subjects of study and of examination.

I. Principal Subjects, studied for Two Years.

GREEK :

Regulations.

Prose composition. Translation at sight from Greek into English.

The study of portions from various authors, three of which (two prose and one verse or one prose and two verse) will be prescribed as subjects of the Final examination.

Books for 1906 : Thucydides vii ; Homer, *Iliad* xxii, xxiii, xxiv.

LATIN :

Prose composition. Translation at sight from Latin into English.

The study of portions from various authors, three of which (two prose and one verse or one prose and two verse) will be prescribed as subjects of the Final examination.

Books for 1906 : Cicero, *Second Philippic* ; Juvenal, *Satires* i, iii, iv, x, xiv.

FRENCH :

The study of various texts, three of which (two prose and one verse, or one prose and two verse) will be prescribed as subjects of the Final examination. Translation at sight from French into English. Principles of Phonetics, and Principles of Historical Grammar. Composition and the study of style. A period or periods of French Literature. Dictation, reading aloud and conversation in French.

Books for 1906 : Corneille, *Le Menteur* ; Molière, *Le Misanthrope*.

Period for 1906 : French Comedy in the XVIIth Century.

GERMAN :

The study of various texts, three of which (two prose and one verse, or one prose and two verse) will be prescribed as subjects of the Final examination. Translation at sight from German into English. Principles of Phonetics and Principles of Historical Grammar. Composition and the study of style. A period or periods of German Literature. Dictation, reading aloud and conversation in German.

Books for 1906 : Schiller, *Wallensteins Lager* and *die Piccolomini*.

Period for 1906 : Schiller's Life and Works.

ENGLISH LANGUAGE AND LITERATURE :

English Language.

First Year Course. The elements of Old English, with prescribed books in Old English prose and unseen translation.

Second Year Course. A more advanced study of Old and Middle English, with prescribed books (prose and verse) and unseen translation.

Candidates may, with the consent of the Board of the Faculty of Arts, be permitted to substitute a further study of English Literature for the above course in English Language.

English Literature.

In each year the study of a selected period of English Literature, with a knowledge of prescribed books and questions of literary history and criticism arising from them.

Books for 1906 (Language): Sweet's *Old English Primer*; the reign of Alfred in the *Anglo-Saxon Chronicles* (ed. Davis); Chaucer, *Clerk's Tale*.

Books for 1906 (Literature): Chaucer, *Clerk's Tale*; Shakespeare, *Twelfth Night*; Palgrave, *Golden Treasury*, book ii; Milton, *Areopagitica*, *Paradise Lost*, i, ii; *Samson Agonistes*; Dryden, *Absalom and Achitophel*, part i; *Essay of Dramatic Poetry*.

Period of Literature for 1906: 1630-1700.

HISTORY :

First Year Course : A general sketch of European History.

Second Year Course : Two prescribed periods of History, studied in connection with some of the original authorities and selected from the following: Greek, Roman, English, Constitutional, European, Economic History.

Periods for 1906: Greek History to 432 B.C.; Roman History 134 to 31 B.C.; English History 1603 to 1714 A.D.; History of Europe 1789 to 1815 A.D.

PHILOSOPHY :

Two of the following :

History of Ancient Philosophy: general outlines of Greek Philosophy, with a prescribed book or books.

History of Modern Philosophy: general outlines of Modern Philosophy from Bacon to Kant, with a prescribed book or books.

Psychology: systematic Psychology, with more detailed study of some part of the subject.

Ethics: the general principles of Ethics, with the special study of selected ethical systems.

Theory of Knowledge: general outlines with the special study of selected works.

Books for 1906: Ancient Philosophy, Plato, *Gorgias* and *Phaedo*; Modern Philosophy, Locke, *Essay concerning Human Understanding*, books i, ii, iii, cc. 3, 6, iv, cc. 1-11.

ECONOMICS :

First Year Course : General principles of Economics, together with the outlines of recent economic history.

Second Year Course : More advanced treatment of economic principles, with description of industrial and commercial organisation.

EDUCATION :

The course extends over three years, and is divided into two parts: Part I., Theory of Education, extending over two years, with an examination at the end of the second year; and Part II., History of Education, extending over one year. Candidates presenting themselves for examination in Part II. must present their other principal subjects at the same examination. Candidates ordinarily attend the courses of instruction in Part I. during the year of their attendance on the Intermediate Course for the degree, and the first year of their attendance on the Final Course.

Part I. Theory of Education.

Functions and agents of Education. The ethical, logical, and psychological bases of mental and moral Education. The general principles of teaching, with application to the primary school curriculum. The general principles of discipline, with applications to school life. School organisation. The general principles of physical training with reference to the work of the school; school hygiene.

Part II. History of Education.

General outline of the history of educational thought in Europe from the Renaissance to the present time, with special reference to England and special emphasis on the Nineteenth Century. A prescribed book. The book prescribed for 1906 is Plato, *Republic*, ii, iii, iv.

MATHEMATICS :

Pure Mathematics :

Analytical Geometry, up to but not including the general equation of the second degree. The more elementary portions of the Differential and Integral Calculus.

Applied Mathematics :

Statics and Dynamics as far as they can be taken without the Integral Calculus. Hydrostatics.

II. Subsidiary Subjects, studied for One Year.

ENGLISH LITERATURE :

A selected period of English Literature, with a knowledge of prescribed books and questions of literary history and criticism arising thereon.

HISTORY :

General sketch of European History.

PHILOSOPHY :

One of the subjects prescribed for Philosophy, taken as a principal subject.

ECONOMICS :

General principles of Economics, together with the outlines of recent economic history.

EDUCATION :

Part I. of the course prescribed for Education taken as a principal subject.

PURE MATHEMATICS :

Analytical Geometry up to but not including the general equation of the second degree. The more elementary portions of the Differential and Integral Calculus.

APPLIED MATHEMATICS :

Statics and Dynamics as far as they can be taken without the Integral Calculus. Hydrostatics.

Regulations previously in Force.

The provisions applicable to candidates who have obtained permission to complete their course for the degree under the former regulations (see page 125) are the same as in the Ordinance now in force, with the following alterations :

For clause 3 read :

Candidates for the Ordinary degree of Bachelor of Arts are required to furnish certificates of having passed through a course of study approved by the University, extending over at least three academic years, of which years at least two shall be subsequent to the date at which they have passed the Matriculation examination.

For clause 10 read :

Candidates presenting themselves for the Intermediate examination for the degree of Bachelor of Arts are required to satisfy the Examiners in :

1. Pure Mathematics *or* Logic.
2. Ancient History *or* Modern History.
- 3, 4. *Two* of the following languages, *one* of which must be Greek or Latin :
 - i. Greek
 - ii. Latin
 - iii. English
 - iv. French
 - v. German.

5. English Literature, *or* Applied Mathematics, *or* Physics, *or* Education, *or* Chemistry, *or* one of the Subjects named in 1, 2, 3, or 4 not already selected.

The details of examination and the prescribed books will be the same in 1906 as those for the Intermediate examination under the new regulations.

The course of study and examination in Education will be the same as those prescribed in the new regulations as Part I. of the Final course in Education.

For clauses 11-15 read :

Candidates presenting themselves for the Final examination for the Ordinary degree of Bachelor of Arts are required to have passed the Intermediate examination, and to furnish certificates of having attended a course of study approved by the University and extending over at least one academic year, in each of the subjects in which they present themselves.

Candidates presenting themselves for the Final examination for the degree of Bachelor of Arts are required to satisfy the Examiners in :

1. English Literature.
2. Greek *or* Latin, provided that candidates taking two modern languages in 3, 4 may substitute a third modern language for either Greek or Latin, and provided that candidates taking four of the following subjects : Advanced Political Economy, Commercial Law, Commercial Geography, Economic History, one of the other subjects in History, may substitute a modern language for Greek or Latin ; and that candidates taking two of these subjects and one modern language may substitute another modern language for Greek or Latin.
- 3, 4. *Two* of the following :
 - i. Greek¹ *or* Latin.¹
 - ii. French Language and Literature.
 - iii. German Language and Literature.
 - iv. English Language.

¹ Provided the candidate does not present this subject under 2.

- v. *Two* of the following : Greek History, Roman History, Modern History, Constitutional History, Ecclesiastical History, Economic History, Advanced Political Economy, Commercial Law, Commercial Geography.
- vi. *Two* of the following : Greek History,¹ Roman History,¹ Modern History,¹ Constitutional History,¹ Economic History,¹ Advanced Political Economy,¹ Commercial Law,¹ Commercial Geography.¹
- vii. Political Economy.
- viii. Pure Mathematics.
- ix. Applied Mathematics.
- x. Philosophy *or* Education.
- xi. History of Philosophy.

The books and periods prescribed for 1906 are the same as those prescribed for the Final examination under the new regulations.

For information as to the details of the various subjects, consult the Professors and Lecturers responsible for them.

Degree of Bachelor of Arts with Honours

N.B. Students who have completed one or two years of study in an Honours School in session 1904-5, may obtain permission to take the Honours examination on completion of three years of study without presenting themselves for examination in any subject which was not required by the regulations previously in force.

Ordinance.

1. Candidates for the degree of Bachelor of Arts with Honours shall, except as hereinafter stated, be required to furnish certificates of having attended courses of instruction approved by the University and extending over not less than three academic years in one of the Honours Schools of the University hereafter enumerated.

2. Every candidate for the degree of Bachelor of Arts with Honours shall be required to present himself for examination at the end of the third or fourth academic year from the time when he has entered upon one of the courses

¹ Provided the candidate does not present this subject under v.

of instruction approved by the University for such degree, unless he shall present a medical certificate of illness satisfactory to the Senate.

3. Candidates for the degree of Bachelor of Arts with Honours may present themselves for examination in any of the following Honours Schools on furnishing certificates of having pursued, to the satisfaction of the Senate, the courses required for such Honours Schools in the University, viz. :

Classics

English Language and Literature

Modern Languages and Literatures

History

Philosophy

Economic and Political Science.

4. Candidates who have passed the Final examination for an Ordinary degree of Bachelor of Arts may, with the sanction of the Senate and on furnishing certificates of having attended, during the academic year following such Final examination for the Ordinary degree, the third year's, or, during the two academical years following such Final examination, the second and third years' courses approved by the University for any one of its Honours Schools, present themselves for examination for the degree of Bachelor of Arts with Honours in such School.

5. No candidate for a degree of Bachelor of Arts with Honours shall be admitted more than once to examination in the same Honours School ; but students who have passed the Final examination in any of the Honours Schools may be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University.

Provided that in the said other Honours School selected, candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them, and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

6. Names of candidates who have passed the examination for the degree of Bachelor of Arts with Honours shall be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.

Honours School of Classics

Regulations. Candidates for the degree of Bachelor of Arts with Honours in Classics shall be required to pursue courses of study and to submit themselves for examination in the following subjects:

Translation from prescribed Greek and Latin books.

Translation at sight from Greek and Latin authors.

Greek and Latin Composition.

Greek and Latin Literature.

Two of the following:

Ancient History

Ancient Philosophy

A special subject connected with Greek or Latin literature.

Attendance in the subjects of the school shall be required as follows: Not less than twelve hours a week in the first and second years, and ten hours a week in the third year. Attendance on the full course for the Intermediate examination for the Ordinary degree of Bachelor of Arts may be accepted as the required attendance for the first year of the Honours course, provided that the subjects chosen by the candidate are substantially and to the satisfaction of the Board of the Faculty of Arts those required for the First Year's course of the Honours School of Classics.

Examination

Greek Prose Composition, one paper.

Latin Prose Composition, one paper.

Greek Unprepared Translation, one paper.

Latin Unprepared Translation, one paper.

Translation from prescribed Greek books, with questions on grammar and subject matter, two papers.

Translation from prescribed Latin books, with questions on grammar and subject matter, two papers.

General Paper.

Two of the following :

Ancient History, one paper.

Ancient Philosophy, one paper.

Special subject in Greek or Latin Literature, one paper.

Greek and Latin Verse Composition, one paper (optional).

Special Books for 1906 :

GREEK : Homer, *Iliad* xxii, xxiii, xxiv, *Odyssey* ix, x, xi, xii, xvi, xvii ; Aeschylus, *Persæ*, **Agamemnon* ; Sophocles, *Ajax*, **Antigone* ; Euripides, *Bacchæ*, *Hercules Furens* ; Aristophanes, *Clouds*, **Frogs* ; Herodotus *vi, vii ; Thucydides vi, *vii ; Plato, *The Republic* ii, iii, iv, x ; Andocides, *de Mysteriis* ; Demosthenes, *de Corona*.

LATIN : Plautus, *Captivi* and *Trinummus* ; Terence, *Phormio* and *Adelphi* ; Lucretius iii, *v ; Vergil, *Georgics*, *Aeneid*, i, ii, iii, iv, v, *vi ; Horace, *Odes* i, ii, iii, *iv and *Satires* ; Livy xxi, xxii, xxiii ; Cicero, *pro Plancio*, **pro Milone*, *pro Roscio Amerino*, *Second Philippic* ; Tacitus, *Annals* i, ii, **Histories* i ; Juvenal, *Satires* *i, *iii, iv, v, *x, xi, xiv.

English Language and Literature

In this School there shall be alternative schemes of study : Scheme A, in which special attention will be paid to language ; and Scheme B, in which special attention will be paid to literature. Under both schemes a competent knowledge of one classical and of at least one modern language shall be required for the attainment of high Honours.

Honours students, under either scheme, will, as a rule, be expected to take the Intermediate B.A. examination at the end of their first year, including the English Language as one of their subjects.

Candidates who have not taken English Language in their Intermediate examination may be permitted to enter for the Honours examination at the end of their third year, on condition that (i) they take Scheme B ; (ii) that, before entering on their second year course, they satisfy the head of the Department that they possess a sufficient knowledge of the English Language to enable them to profit by the subsequent courses in that subject.

*The books marked with an asterisk are to be studied with special care in all their bearings, textual, grammatical, literary, historical, etc.

Scheme A

Candidates shall be required to attend the following courses in the subjects of the School: during three academic years courses in English Language, including the History of the Language, Early English prose and verse, and Gothic, such courses amounting to not less than three hours a week for the first year and not less than four hours a week for the second and third years.

Candidates shall be also required

(1) *either* (a) to attend approved courses in *two* of the following languages: Old Icelandic, Old High German, Old French; *or* (b) to present a dissertation in a subject approved by the Board of the Faculty of Arts;

(2) to attend for two years approved courses of two hours a week in History, English *or* European; for two years approved courses in French *or* German; and for a third year an approved course in the History of the French Language and Literature, *or* in the History of the German Language and Literature. They are further required to attend, during the first year, an approved course in Latin *or* Greek.

Examination

Essay, one paper.

Translation of unseen passages of Old and Middle English, with literary and linguistic questions, one paper.

Prescribed books in Old and Middle English, with literary and linguistic questions, one paper.

Outlines of English Literature, with prescribed books, one paper.

Grammar of Old and Middle English dialects, with illustrative passages for translation or comment, two papers.

History of English, with reference to general principles of linguistic development, one paper.

Gothic, one paper.

Either two of the following: Old Icelandic, one paper; Old High German, one paper; Old French, one paper; *or* a dissertation on a subject approved by the Board of the Faculty of Arts.

Oral examination.

Scheme B

Candidates shall be required to attend the following courses in the subjects of the School: in the first year, three hours a week in English Literature, and three hours a

week in English Language; in the second year, five hours a week in English Literature, and two hours a week in English Language; in the third year, five hours a week in English Literature, and one hour a week in English Language.

Candidates shall be also required to attend, during the first and second years, approved courses in subjects other than English Language and Literature; such courses shall include an approved course in Latin or Greek, and shall average not less than five hours a week in the first year and not less than three hours a week in the second year; and during the third year, a course of two hours a week in some language other than English.

Examination

Essay, one paper.

Translation of unseen passages of Old and Middle English, with literary and linguistic questions, one paper.

Prescribed books in Old and Middle English, with literary and linguistic questions, one paper.

Outlines of English Literature, one paper.

Special period of English Literature, with prescribed books, two papers.

An English author, or selected subject from English Literature, two papers.

History of Criticism, one paper.

Oral examination.

In addition, candidates shall be required to present a dissertation on a subject approved by the Board of the Faculty of Arts.

Modern Languages

The languages studied in the School shall be French, German, English.

Candidates for the degree of Bachelor of Arts with Honours in the School of Modern Languages shall be required to pursue courses of study and to submit themselves for examination in the following subjects:

- Either* (a) French and German, as principal subjects ;
- or* (b) French, as principal subject, together with German and English as subsidiary subjects ;
- or* (c) German, as principal subject, together with French and English as subsidiary subjects.

Candidates who enter the School in 1905, 1906 or 1907 may take English as a principal subject, with either French or German as a second principal subject.

Candidates shall also be required to study auxiliary subjects, of which Latin shall ordinarily form part. Exemptions may be granted to specially qualified candidates.

The names of candidates, who, being placed in the First or Second Class, have shown conspicuous merit in a principal subject or principal subjects, shall be distinguished in the class list by some mark to indicate the subject or subjects in which they have shown such merit.

Principal subjects

I. FRENCH AND GERMAN :

The course of study and subjects of examination in French or German taken as a principal subject shall be : Prescribed texts of before 1500, studied from a literary and linguistic standpoint ; Prescribed texts of after 1500, studied in the same way ; Unprepared translation ; Literature (outlines and special periods) ; The history of the language (including phonetics, versification, &c) ; Composition.

Candidates taking French or German as a principal subject shall be required to attend for at least two years classes in composition, translation and phonetics ; for one hour a week for each of three years a class in Literature ; for three hours a week for two years, and at least two hours a week for one of the three years classes on the history of the language, and the linguistic and literary study of texts prior to 1500 ; for one hour a week for one year a class in French or German Institutions.

II. ENGLISH :

The courses of study and subjects of examination in English taken as a principal subject by candidates entering the School in 1905, 1906 or 1907 are as follows :

Language. During the first year, a course on the History of the Language of not less than two hours a week, and a course of translation of not less than one

hour a week. During the second year, a course of translation of not less than two hours a week, and a course of Gothic, or of French (if not attended as part of the course in French), of not less than one hour a week. During the third year, a course of translation of not less than two hours a week, and an advanced course of not less than one hour a week.

Literature. During one year, a course of instruction in English Literature, averaging not less than three hours a week. During two other years, courses of instruction in English Literature, together amounting to an average of not less than four hours a week.

Candidates are also required to attend, during two years, other courses of instruction of not less than two hours a week.

Subsidiary subjects

I. FRENCH OR GERMAN :

The course of study and subjects of examination in French or German taken as a subsidiary subject shall be : The work required for the full course in French or German for the Ordinary degree of B.A. ; additional modern texts ; additional study of literature for one year.

Candidates taking French or German as a subsidiary subject shall be required to attend : for three years the full course in French or German for the Ordinary degree of B.A. ; for one hour a week for one year an additional class in literature ; for one hour a week for one year a class in French or German Institutions.

II. ENGLISH :

The courses of study and subjects of examination in English taken as a subsidiary subject shall be : English Language : prescribed books in Old and Middle English ; with elements of Old and Middle English Phonology. English Literature : the outlines with prescribed books, and a special period with prescribed books.

Candidates taking English as a subsidiary subject shall be required to attend : courses in Old and Middle English of one hour a week for three years ; courses in

English Literature of three hours a week in the first and third years, and of four hours a week in the second year.

Examination

The examination in each subject of the School shall consist of an oral examination and of the following papers :

FRENCH OR GERMAN AS A PRINCIPAL SUBJECT :

Composition and Essay, one paper.

Unprepared Translation, one paper.

Prescribed Texts of before 1500, with literary and linguistic questions, one paper.

Prescribed Texts of after 1500, with literary and linguistic questions, one paper.

Literature, one paper.

Grammar : History of the language and versification, one paper.

ENGLISH AS A PRINCIPAL SUBJECT :

Translation of unseen passages of English, and of passages from Gothic and Old French, with questions suggested by the passages, two papers.

Translation from prescribed English books, with questions suggested by the passages, one paper.

A period of literature, one paper.

Essays and questions (literature), one paper.

History of the language and historical grammar, one paper.

FRENCH OR GERMAN AS A SUBSIDIARY SUBJECT :

Prescribed texts, unprepared translation and composition, and historical grammar, two papers.

Literature, one paper.

ENGLISH AS A SUBSIDIARY SUBJECT :

Old and Middle English, one paper.

English Literature, two papers.

Books and periods prescribed for 1906 :

I. FRENCH :

Books after 1500 : Darmesteter et Hatzfeld, *Morceaux choisis des Ecrivains du 16^e siècle* (both prose and verse) ; Pascal, *Les Pensées* ; Corneille, *Le Cid*, *Polyeucte* ; Molière, *Les Femmes Savantes*, *Le Misanthrope* ; Bossuet, *Oraisons Funèbres du Prince de Condé et de la Reine d'Angleterre* ; Victor Hugo, *Préface de Cromwell* ; *Les Orientales*.

Periods of literature : Le Théâtre en France au 17^e siècle ; L'Ecole Romantique.

Books in Old French : E. Koschwitz, *Les plus Anciens Monuments de la Langue Française* ; Chardry, *Le petit Plet* ; Aucassin et Nicolette (ed. Suchier).

II. GERMAN :

Books after 1500 : *Luther*, vol. i (selection, ed. Neubauer, Halle) nos. 3 and 10 ; *Goethe, Faust* part i, *Egmont* ; Schiller, *Wallenstein's Lager*, die *Piccolomini*, *Gedichte der dritten Periode* (in Mayr, *Schillers Gedichte*, Wien) ; Lessing, *Minna von Barnhelm*, *Nathan der Weise*, *Hamburgische Dramaturgie* (ed. Lyon, Velhagen and Klasing) ; Grillparzer, *Sappho*.

Period : Die zweite klassische Periode.

Books in Old and Middle High German : Braune, *Althochdeutsches Lesebuch* ii, iv, vi-viii, xii, xiv, xv, xvi (1-8, 14), xvii, xxiii (1, 4, 5, 10, 11, 18, 19), xxiv, xxviii-xxxi, xxxii (1-4, 8-12), xxxiv, xxxvi, xl, xli ; *Nibelungenlied* Av. i-xix ; *Gottfried von Strassburg* i, ii, viii ; Bartsch, *Liederdichter*, xxi.

III. ENGLISH :

OLD ENGLISH : *Beowulf*, 1888 to end ; *Andreas* ; *Battle of Maldon* ; Sweet, *Reader*, xxx-xxxiv (dialect pieces) ; *The Anglo-Saxon Chronicle* (Laud MS.).

MIDDLE ENGLISH : Morris and Skeat, *Specimens of Early English*, the following pieces : *Cursor Mundi* ; Barbour, *Bruce* ; *Ormulum* ; *Genesis and Exodus* ; Chaucer, *Man of Lawes Tale* ; Psalter ; *Ancren Riwle* ; *Owl and Nightingale* ; *Ayenbite of Inwit*.

History

Candidates for the degree of Bachelor of Arts with Honours in History shall be required to take the Intermediate examination for the Ordinary degree at the end of the first year of academic study, Latin and History being two of the subjects.

Attendance in the subjects of the School shall be required for ten hours a week in the second academic year, and eight hours a week in the third.

Candidates shall also be required to attend a course in one modern language during their second or third year.

Examination

Essay, one paper.

English (including Constitutional) History, two papers.

Outlines of European History, two papers.

Special period, studied in connection with the original authorities, two papers.

Economics and Economic History, one paper.

Political Theory, one paper.

In addition, candidates shall be required to present a dissertation on some subject approved by the Board of the Faculty of Arts.

Candidates shall also be required to show in the examination some knowledge of at least one foreign language (ancient or modern).

Philosophy

Candidates for the degree of Bachelor of Arts with Honours in Philosophy shall be required to pursue the following courses of study, and to submit themselves to the following examinations :

The course of study for the first year is that for the Intermediate examination for the Ordinary degree of B.A. or B.Sc., Logic being one of the subjects, and candidates must pass this examination before proceeding further on their Honours course.

During the second and third years candidates shall be required to attend approved courses in Philosophy of not less than five hours a week in each year.

They shall also be required to attend, during the second and third years, approved courses of lectures on other subjects, the number of lectures amounting to not less than two hours a week in each year.

Examination

Essay, one paper.

General Questions, one paper.

Logic, Deductive and Inductive, one paper.

Psychology, one paper.

Ethics, one paper.

Advanced Psychology *or* Moral and Political Philosophy, one paper.

Either History of Ancient Philosophy, one paper, and two papers on *one* of the following :—

Descartes, Malebranche, Spinoza.

Spinoza and Leibniz.

English Philosophy from Locke to Hume, with reference to Bacon and Hobbes and to Reid and the Scottish Philosophy.

Kant.

Or, History of Modern Philosophy, one paper, and two papers on *one* of the following :—

Greek Philosophy before Socrates.

Socrates and Plato.

Aristotle.

Post-Aristotelian Philosophy.

Economics and Political Science

The details of this course will be arranged later.

DEGREE OF MASTER OF ARTS

N.B. The following regulations are in force for the Session 1905-6. Considerable changes will probably be introduced in the following year.

1. Registered Bachelors of Arts shall be entitled to be admitted to the degree of Master of Arts on payment of the proper fee, when of three years' standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.

2. Bachelors of Arts who have graduated with Honours are not required to present themselves for any further examination for the degree of Master of Arts.

3. Bachelors of Arts who have obtained the Ordinary degree are required to satisfy the Examiners in a further examination on *one* of the following subjects: Languages, English, History, Philosophy, Political Economy. Certificates of attendance are not required.

4. The names of candidates who have passed the further examination for the degree of Master of Arts shall be arranged in alphabetical order without distinction of classes.

Examination

Languages

Two of the following:—

1. *Greek:*

Translation from Greek books selected from those prescribed for Honours in Classics, one paper.

Questions upon the subject matter of the specified books, and translation at sight, one paper.

Greek prose composition, one paper.

Books prescribed for 1906: Homer, *Iliad* xxii—xxiv; Aeschylus, *Agamemnon*; Euripides, *Bacchae*; Aristophanes, *Frogs*; Thucydides vii; Plato, *Republic* ii, iii; Demosthenes, *De Corona*.

2. *Latin:*

Translation from Latin books selected from those prescribed for Honours in Classics, one paper.

Questions upon the subject matter of the specified books, and translation at sight, one paper.

Latin prose composition, one paper.

Books prescribed for 1906: Plautus, *Captivi*; Lucretius v; Horace, *Odes* i—iii; Vergil, *Aeneid* i—iv; Cicero, *Second Philippic*; Livy xxi; Tacitus, *Histories* i, *Agricola*; Juvenal i, iii, iv, x, xi, xiv.

3. French:

Translation from prescribed French books into English, including easy passages from mediaeval French, with questions upon the prescribed books and historical grammar, one paper.

Translation at sight from French into English, and from English into French, one paper.

Period of French Literature, and Essay in French bearing on the subject prescribed, one paper.

Oral examination in conversation, and in the theory and practice of pronunciation.

Books prescribed for 1906: G. Paris et Langlois, *Chrestomathie du Moyen Age*; Darmesteter et Hatzfeld, *Morceaux choisis des Ecrivains du 16^e siècle* (prose only); Corneille, *Le Cid*; Molière, *Le Misanthrope*; Voltaire, *Siècle de Louis XIV*, part iii; Victor Hugo, *Les Orientales*.

Period of Literature for 1906: Victor Hugo et l'Ecole Romantique.

4. German:

Translation from prescribed German books into English, including easy passages in Middle High German, with questions upon the prescribed books and historical grammar, one paper.

Translation at sight from German into English, and from English into German, one paper.

Period of German Literature and Essay in German bearing on the subject prescribed, one paper.

Oral examination in conversation, and in the theory and practice of pronunciation.

Books prescribed for 1906: Bartsch, *Liederdichter* xxi; *Nibelungenlied*, Av. 12--19; Luther (selection, ed. Neubauer, Halle), i, nos. 3 and 10; Schiller, *Wallensteins Lager*, *Piccolomini*, *Gedichte der dritten Periode* (in Mayr, *Schillers Gedichte*, Wien); Goethe, *Faust*, i, and *Götz von Berlichingen*; Lessing, *Nathan der Weise*.

Periods of Literature for 1906: History of the German Drama to the middle of the Eighteenth Century; Schiller's Life and Works.

5. English Language and Literature:

Translation from prescribed books in Old and Middle English, with linguistic and literary questions, one paper.

Outlines of English Literature, one paper.

Either Grammar of Old English dialects (or of Middle English dialects), with illustrative passages for translation and comment, one paper.

Or Period of English Literature, with prescribed books, one paper.
The books and periods prescribed for 1906 are drawn from those prescribed in the Honours School.

English

Translation of unseen passages of English, with questions, one paper.

Translation from prescribed books in Old and Middle English, with literary and linguistic questions, one paper.

Outlines of English Literature, one paper.

One of the following groups:

1. Grammar of Old and Middle English dialects, with illustrative passages for translation or comment, two papers; and Gothic, one paper.
2. An Essay, one paper; and
A special period of English Literature, with prescribed books, two papers.

History

Either (a)

General History and Geography, two papers.

English (including Constitutional) History, two papers.

An Essay, one paper.

Or (b)

Two of the following subjects, two papers in each:

Roman History, B.C. 78-44.

The History of the British Isles, A.D. 410-731.

England under Edward I.

History of Italy, 1417-1492.

The Age of Henry VIII.

The Age of Louis XIV.

The History of Europe, 1789-1815.

The History of the English Poor Law or the Distribution of Wealth.

An Essay, one paper.

Philosophy

General Questions, one paper.

Three of the following:

Logic, Deductive and Inductive, one paper.

Psychology, one paper.

Ethics, one paper.

History of Philosophy, Ancient or Modern, one paper.

Advanced Psychology *or* Moral and Political Philosophy.

One of the following special subjects, one paper, provided that no candidate may offer as special subject a period or author included in the period of History of Philosophy offered by him.

Greek Philosophy before Socrates.

Socrates and Plato.

Aristotle.

Post-Aristotelian Philosophy.

Descartes, Malebranche, Spinoza.

Spinoza and Leibniz.

English Philosophy, from Locke to Hume, with reference to

Bacon and Hobbes, and to Reid and Scottish Philosophy.

Kant.

Political Economy

The Economic History of England, one paper.

The Economic special subject (or, if there be more than one, one of them) for Honours in History, two papers.

History of Economic Theory, one paper.

Public Finance, one paper.

CLASSICS

Professor RHYS ROBERTS

Professor CONNAL

Mr. GREENWOOD

GREEK LANGUAGE AND LITERATURE

I. Elementary Class

This class will be for beginners; it will not be held unless there is a reasonable number of entries.

Saturdays at 9.30 a.m.

Fee for the session, £1 1s.; for a term, 7s. 6d.

Text Books

Morice's edition of Arnold's *First Greek Book* (Rivington).

Sonnenschein's *Greek Grammar* (Swan Sonnenschein).

II. Matriculation Course

The work in this course will comprise grammar, elementary composition, translation at sight, and the special study of selected portions of Thucydides, book i, and Euripides, *Medea*.

Mondays, Wednesdays, and Fridays at 11.30 a.m., and a class in composition on one other hour a week at a time to be fixed.

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Colson's *Rise of the Athenian Empire as described by Thucydides* (Macmillan).

Euripides, *Medea*, Bayfield (Macmillan).

III. Intermediate Course

The work in this course will comprise composition, translation at sight and the special study of Demosthenes, *Olynthiacs* i, ii, iii, and Sophocles, *Ajax*.

Mondays, Wednesdays and Fridays at 3 p.m., and a composition class on one other hour a week at a time to be fixed.

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Jebb, *Primer of Greek Literature* (Macmillan).

Butcher, *Demosthenes* (Macmillan).

Demosthenes, *Olynthiacs*, Sandys (Macmillan).

Sophocles, *Ajax*, Jebb (Rivington).

IV. Final Course (First Year)

The work in this course will comprise composition, translation at sight, and the special study of selected books, two of which will probably be Herodotus vi, and Sophocles, *Antigone*.

Four hours a week, including one for composition, to be arranged.

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Murray's, Jevons's, or Mahaffy's *History of Greek Literature*.

Herodotus vi, Strachan (Macmillan).

Sophocles, *Antigone*, Jebb's smaller edition (Cambridge University Press).

V. Final Course (Second Year)

The work in this course will comprise composition, translation at sight, and special study of Thucydides, vii, and Homer, *Iliad* xxii, xxiii, xxiv.

Mondays, Wednesdays and Fridays, at 9.30 a.m., and a composition class on one other hour a week at a time to be fixed.

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Murray's, Jevons's, or Mahaffy's *History of Greek Literature*.

Autenrieth, *Homeric Dictionary* (Macmillan).

Jebb, *Introduction to Homer* (Maclehose).

Thucydides vii, Holden (Cambridge Press).

Homer, *Iliad* xiii-xxiv, Monro (Clarendon Press).

VI. M.A. and Honours Course

The Honours Class will meet on Mondays, Tuesdays, Wednesdays, and Thursdays, at 10.30 a.m., on Saturdays at 11.30 a.m. (composition), and at one other hour to be fixed by arrangement.

Fee for the course: without the class in composition, £4 14s. 6d.; for the composition class, £1 5s.

The work in this course will comprise composition, translation at sight, and the study of books prescribed for the examinations for Honours in Classics, and for the M.A. in Classics (see pages 136 and 145).

LATIN LANGUAGE AND LITERATURE

I. Matriculation Course

The work in this course will comprise grammar, elementary composition, translation at sight, and the special study of Caesar, *de Bello Gallico* ii and iii, and Vergil, *Eclogue* iv, and *Georgic* iv.

Mondays, Wednesdays and Fridays at 10.30 a.m., and Thursdays at 11.30 a.m. (composition). A special class in grammar will be held on Tuesdays at 2 p.m.

Fee for the course : without the classes in composition and grammar, £3 13s. 6d. ; for the composition and grammar classes, £1 5s. each.

Books recommended

Caesar, *de Bello Gallico* ii, iii, Brown (Blackie, 1s. 6d. each).

Vergil, *Bucolics* and *Georgic* iv, Sidgwick (Pitt Press, 1s. 6d. and 2s.), or Page (Macmillan, 1s. 6d. each).

II. Intermediate Course

The work in this course will comprise composition, translation at sight, and the special study of Cicero, *pro Roscio Amerino*, and Vergil, *Georgics* i, ii.

Mondays, Wednesdays and Fridays at 9.30 a.m., and Tuesdays at 10.30 a.m. (composition).

Fee for the course : without the class in composition, £3 13s. 6d. ; for the composition class, £1 5s.

Books recommended

Cicero, *pro Roscio Amerino*, Donkin (Macmillan, 2s. 6d.) or Stock (Clarendon Press, 3s. 6d.).

Vergil, *Georgics* i, ii, Page (Macmillan, 1s. 6d. each).

III. Final Course (First Year)

The work in this course will comprise composition, translation at sight, and the special study of selected books, two of which will be Tacitus, *Agricola*, and Vergil, *Aeneid* vi.

Mondays, Wednesdays, and Fridays, at 11.30 a.m., and Tuesdays, at 11.30 a.m. (composition).

Fee for the course : without the class in composition, £3 13s. 6d. ; for the composition class, £1 5s.

Books recommended

Tacitus, *Agricola*, Pearce (Bell, 2s.).

Vergil, *Aeneid* i-vi, Page (Macmillan, 5s.).

IV. Final Course (Second Year)

The work in this course will comprise more advanced composition, translation at sight, and the special study of Cicero, *Second Philippic*, and Juvenal i, iii, iv, x, xiv.

Mondays, Wednesdays and Fridays at 11.30 a.m., and Tuesdays at 11.30 a.m. (composition).

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended

Cicero, *Second Philippic*, Peskett (Pitt Press, 3s. 6d.).

Juvenal i, iii, iv, x, xiv, Duff (Pitt Press, 5s.).

V. M.A. and Honours Course

For students reading for the M.A. or Honours examination.

Tuesdays, Thursdays, and Saturdays at 9.30 a.m., and Saturdays at 10.30 a.m. (composition).

Fee for the course: without the class in composition, £3 13s. 6d.; for the composition class, £1 5s.

Books recommended for Classical Students.

Such books as the following will be found useful by classical students:

Murray's Ancient Greek Literature, Mahaffy's Greek Classical Literature, Mackail's Latin Literature, Cruttwell's History of Roman Literature.

Sandys' History of Classical Scholarship, Saintsbury's History of Criticism, Evelyn Abbott's Hellenica, Butcher's Aspects of the Greek Genius and Harvard Lectures on Greek Subjects, Dickinson's Greek View of Life, Whibley's Companion to Greek Studies, Greenidge's Roman Public Life.

Jebb's Growth and Influence of Classical Greek Poetry, Symonds' Studies of the Greek Poets, Butcher's Aristotle's Theory of Poetry and Fine Arts, Jebb's Introduction to Homer, Browne's Homeric Study, Haigh's Attic Theatre and Tragic Drama of the Greeks, Deschamps's Euripide et l'esprit de son Théâtre, Jebb's Attic Orators.

Tyrell's Latin Poetry, Sellar's Roman Poets of the Republic and Roman Poets of the Augustan Age (Vergil, Horace), Glover's Studies in Virgil, Martha's Poème de Lucrèce, Boissier's Cicéron et ses amis.

Giles's Comparative Philology, V. Henry's Comparative Grammar of Greek and Latin, Goodwin's Greek Moods and Tenses, Gildersleeve's Greek Syntax, Monro's Homeric Grammar. the Latin Grammars of Roby, Madvig, Gildersleeve, and Lodge.

ENGLISH LANGUAGE & LITERATURE

Professor VAUGHAN

Dr. MOORMAN

I. Matriculation Course (Literature)

The work in this course will include the study of English essay writing and of the following works: Shakespeare, *Coriolanus*; Macaulay, *Lives of Bunyan and Johnson*.

Tuesdays at 11.30 a.m. throughout the session, and Thursdays at 2 p.m. in the second and third terms.

Fee for the course, £2 5s.

II. Intermediate Course (Literature)

The work in this course will comprise the history of English literature from 1630 to 1674, and the special study of Chaucer, *Knight's Tale*; Shakespeare, *Mucheth*; Palgrave, *Golden Treasury*, book ii; Milton, *Paradise Lost* i, ii; Dryden, *Essay of Dramatic Poetry*.

Mondays, Wednesdays and Fridays at 10.30 a.m. throughout the session.

Fee for the course, £3 13s. 6d.

III. Intermediate and First Year Honours Course (Language)

In this course the history of the English language will be treated, with special reference to Old and Middle English grammar.

Three hours a week, at times to be arranged.

Fee for the course, £3 13s. 6d.

Text Books

Sweet, *Anglo-Saxon Primer*.

The West Saxon Chronicles (Reigns of Alfred and Edward the Elder).

Ancrun Riwle (Extracts in Sweet's Middle English Primer).

Chaucer, *Knight's Tale*.

IV. Final Course

Students taking English in the Final course may offer English Literature and Language as a principal subject, or English Literature alone as a subsidiary subject (see p. 128).

The courses will be as follows:

a. *English Literature*

The work in this course will comprise the History of English Literature from 1637 to 1700 and the special study of Chaucer, *Clerk's Tale*; Shakespeare, *Twelfth Night*; Palgrave, *Golden Treasury*, book ii; Milton, *Areopagitica*, *Paradise Lost*, books i, ii; *Samson Agonistes*; Dryden, *Essay of Dramatic Poetry*, *Absalom and Achitophel*, part i.

Mondays, Wednesdays and Fridays, at 10.30 a.m., throughout the session.

Fee for the course, £3 13s. 6d.

b. *English Literature and Language*

The work in this course will comprise, in addition to what is entered under (a), a study of the Elements of Old and Middle English, Sweet's *Anglo-Saxon Primer*, *The West Saxon Chronicles* (Reign of Alfred), Chaucer, *Clerk's Tale*.

One hour a week throughout the session.

Fee for the course, £1 11s. 6d.

V. Honours Course, Second Year (Literature)

This course will be devoted to the study of the life and works of Shakespeare.

One hour a week at a time to be arranged.

Fee for the course, £1 11s. 6d.

VI. Honours Course, Second Year (Literature)

The outlines of English Literature.

One hour a week at a time to be arranged.

Fee for the course, £1 11s. 6d.

VII. Honours and M.A. Course (Language)

Honours students in their second year attend this course for two hours a week, Honours students in their third year attend for one hour a week.

Translation from Old and Middle English texts, as prescribed for the Honours School (see p. 138).

Fee for two hours a week, £2 12s. 6d.; for one hour, £1 11s. 6d.

FRENCH LANGUAGE AND LITERATURE

Professor BARBIER

Mr. LECLÈRE

I. Matriculation Course

The work in this class will comprise grammar, elementary composition, translation at sight, conversation in French, and the study of special books.

Mondays, Wednesdays and Fridays, at 3 p.m.

Fee for the session, £3 13s. 6d.

II, III. Intermediate Courses

The work done in these two courses is the same in every respect. It will comprise grammar, composition, dictation, translation at sight, conversation in French, and the special study of Balzac, *Eugénie Grandet*, and Musset, *Les Nuits*.

Course II will be held on Mondays, Wednesdays and Fridays at 11.30 a.m., Course III at 4 p.m. on the same days.

Fee for either course, £3 13s. 6d.

Text Books

Balzac, *Eugénie Grandet* (Hachette).

Musset, *Les Nuits*.

Kastner, *Elements of French Composition* (Hachette 2s).

IV. Final Course

The work in this course will comprise more advanced syntax and composition, translation at sight, the elements of historical grammar, and the special study of Corneille, *Le Menteur*, and Molière, *Le Misanthrope*.

Mondays, Wednesdays and Fridays, at 2 p.m.

Fee for the session, £3 13s. 6d.

Text Books

Corneille, *Le Menteur* (Hachette).

Molière, *Le Misanthrope* (Hachette).

Gasc, *French Prose Composition* (Bell, 3s.).

V. French Literature

Lectures will be given in French on *La Comédie française au xvii^e siècle*, on Tuesdays at 3 p.m., during the first and second terms.

Fee, £1 1s. ; no entry will be taken for less than two terms.

VI. French Literature Revision Class

Tuesdays at 3 p.m. during the third term.

Students reading for the Final B.A. and Honours are expected to join this class.

Fee, 10s. 6d.

Text Book

Doumic, *Histoire de la Littérature Française* (Delaplane, 3s. 4d.)

VII. Honours Course

Mondays, Wednesdays and Fridays, at 4 p.m.

Fee for the session : two hours, £2 12s. 6d. ; three hours,

£3 13s. 6d.

VIII. Commercial Course.

Two hours a week at times to be arranged.

In addition to the study of French correspondence, etc., a book bearing on French commercial life will be read.

Fee, £2 12s. 6d.

IX. Saturday Morning Training Class (Elementary)

This course is intended to instruct teachers in the methods of teaching elementary French.

Saturdays 10.15 a.m. to 12.15 p.m., beginning October 7.

Fee £4 4s. No entry will be taken for less than the whole course.

Text Book

Heath's *Practical French Grammar* (D. C. Heath & Co., 1903).

X. Saturday Afternoon Training Class (Advanced)

This course is intended to instruct teachers in the methods of teaching French to a more advanced stage than in the Morning class, of which it is a continuation.

Saturdays 3 to 5 p.m., beginning October 7.

Fee £4 4s. No entry will be taken for less than the whole course.

GERMAN LANGUAGE AND LITERATURE

Professor SCHÜDDKOPF

Mr. GOUGH

The German courses have been so arranged as to be applicable to (a) candidates for University and other examinations ; (b) students of modern literature ; (c) general students and students of science ; (d) commercial students.

The Professor will be pleased to direct students as to what courses will best suit them.

I. Elementary Course

Mondays, Wednesdays and Fridays, at 2 p.m.

This class is intended for beginners. The greatest attention will be paid to pronunciation. Easy German prose will be read from the beginning.

Fee for the course, £3 13s. 6d.

Text Books

Kuno Meyer, *German Grammar*, part i (Sonnenschein).

Sonnenschein, *First German Reader and Writer* (Sonnenschein).

Hauff, *Wirthshaus im Spessart*, ed. Schlottman-Cartmell (Pitt Press).

II. Matriculation Course

Mondays, Wednesdays and Fridays, at 4 p.m.

This course is intended for students who already possess an elementary knowledge of German. In addition to the study of grammar and composition, the books set for the Matriculation examination will be read; but instead of these, students of science will have the option of reading German prose bearing on various branches of science. German conversation will be practised.

Fee for the course, £3 13s. 6d.

Text Books

Kuno Meyer, *German Grammar*, parts i and ii (Sonnenschein).

Second German Reader and Writer (Sonnenschein).

Sybel, *Prinz Eugen von Savoyen*, ed. Buchheim (Williams & Norgate).

Eichendorff, *Aus dem Leben eines Taugenichts*, ed. Osthaus (Heath).

Dippold, *Scientific German Reader* (Ginn & Co.).

III. Intermediate Course

Mondays, Wednesdays and Fridays, at 3 p.m.

This course is suitable for candidates entering for the Intermediate examination, for commercial students, and for general students who wish to acquire a greater proficiency in German. In addition to the prescribed work, syntax, dictation, composition, and unprepared translation will be studied, and the class will have considerable practice in German conversation.

Fee for the course, £3 13s. 6d.

Text Books

- Kuno Meyer, *German Grammar*, parts i and ii (Sonnenschein).
Third German Reader and Writer (Sonnenschein).
 Heine's *Prosa*, ed. Buchheim (Clarendon Press).
 Scheffel, *der Trompeter von Sakkingen*, ed. Milner-Barry (Macmillan).

IV. Final Course

Mondays, Wednesdays and Fridays, at 9.30 a.m.

The work of this class comprises revision of elementary grammar, the elements of historical grammar, translation, and composition. The class will be taught in German.

Fee for the course, £3 13s. 6d.

Text Books

- Schiller, *Wallensteins Lager* and *die Piccolomini*, ed. Breul (Pitt Press).
 Longmans' *German Composition* (Longmans, 3s.).
 Trechmann, *Short Historical Grammar of the German Language* (Macmillan).

V. German Literature

Two courses of lectures will be delivered in German during the first and second terms, on Tuesdays, at 4 p.m., commencing October 10.

Subject for the first term: *Schillers Leben und Werke*.

Subject for the second term: *Geschichte des deutschen Dramas bis zur Mitte des achtzehnten Jahrhunderts*.

N.B.—This class will be continued during the third term for candidates reading for Honours or M.A. in German or the Final B.A. examination.

Fee for the first two terms, £1 1s.; for one term, 10s. 6d.; for the whole course, £1 11s. 6d.

VI. Lower Commercial Course

Tuesdays and Thursdays, at 3 p.m.

In addition to the study of German correspondence, &c., a book bearing on German commercial life will be read, the title of which will be announced at the beginning of the first term. The class will be taught in German.

Fee for the course, £2 12s. 6d.

Text Book

- Dann, *German Commercial Correspondence* (Longmans).

VII. Higher Commercial Course

Tuesdays and Thursdays at 2 p.m.

The study of German correspondence, etc., will be continued, and German books on economic subjects will be read, the titles of which will be announced at the beginning of the first term. The class will be taught in German.

Text Book

Whitfield-Kaiser, *Course of Commercial German* (Longmans).

VIII. Honours Course

Mondays, Wednesdays and Fridays at 10.30 a.m.

The work of this class will comprise Old High German grammar and literature, and interpretation of Old High German and Middle High German texts. Part of the work taken in this course is also suitable for graduates reading for the M.A. examination.

For books and periods see page 143.

Fee for the course, £3 13s. 6d.

IX. Saturday Morning Training Course

This class will meet on Saturdays, from 10.15 a.m. to 12.15 p.m., beginning October 7. The full course will extend over 25 lessons of two hours each. (N.B. The hours may be slightly altered to meet the convenience of students living outside Leeds.)

It ought to be joined only by students who already possess at least an elementary knowledge of German.

The object of the class is to instruct its members in the art of teaching elementary German. The instruction will be partly theoretical and partly practical, and will include phonetics, pronunciation, grammar, translation, conversation, and composition.

Text books will be recommended at the first meeting of the class.

Fee, £4 4s. No entry will be taken for less than the full course.

HISTORY

Professor GRANT

Mr. YOUNG

I. Matriculation Course

Outlines of English history.

Tuesdays and Thursdays at 10.30 a.m.

Fee for the course, £2 12s. 6d.

II. Intermediate Courses

(a) Outlines of Greek and Roman History with special reference to 500-404 B.C. in Greek History, and 134-31 in Roman.

Mondays and Wednesdays at 11.30 a.m.

Fee for the course, £2 12s. 6d.; for Greek History or Roman History alone, £1 11s. 6d.

(b) Modern History from 1763 to 1900.

Time to be arranged.

This course will not be given unless there are candidates for the degree of B.Com.

III. Final Courses**1. First Year:**

(a) Outlines of European History.

Two hours a week at times to be arranged.

Fee for the course, £2 12s. 6d.

All students taking this course are recommended to procure *European History*, by G. B. Adams (Macmillan, 6/6).

(b) Tutorial Class in the above course.

One hour a week at a time to be arranged.

Fee for the course, £1 11s. 6d.

2. Second Year:

(a) Greek History to 431 B.C.

Two hours a week at times to be arranged.

Fee for the course, £2 12s. 6d.

(b) Roman History B.C. 134 to B.C. 31.

Tuesdays and Thursdays at 9.30 a.m.

Fee for the course, £2 12s. 6d.

- (c) English History from 1603 to 1714.
Two hours a week at times to be arranged.
Fee for the course, £2 12s. 6d.
- (d) European History: The Revolutionary and Napoleonic Era.

Mondays and Wednesdays at 9.30 a.m.

Fee for the course, £2 12s. 6d.

Note:—The above periods will be studied in connection with certain of the original authorities which will be indicated at the beginning of the session.

- (e) Economic History. (Professor CLAPHAM.)

The commercial and industrial history of England mainly in the nineteenth century.

Two hours a week at times to be arranged.

Fee for the course, £2 12s. 6d.

Candidates are recommended to choose from the above one ancient and one modern period.

IV. Honours and M.A. Courses.

- (a) English Constitutional History from 1066 to 1307.
Two hours a week at times to be arranged.
Fee for the course, £2 12s. 6d.
- (b) Roman History from 79 to 44 B.C.
Two hours a week at times to be arranged.
Fee for the course, £2 12s. 6d.
- (c) A class for the study of certain original authorities on the Revolutionary and Napoleonic Era.
One hour a week at a time to be arranged.
Fee for the course, £1 11s. 6d.
- (d) An Essay Class.
One hour a week at a time to be arranged.
Fee for the course, £1 11s. 6d.

PHILOSOPHY

Mr. GILLESPIE

I. Intermediate Course: Logic

Wednesdays and Fridays, at 2.

This course deals with the elements of logic, deductive and inductive. Students will find it useful to familiarise

themselves with the elementary formal logic, in some such text-books as *Jevons* or *Fowler*, before entering the class.

Fee for the course, £2 12s. 6d.

Text Book

Welton, *Manual of Logic* (2 volumes, Clive, 15s.).

II. Final Course : Psychology

Three lectures a week throughout the session, at hours to be arranged.

This course includes the outlines of general psychology, with the more detailed study of some special branch.

A special course in psychology and ethics may be arranged for students who take the Final examination under the old regulations.

Fee for the course, £3 13s. 6d.

Text Book

Stout, *Elements of Psychology* (Clive, 8s. 6d.).

III. Final Course : History of Ancient Philosophy

Three hours a week throughout the session, at hours to be fixed at the beginning of the first term.

Subjects : The outlines of the history of Greek philosophy with more detailed study of special books. These will be the *Gorgias* and the *Phaedo* of Plato in session 1905-6.

Fee for the course, £3 13s. 6d.

IV. Final Course : Advanced Psychology

Two hours a week throughout the session, at hours to be fixed at the beginning of the first term.

This course is intended for candidates for the Final B.Sc. examination under the old regulations, and will not be held unless such candidates present themselves. It is supplementary to Course II.

Fee for the course, £2 12s. 6d.

V. Honours Courses

Lecture courses of one or two hours a week each on some of the subjects prescribed for the Honours School of Philosophy and for M.A. in Philosophy.

Fee for a course of two hours a week, £2 12s. 6d; for a course of one hour a week, £1 11s. 6d.

EDUCATION

Professor WELTON

Miss ROBERTSON

Mr. WELPTON

Miss MELVILLE

Day Training College for Teachers for Primary Schools

A Day Training College, under the provisions of the Education Code, was established in 1891.

The following particulars are supplied for the information of King's Scholars who desire to be admitted to the Leeds Day Training College.

1. Pupil Teachers who have successfully completed their term of apprenticeship, or who terminate their engagement with the consent of their managers, and others who, not having been Pupil Teachers, will be over 18 years of age at the commencement of the session in which they wish to enter, may apply for admission to the Leeds Day Training College. Such application should be made as early as possible.

2. Applicants will be required to furnish certificates of sound health and good conduct upon forms which will be supplied by the Registrar.

3. Applicants may be examined for admission at the King's Scholarship examination, held at Leeds and elsewhere in December.

Candidates for the King's Scholarship examination must give notice to the Board of Education before the 1st of October. That examination is held in Leeds, not at the University, but at the Education Offices, and candidates who wish to be examined in Leeds must apply to the Clerk of the Education Committee of the City Council for seats.

4. All candidates, whether they have passed the King's Scholarship examination or not, will be required *to pass* the Matriculation examination of the University before admission.

5. Preference will be given to those candidates for admission who are willing to remain for a third year in order to complete their training, if they are reading for a University degree.

6. All candidates will, on admission, be required to sign a declaration of their intention to become Elementary teachers, and must be examined by the Medical Officer of the University.

7. Twenty Men and twenty-five Women King's Scholars may be admitted to the Day Training College next session, and those accepted will be required to come into residence at the beginning of October. They will be at liberty to reside at their own homes if these are within reasonable distance of the University, or they may, by permission of the Managing Committee of the Training College, reside in lodgings which have been inspected, and are registered and subject to inspection, by the University authorities.

8. The Leeds Day Training College year coincides nearly with the session of the University of Leeds, which begins in October, is divided into three terms of about eleven weeks each, and ends in June. Training College students will be engaged in their practical training during certain parts of the University vacations.

9. The Government grant for maintenance of £25 a year for men, and £20 a year for women students, will be paid to such King's Scholars as reside at home or in registered lodgings, at the times and in the instalments prescribed by the Board of Education.

10. All King's Scholars admitted to the Training College will be required to pay annually a charge of £10, and also a sum of 10s. 6d., the compulsory fee payable for membership of the University Union. No further payment to the University will be required, but Scholars will have to provide their own books, and those who work in the University laboratories will have to supply themselves (by purchase or hire) with a small amount of scientific apparatus. The University examination fees will also have to be paid by all King's Scholars.

11. The King's Scholars in residence will be admitted without additional fee to the lectures, classes, and laboratory work required for their prescribed courses of study.

12. All students of the Day Training College will attend the classes and will be required to enter for the examinations qualifying for a degree of the University.

13. The Government certificate will be issued on the results of examinations conducted in part by the Board of Education, and in part by the University. Students who offer approved University examinations will be allowed to substitute these for the greater part of the syllabus of the Certificate examination conducted by the Board of Education.

14. The professional training of the students is conducted by the staff of the Department of Education. This training includes courses of lectures and written exercises in the History, Theory, and Art of Education, supplemented by practical work in selected schools under the supervision of the professional staff. Needlework is under the charge of the Mistress of Method.

Teachers for Secondary Schools

A full course of instruction in the theory and practice of education is provided for men and women students intending to become teachers in secondary schools. Such students attend the ordinary courses of lectures in Education and criticism lessons, and special courses to prepare for the Diploma in education of the University are provided as required.

Arrangements are also made for practical training in class teaching and management in certain selected secondary schools in Leeds or the immediate neighbourhood.

The whole course may be taken in one session, or may be spread over two or three sessions.

Diploma in Education

1. Candidates for the diploma in Education must be graduates of some University in the United Kingdom, or must have obtained such other academic qualifications as shall be approved by the Senate of the University. The Senate will accept any qualification which is recognised by the Teachers' Registration Council as sufficient for the purpose of registration in Column B. Regulations.

2. The course of study shall extend over at least one academic year, and shall consist of:

- (a) Attendance in schools approved by the University for the purpose,
- (b) Attendance upon courses of lectures in the Theory, Practice, and History of Education.

In the case of a student who has taken Honours in the Final examination for a degree after spending four academic years at some University in the United Kingdom, attendance for two consecutive terms will be accepted.

3. Such regular and continuous attendance in school shall be given throughout at least two terms as the Professor of Education may think desirable.

4. Satisfactory reports from (a) the head teacher of the school and (b) the University Education Department shall be presented before the candidate can enter for the examination.

5. Candidates shall attend prescribed courses of lectures at the University on the Theory, Practice, and History of Education.

(*Note*.— All such courses may be taken in one academic year, but it is strongly recommended that students already in the University should take the preparatory course in the Theory of Teaching in a year previous to that given to preparation for the diploma. These courses will, as a rule, be those arranged for the subject of Education for the degree of B.A., except that for lectures on the organisation, curriculum and special methods of teaching in primary schools will be substituted a corresponding course having more definite reference to secondary schools).

6. The examination for the diploma shall take place in June, at the same time as the degree examinations, and shall consist of written papers and tests in practical skill. The written papers—except that in the Practice of Education—will, as a rule, be the same as those set in the degree examination.

The tests in practical skill shall consist in the delivery of lessons and an inspection of records of the candidate's practical work in school. Importance shall be attached to reports on the candidate's work and skill from the head teacher of the school and from a member of the staff of the University Education Department.

7. Graduates in Arts or Science of this University who have included Education in the Final examination for their degree may obtain the diploma in Education after a further year's attendance on a course approved by the Board of the Faculty in which the degree was taken. Such course must include—

- (a) Attendance in schools as specified in 2 (a) above ;
- (b) Attendance on a course of lectures on the practical work of secondary schools ;
- (c) Attendance on a course of study in Arts or Science approved by the Board of the Faculty as at least equivalent to the subject of Education taken as part of the Final course for the degree.

The examination for the diploma in Education will in these cases consist of the tests of practical skill, and the paper in the Practice of Education (s. 6).

The diploma in Education will not be issued until the candidate has also passed the degree examination in the subject or subjects included under (c).

8. The list of successful candidates shall be issued in alphabetical order, and no special honours shall be assigned to any candidate.

9. No diploma shall be issued until the candidate has passed in both the written and the practical parts of the examination. But a candidate who fails in the practical part only may, on the recommendation of the Examiners, be allowed by the Senate to present that part at a subsequent date without further written examination. In such cases the candidate must produce a satisfactory report from the head teacher of the school in which he (or she) has been teaching, and must submit records of work done.

LECTURE COURSES

I. Education : First Year Course

Lectures on Mondays, Wednesdays and Fridays, at 4 p.m.

Each Term—General nature of education. The psychological foundations of the general principles of educational method. Applications of the general principles of method to the teaching of the usual school subjects and the preparation of notes of lessons. Three hours a week.

Each Term—Criticism Lesson. One and a half hours a week on Thursdays at 3.15 p.m.

Fee (except for King's Scholars in the College) for lectures only, £3 13s. 6d.; for lectures and criticism lessons, £4 4s.

II. Education : Second Year Course

Lectures on Tuesdays and Thursdays in the first and second terms at 9.30 a.m.; in the third term two hours a week, at times to be arranged.

First Term—Physical education and school hygiene. School organization.

Second Term—The logical and psychological foundations of teaching.

Third Term—The psychological and ethical foundations of moral education, with applications to school discipline.

Each Term—Criticism Lesson. One and a half hours a week on Thursdays at 3.15 p.m.

Fee (except for King's Scholars in the College) for lectures only, £3 3s.; for lectures and criticism lessons, £3 13s. 6d.

III. Education : Third Year Course

Course A. Mondays and Wednesdays at 3 p.m. The history of educational thought in West Europe from the Renaissance to the present time, with special reference to England, and special emphasis on the Nineteenth Century.

Course B. Fridays at 3 p.m. Plato, *Republic*, ii, iii, iv. A discussion class on the Theory of Education will be held at a time to be arranged. Attendance optional.

Criticism Lessons. Each term for one and a half hours per week. Thursdays at 3.15 p.m.

Fees (except for King's Scholars in the College):—For Course A, lectures only, £3 3s.; For lectures and criticism lessons, £3 13s. 6d.; For Course B, or the discussion class, without criticism lessons, £1 11s. 6d.; with criticism lessons, £2 2s.

IV. Nature Knowledge

For first year King's Scholars, on Saturdays, 9.30 a.m. to 12.30 p.m. See page 225 under Nature Knowledge.

V. General Elementary Science

For second year King's Scholars, on Saturdays, 9.30 a.m. to 12.30 p.m. See pages 215 and 219.

VI. Drawing and Elementary Design

This course is arranged to meet the requirements of the students in the Day Training College, and consists of one lecture per week in the first and second years, together with at least one hour per week for practical work. The lecture for first year King's Scholars is on Thursdays, from 2 to 3 p.m. The Lecture for second year King's Scholars is on Tuesdays, from 2 to 3 p.m.

The time devoted to practical work will be arranged to meet the convenience, as far as possible, of individual students.

Students wishing to prepare for any subjects which they may require in order to complete the Elementary Drawing Certificate of the Board of Education, may do so by arrangement with the lecturer.

VII. Reading and Recitation

For first year King's Scholars, (men) on Wednesdays, at 5 p.m. ; (women) on Wednesdays at 11.30 a.m. For second year King's Scholars, on Thursdays, at 2 p.m.

VIII. Music

For first and second year King's Scholars, on Thursdays, at 5 p.m. Tutorial classes will be held at times to be arranged.

IX. Needlework

For first and second year King's Scholars, two hours a week (time to be arranged).

X. Physical Exercises

For first and second year King's Scholars, two half hours per week for each year (times to be arranged).

DEGREE, DIPLOMA, EXAMINATIONS, AND COURSES OF STUDY IN COMMERCE

Students in the Department of Commerce may take a three years' course for the degree of Bachelor of Commerce, or a two years' course for the diploma in Commerce, according to the ordinance and regulations which follow.

Degree of Bachelor of Commerce

Ordinance.

1. The degree in Commerce shall be that of Bachelor of Commerce (B. Com.).
2. All candidates for the degree of Bachelor of Commerce shall be required to have passed the Matriculation examination, with at least one modern foreign language as one of the subjects, and thereafter to have pursued approved courses of study for not less than three academic years.
3. The complete course of study for the degree of Bachelor of Commerce shall be divided into two parts, called respectively the Intermediate course and the Final course.
4. Every candidate shall be required to pass two examinations, the Intermediate and the Final.
5. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.
6. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee for the degree of Bachelor of Commerce, may determine.
7. All students shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the

class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

Intermediate Course and Examination

8. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in five subjects, viz. :

- i. Economics : the outlines of the economic history of England in the Nineteenth Century, and the general elementary principles of Economics
- ii. The economic geography of the British Empire
- iii. A modern foreign language (French or German)
- iv, v. *Two* of the following :

A second modern foreign language (French or German, whichever of the two has not been offered under iii)

Mathematics

European History from 1763,

and to pass in each of the subjects offered. The examination in each modern foreign language shall include an oral examination.

Final Course and Examination

9. Every candidate shall be required, except as provided in clause 10, to attend approved courses of study, extending over two years, and to pass an examination in each of the following principal subjects :

- i. Economics : comprising (a) advanced general Economics (b) a special economic subject
- ii. A modern foreign language (French or German)
- iii. A second modern foreign language (French or German, whichever of the two has not been offered under ii)
- iv. Accountancy.

The examination in each modern foreign language shall include an oral examination. An essay shall also form part of the examination.

10. For the second modern foreign language *or* for Accountancy candidates may substitute *two* of the following, studied each for one year as a subsidiary subject :

- (a) The economic geography of the principal foreign countries
- (b) Commercial Law
- (c) Accountancy (unless Accountancy has already been offered as a principal subject).

Candidates may take the course of study in a subsidiary subject in the first year of the Final course, and present themselves at the end of that year for examination in such subject.

Diploma in Commerce

Regulations. Candidates for the diploma must have passed the Matriculation examination, with at least one modern foreign language as one of the subjects, or some other public examination, which in the opinion of the Senate is of sufficiently high standing, and thereafter to have pursued approved courses of study for not less than two years.

First Year Course

Economics
 French *or* German
 The economic geography of the British Empire
 Accountancy
 Mathematics *or* a second language *or* some other course to be approved by the Senate.

Second Year Course

I. Compulsory subjects :

Economics, more advanced general course
 French *or* German
 The economic geography of the principal foreign countries
 Accountancy, second year course
 Commercial Law.

II. Optional subjects:

Candidates for the diploma may also take, in their second year, an optional course in a second foreign language *or* a short course in the Textile, Engineering, or other Technological Department of the University.

DEPARTMENT OF COMMERCE

Professor CLAPHAM

Mr. SHAW

Professors and Lecturers in other subjects, especially French, German, and Law, take part in the teaching.

Syllabus of Courses

The following syllabus explains more in detail the nature of the various courses. All the classes are open, as in other Departments of the University, to students who are not candidates for a degree or diploma.

Economics

Professor CLAPHAM

First Year Course.—Mondays, Wednesdays and Fridays,
2 p.m.

Second Year Course.—Three hours a week at times to be arranged.

Third Year Course.—Times and hours to be arranged.

Fee for the session for each three hours' course
£3 13s. 6d.

First Year: The first term will be given to the study of the modern commercial and industrial history of England, mainly in the nineteenth century. This will lead up to the explanation of the leading features of the existing industrial and commercial organisation of the country. The main principles connected with the production and distribution of wealth, with wages, profits, interest and rent, and the values of goods and services will be dealt with. A

preliminary study of the English monetary and banking system will be made, and attention will be given to foreign trade, the exchanges, and the relations of government to trade.

Second Year: This course will be of a more advanced character, and will be largely descriptive, though some of the more difficult general principles of Economics will also be dealt with. It will include such topics as the organisation of the chief markets; the money market; the Stock Exchange; price fluctuations and commercial crises and depressions; more advanced monetary and banking questions; combinations, their characters and policies; trade unions, their aims and methods; railways and railway rates. The latter part of the course will be given to public finance—rates, taxes, debts, the Budget.

Third Year: In this year candidates for the B.Com. will study in detail some selected branch of Commerce or of Economics. The practical details as well as the history and general principles of the special subject will be kept in view. Subjects will be chosen from time to time to suit the needs of various classes of students, as the work and staff of the Department grow. Among these subjects will be: Foreign Trade, Transport (including Railway Economics), Money and Banking.

Economic Geography

Professor CLAPHAM

First Year Course.—The British Empire, Tuesdays and Thursdays, at 4 p.m.

Second (or Third) Year Course.—The principal foreign countries, two hours a week at times to be arranged.

Fee for the session, for either course, £2 12s. 6d.

These two courses will supplement those in Economics. They will deal with the geographical basis of trade; with the situation, features, population, mineral, and other resources and industrial and commercial development of the various countries. Trade routes, railway and canal systems, will be studied geographically. The import and export trades of each country will be examined; and also the distribution of the leading industries, the special features of each, the

sources of its raw material and the markets for its goods. The courses will also include an examination of commercial policy in each of the countries dealt with.

Commercial Law

Professor PHILLIPS

Tuesdays and Thursdays at 3 p.m. throughout the session.

First Term: The general principles of the law of contract; the conception of contract in English Law; doctrine of consideration; statute of frauds; Sale of Goods Act—mistake—misrepresentation—fraud—illegality; assignment of contract, discharge of contract.

Second Term: Two independent short courses each of one hour a week: (a) Law of negotiable instruments; (b) Law of Bankruptcy.

Third Term: Two independent courses as in the second term: (a) Industrial Law or Law as to Employers and Employed; (b) Company Law.

Fee for the session, £2 12s. 6d.; for one term, £1 5s.; for Sections (a) or (b) in the second or third terms, 15s. each.

Accountancy

Mr. SHAW

First Year Course.—Wednesdays, 3 p.m.

Second Year Course.—Wednesdays, 4 p.m., and at a second hour to be arranged.

Third Year Course.—Hours to be arranged.

Fee for the First Year Course, £1 11s. 6d.; for the Second Year Course, £2 12s. 6d.

First Year: The course will deal with (1) the general principles of book-keeping, illustrated by the ordinary transactions of a merchant or manufacturer; (2) the special principle of book-keeping by double entry; (3) the books themselves—various subsidiary books, leading up to the ledger; (4) the trial balance and the various methods of preparing it; (5) the preparation of the trading account, profit and loss account and balance sheet; (6) cheques, bills of exchange, and other important commercial documents.

Second Year: (1) Partnership accounts and other more complicated transactions; (2) the different forms of books and accounts suitable for various kinds of businesses; (3) the various methods of stock-taking; (4) the books and forms used for limited companies in connection with the share capital, debentures, &c., a study of the balance sheets of a number of companies; (5) departmental accounts; (6) the preparation of accounts required for income tax purposes.

Third Year: (1) The analysis of accounts with a view to the computation of earnings and comparison of expenses; (2) costing and cost accounts; (3) sinking funds, provision for depreciation, &c.; (4) the various methods of payment of wages and of remuneration for management; (5) limited companies—public and private—their advantages and disadvantages; (6) fixed charges and the relation of selling prices to cost prices; (7) goodwill.

French

Professor BARBIER and Mr. LECLÈRE

German

Professor SCHÜDDEKOPF and Mr. GOUGH

In the degree course students in their first year will take the same work in languages as Arts students, including composition, translation at sight, dictation, conversation and the study of prescribed books. It is not thought desirable that the teaching should be specialised at this stage in the case of degree students.

During the second and third years, in preparation for the final examination, students will continue some parts of the general work and teaching, but will also read specially selected books of an economic or commercial character, and they will have opportunities of studying (1) correspondence, and (2) the institutions of the country whose language they are learning.

Diploma students will, as a rule, give special attention to correspondence and reading of a commercial character during both years of their course.

European History since 1763

Professor GRANT

This course, one of the options for the Intermediate examination, is intended to introduce students to the main facts in the political history of the nineteenth century. It is thought that it will be a valuable part of a general modern education, such as the B.Com. course aims at providing, and will bring out the connection of the economic and commercial studies, which form the bulk of the course, with politics and social developments. It will also assist in the study of the languages and institutions of foreign countries.

Mathematics

Professor ROGERS

The course in Mathematics will be that for the Intermediate B.A. It is intended for students who propose to enter a career such as that of an Accountant, in which a mathematical training may be of special value.

DEGREES, EXAMINATION, AND COURSES OF STUDY IN LAW

Ordinance. The degrees in Law shall be :

Bachelor of Laws (LL.B.)

Doctor of Laws (LL.D.).

Degree of Bachelor of Laws

1. All candidates for the degree of Bachelor of Laws are required to have matriculated and to have passed the Matriculation examination¹ or to have graduated in this or some other University of the United Kingdom.

2. The examination for the degree of Bachelor of Laws shall be divided into two parts, called respectively the Intermediate and the Final examination.

Intermediate Examination

3. The names of candidates who have passed the Intermediate examination shall be published in two divisions.

4. Candidates before entering for the Intermediate examination are required to furnish certificates of having attended an approved course of study in the University in each subject which they present for examination.

5. Candidates presenting themselves for the Intermediate examination for the degree of Bachelor of Laws are required to satisfy the examiners in :

- i. Roman Law
- ii. The Law and Custom of the English Constitution
- iii. Jurisprudence
- iv. Logic *or* Political Economy *or* Ancient History.

Provided that any candidates who are already graduates of some other University within the United Kingdom, or are graduates in Arts, Science, or Medicine of this University, shall not be required to attend classes or to be examined in Logic or Political Economy or Ancient History.

Final Examination¹

6. Candidates presenting themselves for the Final examination for the degree of Bachelor of Laws are required to satisfy the examiners in :

Real and Personal property
The Principles of the Law of Contract
The Principles of the Law of Torts
The Principles of Equity.

One of the following :

Succession
Trusts
Bankruptcy
Crimes.

Candidates for a place in the First division must offer themselves for examination in *one* of the following :

International Law
Constitutional Law
Conflict of Laws.

7. Candidates for the Final examination are required to present certificates of having attended, during two years after passing the Intermediate examination, courses of instruction in the Department of Law of the University for not less than five hours a week in one of such years, and four hours a week in the other of such years, provided that students who have been called to the bar or who have been admitted on the rolls as solicitors, and students who are reading in the chambers of a barrister or who are articled to a solicitor, may be admitted to this examination on presenting certificates of having attended courses in Law in the University for three hours a week during two years after the date of passing the Intermediate examination.

8. Candidates who are already graduates in some other Faculty and desire to proceed to the Final examination after two instead of three years' attendance on classes in the Law department of the University must attend in the first of such years the classes for the Intermediate examination and during the first and second years classes in English Law for

¹ Persons who, before or after entering into Articles of Clerkship, have passed this examination, are exempted from the Intermediate examination of the Law Society

three hours a week. Candidates may, however, in place of one or two hours a week in the first year attend one or two additional hours a week in the second year.

9. Candidates who offer themselves for examination in any of the special subjects of International Law, Constitutional Law, Conflict of Laws, are required further to present a certificate of having attended a course in the University in one of such special subjects.

10. Graduates of this or any other University of the United Kingdom in any other Faculty may proceed to the Final examination after two instead of after three years' study in the Law department of the University, and will be examined in subjects i, ii, and iii only of the Intermediate examination.

11. The names of candidates who have passed the Final examination shall be published in three divisions in alphabetical order.

Degree of Doctor of Laws

The Regulations for the degree of Doctor of Laws are under consideration.

NOTE. The following is an extract from the Consolidated Regulations of the Inns of Court :

"The Council may accept a degree granted by any University within the British Dominions, *for which the qualifying examination was in Law*, as an equivalent for the examination in any of the subjects mentioned in Rule 43 (Roman Civil Law, the Law of Real and Personal Property, Common Law and Equity) other than Common Law and Equity."

Undergraduates of this University can keep their terms at any of the Inns of Court by dining in Hall any *three* days in each Term.

DEPARTMENT OF LAW

Supported by the Yorkshire Board of Legal Studies

Professor PHILLIPS

The Law Department of the University of Leeds has been founded by the Yorkshire Board of Legal Studies, assisted by the Law Society of the United Kingdom, and

is intended to afford systematic instruction throughout the academic year to students preparing for

1. The Law examinations of the University of Leeds,
2. The examinations of the Council of Legal Education, preparatory to call to the Bar, and
3. The examinations of the Law Society of the United Kingdom, qualifying for admission to practice as a Solicitor.

Most of the classes will also be found useful to candidates for the Law degree of the University of London.

Students pursuing the requisite course of study for a University degree in Laws, or for the examinations of the Council of Legal Education or of the Law Society of the United Kingdom, will, after registration and payment of the entrance fee, be admitted to all the University lectures and classes that are arranged to meet their special requirements for an annual composition fee (paid in advance) of £8 8s. Students who are preparing for *both* a degree in Law and admission to the rolls as solicitors may attend all the lectures and classes for this double purpose for an annual composition fee of £10 10s. Those who desire to attend less than four lectures or classes may pay the separate fees of the classes selected. Candidates for the examinations of the University of Leeds must, however, comply with the University regulations as to the number of hours of weekly attendance to be given to the prescribed courses.

The courses will be arranged so as to give preparation for the Intermediate examinations in one session, and for the Final examinations in two sessions.

Professor Phillips would be glad to confer with law students on all questions concerning their examinations, and to render them such assistance as might be in his power.

In cases where the hours of the lectures and classes are not stated, arrangements will be made in accordance with the requirements of individual students and the convenience of the majority.

DEGREE OF BACHELOR OF LAWS**I. Intermediate Course****Roman Law**

Professor PHILLIPS

Wednesdays and Fridays, at 3 p.m., throughout the session. During the third term attendance is optional for candidates for the Intermediate LL.B.

This is a qualifying course for the Intermediate examination of the University of Leeds, and prepares for the examination in Roman Law of the Council of Legal Education.

It will deal with the general history of Roman Law and with the elements of that Law so far as they are contained in the Institutes of Gaius and Justinian, omitting the titles on Intestate Succession.

Fee for the course, £3 3s.

The Law and Custom of the English Constitution

Professor PHILLIPS

Fridays, at 4 p.m., throughout the session.

This is a qualifying course for the Intermediate Law examination of the University of Leeds, and prepares for the examination in Constitutional Law and Legal History of the Council of Legal Education.

Fee for the course, £2 2s.

Analytical and Historical Jurisprudence

Professor PHILLIPS

Wednesdays, at 4 p.m. throughout the session.

This is a qualifying course for the Intermediate Law examination of the University of Leeds, and prepares for the examination for the Studentship and Honours of the Council of Legal Education.

Fee for the course, £2 2s.

II. Final Course**Real and Personal Property**

A course of Lectures of one hour a week throughout the session will be given at times to be arranged.

Fee for the course, £2 2s.

Common Law

Professor PHILLIPS

During the session 1905-6, a course of Lectures on the Law of Contract, of one hour a week throughout the session, will be given at times to be arranged, to be followed in the next session by a course on the Law of Torts.

Fee for the course, £2 2s.

Equity

A course of Lectures on the Principles of Equity, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course, £2 2s.

Trusts or Succession

A course of Lectures on Trusts or Succession will be given during the present session. The class will meet twice a week at times to be arranged.

These courses respectively qualify for the optional subjects of Trusts or Succession in the Final examination of the University of Leeds.

Fee for the course, £3 3s.

Bankruptcy

Professor PHILLIPS

A course of Lectures on the Law and Practice of Bankruptcy will be given at times to be arranged.

Fee for the course, £2 2s.

Criminal Law

Professor PHILLIPS

A course of Lectures on Criminal Law and Practice, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course, £2 2s.

International Law—Public and Private
 Professor PHILLIPS

A class will be held when required in International Law, Constitutional Law, or The Conflict of Laws, to prepare candidates for the First Division in the LL.B. examination of the University of Leeds. Such a class would also be found useful to candidates for the examination of the Council of Legal Education.

Fee for the class, £2 2s.

LAW SOCIETY EXAMINATIONS

I. Intermediate Examination

The Elements of English Law

Mondays and Thursdays, at 4 p.m. throughout the session.
 Subject: *Stephen's Commentaries on the Laws of England*.
 This class will be mainly tutorial.

Fee for the course, £3 3s.

II. Final Examination

Real and Personal Property

A course of classes of one hour a week throughout the session will be given at times to be arranged.

Fee for the course, £2 2s.

Conveyancing

A class for tuition in the practice of Conveyancing will be held once a week throughout the session. The time of meeting will be arranged.

Fee for the class, £2 2s.

Common Law

Professor PHILLIPS

During the session 1905-6, a course of classes on the Law of Contract, of one hour a week throughout the session, will be given at times to be arranged, to be followed in the next session by a course on the Law of Torts.

Fee for the course, £2 2s.

Equity

A course of classes in the Principles of Equity, of one hour a week throughout the session, will be given at times to be arranged.

Fee for the course, £2 2s.

Candidates are also recommended to attend the lectures on Trusts or Succession of which an account is given on page 183.

Bankruptcy

Professor PHILLIPS

Classes will meet once a week during the session at times to be arranged.

Fee for the course, £2 2s.

Criminal Law

Professor PHILLIPS

Classes will meet once a week during the session at times to be arranged.

Fee for the course, £2 2s.

Company Law

Classes will meet once a week during the first and second terms at times to be arranged.

Fee for the course, £1 11s. 6d.

Equitable Procedure

Classes will meet once a week during the third term at times to be arranged.

Fee for the course, £1 1s.

Legal Evidence and Procedure

Classes will meet once a week at times to be arranged.

Fee for the course, £2 2s.

Probate, Divorce, and Admiralty Law

Classes will meet once a week at times to be arranged.

Fee for the course, £2 2s.

Tutorial Classes

In the case of students who are about to present themselves for the Final examination of the Law Society, there will be held during each term Tutorial Classes, the work of which will be revisionary. These classes will be open only to such students as have attended a complete course of classes in the Law Department of the University. The Tutorial Classes of each term will be complete in themselves.

Fee for the classes, £2 2s.

N.B.—This fee is not included in any composition fees.

DEGREES, EXAMINATIONS & COURSES OF STUDY IN THE FACULTIES OF SCIENCE & TECHNOLOGY

1. The degrees in Science shall be :

Ordinance

Bachelor of Science (B.Sc.)

Master of Science (M.Sc.)

Doctor of Science (D.Sc.).

Diplomas are also granted by the University in the following technological subjects : Engineering, Civil, Mechanical and Electrical ; Coal Mining ; Textile Design, Spinning, and Textile Manufacture ; Dyeing ; Leather Manufacture. For particulars see page 208, and under the several departments.

DEGREE OF BACHELOR OF SCIENCE

2. The degree of Bachelor of Science shall be conferred either as an Ordinary degree or as a degree with Honours.

3. All candidates for the degree of Bachelor of Science shall be required to have passed the Matriculation examination, and thereafter to have pursued approved courses of study for not less than three academic years.

Ordinary Degree of Bachelor of Science

N.B. Students who began their course for the degree under the scheme previously in force may obtain permission to complete their course according to the former regulations, as reprinted in pages 193-5 below.

4. The complete course of study for the Ordinary degree of Bachelor of Science shall be divided into two parts, called respectively the Intermediate course and the Final course.

5. Every candidate shall be required to pass two examinations, the Intermediate and the Final.

6. The Intermediate and Final examinations shall ordinarily be held in June of each year. There shall also be a supplementary Intermediate examination in September, at which those candidates only may present themselves who have obtained the permission of the Senate.

7. Candidates who have failed at an Intermediate examination in June, and have obtained permission to present themselves at the following supplementary examination, may be excused such part of the supplementary examination as the combined Examination committees, on report from the Examination committee concerned, may determine.

8. All candidates shall be required, before presenting themselves for the Intermediate or Final examination, to furnish to the Registrar certificates testifying that they have regularly attended the prescribed courses of study, and performed the class exercises to the satisfaction of the Professor or Lecturer, in each of the subjects which they offer at the examination.

9. Every candidate who has not passed in French or German at the Matriculation examination must show at the Final or some previous examination during his course that he has a reading acquaintance with French or German.

10. The proficiency of candidates in laboratory work may be determined by inspection of their laboratory note books and the consideration of terminal or sessional reports from their laboratory teachers. Candidates may also be called upon to undergo a special practical examination at the Intermediate and Final stages of the degree course.

It shall always be in the power of the External Examiner to impose a practical or *viva voce* examination on such occasions as he may think desirable.

Intermediate Course and Examination

11. Every candidate shall be required, after passing the Matriculation examination, to attend during not less than one academic year approved courses of study in three subjects (one of which must be Mathematics or Physics) selected from the following:

Mathematics

Physics

Chemistry

Biology

Geology,

and to pass in each of the subjects selected.

Candidates who propose to take an Applied Science (see section 16) in the Final course must pass in the subjects of the Intermediate course specified in section 21.

12. Every candidate is further required, at some time during his course, to take an additional subject at the Intermediate standard, selected from the following: Greek, Latin, French, German, English Literature, English Language, Ancient or Modern History, Logic, Economics, Economic Geography, Mathematics, Physics, Chemistry, Biology, Geology. In the case of candidates taking an Applied Science as a principal subject at the Final course (section 21 below), this list is increased by the addition of Applied Mechanics and General Engineering.

13. A descriptive essay relative to the scientific or technical work of the candidates will be set as part of the Intermediate examination, and will be examined by the teachers of English in co-operation with the Head of the Scientific department concerned, and in the event of a student failing in this portion of the Intermediate examination, he shall be permitted to take it again at the end of any succeeding term.

Final Course and Examination

14. Every candidate will be required to attend approved courses of study either in two principal subjects, or in one principal subject and two subsidiary subjects, provided that the same subject shall not be taken both as a principal and a subsidiary subject. One of the subjects selected must be Mathematics, Physics, Chemistry, or an Applied Science.

In the Final examination there will be included, for translation into English, passages in French and German relating to the principal subject or subjects of a candidate's degree course.

15. The course of study in each principal subject shall extend over at least two years beyond the Intermediate standard, and the course of study in a subsidiary subject shall extend over at least one year beyond the Intermediate standard.

Principal Subjects

16. The principal subjects shall be selected from the following lists :

Pure Sciences :

Mathematics
Physics
Chemistry
Zoology
Botany
Physiology
Geology.

Applied Sciences :

Mechanical Engineering
Civil Engineering
Electrical Engineering
Mining Engineering
Agriculture
Applied Chemistry (Colour Chemistry and Dyeing)
Applied Chemistry (Chemistry of Leather Manufacture).

Every candidate taking Physics as a principal subject is required to have passed in Mechanics at the Matriculation examination, or to satisfy the Professor of Physics that he possesses an adequate knowledge of the subject.

In the event of Physiology being chosen as a principal subject, the second principal or the two subsidiary subjects shall be chosen from among the following :—Physics, Chemistry, Zoology, Botany. In any case, six months' instruction in Human Anatomy will be required.

Every candidate taking an Applied Science as a principal subject is required to pursue one of the courses specified in section 21.

Subsidiary Subjects

17. The subsidiary subjects shall be selected from the following list :

Pure Mathematics
Applied Mathematics
Physics
Chemistry

Zoology
Botany
Physiology
Geology
Human Anatomy
Bacteriology
Education (including the teaching of
Elementary Science).

Pure and Applied Mathematics cannot be taken together as subsidiary subjects.

18. The following subjects shall rank as subsidiary subjects in connection with courses where Mechanical or Civil or Electrical or Mining Engineering is taken as a principal subject :

Mechanical Engineering
Civil Engineering
Electrical Engineering
Mining Engineering.

19. The course of study in the subsidiary subjects may be taken either in the first or second year of the Final course.

20. Candidates who have attended, during the first year of their Final course, the prescribed course of study in a subsidiary subject, may present themselves in the following June for examination in such subsidiary subject. When Education is taken as a subsidiary subject, part of the examination may be taken at the end of each of the two years of the Final course. Candidates who fail to satisfy the examiners in such parts of the Final examination as they have taken at the end of the first year of their Final course shall be required to repeat this part of the examination at a subsequent June examination.

Courses for candidates taking an Applied Science

21. Candidates selecting an Applied Science as a principal subject are required to attend courses of study and to present themselves for examination in definite subjects, as specified below :

Mechanical Engineering :

Intermediate—Mathematics, Physics, and Chemistry ;
additional subject at Intermediate standard, Applied
Mechanics.

Final—Principal subject, Mechanical Engineering ; subsidiary subjects, Mathematics, and either Physics or Civil or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

Civil Engineering :

Intermediate—Mathematics, Physics and Chemistry ; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Civil Engineering ; subsidiary subjects, Mathematics, and either Geology or Mechanical or Electrical or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Geology.

Electrical Engineering :

Intermediate—Mathematics, Physics, and Chemistry ; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Electrical Engineering ; subsidiary subjects, Mathematics, and either Physics or Mechanical or Civil or Mining Engineering, but in any case the candidate shall produce a certificate of having satisfactorily attended a prescribed course in Physics.

Mining Engineering :

Intermediate—Mathematics, Physics, and Chemistry ; additional subject at Intermediate standard, Applied Mechanics.

Final—Principal subject, Mining Engineering ; subsidiary subjects, two of the following : Mathematics, Geology, Mechanical, or Electrical Engineering, but candidates shall produce certificates of having satisfactorily attended prescribed courses of study in each of these four subjects.

Agriculture :

Intermediate—Physics, and two of the following : Chemistry, Biology, Geology ; together with an additional subject at Intermediate standard.

Final—Agriculture, as principal subject, together with one of the pure sciences specified under section 16 above as the second principal subject, or two of the pure sciences specified under section 17 as subsidiary subjects.

Applied Chemistry (Colour Chemistry and Dyeing):

Intermediate—Mathematics, Physics, and Chemistry ; additional subject at Intermediate standard, General Engineering.

Final—Two principal subjects, viz.: Colour Chemistry and Dyeing, and Chemistry.

Candidates presenting Applied Chemistry (Colour Chemistry and Dyeing) may not present this subject until the end of the fourth year of study. Such candidates may take the examination in Chemistry at the end of the third year.

Applied Chemistry (Chemistry of Leather Manufacture):

Intermediate—Three of the following: Mathematics, Physics, Chemistry, Biology, and an additional subject at Intermediate standard (see section 12).

Final—Two principal subjects, viz.: Chemistry of Leather Manufacture, and Chemistry.

Candidates presenting Applied Chemistry (Chemistry of Leather Manufacture) may not present this subject until the end of the fourth year of study. Such candidates may take the examination in Chemistry at the end of the third year.

Regulations previously in force

For clause 3 read :

Candidates for the Ordinary degree of Bachelor of Science are required to furnish certificates of having passed through a course of study approved by the University, extending over at least three academic years, of which years at least two shall be subsequent to the date at which they have passed the Matriculation examination.

For clauses 11, 12, 13 read :

Candidates presenting themselves for the Intermediate examination for the degree of Bachelor of Science are required to satisfy the Examiners in :

1, 2, 3. *Three* of the following :

- i. Pure Mathematics
- ii. Applied Mathematics
- iii. Physics
- iv. Chemistry
- v. Biology
- vi. Applied Mechanics *or* Surveying.

Provided that of the three subjects selected *one* shall be Pure Mathematics or Applied Mathematics or Biology.

4. *One* of the following, to be presented at *either* the Intermediate *or* the Final examination, the standard being that of the Intermediate examination in either case :

- i. Applied Mathematics¹
- ii. Logic
- iii. French Language
- iv. German Language
- v. English Literature
- vi. Applied Mechanics¹
- vii. Surveying¹
- viii. Education.

For clauses 14 to 21 read :

Candidates presenting themselves for the Final examination for the Ordinary degree are required to have passed the Intermediate examination, and to furnish certificates of having attended a course of study, approved by the University and extending over at least one academic year, in each of the subjects in which they present themselves.

Candidates presenting themselves for the Final examination for the degree of Bachelor of Science are required to satisfy the Examiners in :

Two of the following :

- Pure and Applied Mathematics
- Physics
- Chemistry

¹ If not already taken under 1, 2, 3.

Zoology
Botany
Physiology
Geology
Mental and Moral Science
Agriculture.

Or *one* of the following :

Engineering
Electrical Engineering.

Degree of Bachelor of Science with Honours

1. The degree of Bachelor of Science with Honours will be awarded in the following subjects :

Mathematics
Physics
Chemistry
Zoology
Botany
Physiology
Geology
Civil Engineering
Mechanical Engineering
Electrical Engineering
Mining Engineering
Applied Chemistry (Chemistry of Leather
Manufacture)
Applied Chemistry (Colour Chemistry and
Dyeing)
Agriculture

2. Candidates will be required to present certificates of attendance upon approved courses of study extending over three or four years, as defined under the regulations for each Honours School. Such certificates of attendance shall only be granted when the candidate has regularly attended to the work of the classes and has acquitted himself satisfactorily at the class examinations.

3. Candidates are required to pass the Intermediate examination for the Ordinary degree, including the additional subject, but attendance upon University classes recognized for this examination is not compulsory,¹ and it is not obligatory to pass simultaneously in all the subjects of the examination.

Candidates will be excused the Intermediate examination in any subject which they are presenting at a more advanced standard.

4. Candidates are required to attend the recognized classes, and to pass in the two principal (or one principal and two subsidiary) subjects of the Final examination for the Ordinary degree (as specified in the regulations for each Honours School), but it is not obligatory to pass simultaneously in all the subjects of the examination.

5. A special examination in connection with each Honours School will be held at the end of the course of study. Candidates who have prosecuted research may be excused part of this examination.²

6. Candidates who have passed the examination for the Ordinary degree of Bachelor of Science may (during the succeeding year or the two years immediately succeeding) proceed with the course of study in an Honours School.

7. No candidate for a degree of Bachelor of Science with Honours shall be admitted more than once to examination in the same Honours School, except under special conditions approved by the Senate; but the course shall in no case exceed four years, except in cases of illness, when a medical certificate satisfactory to the Senate will be required.

8. Students who have passed the Final examination in any of the Honours Schools shall be admitted to the Final examination in any other Honours School after the expiration of one or two years, on presenting certificates of having attended, during the period in question, courses approved by the University, provided that in the said other Honours School selected candidates shall not present themselves for the Final examination more than two academic years after the Final examination in Honours already passed by them,

¹ Candidates are therefore at liberty to present themselves for the Intermediate examination before commencing attendance at the University.

² Further regulations relating to research work offered by candidates will be announced at a later date.

and also that no candidate be admitted to examination in any Honours School after a longer period than five years has elapsed since the date of his first entrance upon a prescribed course of study for an Honours School.

9. Candidates who have passed the Second M.B. examination may, with the sanction of the Senate, and on furnishing certificates of having during the academical year following such Second M.B. examination attended the third year's, or during the two academical years following such Second M.B. examination of having attended the second and third year's course approved by the University for one of its Honours Schools in Science, present themselves for examination for a B.Sc. degree with Honours in such school.

10. Names of candidates who have passed the examination for the degree of Bachelor with Honours will be published in such form as to distinguish the Honours School in which severally they may have passed; the names of those who have passed in Honours being drawn up in three classes, and each class being arranged in alphabetical order.

In the following regulations the words *Intermediate course* or *examination* and *Final course* or *examination* indicate respectively the Intermediate and the Final courses or examinations for the Ordinary degree of Bachelor of Science.

Honours School of Mathematics

The three years' course is as follows: In the first year, Regulations the Final course in Pure and Applied Mathematics, the Intermediate course in Physics, including laboratory work, and the Intermediate course in Chemistry or Biology or Geology, including laboratory work. In the second year, an Honours course in Mathematics, and the Final course in Physics, including laboratory work. In the third year, Honours courses in Mathematics.

The four years' course is as follows: In the first year, preparation for the Intermediate examination. In the second year, preparation for the Final examination. In the third and fourth years, Honours courses in Mathematics.

Examination for Honours

Ten papers will be set on the following subjects :

PURE MATHEMATICS :

Pure Geometry, plane and solid
Algebra
Theory of Equations and Determinants
Plane Trigonometry
Spherical Trigonometry with simple applications to Astronomy
Analytical Geometry of two and of three dimensions
Elements of Projective Geometry
Differential Calculus with applications to plane curves
Integral Calculus
Ordinary Differential Equations
Partial Differential Equations of the first order
Finite Differences.

APPLIED MATHEMATICS :

Dynamics of a particle
Statics
Attractions
Dynamics of rigid bodies
Hydrostatics
Elementary Hydrodynamics
Elementary Theory of Sound.

Physics

The three years' course is as follows : In the first year, the Final course in Physics, the Final course in Pure and Applied Mathematics, and the Intermediate course in Chemistry. In the second year, Honours courses in Physics, and in Pure and Applied Mathematics. In the third year, Honours courses in Physics.

The four years' course is as follows : In the first year, preparation for the Intermediate examination. In the second year, preparation for the Final examination. In the third and fourth years, Honours courses in Physics. All the courses in Physics and Chemistry include laboratory work.

Examination for Honours

Experimental and Theoretical Physics, requiring a knowledge of the Calculus, three papers.

One of the following :

Mathematical Physics, more advanced portions, one paper.
Physical Chemistry, one paper.
Technical Electricity, one paper.

Practical examination in the Physical laboratory extending over two days.

Chemistry

The three years' course is as follows : In the first year, the Intermediate courses in Chemistry, Mathematics and Physics. In the second year, the Final courses in Chemistry and Physics. In the third year, Honours courses in Chemistry.

The four years' course consists of preparation for the Intermediate examination in the first year, preparation for the Final examination in the second and third years, and Honours work in the fourth year.

All the courses in Chemistry and Physics include laboratory work.

Examination for Honours

Inorganic Chemistry, one paper

Organic Chemistry, one paper

Physical Chemistry, one paper

History of Chemistry, one paper

One of the following subjects :

Electrochemistry, one paper

One of the following branches of Applied Chemistry :

Colour Chemistry and Dyeing, one paper

Chemistry of Leather Manufacture, one paper

Agricultural Chemistry, one paper

Chemistry of Food and Drugs, one paper.

A branch of Physics, one paper

Mineralogy and Crystallography, one paper

Metallurgy, one paper

Mechanical Engineering, one paper.

Practical Examination in the Laboratory, extending over three days.

Zoology

The three years' course consists of preparation for the Intermediate examination, including Elementary Biology, in the first year; preparation for the Final examination, including Zoology, in the second and third years; with special Honours work in the third year. Laboratory work is required at each stage.

The four years' course consists of preparation for the Ordinary degree of B.Sc. in the first, second and third years, and in the fourth year a special Honours course, which may include research.

Examination for Honours

One or more of the subjects named below may be selected, or the candidate may propose other subjects for the approval of the Senate. The subjects must be sent in not later than the last day of the October preceding the examination. A summary of the course of study actually gone through must be sent in to the examiners during the following April.

The Honours examination may be taken in the same year as the Ordinary B.Sc., or a year later. It will extend over three days, one of which will be occupied with practical work. There will be a *viva voce* examination.

A thesis, founded upon original research, may be sent in either alone, or together with one or more special subjects for examination.

Subjects, one or more of which may be selected for an Honours course in Zoology :

- (a) The comparative anatomy of some large and important group of animals.
- (b) Comparative embryology.
- (c) Palæontology, with special reference to some large and important group of animals.

Botany

The three years' course consists of preparation for the Intermediate examination, including Elementary Biology in the first year; preparation for the Final examination, including Botany, in the second and third years; with special honours work in the third year. Laboratory work is required at all stages.

The four years' course consists of preparation for the ordinary degree of B.Sc. in the first, second and third years, and in the fourth year a special Honours course, which may include research.

Examination for Honours

One or more of the subjects named below may be selected, or the candidate may propose other subjects for the approval of the Senate. The subjects must be sent in not later than the last day of the October preceding the examination. A summary of the course of study actually gone through must be sent in to the examiners during the following April.

The Honours examination may be taken in the same year as the Ordinary B.Sc., or a year later. It will extend over three days, one (or more) of which will be occupied with practical work. There will be a *viva voce* examination.

A thesis, founded upon original research, may be sent in either alone, or together with one or more special subjects for examination.

Subjects, one or more of which may be selected for an Honours course in Botany :

- (a) Special study of a selected group of plants
- (b) Ecology of a selected group
- (c) Geographical Distribution of Plants
- (d) Fossil Botany.

Physiology

The three years' course is as follows : In the first year, preparation for the Intermediate examination. In the second year, the Final course in Physiology, as principal subject, together with two of the following courses in subsidiary subjects of the Final examination, provided that one shall be Physics or Chemistry, viz., Chemistry, Zoology, Bacteriology ; candidates will also be required to produce certificates of having attended satisfactorily six months' instruction in Human Anatomy. In the third year, Honours courses in Physiology.

The four years' course consists of preparation for the Intermediate examination in the first year. In the second and third years, preparation for the Final examination, the examination to include two principal subjects, viz., Physiology and either Physics or Chemistry or Zoology.

Examination for Honours

Physiology, three papers

Practical examination, extending over two days.

Geology

In this school there are alternative schemes of study, Scheme A—Physical, and Scheme B—Biological.

Scheme A

The three years' course is as follows : In the first year, preparation for the Intermediate examination. In the second year the Final course in Geology (as principal subject), together with the Final courses in Chemistry and Physics (as subsidiary subjects), or the Final course in Chemistry (as principal subject). In the third year, Honours work in Geology, with research.

The four years' course consists of preparation for the Intermediate examination in the first year ; of the Final course in Geology (principal subject) and the Final courses

in Chemistry and Physics (subsidiary subjects) in the second and third years ; and of Honours work in Geology, with research, in the fourth year.

Examination for Honours

Geology, two papers

Petrology, one paper

Elementary Mineralogy, one paper

A special paper on the subject of research selected by the candidate

Practical examination, extending over two days.

Scheme B

The three years' and four years' courses are as follows : In the first year, preparation for the Intermediate examination. In the second year or in the second and third years, the Final course in Geology (principal subject), together with the Final course in Zoology or Botany (principal subjects) or with the Final courses in two of the following (as subsidiary subjects), Zoology, Botany, Chemistry. In the third or fourth year Honours work in Geology, with research.

Examination for Honours

Geology, one paper

Palæontology, one paper

Palæobotany, one paper

Special paper on the subject of research selected by the candidate

Practical examination extending over two days.

Mechanical Engineering

The course extends over three years.

The first year course consists of preparation for the Intermediate examination in Mathematics, Physics and Chemistry. Attendance is also required on a course in Engineering.

The second year course consists of the Final course in Pure and Applied Mathematics and courses in Engineering. Attendance is also required on an approved course in Physics.

The third year course consists of Mathematics and Engineering.

Examination for Honours

Graphics and Descriptive Geometry, one paper
Strength and Elasticity of Materials, one paper
General Hydraulics, one paper
Thermodynamics and Theory of Heat Engines, one paper
Dynamics of Steam Engines and Machinery, one paper
Mechanics and Kinematics, one paper
Pure Mathematics, one paper
Applied Mathematics, one paper.
Practical examination, two days.

A candidate's work done in the drawing office and the laboratory and the class examination results in Engineering during his three years' course will be taken into consideration.

Civil Engineering

The course extends over three years.

The first year course consists of preparation for the Intermediate examination in Mathematics, Physics and either Chemistry or Geology. Attendance is also required on a course in Engineering.

The second year course consists of Pure and Applied Mathematics, Geology and Engineering.

The third year course consists of Mathematics and Engineering.

Examination for Honours

Graphics and Descriptive Geometry, one paper
Strength and Elasticity of Materials, one paper
General Hydraulics, one paper
Theory of Complex Structures, one paper
Surveying and Descriptive Engineering, one paper
Water Engineering, Tidal and Railway Construction, one paper
Pure Mathematics, one paper
Applied Mathematics, one paper.
Practical examination, two days.

A candidate's work done in the drawing office and the laboratory, and the class examination results in Engineering during his three years' course will be taken into consideration.

Electrical Engineering

The course extends over three years.

The first year course consists of preparation for the Intermediate examination in Mathematics, Physics and Chemistry. Attendance is also required on courses in Mechanical and Electrical Engineering.

The second year course consists of Mathematics, Mechanical Engineering and Electrical Engineering. Attendance is also required on an approved course in Physics.

The third year course consists of Mathematics and Electrical Engineering.

Examination for Honours.

Generation of Electrical Energy, one paper
Transformation of Electrical Energy, one paper
Distribution of Electrical Energy, one paper
Design of Electrical Appliances, one paper
Mechanical Engineering, one paper
Heat Engines, one paper
Pure Mathematics, one paper
Applied Mathematics, one paper.
Practical examination, two days.

Mining Engineering

Honours in this subject will be awarded to candidates who, having obtained the Ordinary degree, with Mining Engineering as a principal subject, and being recommended as suitable to proceed with an Honours course, shall have spent one year in research or in the preparation of a thesis, attendance at the University during this fourth year not being compulsory. All candidates for Honours shall pass the same Mathematical examinations as if they had taken Mathematics as a principal subject.

Applied Chemistry : Colour Chemistry and Dyeing

Honours in this subject will be awarded to candidates who, having completed the four years' course of study for the Ordinary degree, with Colour Chemistry and Dyeing as a principal subject, shall have specially distinguished themselves in the Final examination.

Applied Chemistry : Chemistry of Leather Manufacture

The course extends over four years.

The first year course consists of preparation for the Intermediate examination in Chemistry, and two of the following: Mathematics, Physics and Biology.

The second and third years' course consists of preparation for the Final examination, Chemistry and Chemistry of Leather Manufacture being taken as the principal subjects. Attendance is also required in approved courses in Physics and Engineering.

The fourth year course consists of instruction in the Chemistry of Leather Manufacture or of research.

Examination for Honours

Physics and Chemistry of Leather Manufacture, one paper.

Methods of Leather Manufacture, one paper.

Practical examination, three days.

Agriculture

The course extends over four years.

In the first year students prepare for the Intermediate examination in three of the following: Physics, Chemistry, Biology, Geology.

In the second and third years students pursue the courses prescribed for candidates for the Final examination for the Ordinary degree who offer Agriculture as a principal subject (see page 193) and engage in research work. At the end of the third year they are required to present themselves for the Final examination.

In the fourth year they engage in Honours work, including research.

The same rule shall apply to an Honours student as to a student reading for an Ordinary degree, viz., six months shall be spent at the Manor Farm, Garforth, after the Intermediate examination and before the completion of the third year. At the examination at the end of the third year the candidate for the Ordinary degree will be required to submit a report on an experiment he has himself conducted. The candidate for Honours will be required to submit an interim report on his special research.

Examination for Honours

The examination will extend over two days, part of the time being occupied by a *viva voce* examination at the Manor Farm, Garforth.

DEGREE OF MASTER OF SCIENCE**Ordinance**

1. The degree of Master of Science is conferred, on payment of the proper fee, upon registered Bachelors of Science, when of three years' standing from the date of their graduation as Bachelors, subject to the conditions contained in the following paragraphs.

2. Bachelors of Science who have graduated with Honours are not required to present themselves for any further examination for the degree of Master of Science.

3. Bachelors of Science who have obtained the Ordinary degree are required to satisfy the Examiners in a further examination in *one* of the following subjects : Mathematics, Physics, Chemistry, Zoology, Botany, Physiology, Geology, Mechanical, Civil, Electrical, Mining Engineering, Applied Chemistry (Colour Chemistry and Dyeing), Applied Chemistry (Chemistry of Leather Manufacture), and Agriculture. Certificates of attendance are not required.

4. The names of candidates who have passed the further examination for the degree of Master of Science are arranged in alphabetical order without distinction of classes.

5. Candidates who have prosecuted research, and who give satisfactory evidence thereof by the presentation of a thesis, may be excused part of the examination.

Regulations**Examination****MATHEMATICS :**

Analytical Geometry, Plane and Solid
Differential and Integral Calculus
Dynamics and Statics of a Particle
Hydrostatics and Rigid Dynamics.

PHYSICS :

Experimental Physics, including Chemical Physics, two papers
Experimental and Theoretical Physics requiring a knowledge of the
Differential Calculus and of the elements of the Integral
Calculus, one paper
Practical examination, one day.

CHEMISTRY :

Inorganic Chemistry, one paper
Organic Chemistry, one paper

¹ The fee must be paid before March 31.

One of the following :

History of Chemistry and of Chemical Philosophy, one paper
Physical Chemistry, one paper
Mineralogy and Crystallography, one paper
Technological Chemistry, one paper
Metallurgy, one paper
Sanitary Chemistry, one paper
Physiological Chemistry, one paper
Chemical Physics treated experimentally, one paper

Practical examination, one day.

ZOOLOGY :

Zoology and Comparative Anatomy (including the more important extinct forms) and Embryology, two papers

Practical examination, one day.

BOTANY :

Botany, two papers

Practical examination, one day.

PHYSIOLOGY :

Animal Physiology, three papers

Practical examination, one day.

GEOLOGY :

Either Geology and the elements of Mineralogy, three papers,
or Geology and Zoology, three papers

Practical examination, one day.

MECHANICAL ENGINEERING :

Dynamics of Machinery

Stress, Strain and Elasticity

Heat Engines and Thermodynamics

Hydraulics.

CIVIL ENGINEERING :

Surveying and Descriptive Engineering

Stress, Strain and Elasticity

Complex Structures

Hydraulics.

ELECTRICAL ENGINEERING :

Details to be considered.

MINING ENGINEERING :

Details to be considered.

COLOUR CHEMISTRY AND DYEING :

Details to be considered.

CHEMISTRY OF LEATHER MANUFACTURE :

Details to be considered.

AGRICULTURE :

Details to be considered.

DEGREE OF DOCTOR OF SCIENCE

Ordinance 1. The degree of Doctor of Science is conferred by the University upon registered Masters of Science of the University who shall be deemed by the Council, on a report furnished by the Senate after considering a report from one or more of the Boards of Faculties, to have distinguished themselves by special research or learning.

Provided that the Senate may, in such cases as it shall think fit, after considering a report from one or more of the Boards of the Faculties, also require candidates to pass such an examination as it may from time to time determine.

2. A Master of Science of the University may make application for the degree of Doctor of Science in the sixth, or any subsequent year from the date of his admission to the Bachelor's degree.

3. Such application shall be made in writing to the Registrar and shall contain a full statement of the grounds on which the claim for the degree is based, together with one or more copies of any memoir, whether in type or in manuscript, which the applicant may desire to submit in support of the application.

4. If the application be approved by the Council, the degree may be conferred at the expiration of not less than six years from the date of admission to the Bachelors' degree.

DIPLOMAS

Diplomas in the following subjects will be granted by the University to students who pursue prescribed courses of study, and pass prescribed examinations: Engineering, Civil, Mechanical, and Electrical; Coal Mining; Textile Industries—(1) Textile Designing and Cloth Finishing, (2) Woollen and Worsted Spinning, (3) Textile Manufacturing; Dyeing; Leather Manufacture.

The course of study prescribed for Diplomas, except where specially mentioned, extends over three years, and includes in each case some subject or subjects other than those which give the title to the Diploma.

General Regulations

Applicable to all Diplomas

Candidates for Diplomas are required to give satisfactory attendance upon all the subjects which form part of their course of study, and to present themselves for the class examinations held in the same. Those who do not pass satisfactorily in these examinations in any year will be disqualified for the Diploma unless they repeat the course in whole or in part, as may be required by the Senate.

At the close of the course candidates will be required to present themselves for such examination in the main subject of study as may be prescribed.

Some deviation from these courses may be sanctioned in special cases, and students who on entering upon a Diploma course produce evidence that they possess a sufficient knowledge of the work done during a part of the course will be allowed to dispense with a certain amount of attendance. Applications for exemption from attendance should be made to the Head of the Department concerned.

Special Regulations

Engineering, Civil, Mechanical, and Electrical; Coal Mining: Full details will be found in the separate prospectus of the Engineering Departments, to be obtained from the Registrar.

Textile Design, Spinning, and Cloth Manufacture: Full details will be found in the separate prospectus of the Department of Textile Industries, to be obtained from the Registrar.

Dyeing. Full details will be found in the Prospectus of the Department of Dyeing and Tinctorial Chemistry.

Leather Manufacture: For full details see separate Prospectus of the Department of Leather Industries.

MATHEMATICS

Professor ROGERS

Mr. WATSON

I. Matriculation Course

Mondays, Wednesdays, and Fridays, at 2 p.m.

The subjects are elementary geometry, algebra, and arithmetic, as required for the Matriculation examination. Text books will be recommended by the Professor.

Fee, £3 13s. 6d.

II. First Year Course for Engineers

Mondays, Wednesdays, and Fridays, at 3.0 p.m.

This course will treat of algebra, elementary trigonometry, and other subjects useful to engineering students.

Fee, £3 13s. 6d.

III. Intermediate Course in Pure Mathematics

Mondays, Wednesdays, and Fridays, at 2 p.m.

Students reading for the Intermediate B.Sc. examination attend for all three hours; students reading for the Intermediate B.A. examination attend on Mondays and Wednesdays only.

Fee for three hours a week, £3 13s. 6d.; for two hours, £2 12s. 6d.

Books recommended

Hobson and Jessop, *Elementary Trigonometry* (Cambridge)

Bottomley, *Mathematical Tables* (Collins, 1s.)

Gibson, *Introduction to the Calculus* (Macmillan, 3s. 6d.)

IV. Second Year Course for Engineers

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

The subjects are elementary co-ordinate geometry, differential and integral calculus.

Fee, £3 13s. 6d.

Book recommended

Gibson, *Introduction to the Calculus* (Macmillan, 3s. 6d.)

V. Final Course in Applied Mathematics (First Year)

Mondays, Wednesdays, and Fridays, at 4 p.m.

Elementary statics, dynamics, and hydrostatics.

Fee, £3 13s. 6d.

Book recommended

Jessop, *Elements of Applied Mathematics* (Bell, 4s. 6d.)

VI. Final Course in Pure Mathematics

Mondays, Wednesdays, and Fridays, at 11.30 a.m.

Subjects: co-ordinate geometry, differential and integral calculus.

Fee, £3 13s. 6d.

Books recommended

Lamb, *Infinitesimal Calculus* (Cambridge)

Smith, *Conic Sections* (Macmillan)

VII. Final Course in Applied Mathematics (Second Year)

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

Subjects: statics, dynamics, and hydrostatics. Text books will be recommended by the Professor.

Fee, £3 13s. 6d.

VIII., IX. Honours Courses in Pure and Applied Mathematics

Courses of lectures of three hours a week each in Pure and Applied Mathematics will be delivered to students reading for Honours in Mathematics. Hours of meeting will be arranged.

Fee for each course, £3 13s. 6d.

PHYSICS¹

Chair endowed in 1884 by public subscription in memory of the late Lord Frederick Cavendish, first President of the

Yorkshire College

Professor STROUD

Mr. ALLEN Mr. SHORTER

Mr. NETTLETON

LECTURE COURSES

I. Matriculation Course, Elementary Mechanics

Experimental Lectures: Tuesdays and Thursdays, at 9.30 a.m., throughout the session.

Exercise Class—Saturdays, at 9.30 a.m., throughout the session.

This course will embrace the subject of Mechanics, and is framed to meet the requirements of candidates for the Matriculation examination of the University of Leeds.

¹ Candidates for the First examination in Medicine, or the Intermediate Science or Preliminary Scientific (M.B.), London, should refer to the course given on page 276.

The subjects will be as follows: properties of matter, composition and resolution of forces, the simple machines, the balance, centre of gravity, friction, laws of motion, falling bodies, laws of fluid pressure, specific gravity, Boyle's law, the barometer, the air pump, the siphon.

Fees—For the whole course, £3 13s. 6d.; for the Experimental lectures only, £2 12s. 6d.; for the Exercise class only, £1 5s.

Text Book

Pinkerton's *Mechanics and Hydrostatics* (Blackie & Son, 3s. 6d.).

II. Intermediate Course

Experimental Lectures—Wednesdays and Fridays at 3 p.m., *or* Wednesdays and Fridays at 4 p.m.

Exercise Class—Mondays at 3 p.m., *or* Thursdays at 9.30 a.m., throughout the session. Students taking the whole course will therefore attend either on Mondays, Wednesdays, and Fridays at 3 p.m., *or* on Wednesdays and Fridays at 4 p.m., and Thursdays at 9.30 a.m.

This course will be divided into two parts: the first will consist of experimental lectures describing and exhibiting the chief phenomena of Electricity and Magnetism. The second part will treat of *Mechanics*—Work, centrifugal force, the pendulum, elasticity; *Heat*—Temperature, expansion, change of state, relations of heat and work, mechanical equivalent of heat; *Acoustics*—Nature of sound, wave motion, velocity of sound, musical intervals, vibrations of rods and strings; *Light*—Velocity of light, methods of measuring the intensity of light, the spectrum, reflection and refraction at spherical surfaces, achromatism.

Fees for the whole course, the same as for the first year course. For Parts I or II only, £2 2s. For the experimental lectures of Parts I or II only, £1 11s. 6d.

Text Books

Part I. S. P. Thompson, *Electricity and Magnetism* (Macmillan, 4s. 6d.)

Jones, *Examples in Physics* (Macmillan, 3s. 6d.)

Part II. Jones, *Sound, Light, and Heat* (Macmillan)

Recapitulation Class

This class is intended for students of the Intermediate course who fail to get a first or second class in the terminal

examinations, and will be limited to such students. The class will meet for one hour per week on Mondays, at 9.30 a.m., during the second and third terms.

Fee, £1 1s.

III. Final Course (First Year)

Lectures—Mondays and Fridays, at 10.30 a.m., throughout the session.

This course is designed to meet the requirements of persons taking Physics as a subsidiary subject in the Final B.Sc. examination. It also forms the first half of the course for persons taking Physics as a principal subject in that examination.

Fee, £2 12s. 6d.

Text Book

Watson, *Physics* (Longmans 10s. 6d.)

The following works may also be usefully consulted :

Poynting & Thomson, *Properties of Matter, Heat, and Sound*

Edser, *Heat and Light*

Foster & Porter, *Electricity and Magnetism*

IV. Final Course (Second Year)

Lectures—Wednesdays, at 10.30 a.m., throughout the session, and at some other hour to be arranged when the class meets.

This course is designed to meet the requirements of persons taking Physics as a principal subject in the B.Sc. examination. Persons taking this course are required to have previously gained at least a second class in each terminal examination in Course III, or in default are required to take Course III again concurrently with this course, unless specially exempted by the Senate.

Fee, £2 12s. 6d.

Fee for courses III. and IV. taken together, £4 14s. 6d.

V, VI. Honours Course

Three lectures a week throughout the session, at times to be arranged.

This will form a continuation of the previous course, and will treat the subject mainly from the mathematical standpoint. It is designed to meet the requirements of candidates for Honours in Physics. The complete course extends over two sessions.

Fee, £3 13s. 6d. per session.

N.B.—The class will meet for the first time on Thursday, October 5, at 2 p.m., when times will be arranged for the lectures to suit the convenience of students attending the class.

PHYSICAL LABORATORY

The Physical laboratory will be open from 9.30 a.m. to 1 p.m., and from 2 to 5 p.m. (except on Saturdays), for instruction in the methods of performing physical experiments.

Students preparing for the Intermediate B.Sc. examinations or for the First examination in Medicine, will require to devote at least three hours per week throughout the session to practical work.

A student preparing for the Final B.Sc. examination with Physics as a principal subject is required to devote one day per week for two sessions to practical work.

A student taking Physics as a subsidiary subject is required to devote one day per week for one session to practical work.

The laboratory will be open for the different classes of work according to the following table:

| | 9.30—12.30. | 2.0—5.0. |
|-----|---------------|---------------|
| M. | Honours. | Final. |
| Tu. | Final. | Intermediate. |
| W. | Honours. | Final. |
| Th. | Final. | Intermediate. |
| F. | Honours. | Final. |
| S. | Intermediate. | |

Text Book for Intermediate Course: Schuster & Lee's *Intermediate Physics* (Macmillan).

For fees, see page 112.

General Elementary Science

This Class, which is intended for teachers, will meet on Saturdays from 9.30 a.m. to 12.30 p.m., for half the session. It will be divided into two sections, viz.:

1. For those who are new to the study of Science.
2. For those who have taken Science courses.

Section 1 will meet from the beginning of the session to the middle of the second term.

Section 2, from the middle of the second term to the end of the session.

The classes will be co-ordinate with classes in the Chemical department. See page 219.

Fee, £2 12s. 6d.

CHEMISTRY¹

Professor SMITHELLS

Professor COHEN

Dr. DAWSON

Mr. LOWSON

Mr. WHITELEY

LECTURE COURSES

1. General Course of Chemistry

The lectures of this course are given throughout the session, on Mondays, Wednesdays, and Fridays, at 11.30 a.m. In addition a tutorial class will be held one hour weekly throughout the session.

The course is divided into two parts:

Part I. will comprise lectures on the general properties of matter; chemical combination and decomposition; preparation, classification, and chemical behaviour of the chief elements and their compounds; chemical theory treated in an elementary manner.

Part II. (third term) will form an introduction to organic chemistry.

Fee for the whole course (including tutorial class), £4 4s.; fee for part I., £3 13s. 6d.; for part II., £1 1s.

¹ Candidates for the First examination in Medicine, or the Intermediate Science or Preliminary Scientific (M.B.), London, should refer to the course given on page 276.

II. Inorganic Chemistry¹**Advanced Course—Metals**

Mondays, Wednesdays, and Fridays, at 9.30 a.m., throughout the session.

This class will deal chiefly with the metals and their compounds. A previous general knowledge of chemistry is necessary.

Fee, £3 13s. 6d.

III. Inorganic Chemistry**Advanced Course—Non-Metals**

Tuesdays, Thursdays, and Saturdays, at 9.30 a.m., throughout the session.

This class will deal chiefly with the chemistry of the non-metallic elements. A previous general knowledge of chemistry is necessary.

Fee, £3 13s. 6d.

IV. Organic Chemistry

Tuesdays, Thursdays, and Saturdays, at 12 (noon), throughout the session.

This course is intended for second year students, or for those who have already some knowledge of chemistry.

Fee, £3 13s. 6d.

V. Honours Courses**A. Organic Chemistry**

Professor COHEN

Mondays, Wednesdays, and Fridays, at 12 (noon), during the first and second terms.

Fee, £2 12s. 6d.

B. History of Chemistry

Professor COHEN

Mondays, Wednesdays, and Fridays at 9.30 a.m., during the first term.

Fee, £1 11s. 6d.

¹ It will be advisable, as a rule, for students to take course II. before course III. but this order is not essential.

C. Physical Chemistry

Dr. DAWSON

Tuesdays, Thursdays, and Saturdays, at 9.30 a.m. during the second and third terms.

Fee, £2 12s. 6d.

D. Electro-Chemistry

Dr. DAWSON

One hour weekly at a time to be arranged.

Fee, £1 11s. 6d.

VI. Chemistry of Food and Drugs

During the third term a special class will be held for those students who are taking the Final examination of the Institute of Chemistry in Branch E (Food and Drugs).

Fee, £2 2s.

PRACTICAL CHEMISTRY**1. General Laboratory Courses**

The object of the Laboratory courses is to enable the student to obtain a practical acquaintance with chemical science, so as to fit him to conduct chemical analysis, to make original investigations in Chemistry, and generally to become qualified to apply the science to the arts and manufactures. It is necessary that each Laboratory student should attend or should have attended the General or the Advanced courses in Chemistry and the course in Organic Chemistry.

In the Chemical laboratories instruction is given in the general modes of preparing chemical compounds, inorganic and organic, in the qualitative and quantitative analysis of minerals and commercial products, in water analysis, gas analysis, and in the various branches of physical chemistry. It is necessary, however, that students wishing to pursue any special branch of practical work shall first have thorough training in the general principles and method of chemical manipulation and analysis.

Each student will be furnished with a separate working ble, a set of re-agents, water and gas, and will be

required to provide himself with a regulation set of apparatus on entry,¹ and also, if required, a few of the more costly tests, and any expensive materials which he may need for the purposes of original investigation. Apparatus of a special or expensive character may be obtained on loan, subject to such conditions as may be prescribed by the Professor.

For fees see page 112.

Students taking the course for the First examination in Medicine or the Preliminary Scientific (M.B.) of the University of London, must attend at the hours specified on page 276.

2. Practical Organic Chemistry for Medical Students

Tuesdays and Thursdays, from 10 to 12 (noon) during the third term. A tutorial class is included.

Fee, £2 2s.

3. Practical Course in Sanitary Chemistry

This course is arranged on the lines laid down by the General Medical Council and to suit the requirements of Medical Officers of Health.

The course will be held during the second term of the session, from beginning of January to end of March, on Tuesdays and Thursdays, from 2 to 5 p.m., and will include practical instruction or demonstrations in the sanitary examination of water, air and food, and on the properties of gases, the laws of heat and the use of meteorological instruments.

Instruction will be given in :

Water.—Qualitative examination, quantitative examination, estimation of free and albuminoid ammonia, oxygen consumption, chlorine, nitrates and nitrites, total solids, temporary and permanent hardness, metallic impurities.

Air.—Qualitative examination of foreign gases, quantitative determination of carbon dioxide, sulphur dioxide and dust.

Food.—Qualitative or quantitative examination of milk, butter, tea, coffee, sugar, alcoholic beverages.

¹ For the convenience of students, a supply of apparatus is kept at the University, and may be purchased from the Laboratory steward.

The Properties of Gases.—Expansion, weight, pressure, diffusion, ventilation.

The Laws of Heat.—Expansion of liquids and solids, temperature, latent and specific heat, liquefaction, evaporation, ebullition, radiant heat.

The Use of Meteorological Instruments.—Thermometers (wet and dry bulb), barometers, hygrometers, anemometers, analysis of weather reports and meteorological charts.

Fee, £5 5s.

4. General Elementary Science

This class, which is intended for teachers, will meet on Saturdays from 9.30 a.m. to 12.30 p.m. for half the session. It will be divided into two sections, viz. :

1. For those who are new to the study of Science.
2. For those who have taken Science courses.

Section 1 will meet from the middle of the second term to the end of the session.

Section 2, from the beginning of the session to the middle of the second term.

The classes will be co-ordinate with classes in the Physical Department. See page 215.

Fee, £2 12s. 6d.

Applied Chemistry Course

The following course of instruction is recommended to students who intend to devote themselves to Applied Chemistry :

First Year—Chemistry Lectures.—General Course or Advanced Course II.

Chemical Laboratory (3 days per week).

Mathematics.

Physics.

French or German.

Fee for the First Year Course (including Entrance fee of £1 1s. and Union fee of 10s. 6d.), with General Chemistry, £28 18s. 6d. ; with Advanced, £28 9s.

Second Year.—Chemistry Lectures.—Advanced Course,
II. or III., or both.

Organic Chemistry.

Chemical Laboratory (3 days per week)

Physics.

French or German.

Fee for the Second Year Course (including Union fee),
with Advanced Chemistry, Course II. or III., £27 8s.,
with both, £30 14s. 6d.

Third Year—Organic Chemistry.

Honours Courses, B, C, D.

Chemical Laboratory (4 days per week).

Physical Laboratory (1 day per week).

Elementary Engineering.

Fee for the Third Year Course (including Union fee),
£33 18s. 6d.

The above course is suitable for students preparing for
the Associateship of the Institute of Chemistry.

BIOLOGY

Professor MIALL

Dr. SMITH

Mr. TAYLOR

Mr. WALKER

Mr. UNWIN

I. Intermediate Course : Elementary Biology

*A. Zoology*¹

Lectures on Mondays, Wednesdays and Fridays during
the first term, and on Mondays and Wednesdays during
the second term, at 10.30 a.m. Demonstrations and
Laboratory work on Mondays, from 2.0 to 5.0 p.m., and
Tuesdays, from 9.30 a.m. to 12.30 p.m., during the first term,
and on Mondays, from 2.0 to 5.0 p.m. during the second
term.

Subject : Types of Animal Life.

¹ This course will prepare for the examination of the University in Elementary
Biology (see Time-table on page 276). It is recognised by the Royal College of
Surgeons as meeting its requirements in Comparative Anatomy

*Text Books*Marshall, *The Frog* (Cornish, 3s. 6d.)Marshall & Hurst, *Practical Zoology* (Smith, Elder & Co., 10s. 6d.)

Fee, £5 5s. (including laboratory practice).

Each student is required to provide himself with a microscope, a pocket lens, a dissecting case (a suitable case is made for Reynolds & Branson, Leeds, and sold at 13s. 6d.), a biological drawing book (Jackson, Leeds, 1s.), two razors and a strop.

Any of the following microscopes will suffice for the biological work. The Professor of Physiology recommends students who intend to take Practical Physiology in a later part of their course to procure one of the first three.

1. Swift's College Stand, with Zeiss D objective in place of $\frac{1}{4}$ in., £6 10s.
2. Swift's College Stand, with Zeiss DD in place of $\frac{1}{4}$ in., £7 2s.
3. Leitz' Stand, II.b, with objectives 3 and 7, £6 5s.
4. Swift's College Stand, with Swift's 1 in. and $\frac{1}{8}$ objectives, £5 5s.

Every microscope should be fitted with a ruled circle in the eyepiece for drawing. Messrs. Reynolds & Branson will supply such a circle for 7s. 6d., or 6s. 6d. when included with a microscope.

Revision Class

A Revision Class in Zoology will be held in the third term, meeting on Thursdays at 11.30 a.m. Practical work on Fridays from 9.30 to 11.30 a.m.

Fee, £1 1s.

*B. Botany*¹

Lectures on Fridays at 10.30 a.m., during the second term, and on Mondays and Wednesdays at 9.30 a.m., Tuesdays and Thursdays at 2 p.m., during the third term. Demonstrations and laboratory work on Tuesdays from 9.30 to 12.30, during the second term, and on Mondays and Wednesdays, 10.30 to 11.30 a.m., Tuesdays and Thursdays, from 3 to 5 p.m. during the third term. Also, for candidates taking the London Intermediate Science examination, at times to be arranged, during the third term.

¹ This course will prepare for the examination of the University in Elementary Biology (see Time Table on page 276).

Subjects: Types of plant life; the elements of descriptive and systematic botany.

Fee, £5 5s. (including laboratory practice).

Text Books

Bower, *Practical Botany for Beginners* (Macmillan, 3s. 6d.).

Simpson, *Families of British Flowering Plants* (Jackson, 1s.).

II. Medical Biology

During the first term the lectures will be given on Mondays, Wednesdays and Fridays at 10.30 a.m.; demonstrations and laboratory work on Mondays from 2 to 5, and Tuesdays from 9.30 to 12.30. During the second term the lectures will be given as above; laboratory work on Tuesdays from 10.30 to 12.30, and Fridays, from 2 to 4 p.m.

Fee, £5 5s. (including laboratory practice).

Text books and regulations as for Elementary Biology, A. Zoology (above).

III. Final Course: Zoology

Lectures three times a week, at hours to be arranged with the class.

Courses A and B will be taken alternately, each occupying one session. Either will rank as a subsidiary course for the degree.

A. The structure and life-history of selected animals; about half the classes of the animal kingdom; the development of selected animals; extinct vertebrates and mollusks; the freshwater fauna.

B. The structure and life-history of selected animals (a different selection from those in course A); the remaining classes of the animal kingdom; the development of selected animals; a few remarkable extinct invertebrates; the geographical distribution of animals in connection with the physical history of the continents.

Fee for each session, £5 5s.

Courses of laboratory work, occupying from nine to twelve hours per week, at the choice of the student, will be provided in connection with these courses of lectures. For fees, see scale of laboratory fees on page 112.

The courses will prepare for the Zoology of the Final B.Sc. examination.

IV. Final Course : Botany

Lectures on Mondays, Wednesdays and Fridays throughout the session. Courses A and B will be taken alternately, each one occupying one session. Either will rank as a subsidiary course for the degree.

- A. Algæ and Bryophyta : classification, and life-histories of representative groups.

Gymnosperms : morphology, anatomy and classification of principal groups ; distribution in space and time.

Important natural orders of flowering plants.

Physiology of nutrition and œcology of the leaf.

- B. Fungi : classification, and life-histories of representative groups.

Pteridophyta : structure and relationships of the principal groups (ferns, lycopods, etc.).

Angiosperms : the morphology of the flower, and physiology of reproduction. The principles of geographical distribution, and œcology.

Physiology of the plant axis ; growth and response to stimulation.

Fee for each session, £5 5s.

A course of laboratory work on one of the above courses will be provided ; for fees see page 112.

The course will prepare for the Botany of the Final B.Sc. examination.

V. Economic Entomology

Lectures at 11.30 on Thursdays ; laboratory work, 9.30 to 11.30, on Fridays during the first term. The course will commence on October 12.

The structure and classification of insects will be treated in an elementary way, and the life-history of certain types will be followed out. It is expected that attention to the work of the class will qualify any student to read with advantage special memoirs on injurious insects.

Special arrangements will be made for the benefit of students desirous of taking a fuller course of instruction in Economic Entomology, either for teaching purposes or to qualify for appointments.

Fee, £1 11s. 6d.

Text Book

Miall, *Injurious and Useful Insects* (Bell & Sons, 3s. 6d.)

VI. Biological Laboratory

The Biological laboratory will be open daily from 9.30 a.m. to 5 p.m. (Saturdays, 9.30 to 12.30).

For fees see page 112.

Each laboratory student, or student taking a practical class in Biology, will be required to use his own microscope and dissecting instruments. Microscopes may be had on loan from the University at the rate of 2s. 6d. each per term, to be paid in advance. The regulations hung up in the Biological laboratory are to be observed by all students in this department.

VII. Natural History for Agricultural Students

Lectures and laboratory work on Mondays, 10.30 to 12.30; Wednesdays at 11.30; Fridays, 9.30 to 11.30, during the first and second terms, commencing October 11.

Subjects: Elementary facts of structure of plants and animals; drawing; the use of the microscope; simple experiments on the growth of plants and allied matters; the elements of Agricultural Botany.

Fee, £2 12s. 6d.

VIII. Botany for Agricultural Students

(Second year of Agricultural Course)

Mondays and Wednesdays, from 2 to 4 p.m., and Fridays, at 2 p.m., during the first and second terms.

Subjects: Structure and nutrition of plants; the elements of systematic Botany; diseases of crops caused by fungi.

Laboratory work to accompany the lectures, with special work on identification of grasses and other crop-plants, common weeds, and diseases of plants.

This course will prepare for the National Diploma examination.

Fee, £3 3s.

IX. Forestry

During the third term. Lecture hours (twice a week) to be arranged. Laboratory work on Tuesdays and Thursdays, 9.30 to 11.30.

Occasional excursions will be made during the term; students to pay their own railway fares or other expenses.

Subjects: (1) Forest Botany; the structure and growth of trees and timber.

(2) General Forestry; trees in relation to soil and climate; the growth of trees in the open and in forests; formation and regeneration of woods and plantations; pure and mixed woods; general management of trees.

Laboratory work includes identification of important trees and timbers, and common diseases of trees.

Fee, £2 12s. 6d.

X, XI, XII. Saturday Classes in Elementary Biology

X. Botany

Mr. WALKER

A course of elementary lessons, suited to the requirements of teachers, will be given on Saturday mornings from 9.30 to 12.30, throughout the session. The following subjects will receive attention:—the classification of flowering plants, types of cryptogams and flowering plants, the mode of life of the higher plants. Special attention will be given to the study of living plants, and occasional excursions will be held.

Fee for the session, £3 3s. ; for one term, £1 11s. 6d.

The Biological laboratory will be open on Saturdays from 9.30 to 12.30, and from 2 to 5 for other students; among the rest for students preparing for the examinations of the London University. For fees see the scale on page 112.

XI. Nature Knowledge

Professor MIALL

The Class will meet on Saturdays from 9.30 to 12.30, beginning October 7, and will extend throughout the session.

Natural objects will be studied in the Laboratory, and afterwards discussed in the class-room.

Fee, £5 5s.

XII. Experimental Plant Physiology

Mr. WALKER

This Class will be held at the Manor Farm, Garforth, on Saturday mornings and afternoons throughout the session. It is intended for Teachers of Horticulture, and is held in connection with a two years' course in Horticulture.

Fee for the two Courses, £1 12s. 6d.

PHYSIOLOGY

Professor BIRCH

Mr. CLARK

For Courses in this Department see pages 299 to 301.

GEOLOGY

Professor KENDALL

Mr. DWERRYHOUSE

I. Intermediate Course

Subjects: General and Stratigraphical Geology, and Geology in relation to the study of Geography.

Lectures three hours a week throughout the session at times to be fixed.

The course will also include practical work.

Fee for the lectures, £3 13s. 6d.

II. Final Course in Geology

Mondays, Wednesdays, and Fridays throughout the session, at 2 p.m.

SYLLABUS. The scope of Geology. The crust of the earth. The common rock-forming minerals. Classification of rocks according to their mode of origin. Aqueous rocks. Denudation, transport, and accumulation of rocks. Chemical action. Forms of stratification. Jointing and concretionary structures. Igneous rocks. Volcanoes and earthquakes. The condition of the interior of the earth. Metamorphic rocks and metamorphism. Slaty cleavage. Mountain-building. The elements of Stratigraphical Geology and Palæontology. The application of Geology to Civil Engineering.

Fee, £3 13s. 6d.

III, IV, V. Final Courses in Palæontology, Applied Geology, Petrology

These courses will prepare for the Final B.Sc. (Ordinary). Each will consist of two lectures and not less than two hours' practical work a week during the session.

Lecture fee, £2 12s. 6d. for each course.

VI. Honours Course in Geology

A course of not less than 90 lectures will be given at hours to be arranged with the students.

Fee, £3 13s. 6d.

VII. Honours Course in Mineralogy

A course of 30 lectures and demonstrations will be given for students reading for Honours Geology (Scheme A).

Fee, £1 11s. 6d.

VIII. Mineralogy for Mining Course

A course of 60 lectures with practical work will be given during the session for students taking the Mining course, and will include the following subjects, viz. :

Principles of Crystallography.

Physical properties of Minerals.

Descriptive and Determinative Mineralogy.

Modes of occurrence and association of Minerals and Ores, with special reference to Metalliferous Mining.

Lectures on Wednesdays and Fridays, at 11.30 a.m.

Lecture fee, £2 12s. 6d.

IX. Agricultural Geology

A course of about 60 lectures will be given on Mondays, Wednesdays, and Fridays, during the first and second terms, at 11.30 a.m., commencing October 11.

SYLLABUS. Scope of the science. The composition and physical characters of the common rock-forming minerals. Classification of rocks according to (a) their mode of origin and (b) chemical composition.

Denudation, transport and accumulation. Forms of stratification. The subdivision of stratified rocks. Economic products of the chief formations. The nature and origin of

the drift deposits. Their importance in relation to the soils of the North of England. The soils of the Warp lands and the Yorkshire Wolds.

The disintegration of rocks and the formation of soils. Geological maps, their interpretation and use. British rainfall, its measurement and variation. Storage of subterranean waters. Water supply from springs and deep and shallow wells. Application of geological knowledge to the selection of sites for roads, bridges, &c.

Fee, £2 12s. 6d.

X. Field Course

A Course of practical instruction, with field excursions, will be given at times to be arranged.

Fee, £3 13s. 6d. An allowance of £1 1s. will be made to students who attend the excursions towards the payment of railway fares.

XI. Laboratory

The Geological Laboratory will be open every day except Thursday.

Students preparing for the Final B.Sc. (Ordinary), will be required to take not less than 4 hours practical work a week exclusive of the time devoted to II., III., or IV. Students preparing for Honours will be required to take not less than 6 hours a week.

For fees, see page 112.

XII. Geology applied to Coal Mining

Tuesdays at 4 p.m. during the second and third terms.

Outline of Physical and Dynamical Geology: Denudation, transport, and accumulation of rocks. Volcanoes and earthquakes. Elevation and depression of the earth's crust. Condition of the interior of the earth. Earth folds, and the origin of mountain chains.

Historical Geology: General Outline of Historical Geology; detailed description of the carboniferous rocks, with special reference to the Yorkshire coalfield. The rocks which overlie the carboniferous. Search for coal under the newer rocks. The drift deposits, how they affect the discovery and working of coal.

Fee, £1 1s.

XIII. Matriculation Course : Geography

Mondays, Wednesdays, and Fridays, at 9.30 a.m., in the second and third terms.

(a) Physical Geography :

The agents, at work on and beneath the surface of the earth. Phenomena resulting from earth-heat. Distribution of land and water.

(b) Political and Commercial Geography :

Political and economic effects of natural features and conditions. Outlines of Geography of the British Empire (including Historical Geography). Political and Commercial Geography of the United Kingdom.

The Course will prepare for the Matriculation examination.
Fee, £2 12s. 6d.

CIVIL & MECHANICAL ENGINEERING

Professor GOODMAN

Mr. GILCHRIST

Mr. MACLACHLAN

Mr. MYERS

Mr. DUNCAN

The course of instruction in Engineering extends over three sessions, and comprises (a) Lectures on Engineering Principles and Work; (b) Instruction in Machine and Geometrical Drawing; (c) Experimental Work in the Engineering Laboratory.

The work of the Department is intended to provide a systematic training in the application of scientific principles to engineering purposes, and is not intended in any way to supersede the usual routine of engineering works and offices. An apprenticeship or pupilage in such works is an absolute necessity to every engineering student, and is the only means by which he can obtain a thorough knowledge of the practical details of his future work.

The scientific training at the University must be regarded as a means of acquiring the principles that underlie the art of Engineering, and the training in the works as necessary for acquiring the art itself.

It is very desirable that, when possible, students should have some practical experience in engineering works before taking up the University course.¹

¹ See a pamphlet published by the University on "The Training of Professional Engineers." The Registrar will forward a copy on application.

An ordinary three hours' examination is held at the end of the first and second terms. At the end of the third term a piece of designing and drawing work is set, for which a fortnight is allowed.

For Scholarships and Bursaries open to students of Engineering, see page 328 and following pages.

Entrance Examination

All students entering the departments of Civil and Mechanical and Electrical Engineering, or entering the three years' course and the diploma course in Mining, are required to produce certificates of having passed the Matriculation examination, the Oxford and Cambridge local examinations in Mathematics, London Matriculation, or other approved examination, or to pass the following Entrance¹ examination :—

Arithmetic : The ordinary rules of Arithmetic including vulgar and decimal fractions, proportion, factors, H. C. F. and L. C. M., practice, square root, conversion from English to metric system, averages, percentages, interest.

Algebra : The ordinary rules of Algebra including fractions, brackets, simple equations with problems. H. C. F. and L. C. M.

Geometry : The first book of Euclid or its equivalent including riders.

Elementary Trigonometry.

Every student is required to pass in each subject.

Students under 17 have to take a paper on English Composition and Dictation as shown on page 108.

Degree and Diploma Courses

Students who can devote three years to attendance at the University, are strongly recommended to take up the B.Sc. degree course in Engineering Science (see p. 169). Students intending to read for a degree are required to pass the Matriculation examination before taking up the University course or to devote four years to the course. The Institution of Civil Engineers now requires that all candidates for

¹ The Entrance examination is held in July and October, and it may (under certain conditions) be taken at any place convenient to the candidate. The examination will be held on Tuesday, October 3, 1905, at 2 p.m.; and Tuesday, July 3, 1906, at 2 p.m. Candidates should send in their names to the Registrar. Students who have attended Evening Classes at the University, and have taken a satisfactory position in the examinations, will be exempted from this examination.

membership shall take an Honours Engineering degree or shall pass an equivalent examination before being admitted.

A diploma in Engineering Science will be granted by the University to students who have pursued a full three years' course of study in Engineering, Mathematics, and other subjects, and have passed the usual term examinations in each class, and such final examination as may be appointed, to the satisfaction of the Senate. Candidates for these diplomas, who do not pass satisfactorily in their examinations in any year, may be required to take that year's course over again, in whole or in part, as the Senate may determine.

For full information as to the courses qualifying for the B.Sc. degree and the diploma see the separate prospectus of the Engineering departments, which may be obtained from the Registrar.

LECTURE COURSES

I. First Year : Elementary Engineering

Mondays, Wednesdays, and Fridays, at 4 p.m.

This course is suitable for students in all branches of Engineering. Elementary graphical constructions, strength of materials, riveted joints, beams, fuels, steam boilers, steam and the steam engine, gas and petroleum engines, transmission of power, hydraulics.

Fee, £4 4s.

II. General Engineering

This course is intended to give students who are going into other branches of industry than that of Engineering an intelligent idea of engines and machinery, &c., without entering into minute details.

Course A: for students of Applied Chemistry, Dyeing, Leather Manufacture, and Textile Industries.

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

Generation of steam boilers, engines; heating by steam; transmission of power by shafts, belts, ropes; pumps for

air, water, and other liquids, grinding machinery, drying plant, fans, electric transmission of power.

Fee, £3 13s. 6d.

Course B: for Agricultural Students.

Mondays, Wednesdays, and Thursdays, at 2 p.m., during the first and second terms only.

Elementary mechanics; air, water, heat; steam engine, gas and petroleum engines; electrical generators, motors and conductors.

Fee, £2 12s. 6d.

Course C: for Mining Students.

Mondays, first and third terms, at 4 p.m.

Mechanics, strength of materials, heat, boilers, steam engines.

Fee, £1 1s.

On Mondays, throughout the Session, from 5.30 to 7 p.m., instruction will be given in the Engineering laboratory. Mensuration, levers, graphic determination of forces, testing, indicating, steam and boiler testing.

Fee, £1 11s. 6d.

III. Second Year : Civil Engineering

Tuesdays and Thursdays, at 4 p.m.

Chain surveying, needle surveys, plane table, angular instruments, levelling, geodetic astronomy, optical instruments for the measurement of distances, setting out of railway curves, half width of railways, hydrographic, geodetic, and underground surveying.

Fee, £2 12s. 6d.

IV. Third Year : Civil Engineering

Tuesdays and Thursdays, at 9.30 a.m.

Framed structures, roofs, girders, arches, cements and concrete foundations, lateral pressure of earthwork, masonry, dams and tunnels.

Fee £2 12s. 6d.

V. Practical Surveying

Instruction is given in Surveying and field work for about fourteen clear working days during the Easter vacation.

The class is held at Barden in Wharfedale, where accommodation is provided at a farmhouse.

Fee—Including board and lodging... £6 6 0

„ —Including the Civil Engineering Lectures in Class III. or IV. ... 8 8 0

VI. Second Year : Mechanical Engineering

Mondays, Wednesdays, and Fridays, at 10.30 a.m., with an exercise class one hour a week.

Graphical constructions, strength and elasticity of materials, beams, combined bending and direct stresses, struts, shafts, helical springs ; boilers ; the thermodynamics of the steam engine ; air, gas, and petroleum engines ; transmission of power, hydraulics, mechanics of machines.

Fee, £4 4s.

VII. Third Year : Mechanical Engineering

Tuesdays, Thursdays, and Saturdays, at 10.30 a.m., with an exercise class one hour a week.

Treatment of advanced problems in graphical constructions, mathematical theory of elasticity, steam, dynamics of the steam engine, governors, friction and lubrication, kinetics of machines, hydraulics, compressed air, refrigeration.

Fee, £4 4s.

VIII. Engineering Drawing

The Drawing Department is open every day. A draughtsman is always in attendance.

Fees for the Session :

| | | |
|--------------------|---------------------------|--------|
| Students attending | 12 hours or more per week | £7 7 0 |
| „ „ | 6 hours per week ... | 5 5 0 |
| „ „ | 3 „ „ ... | 3 3 0 |

VIIIa. Machine Design

Saturdays, at 9.30.

Fee, £1 11s. 6d.

IX. Engineering Laboratory

The work done in this department consists chiefly of making experiments and testing operations ; it in no way whatever pretends to supersede the practical training that

every engineer must undergo in engineering works. It should be clearly understood that no instruction is given in the use of either hand or machine tools; such work can only be properly done in engineering works.

For fees see p. 112.

Object Drawing, &c.

Wednesdays, from 11.30 a.m. to 1 p.m. in the Art Studio. Freehand sketches of working drawings, parts of machinery, apparatus, &c.; the use of water-colour for tinting architectural or mechanical drawings.

Fee, £1 11s. 6d. for the session.

ELECTRICAL ENGINEERING

MR. PARR

The courses of instruction in this department have been arranged to meet the requirements of the following students: (1) those who propose to take the B.Sc. degree of the University of Leeds in Electrical Engineering; (2) those who are desirous of taking the diploma of the University in Electrical Engineering only; (3) those who are unable to devote the time required for the complete courses of study for the degree or diploma, but who desire to attend special parts of those courses.

The Degree course necessitates three years' attendance at the University after matriculation in the University.

The Diploma course extends over three years after passing the Entrance examination to the Engineering departments intended for students not taking degrees, but may, under certain conditions, and where the student possesses an intimate knowledge of all the work of the first year, be taken in two years.

The instruction during the first year of the above courses is almost the same for Civil, Mechanical, and Electrical Engineering. In the second year the electrical engineering student begins to specialise in the work of the department, while in the third year most of his time is devoted to this particular work.

LECTURE COURSES

I. Elementary Electrical Engineering

Mondays, Wednesdays, and Fridays, from 9.30 to 10.30 throughout the session.

This course is specially intended for students in their second year, who are preparing for the University degree or the diploma in Electrical Engineering, and embraces the application of fundamental principles in the construction and action of electrical engineering appliances in general.

Fee, £4 4s.

Text books recommended

Parr's *Electrical Engineering Measuring Instruments*, (Blackie and Son, 9s. net).

Parr's *Electrical Engineering in Theory and Practice*, vols. i. and ii. (Macmillan & Co.)

Electricity as applied to Mining, by Lupton, Parr and Perkin (Crosby Lockwood and Son).

II. Advanced Electrical Engineering

Mondays, at 4 p.m., throughout the session.

This course is specially intended for students in the third year of preparation for the degree or diploma, and embraces the generation, transformation, distribution, and applications of single and polyphase alternating currents of electricity.

Fee, £1 11s. 6d.

III. Advanced Electrical Engineering

Tuesdays, at 4 p.m., throughout the session.

This course is specially intended for students in the third year of preparation for the degree or diploma, and embraces the generation, transformation, distribution, and applications of direct currents of electricity.

Fee, £1 11s. 6d.

IV. Electrical Design

Lectures on Fridays at 4 p.m., and Designing and Drawing on Mondays 2 to 4 p.m., Thursdays 9.30 to 12.30, throughout the session.

This course also is specially arranged for students in the third year of preparation for the degree or diploma, and embraces lectures on the general principles underlying electrical design, and also the complete mechanical and

electrical design of direct and alternating current dynamos, motors, transformers, condensers, together with installation design and estimates. Students will themselves design and draw from new data the machines and appliances dealt with in the course.

Fee, £3 13s. 6d.

ELECTRICAL ENGINEERING LABORATORIES

These comprise—elementary laboratories, dynamo, electro-motor, transformer, instrument, photometer, and cable jointing rooms, which are equipped with a large variety of the most modern plant and appliances necessary for elementary and advanced testing in electrical engineering.

Text books required

- 1st and 2nd years. Parr's *Practical Electrical Testing in Physics and Electrical Engineering* (Longmans, Green & Co., 8s. 6d.).
3rd year. Parr's *Electrical Engineering Testing* (Chapman & Hall, 9s. net).

For detailed syllabuses of lecture and laboratory courses, special departmental time tables, description of equipment, and further particulars relating to degree, diploma, and special courses, examinations (entrance or otherwise), and evening classes, see separate prospectus of the Electrical Engineering department, to be had on application to the Registrar.

MINING DEPARTMENT

Assisted by the Drapers' Company of the City of London, and by the West Yorkshire Coal Owners' Association

Professor THOMPSON

Mr. PERKIN

There are three distinct courses of study arranged in this department to meet the requirements of different classes of students, viz :—

1. A three years' course in General Mining, qualifying for the degree of B.Sc.
2. A two years' course in Coal Mining, qualifying for the Diploma in Coal Mining.
3. A three years' course in Coal Mining.

Students entering for Courses 1 or 2 will be required to pass an Entrance examination; for syllabus of subjects and dates of examination see page 230.

A detailed syllabus of these courses, with complete time-tables and the fees payable, will be found in the separate prospectus of the Engineering and Mining Departments, to be obtained from the Registrar.

I. Degree Course in General Mining¹ (Three Years)

This course of instruction is intended for students who desire to qualify themselves as mining engineers, surveyors, or assayers, and also for those who intend, in the future, to take charge of mining and prospecting operations in the colonies or foreign countries. During the first year the student applies himself entirely to general science and Engineering. In the second year he continues his work in general science and Engineering, adding Electrical Engineering and the introductory lectures on Coal Mining. In the third year the student takes a course of Geology, including field work, but spends the greater part of his time in special mining work. Students are required to devote the summer vacation to getting experience in mines.

In addition to the subjects specified in the time tables below, students are advised to study a modern language.

Students who are unable to afford time for the complete course may be admitted to the Mining, Surveying, and Assaying courses on furnishing proof that they possess sufficient knowledge to follow the instruction given.

The fee for the complete course in each year is about £30.

Syllabus

| <i>First Year</i> | | <i>Second Year</i> | |
|-------------------------------|-------------------|----------------------------|-------------------|
| | Hours per week | | Hours per week |
| Mathematics, Intermediate ... | 3 | Mathematics, Final ... | 3 |
| Physics II. ... | 3 | Electrical Engineering ... | 3 |
| Chemistry, General Course ... | 3 | Engineering VI. ... | 3 |
| Engineering I. ... | 3 | Coal Mining ... | 1 |
| Machine Design ... | 1 | Engineering Laboratory ... | 6 |
| Physical Laboratory... .. | 3 | Electrical Engineering | |
| Chemical Laboratory ... | 6 | Laboratory ... | 3 |
| Engineering Drawing and | | Engineering Drawing ... | 6 |
| Laboratory | 6 | | |

¹ This course has been recognized by the Secretary of State for the Home Department as equivalent to two years' service in the mine for the purposes of the Colliery Manager's certificate.

Third Year

| | Hours per week |
|---|-------------------|
| Mining | 3 |
| Metallurgy, 1st term | 2 |
| Ore Dressing, 2nd term | |
| Surveying, 3rd term | |
| Geology I. | 3 |
| Geology Laboratory | 6 |
| Field Course | |
| Metallurgy Laboratory, 1st term | 15 |
| Mining Laboratory and Surveying 2nd and 3rd terms | |
| | |

II. Diploma Course in Coal Mining¹

(Two Years)

This course is arranged for those who intend to devote their attention to coal mining at home, and who, at the same time, desire to get a liberal training in the scientific principles underlying their profession.

Students entering this course apply themselves during the first year chiefly to general science and Engineering. In the second year the work in Electrical Engineering is continued; Geology is added, but students devote themselves mainly to the special mining work, consisting of lectures on Mining and that portion of the Metallurgy lectures (first term only), which deal with fuel, refractory materials, and the properties of metals and alloys. In the laboratory students will receive instruction in the testing of fuel, safety lamps, fans, &c., and conduct experiments on coal washing. The remainder of their time will be spent in making drawings of machinery used in mines, plan drawing, and in the course of field and underground work in surveying.

Students are required to obtain four months' experience at a mine during the vacations or to have had previous experience at mines before entering on the course.

¹ This course has been recognized by the Secretary of State for the Home Department as equivalent to two years' service in the mine for the purposes of the Colliery Manager's certificate.

Syllabus

| <i>First Year</i> | <i>Second Year</i> |
|--|--|
| Physics I. | Mining |
| Chemistry I. (two terms) | Metallurgy (first term) |
| Mathematics II. | Geology I. |
| Engineering I. | Geological Laboratory, three hours |
| Coal Mining | Electrical Engineering Laboratory, three hours |
| Chemical Laboratory, three hours | Mining Laboratory and Surveying, fifteen hours |
| Physical Laboratory, three hours | |
| Engineering Laboratory, six hours | |
| Drawing, five hours | |
| Electrical Engineering Laboratory, two hours | |

III. Three Years' Coal Mining Course

This course is intended for miners and sub-officials who are occupied in or about collieries, and can only attend for one afternoon per week, but desire to qualify themselves for Managers' Certificates under the C.M.R. Act, and particularly for those who have attended complete courses of instruction in Mining at one of the local centres appointed by the West Riding County Council.

The course will extend over three years. The first and third year students attend on Mondays from 3 to 7 p.m. The second year students, on Tuesdays, during the same hours. The instruction in Engineering, Electrical Engineering, and Geology will be given in the respective departments, the remaining subjects in the Mining Department. In the class on Mathematics the subject will be dealt with entirely from the mining point of view, the examples being taken from mining practice. Students will be given mining data in the examples set, and will be required to copy these out into an indexed pocket-book to form a nucleus for the observations which they subsequently make as a result of their own experience. A similar mode of treatment will be adopted for the Chemistry course, the properties of matter and chemical change being illustrated as far as possible from ordinary examples to be met with at a coal mine. In addition to the course of Surveying drawing, a course of practical work in the use of surveying instruments is given during the third term. Lectures will be given in connection with the two Surveying courses as they become necessary to explain the work in hand.

The first and third year courses begin on Monday, October 9, and the second year on Tuesday, October 10. Students must call upon the Vice-Chancellor on either October 9 or 10, between 2 and 3 p.m., to register their names and take out their class tickets.

Syllabus

| <i>First Year</i> | <i>Second Year</i> |
|-----------------------------------|--------------------------|
| Mathematics | Mining |
| Engineering | Chemistry of Coal Mining |
| Engineering Laboratory | Surveying |
| Mining | Geology |
| <i>Third Year</i> | |
| Electricity | |
| Mining | |
| Electrical Engineering Laboratory | |

Fee for either of the above courses, £5 5s. Composition fee for all three years, if paid in advance, £15.

SYLLABUS OF LECTURES, &c., IN COURSES I & II

I. Coal Mining

Mondays, at 4 p.m.

These lectures are intended to co-ordinate the information which students have acquired during the previous vacation, and to show them what to observe in the next summer's work preparatory to the Mining lectures of the third year.

With this object the general processes necessary for the extraction of coal from the ground will be passed in review, while to relieve the lectures of the third year those mining operations which find their best exemplification in coal mining will be discussed in detail.

Fee, £1 11s. 6d.

II. Mining

Mondays, Wednesdays, and Fridays, at 9.30 a.m.

This course will consist of about 90 lectures, which will be delivered during the third year. The object of these lectures will be to explain to students the methods, operations, and appliances commonly employed in mining, with illustrations from actual practice in various districts and countries, and to indicate the principles which should

influence the selection of methods and the introduction of such variations in them as local circumstances may demand.

Fee, £3 13s. 6d.

III. Metallurgy

Mondays and Wednesdays, at 10.30 a.m.

These lectures are for mining students, and are intended to give them a knowledge of the treatment required to recover the useful metals, so that they may be in a position to judge the cost of treatment of any particular ore. The lectures will deal with the properties of fuel and the various refractory materials, principles of construction of furnaces and the utilisation of heat. Fluxes. Properties of metals and alloys. Extraction of the common metals from their ores.

Fee, £2 12s. 6d.

IV. Laboratory Work

A course of instruction in testing fuel and refractory material and the assaying of ores and metallurgical products. Special attention will be given to the methods suitable for prospectors and to experimental work in the concentration of minerals by water.

V. Surveying (Office Work)

During the second term students in the regular course spend their time in plotting surveys, drawing mining machinery, and in general office work in studying the methods of recording field observations, the purposes to which these are applied, and the instruments with which they are made. The drawing work will be supplemented by lectures to prepare the student for the field and underground work of the third term.

VI. Surveying (Field and Underground Work)

During the third term a course of instruction in field work will be given, the students making and plotting their own surveys. This course will include chaining by ordinary chain and steel bands, precautions to be observed in chaining where great accuracy is required and on slopes. Measurements of length by wires. Traversing by dial and theodolite on the surface and underground. Triangulation

survey. Adjustment of errors in traverse and triangulation surveys. Levelling and contouring. Setting out work. Determination of meridian. Connection of the underground and surface surveys.

The field work will be supplemented by lectures on the methods employed.

The fees for laboratory work and surveying will be according to the time spent by the student in such work. (See page 112).

TEXTILE INDUSTRIES

Endowed by the Clothworkers' Company of the City of London

Professor BEAUMONT

Mr. HOLLIS

Mr. YEWDALL

Mr. HOWELL

Mr. FARLEY

The Department comprises the following branches :

- (a) Woollen Yarn Manufacture.
- (b) Worsted Yarn Manufacture.
- (c) Designing, Weaving, and Textile Manufacturing.
- (d) Finishing of Textile Fabrics.

Each branch possesses a complete plant of machinery designed and constructed for the demonstration of the technicalities of the various processes.

All the experiments made on the scouring, blending, carding, combing, spinning, weaving, dyeing, and finishing machines are primarily conducted for showing the nature and results of certain methods of work. The student records the experiments made during the session, and receives actual specimens of materials, yarns, and fabrics.

The scheme of teaching, as it relates to mechanical operations, is devised to give as varied an experience in spinning and textile manufacturing as possible, and also to practically supplement, in an efficient way, the lecture courses of study.

The Spinning Buildings are equipped with machinery for treating fine, medium, and coarse wools from the raw or greasy state to the spun yarn, whether on the worsted or woollen system, and for the construction of single, folded and fancy twist threads.

In the Weaving Sheds there are 116 looms, including the principal types of power looms, with the necessary accessories, such as winding, warping and beaming (hand and power), card stamping and lacing machines, healding, pegging, and other frames. This extensive series of looms affords unique facilities for experiments in the design, structure, weaving, and colouring of all classes of fabrics.

The Finishing Shed contains machinery for scouring, milling (by stocks, machine, and combined milling machine and stocks), raising, crabbing, cutting (on three builds of machines), and pressing (electric system).

In the Textile Museum there is a valuable collection of woven and other specimens, which students have the privilege of examining during the session.

The testing and examination of fibres, materials in the several stages of manufacture, yarns and fabrics, are so important in teaching and actual manufacturing, that a conditioning laboratory has been equipped with apparatus for this purpose.

Courses of Study

The following are the principal courses of study :

- (a) Textile Designing and Cloth Finishing
- (b) Woollen and Worsted Spinning
- (c) Textile Manufacture, including Woollen and Worsted Spinning, Textile Designing and Weaving and Cloth Finishing.

Courses for the Diploma

Diplomas are awarded in each of the above courses when the following subjects are also taken :

- (a) Lectures in Engineering, French or German; Practice in Applied Art, and Mechanical Drawing.
- (b) Lectures in First Year Textile Designing and Weaving, Engineering, French or German, and Mechanical Drawing.
- (c) Lectures in Engineering, French or German, and Mechanical Drawing.

For general regulations applicable to students taking the courses of study and examinations for the diploma, see page 208. For further details and time-tables of all courses of study in the department see the departmental prospectus, obtainable from the Registrar.

Lecture Courses and Experimental Work

Designing and Weaving

First year—Lectures, pattern analysis, designing and calculations, Tuesdays and Thursdays, from 9.30 to 11.30, throughout the session. *Subjects* :—Designs and fabrics, hand looms, power looms, yarns, calculations—costing, speed of power looms, etc., analysis of single-make fabrics.

Fee, £5 5s.

Experimental Weaving on Tuesdays and Thursdays, from 2 to 5.

Experiments in pattern composition, by arranging coloured yarns in simple and complex weaves in single and compound cloths, in the following classes of fabrics :—Trouserings, suitings, fine coatings, mantle cloths, dress goods, &c. A loom is allotted to each first year student, on which he works out experiments in single and backed fabrics. For fees see page 112.

Second year—Lectures, designing, pattern analysis, and calculations, on Mondays and Fridays, from 9.30 to 11.30, throughout the session. *Subjects* :—Double-make fabrics and designing, power looms, Jacquard or Harness loom, calculations on setting and costing, output of weaving machines, etc., dissection of backed, double and compound fabrics. Fee, £5 5s.

Experimental Weaving, Mondays and Fridays, from 2 to 5, on looms mounted for producing fancy woollen and worsted coatings, trouserings, and suitings; union fabrics for coatings, suitings, and mantlings; dress goods, shirtings, figured vestings, figured dress stuffs, figured mantles in various materials; velvets, plain and figured; plushes and imitation sealskins; lenos, figured gauzes; shawls, rugs, &c., &c. For fees see page 112.

Textile Colouring

First year—Lectures, Tuesdays and Thursdays, from 11.30 to 12.30, during the first and second terms. *Subjects*:—Theories of colouring; qualities of colours; functions of colours in woven design; harmony and contrast; various styles of patterns produced by colours, such as mixtures, stripes, checks, &c. Fee, £2 2s.

Second year—Mondays, from 11.30 to 12.30, during the first and second terms. *Subjects*:—Colour in relation to combination and drafted designs; backed and double-make cloths; rib patterns; spotted effects; figured patterns coloured in the warp, in the weft, and in both warp and weft. Fee, £1 1s.

Cloth Finishing

Lectures on styles and processes of finishing, and the constructing of finishing machinery, on Fridays, from 11.30 to 12.30, during the first and second terms. *Subjects*:—Scouring, tentering, milling, washing off, raising—both on the gig and by hand—cutting or cropping, pressing and steaming. Practical Cloth Finishing, Tuesdays and Thursdays, from 2 to 4. Fee (for both lectures and practical course), £2 2s.

Woollen Yarn Manufacture

First year—Lectures, Tuesdays, from 4 to 5, during the first and second terms. *Subjects*:—Wools; materials; manufacture of mungo and shoddy; carbonising; wool washing and the construction of washing machines; utilisation of scour suds and the recovery of oils; the processes of drying, blending, burring, and garnetting, and the machinery employed. Fee, £1 1s.

Second year—Lectures, Wednesdays, from 4 to 5, during the first and second terms. *Woollen Yarn*.—Scribbling, carding, condensing and spinning; different kinds of machines; the counts of the cards for various kinds of material; various kinds of feeds for scribbler and carder; condensers; calculations on the weight and value of spun material, also of the loss of material in yarn manufacture. Fee, £1 1s.

Practical Woollen Spinning: *First year*—Wednesdays; *Second year*—Tuesdays. For fees see page 112.

Worsted Yarn Manufacture

First year—Lectures, Fridays, from 4 to 5, during the first and second terms. *Subjects*:—System of making worsted yarns, and the several points of difference between woollen and worsted threads; the quality and length of the wool in relation to the kind of yarn produced; preparing, carding, backwashing, and gilling; the nature of these processes, and the construction and working of the machines used therein; the Noble's combing machine and the process of combing; comparison of the condition of the material in the different stages in woollen yarn making up to scribbling, with those in worsted yarn making up to combing. Fee, £1 1s.

Second year—Lectures, Thursdays, from 4 to 5, during the first and second terms. *Subjects*:—Principles of combing on Lister's, Holden's, and Heilman's machines; principles of drawing; open, cone, and French systems; construction and working of drawing and roving frames; spinning on the cap, flyer, and ring machines; the kinds of yarn for which each machine is considered most suitable; construction of doubling and twisting frames; production of mixture, marl and twist yarns; making-up of hanks, bundles, balls, and the process and effect of genapping; yarn-testing for condition, strength, elasticity, amount of twine and weaving qualities; costing or calculations on the manufacture of both woollen and worsted yarns. Fee, £1 1s.

Practical Worsted Spinning: *First year*—Fridays; *Second year*—Thursdays. For fees see page 112.

Yarn and Fabric Analysis

These studies are followed in a laboratory specially equipped with testing, conditioning and other apparatus.

Third Year Designing and Weaving

The experimental course of study in Designing is supplemented in the third year by occasional lectures on such subjects as textile economics, textile inventions, new yarns and woven structures, and industrial developments.

Specialization

Third and fourth year students and students who have graduated at other institutions, are afforded facilities of pursuing special courses of study in any branch of woollen and worsted spinning, designing and weaving or manufacturing.

Text Books

Beaumont, *Woollen and Worsted Cloth Manufacture* (Bell and Sons, 7s. 6d.)

Beaumont, *Colour in Woven Design*.

Bradbury, *Textile Calculations*.

Fox, *Weaving Mechanism*.

Bowman, *Structure of the Wool Fibre*.

Art applied to Textile Design

MR. FARLEY

The courses of study relate to the analysis, composition and colour qualities of decorative design applicable to the various styles of woven fabrics; and comprise first, second, and third year classes in both lectures and practice.

Textile students for the diploma in Designing and Weaving (see page 243) and also students in the designing of carpets, tapestries, mantle cloths and other figured fabrics are required to take the courses in Applied Art.

First Year Course

Lectures on Wednesdays, from 10.30 to 11.30.

Practical work in the Art Studio on Wednesdays, from 9.30 to 10.30, 11.30 to 12.30, and from 2 to 4 or 3 to 5.

Fee, £1 11s. 6d. per term; £2 12s. 6d. for two terms; or £3 3s. for the session.

Text Book for First and Second Year Courses

Ornamental Design for Woven Fabrics, by C. Stephenson and F. Suddards (Methuen & Co., 7s. 6d.).

Second Year Course

Lectures on Thursdays, from 11.30 to 12.30.

Practical work in the Art Studio on Thursdays, from 9.30 to 11.30, and from 2 to 4.

Fee, £1 11s. 6d. per term; £2 12s. 6d. for two terms; or £3 3s. for the session.

Third Year Course

Wednesdays or Thursdays, from 9.30 to 12.30, and from 2 to 4.

Fee, £1 11s. 6d. per term; £2 12s. 6d. for two terms; or £3 3s. for the session.

Arrangements may be made by which students who wish to devote themselves more closely to the artistic side of Textile Design may attend the Design Studio for two or more days per week, the fees for which will be at the same rate as for the above Third Year course.

DYEING AND TINCTORIAL CHEMISTRY

Professor GREEN

Mr. PERKIN

Mr. STEVEN

The instruction given in the various courses is arranged to meet the requirements both of students intending to become practical dyers or masters of dyeworks, and of those wishing to acquire a more thorough acquaintance with the chemistry of the colouring matters and their manufacture, with the object of becoming dyers' chemists, chemists in colour works, travelling chemists for dye manufacturers, experts in analysis of dyewares, &c. For the latter class, *i.e.*, colour chemists, an intimate acquaintance with the structural organic chemistry of the artificial dyestuffs is essential, and a very thorough knowledge of pure chemistry is required before specialising in this direction. For the dyer such an advanced knowledge, though useful, is not essential, and in any case cannot be acquired in a three years' course. It is, however, equally necessary for the dyer that he should acquire at the outset a sound fundamental knowledge of the chemical and physical sciences underlying the art with which he is ultimately to deal. The study of the colouring matters may thus be confined to a general acquaintance with their chemical relationships, and a thorough knowledge of their various properties and dyeing behaviour.

To meet the requirements of these two classes of students, two courses have been arranged, a *Three Years' Course* for practical dyers and a *Four Years' Course* for colour chemists.

The *Three Years' Course* qualifies for the Diploma in Dyeing of the University; see pages 187 and 208. The first year will be spent in the Chemical department, together with lectures on Physics and German. The second year will be divided between pure chemistry, elementary engineering, and practical work in dyeing; whilst the last year will be devoted entirely to dyeing, technical analysis of dyewares, study of the chemical properties of dyestuffs, examination of textile fibres, and calico printing.

In the *Four Years' Course* more time will be devoted to pure organic chemistry and to the chemistry of the colouring matters, their examination and analysis. In the fourth year some research work on colouring matters or dyeing processes may also be undertaken. Attendance on this course by students who have previously passed the Matriculation examination qualifies for the degree of B.Sc. (See Regulations, page 193.)

Students holding a degree of any University (English or Foreign) or otherwise bringing forward satisfactory evidence of a sufficient previous training in pure chemistry and general science will be admitted at once to the lectures and practical work of the department and become eligible for the diploma. Such previous training will be allowed to count in reducing the length of their course to an extent corresponding to the knowledge they possess.

Students of the Textile Department who are unable for want of time to take a full course of study in dyeing will not be required to study pure chemistry, but may enter for the lectures on the chemical technology of the textile fibres and dyeing together with practical work in the Experimental dyehouse.

The lectures on the chemistry of the artificial and natural colouring-matters will be open to senior students in the department of Pure Chemistry without joining the regular four years' course.

SYLLABUS OF COURSES

I. Three Years' Course qualifying for a
Diploma in Dyeing

This course is recommended to all who wish to obtain a good scientific and practical education in the art of Dyeing.

First Year

| | <i>Per week.</i> |
|---|------------------|
| Lectures on Chemistry (General Course) ... | 4 hrs. |
| Chemical Laboratory | 22 „ |
| Lectures on Physics (Intermediate Course) ... | 3 „ |
| German | |

Fee for the above course (including Entrance fee and University Union fee, but exclusive of German), £24. 19s.

The work in the Chemical laboratory will consist of inorganic preparations and qualitative analysis.

Second Year

| | <i>Per week.</i> |
|--|------------------|
| Lectures on Chemistry (Organic) | 3 hrs. |
| Chemical Laboratory | 11 „ |
| Experimental Dyehouse | 15 „ |
| General Engineering Lectures | 3 „ |
| German | |

Fee for the above course (including University Union fee, but exclusive of German), £27 12s. 6d.

The work in the Chemical laboratory will consist of quantitative analysis and simple organic preparations. In the Experimental dyehouse the work will comprise the study of the dyeing properties of the various classes of colouring matters in relation to different fibres, methods of application, colour-matching and mixing, tests for fastness, comparison of dyes for strength, &c.

Third Year

| | <i>Per week.</i> |
|--|------------------|
| Experimental Dyehouse } Practical Dyehouse } | 32 hrs. |
| Calico Printing } | |
| Lectures on Chemical Technology of Textile } Fibres (1st term) } | 2 „ |
| „ Dyeing (2nd term) } | |

Fee for the above course (including University Union fee), £22 7s. 6d.

The work in the Experimental dyehouse will include examination of the chemical properties of dye-stuffs, the detection of various colours on the fibre, preparation of mordants, examination of textile fibres, and the technical analysis of dyewares. The work in the Practical dyehouse will consist in dyeing wool and cotton on a larger scale in model machines, thus giving a general knowledge of dyeing machinery and of the practical conditions of dyehouse work. In calico printing a practical study will be made of the principles of the more important styles.

II. Four Years' Course for Colour-Chemists

Suitable for those desiring to become chemists in colour works, dyers' chemists, travelling chemists for dye manufacturers, experts in analysis of dyewares, &c.

Attendance on this course after matriculation qualifies for the degree of B.Sc.

First Year (Intermediate Course)

| | <i>Per week.</i> |
|---|------------------|
| Lectures on Chemistry (General Course) | 4 hrs. |
| Chemical Laboratory | 18 " |
| Physics (Intermediate Course) | 6 " |
| Mathematics | 3 " |
| German | ... |

Fee for the above course (including Entrance fee and University Union fee, but exclusive of German), £28 15s. 6d.

The work in the Chemical laboratory will consist of inorganic preparations and qualitative analysis.

Second Year

| | <i>Per week.</i> |
|--|------------------|
| Lectures on Chemistry (Organic, etc.) | 6 hrs. |
| Chemical Laboratory | 22 " |
| General Engineering... .. | 3 " |
| German | ... |

Fee for the above course (including University Union fee, but exclusive of German), £26 14s. 6d.

The work in the Chemical laboratory will consist of quantitative analysis, organic analysis, and organic preparations.

Third Year

| | <i>Per week.</i> |
|---|------------------|
| Experimental Dyehouse } 30 hrs. | |
| Clothworkers' Laboratory } | |
| Lectures on Chemical Technology of Textile } Fibres (1st term) 2 " | |
| Lectures on Dyeing (2nd term) } | |
| German | |

Fee for the above course (including University Union fee, but exclusive of German), £21 6s. 6d.

The work in the Experimental dyehouse will include dyeing trials with various classes of colouring matters, methods of application upon different fibres, testing colours for fastness, comparison of dyes for strength and shade, detection of colours on the fibre and in bulk, examination of textile fibres, and technical analysis of dyewares.

Fourth Year

| | <i>Per week.</i> |
|---|------------------|
| Clothworkers' Laboratory } 30 hrs. | |
| Calico Printing and Practical Dyehouse } | |
| Lectures on Artificial Colouring Matters } | |
| ist and 2nd terms | 2 " |
| " Natural Colouring Matters 3rd term | |

Fee for the above course (including University Union fee), £22 5s. 6d.

The work in the Clothworkers' laboratory will comprise further preparations of coal-tar products and colouring matters, identification of colouring matters and mixtures, determination of the constitution of colouring matters, and valuation of intermediate coal-tar products such as benzene, aniline, toluidine, naphthol, &c. Research work may also be undertaken by the more advanced students.

**Original Research in the Chemistry of Colouring Matters
and upon Dyeing Processes**

Special facilities are provided in the Clothworkers' Research laboratory for the conduct of research work in colour and textile chemistry. The laboratory is a very spacious one and is thoroughly equipped for carrying out scientific and technical investigations in these subjects. Students of the Department and also of the Department of Pure Chemistry who have satisfactorily completed their full

term of study will be admitted to the Research laboratory upon special terms, and will find it greatly to their future advantage to spend an extra year (5th) upon research work. A cordial invitation is also extended to graduates of other Universities (English or Foreign), and to other fully qualified chemists, who will be admitted direct as research workers for any period desired.

The fee for all research workers will be £3 3s. a term. Materials, if costly, or when used in large quantities, will be charged for, but at low prices. Ordinary apparatus will be lent, and only charged for if broken or spoilt.

LECTURES AND LABORATORY WORK

I. The Chemical Technology of Textile Fibres

Tuesdays and Thursdays at 9.30 a.m. during the first term.

The lectures will deal with the chemical and physical properties of the various animal and vegetable fibres, viz., cotton, flax, hemp, ramie, jute, wool, hair, silk, and artificial silk; and with the processes and machinery employed in the isolation, purification, bleaching, and finishing of the different fibres and of the textile materials prepared from them.

Fee, £1 1s.

II. The Chemistry and Technology of Dyeing

Tuesdays and Thursdays, at 9.30 a.m. during the second term.

The following are among the subjects to be treated in the lectures: Mordants; classification of colouring matters; methods of application in dyeing and printing of the various classes of colouring matters; theory of dyeing; testing of colours for fastness; machinery for dyeing; printing of cotton, wool, and silk.

Fee, £1 1s.

Text Books recommended for Courses I and II.

Hummel, *Dyeing of Textile Fabrics.*

Knecht, Rawson, & Loewenthal, *Manual of Dyeing.*

Georgievics, *Chemical Technology of Textile Fibres.*

III. Chemistry of the Artificial Colouring Matters

Tuesdays and Thursdays at 4 p.m., during the first and second terms.

The lectures will comprise the following subjects :

Distillation of coal-tar and separation of benzene, toluene, naphthalene, anthracene, &c. ; preparation of intermediate products of colour manufacture ; the manufacture, properties, and constitution of the most important colouring matters belonging to the following groups :—Rosaniline, pyrone, azine, oxyazine, thiazine, acridine, quinoline, thiobenzoyl, nitro, azo, stilbene, anthracene, sulphide colours, and indigo ; general methods and plant employed in the preparation of colouring matters and their raw materials.

Fee, £2 2s.

Text Books recommended

Georgievics' *Chemistry of Dye-stuffs*, translated by Salter (10/6).

Survey of the Organic Colouring Matters, by A. G. Green (21/-).

IV. Chemistry of Natural Colouring Matters

Tuesdays and Thursdays at 4 p.m., during the third term.

The lectures will deal with the origin, chemistry, and technology of the principal natural dye stuffs :—Madder, logwood, brazilwood, cochineal, barwood, safflower, cudbear, orchil, weld, turmeric, quercitron bark, Persian berries, fustic, catechu, indigo.

Fee, £1 1s.

Text Book recommended

Chemie der Natürlichen Farbstoffe, by H. Rupe.

V. Work in the Experimental Dyehouse

The Experimental dyehouse will be open for work every weekday during the session from 9 a.m. to 5 p.m., Saturdays 9 a.m. to 1 p.m. The Dyehouse is fitted up with modern dyebaths suitable for comparative dyeing trials, drying stoves, and other appliances.

The work in the Experimental dyehouse will include the following subjects :—Systematic dyeing trials with the different groups of dyestuffs upon cotton, wool, and silk. Application of various mordants and assistants. Methods of dyeing union materials. Principles of colour mixing and matching. Scouring and bleaching of cotton and

wool. Quantitative dyeing of colouring matters for strength and shade. Detection of colouring matters on the fibre. Testing colouring matters for fastness. Preparation of mordants. Analysis of water and removal of impurities. Technical analysis and valuation of dyewares. Detection of different fibres and estimation in mixtures. Examination of newly introduced colouring matters, and determination of their value as dyestuffs. Investigations upon dyeing processes. The use of the colorimeter, tintometer, and spectroscope.

A special Exposure chamber has been erected in a convenient position for the purpose of making tests of the fastness of colours to light.

VI. Work in the Practical Dyehouses

The Practical dyehouses are equipped with the most modern machinery for carrying out experiments on a practical scale. The equipment includes many model machines, all of which are driven by electric motors.

In these dyehouses advanced students of dyeing receive training in the treatment of all classes of textile materials.

The experiments are not merely confined to the actual dyeing processes, but include bleaching, scouring, stoving, singeing, crabbing, finishing, &c.

VII. Printing Room

The Printing laboratory is equipped with a model printing machine, steaming chamber, colour pans, &c.

A practical course in calico printing is held during the third term, the work comprising experiments in the different styles, discharges, resists, printing with diazo compounds, aniline black, indigo, &c.

VIII. Clothworkers' Chemical Laboratory

The Clothworkers' laboratory is a spacious building provided with every facility for the conduct of chemical work upon colouring matters. The work carried out comprises the following subjects:

(a) Analysis of colouring matters; (b) Preparation of coal tar products and colouring matters; (c) Researches upon

artificial and natural colouring matters, directed to the determination of their constitution, discovery of new groups, the solution of technical problems, &c.

IX. Special Courses of Study

Experimental classes will also be held in the following specialised subjects if a sufficient number of students present themselves :

1. Paper staining.
2. Straw dyeing.
3. Lake and pigment manufacture.

X. Museum

The museum of natural and artificial dyestuffs and textile fibres is open to students daily.

Examinations of the City and Guilds of London Technical Institute

The above courses prepare for the technological examinations of the City and Guilds of London Institute in Dyeing and also in Coal Tar Products. Students of the Department are recommended to present themselves for these examinations in the last year of their University course.

In connection with these examinations certificates, money prizes and silver and bronze medals are awarded to the successful candidates. The examinations are held annually at the University in April or May.

LEATHER INDUSTRIES

Assisted by the Skinners' Company of the City of London and
by Members of the Leather Trades

Professor PROCTER

Mr. KOPECKY Mr. BRUMWELL

Degrees in Science are conferred in connection with Leather Manufacture of which particulars are given below. Before beginning courses for degrees, the student must have matriculated in the University. A diploma in the Chemistry of Leather Manufacture is also given by the University for which matriculation is not required.

Scheme I. Four Years' Course for B.Sc. with Honours

First Year

Preparation for Intermediate examination in Chemistry and two of the following—Mathematics, Physics, Biology.

Second and Third Years

Preparation for Final examination in Chemistry, and Chemistry of Leather Manufacture. Approved courses on Physics and Engineering must be attended.

Fourth Year

Honours work on Chemistry of Leather Manufacture and research.

Arrangements may also be made for students who have taken the Ordinary B.Sc., or B.Sc. with Honours in Chemistry, to proceed to Honours in Leather Manufacture.

Scheme II. Three Years' Course for Ordinary B.Sc.

First Year

Usual Intermediate course. Three subjects must be selected from the following, of which Chemistry must be one :

- | | |
|--------------|----------------|
| 1. Chemistry | 3. Mathematics |
| 2. Physics | 4. Biology |

Students will also be required to write a short English Essay on one of a series of subjects connected with their studies.

It is also desirable that German or French should be studied, as passages for translation from scientific or technical works will be set in the Final examination.

A fourth subject selected from the list of Intermediate subjects given in paragraph 12, page 189 must also be presented at some Intermediate examination during the course.

| Second Year | | | | Per week. |
|---|-----|-----|-----|-----------|
| Chemical Lectures | ... | ... | ... | 6 hrs. |
| Chemical Laboratory (average) | ... | ... | ... | 12 " |
| Lectures on Principles of Leather Manufacture | | | | 3 " |
| Leather Industries Laboratories and Workshops (average) | ... | ... | ... | 6 " |
| Fee for the above course (including Union fee) | | | | £25 3s. |

| Third Year | | | | Per week. |
|--|-----|-----|-----|-----------|
| Lectures on Organic Chemistry | ... | ... | ... | 3 hrs. |
| " Chemistry of Leather Manufacture | | | | 1 " |
| " Leather Dyeing and Staining (1st term) | ... | ... | ... | 2 " |
| " Currying and Finishing (2nd term) | | | | |
| " Technical Microscopy and Bacteriology (3rd term) | ... | ... | ... | |
| " General Engineering (Course II A) | | | | |
| Chemical Laboratory (Organic) | ... | ... | ... | 3 " |
| Leather Industries Laboratories and Workshops | | | | 6 " |
| | | | | 12 " |
| Fee for the above course (including Union fee) | | | | £26 2s. |

Scheme III. Course for Diploma in Leather Manufacture

This course, extending over three years, is suitable for those who intend to become technical managers in leather works, and is recommended to sons of tanners and others who require a practical knowledge of the science and technology of the industry, but are unable to take a degree course.

| First Year | | | | Per week. |
|---|-----|-----|-----|-------------|
| Chemistry Lectures (General Course) | ... | ... | ... | 3 hrs. |
| Chemical Laboratory | ... | ... | ... | 18 " |
| Leather Industries Workshops | ... | ... | ... | 3 " |
| Mechanical Drawing | ... | ... | ... | 3 " |
| Fee for the above course (including Entrance and Union fees), | | | | £25 6s. 6d. |

| Second Year | | | | Per week. |
|--|-----|-----|-----|-----------|
| Lectures on Principles of Leather Manufacture | | | | 3 hrs. |
| " Organic Chemistry | ... | ... | ... | 3 " |
| Chemical Laboratories (Organic) | ... | ... | ... | 6 " |
| Leather Industries Laboratories and Workshops | | | | 15 " |
| Fee for the above course (including Union fee) | | | | £23 19s. |

Third Year

| | Per week |
|---|----------|
| Lectures on Chemistry and Physics of | |
| Leather Manufacture | 1 hr. |
| " Currying, Dyeing, and Leather | |
| Finishing, 1st and 2nd terms | |
| " Technical Microscopy and | 2 " |
| Bacteriology, 3rd term ... | |
| " General Engineering (Course II A) | 3 " |
| Leather Industries Laboratories and Workshops | 21 " |

Fee for the above course (including Union fee) £23 17s.

In awarding this diploma, in addition to any special examinations which may be imposed, the University will take into account the result of all terminal examinations during the course, and students failing in any of these may be disqualified, or required to repeat that part of the course.

Students who have taken not less than a two years' course in pure chemistry in the University of Leeds (or other institution approved by the Senate for the purpose) and who take the Third Year course of this scheme with the addition of the lecture course on the Principles of Leather Manufacture, and pass the prescribed examinations will also be entitled to the diploma. The Senate has also power to accept courses at other institutions in place of equivalent ones prescribed in Scheme II.

The International Association of Leather Trades Chemists, which now includes most of the leading chemists of the manufacture, demands as a condition of membership a three years' course of study of pure chemistry of university standard, or the evidence of an equivalent knowledge, and at least one year's experience in the laboratory of a leather works or leather industries school. Students who desire membership in this Association are recommended to take the course prescribed for the B.Sc. degree with Honours, though a less qualification may be accepted.

Shorter courses of study will be arranged for students who cannot afford the necessary time for a degree or diploma course, but in no case can a student be allowed to work in the Leather Industries laboratories, until he has satisfied the Professor of Leather Industries that he has the

requisite preliminary training in chemistry. Some previous acquaintance with actual leather manufacture is very desirable before taking the University courses.

Text Books

Procter's *Leather Industries Laboratory Book* (E. & F. N. Spon Ltd.).

Procter's *Principles of Leather Manufacture* (E. & F. N. Spon Ltd.).

Work During Vacation

Students in the Leather Industries Department are referred to page 112. The laboratories of the Department will be open to qualified students for research and private study during a part of the long vacation, but students are strongly recommended to employ the time in gaining practical experience in works wherever such a course is possible. The Professor will be glad to give advice before the end of term as to suitable courses of vacation study; and to consider applications from suitable students desiring the use of the laboratories.

LECTURE COURSES

I. The General Principles of Leather Manufacture

Lectures on Mondays, Wednesdays, and Fridays, at 10.30 a.m., throughout the session, comprising the following subjects:—Character and sources of hides and skins used in Leather manufacture, their structure and constituents. Preparation for tannage, including soaking, liming, and other preliminary processes, and the chemistry involved. The vegetable tanning process and its materials, with special reference to the heavier leathers. Mineral and special tanning processes, including chrome tanning and the use of formaldehyde.

Fee, £3 13s. 6d.

II. The Chemistry and Physics of Leather Manufacture

Lectures on Tuesdays, at 10.30 a.m., throughout the session, comprising the following subjects:—

The anatomical and chemical structure of skin and its constituents. Physics of evaporation, drying, heating, and ventilation. The physical chemistry of the limeyard and

tannery. Theories of the tanning process. Chemistry of the tannins and their derivatives. Leather analysis. Examination and purification of effluents.

Fee £1 1s. 6d.

III. Leather Dyeing, Staining, and Finishing

Lectures twice a week, on Thursdays and Saturdays at 10.30 a.m., during the first term, comprising the following subjects:—

Sketch of colouring matters. Chemistry of dyeing. Nature of light and colour. Laws of colour-mixture. The practical methods of leather dyeing and staining.

Fee, £1 1s.

Students requiring a fuller knowledge of Dyes and Dyeing are advised to attend such lectures in the Dyeing Department as the Professor may recommend.

Practical Leather Dyeing. Instruction will be given as part of the Laboratory Course.

IV. Currying and Leather Finishing

Lectures twice a week, on Thursdays and Saturdays, at 10.30 a.m., during the second term, comprising the following subjects:—

Chemistry of oils and fats. Practical currying in connection with the work done in the currying shop.

Fee, £1 1s.

V. Technical Microscopy and Bacteriology in Leather Manufacture

Lectures twice a week, on Thursdays and Saturdays, at 10.30 a.m., during the first half of the third term.

Fee, 10s. 6d.

The delivery of Courses III, IV, and V will be subject to the entry of a sufficient number of students.

Practical Microscopy and Bacteriology

Instruction on these subjects will be given during the session in the laboratory of the Leather Industries department, and will form part of the ordinary laboratory work of students in the department.

Microscopes must, as a rule, be provided by the student but one or two may be hired of the Department. For bacteriological work they must be provided with $1/12$ th oil immersion objective and substage condenser ; but for the study of skin and leather only a simpler microscope will suffice.

LEATHER INDUSTRIES LABORATORIES

The laboratories and workshops will be open during the session from 9.30 a.m. to 1 p.m., and from 2 to 5 p.m., except on Saturday afternoons.

All the ordinary chemicals (except silver nitrate and alcohol), and small quantities of skin and leather for experimental purposes, will be furnished by the Department, but larger quantities required for special experiment or research may be charged to or provided by students at the discretion of the Professor.

For fees, see page 112.

AGRICULTURE

Professor SETON

Mr. HAYDON Mr. ARCHIBALD Dr. CROWTHER

Mr. BOWES Mr. STEWART

Mr. PARTON Mr. T. REDINGTON Mr. GAUT

Miss MCKERROW Mr. ANSTEY

The Winter Course will begin on Monday, October 16, when the Vice-Chancellor will admit students from 9.30 a.m. to 12.30 p.m., and from 2 to 5 p.m. All students are expected to register their names on this day. Lectures will begin on Tuesday, October 17.

The Winter Course extends over two terms: the first term begins October 16, and ends December 23, 1905; the second term begins January 8, and ends March 17, 1906. The fee is £10.

The Summer Course extends over the third term, beginning April 18, and ending June 30, 1906. The fee is £5.

Students taking the full Winter or Summer Course are entitled to the use of the library, common rooms (which are supplied with the daily papers, current periodicals, &c.), to free instruction in the University gymnasium, and to the use of the athletic ground and tennis courts.

Students may reside either in Leeds or in the village of Garforth, which is about three-quarters of a mile from the Farm. The cost of a contract ticket between Garforth and Leeds during the Winter Session (five months) is £2 7s., and for students under 18 years of age £1 3s. 6d.

The courses of study in Agriculture at the University are :

1. A general course designed without reference to the requirements of any examining body.
2. A course for the National Diploma.
3. A course for the B.Sc. degree.

I and II. General and Diploma Courses

Winter Session.

Students may obtain a full course during winter, and are free to devote the spring and summer months to practical farm work.

The instruction has been arranged to meet the requirements of young men who intend to become farmers, land agents, valuers, or teachers of agricultural science.

The complete course extends over three winters, but students may take a one or two winters' course. The complete course prepares students for the examination for the National Diploma in Agriculture, awarded jointly by the Royal Agricultural Society of England and the Highland Society of Scotland. Students are also prepared for the examination of the Surveyors' Institution.

The University of Leeds is among the places of professional education which have been approved by the Surveyors' Institution. The effect of this recognition is that students of the University who have taken the two years' course in Agriculture are admitted to the examinations or the Institution in Sub-Division 1, "chiefly Land Agency," without the usual period of pupilage in a land agent's or surveyor's office.

A Laboratory for the exclusive use of Agricultural students has been added to the Department, and will be open on special terms to those who wish to devote their whole time to agricultural chemical analysis.

Practical instruction in Agriculture is provided for at the Educational Farm at Garforth. In addition to the lectures at the University, students must attend regular classes at the Farm, where class-rooms and laboratories have been erected, in which classes will be conducted according as it is found necessary.

All students taking a full course will be required to follow closely the farm work, including field operations, methods of feeding stock, and progress of experiments.

A Tutor has been provided to supervise the studies of first year students. Tutorial classes will be formed to suit their requirements.

Summer Session

For students who can devote the summer as well as the winter months to study, a special course will be arranged. This will extend from April 18 to June 30, 1906.

The subjects will comprise agricultural chemical analysis, forestry, horticulture, poultry keeping, farm bacteriology, field surveying and levelling, mathematics, and practical agriculture.

Students reading for the National Diploma are recommended to take the Summer course in their first year.

For time-tables and fuller information see the departmental prospectus, to be obtained from the Registrar.

III. Degree Course

Students preparing for the degree of Bachelor of Science who take Agriculture as one of their subjects for the Final examination, do not enter the Department of Agriculture until they have passed the Matriculation and Intermediate examinations and begin the work for the Final examination. The subjects of examination and attendance conditions will be found under the Regulations for the degree of B.Sc., p. 187. The period of study for students who take the course will

ordinarily be three years after passing the Matriculation examination ; they are therefore recommended, when practicable, to pass the Matriculation examination before entering the University.

SYLLABUSES

For more detailed syllabuses see the prospectus of the Department.

First Year

Agriculture

Professor SETON

Tuesdays, Wednesdays, and Thursdays, at 9.30 a.m.

The lectures will deal with soils, their nature, functions, origin and wasting ; soil temperature ; soil water and its conservation ; tillage operations ; steam cultivation ; farm drainage ; irrigation ; manures, farm-yard and artificial ; the rotation of crops ; seeds, grasses, and pastures.

Physics and Chemistry

Tuesdays, Wednesdays, and Thursdays, at 10.30 a.m.

Physics and Chemistry so far as is sufficient to enable students to understand thoroughly the application of these sciences to agricultural practice.

Natural History

This course will be held in the Department of Biology, see p. 224.

Tutorial Classes

Tuesdays, Thursdays, and Fridays, at 11.30 a.m.

Correspondence, calculations, elementary mathematics preparatory to book-keeping, surveying, and engineering.

Chemical Laboratory

Mondays and Wednesdays, from 2 to 5 p.m.

Selected experiments arranged to illustrate the chemical and physical principles underlying agricultural operations. These will include the preparation and properties of the elements of special interest to agriculturalists, and experiments leading up to a correct knowledge of the nature, properties, composition, and use of soils, manures, and feeding stuffs.

Practical Agriculture

Tuesday and Friday afternoons, at Garforth.

SUBJECTS.—Stock. Stock-feeding. Estimation of weights of crops and animals. Pastures, pasture plants. Practical examination of seeds, manures, and feeding stuffs.

Seasonable operations will be closely followed ; different systems will, so far as practicable, be illustrated, and the reasons for the variations explained. Students will be required to closely follow stock-feeding and other experiments at Garforth. Occasional demonstrations will be given by specialists in certain departments of practical agriculture.

Students will be required to pay their railway fares to and from Garforth. For price of contract railway tickets, see page 263.

Second and Third Years

Agriculture

Mr. HAYDON and Mr. ARCHIBALD

Lectures daily, except Saturdays, at 10.30 a.m.

Feeding Stuff.—Animal nutrition. Process of digestion. Functions of the various constituents of food. *Crops and Cropping.*—Characteristics, habits, cultural requirements, and management of the various arable land crops. *Live Stock.*—Origin, history, and description of the different breeds of horses, cattle, sheep, and pigs in the British Isles. Accommodation for farm stock. The buying and selling of stock. Agricultural statistics. *Labour and Implements.*—Management of farm labour. Manual labour, horse labour, water, wind and steam power. Agricultural implements and machinery. Farm buildings and fences. *Agricultural Economics.*—Considerations involved in the valuation and taking of farms. Times of entry. Yearly and other tenancies. Leases and agreements. Acts of Parliament affecting landlord and tenant. The tenant's capital and its distribution. Live and dead stock required. Valuation of tenant-right, and live and dead stock. Different systems of farming. Arrangement and cost of labour in connection with stock, cultivation, cropping, harvesting, &c.

Chemistry

Dr. CROWTHER

Mondays, Tuesdays, and Thursdays, at 9.30 a.m.

SUBJECTS.—The chemical elements, their classification, distribution, and functions in nature and the arts. The atomic theory. Methods of determining and controlling atomic weights. Valency. Molecular weights. The periodic system of the elements. Chemical nomenclature. Laws of chemical combination. The chemistry of the more common elements and of their most important compounds. The principles of qualitative and quantitative analysis of inorganic substances and of gases. Typical volumetric processes. Ultimate analysis of organic substances. Fractional distillation. Vapour density determinations. The chemistry of some typical carbon compounds important in agriculture, including alcohol, ether; oxalic, lactic and acetic acids; fats, oils, and soaps; the paraffins; cyanogen, urea, and uric acid, the sugars and starches; turpentine, tannin, albumen, gelatine, &c.

Agricultural Chemistry

Dr. CROWTHER

Wednesdays, Thursdays, and Fridays, at 11.30 a.m.

The Plant.—Elementary constituents of the food of plants. Forms in which these constituents may be absorbed. The atmosphere and its relations to plant life. Assimilation of the various ingredients of plant food. Production of organic substances by the plant. Transport and storage of prepared material. The chief organic constituents of the plant. Respiration. Germination, growth, and maturation. *The Soil*.—Its constituents, their origin and properties. Analysis—mechanical and chemical. The chief chemical processes at work in soils. Bacteria of the soil. *Manures*.—Their composition and commercial value. Fermentation of farmyard manure. Sewage manures. *Crops*.—Characteristic composition of the various farm crops. *Animal Nutrition*.—Constituents of the animal body. Nature of animal nutrition. Food constituents and their functions. Digestion and excretion. Secretion. Respiration. The composition of foods. Their digestibility and comparative nutritive value.

The Dairy.—The chemical composition and properties of milk, cream, skim milk, butter, cheese, and whey. Milk and cheese ferments and their action.

Agricultural Botany

In the Department of Biology, see page 224.

Book-keeping

Mondays at 11.30 a.m., and Fridays at 9.30 a.m.

SUBJECTS.—Accounts, day book, cash book, ledger, balance sheet, profit and loss account, &c.

Mathematics

Wednesdays at 9.30 a.m.

This class will be largely tutorial. The subjects taken will be arranged to suit the requirements of the student, and in addition to Mathematics as required for examination the course will include practice in all calculations that an agriculturist would be required to make in the course of a year.

Chemical Laboratory

Tuesdays, 10.30 a.m. to 12.30 p.m.; Thursdays, 2 to 4 p.m.; Saturdays, 9.30 a.m. to 12.30 p.m.

Chemical analysis, with special reference to Agriculture.

Veterinary Science

Mr. BOWES

Mondays, Tuesdays, Wednesdays and Thursdays at 9.30 a.m.

SUBJECTS.—Anatomy and Physiology of farm animals. Recognition of diseases affecting farm animals. Means of preventing disease, including ventilation, drainage, judicious feeding, grooming. Nature of heredity, contagion, infection.

Practical Agriculture

Classes at the Farm on the same lines as for first year students, with the addition of practical demonstrations by Mr. Bowes on conformation, handling, &c., and generally the application of veterinary hygiene to farm animals.

Economic Entomology

This course will be held in the Department of Biology, see page 223.

Geology

In the Department of Geology, see page 227.

Surveying

Mr. ARCHIBALD

Revision classes for those students who have taken this subject in the summer term.

On Mondays at 9.30 a.m. and 4 p.m.

Agricultural Engineering

In the Department of Engineering, see page 232.

Summer Course

Dairying

Mr. HAYDON

Commercial aspects. Conditions which favour foreign importation. The factory system. Relative merits of milk-selling, butter-making and cheese-making under different conditions. General character of milk. Testing quality. Butter-making. Details of the manufacture of Cheddar, Stilton, Cheshire and Wensleydale cheese. Utilization of by-products. General management of the herd. Live and dead stock and buildings required on cheese-making farms.

Practical Agricultural Chemistry

Dr. CROWTHER.

Qualitative and quantitative analysis.

Forestry

In the Department of Biology, see page 224.

Horticulture

Mr. T. REDINGTON

SUBJECTS.—Preparation of the soil of the garden. The use and application of farm yard manure, artificial manures and lime. Seeds and their treatment. *Garden Crops*.—

Their cultivation and management. *Fruit Culture*.—Propagation by seed, cuttings, layering, budding, grafting, &c. ; planting ; root and branch pruning. Produce—gathering, grading, storing, packing, marketing, preserving, bottling, &c. *The Flower Garden*.—Autumn, Spring, and Summer work ; special subjects of the flower garden.

Poultry Keeping

Mr. PARTON

SUBJECTS.—Origin and antiquity of fowls. Breeds and their characteristics. The anatomy of the fowl. Accommodation and sanitation of the house. Embryology of the chicken. Natural incubation. Rearing chickens. Use of incubators and of brooders for artificial rearing. Foods—the principles and methods of feeding. Fattening—the different methods adopted. Breeds of ducks, geese, and turkeys. Marketing poultry produce—preserving eggs. Diseases of poultry. General management.

Field Surveying and Levelling

Mr. ARCHIBALD

Students will be required to make a survey of a part of the Manor Farm, Garforth, and to plot the same in the office. In addition to chain, compass, theodolite, and level, students will have an opportunity of using other instruments.

TIME TABLE OF INTERMEDIATE ARTS COURSES

| | 9.30. | 10.30. | 11.30. | 2. | 3. | 4. |
|--------------|------------------------|---------------------|--------------------------------|------------------------|-------------------|----------------------------------|
| MONDAY .. | Latin. | English Literature. | Ancient History. French II. | Mathematics. | Greek. German. | French III. Education 1st Yr. |
| TUESDAY .. | Education 2nd Year. | Latin Comp. | .. | .. | .. | .. |
| WEDNESDAY .. | Latin. | English Literature. | Ancient History. French II. | Logic. Mathematics. | Greek. German. | French III. Education 1st Yr. |
| THURSDAY .. | Education 2nd Year. | .. | .. | .. | .. | .. |
| FRIDAY .. | Latin. | English Literature. | French II. | Logic. Mathematics. | Greek. German. | French III. Education 1st Yr. |
| SATURDAY .. | .. | .. | .. | .. | .. | .. |

The time for the English Language Classes to be arranged with Students.

TIME TABLE OF FINAL ARTS COURSES

| | | | | | | |
|--------------|---|---------------------|-----------------|---------|----------------------------------|-------------------|
| MONDAY .. | Greek. † German. European Hist. † | English Literature. | Latin. * † | French. | Education A. | |
| TUESDAY .. | Roman History. † | .. | Latin Comp. * † | .. | French Literature. | German Literature |
| WEDNESDAY .. | Greek. † German. European Hist. † | English Literature | Latin. * † | French. | Education A. | .. |
| THURSDAY .. | Roman History. † | .. | .. | .. | 3.15-4.45. Criticism Lessons. | .. |
| FRIDAY .. | Greek. † German. | English Literature. | Latin. * † | French. | Education B. | .. |
| SATURDAY .. | .. | .. | .. | .. | .. | .. |

* First Year. † Second Year.
 Greek Composition, one hour.
 English Language, three hours.
 European History, First Year, two hours.

At times to be arranged :-
 Greek History, two hours.
 Constitutional History, two hours.
 History of Ancient Philosophy, three hours.
 Economic History, two hours.
 Psychology, three hours.

GENERAL TIME TABLE

| | 9.30—10.30. | 10.30—11.30. | 11.30—12.30. |
|------------|---|---|--|
| MONDAY. | Final Greek II. Intermediate Latin. Final German. European Hist. II. Math. IV. and VII. Int. Phy. Recap. <i>b c</i> Adv. Chem. II. Metals. Hist. Chem. <i>a</i> Botany Elem. <i>c</i> Geography. <i>b c</i> Engineering IIA. Elect. Engineering I Mining. 9.30—11.30. 2nd Year Text. Ind. Chem. (Agl.) <i>a b</i> Vety. Sci. <i>a b</i> 9.30—11.30. Forestry. <i>c</i> | Honours Greek. Matric. Latin. Inter. Literature. Final Literature. Honours German. Final Physics I. Zoology. <i>a b</i> Med. Biol. <i>a b</i> 10.30—12.30. Nat. History. <i>a b</i> 2nd Year Mech. Engineering. Metallurgy. Tanning Prin. 2nd Year Agricul. <i>ab</i> | Matric. Greek. Final Latin. French II. Int. Anct. History. Math. VI. Chemistry (General Course). 12.0 Organic Chem. (Honours) <i>a b</i> Agl. Geology. <i>a b</i> 2nd Year Textile Colouring. <i>a b</i> Agl. Bookkeeping. <i>a b</i> Poultry. <i>c</i> |
| TUESDAY. | Honours Latin. Final Anct. Hist. (Roman) Education (2nd Year). Matric. Physics. Adv. Chem. III. Non- Metals. Physical Chem. <i>b c</i> 9.30—12.30. Practical Zoology. <i>a</i> 9.30—12.30. Pract. Med. Biol. <i>a</i> 9.30—12.30. Practical Botany. <i>b</i> 9.30—11.30. Forestry. <i>c</i> 3rd Year Civil Engrg. 9.30—11.30. 1st Year Text. Ind. Dyeing I. <i>a</i> Dyeing II. <i>b</i> 1st Year Agricul. <i>a b</i> Chem. (Agric.) <i>a b</i> Vety. Sci. <i>a b</i> Dairying. <i>c</i> | Honours Greek. Int. Latin Comp. Matric. History. 10—12. Pract. Med. Organic Chem. 10.30—12.30. Pract. Med. Biol. <i>b</i> 3rd Year Mech. Eng. Leather Chemy., &c. 2nd Year Agricul. <i>ab</i> Phys., &c. (Agri.) <i>a b</i> Horticulture <i>c</i> | Final Latin Comp. Matric. Literature. 12. Organic Chem. 1st Year Textile Colouring. <i>a b</i> Tutorial Agricul. <i>a b</i> Agric. Surveying. <i>c</i> |
| WEDNESDAY. | Final Greek II. Intermediate Latin. Final German. European Hist. II. Mathematics IV. & VII. Adv. Chem. II. Metals. Hist. Chem. <i>a</i> Botany Elem. <i>c</i> Geography. <i>b c</i> Engineering IIA. Elec. Eng. I. Mining. 9.30—12.30. Textile Art. (1st and 3rd Years). 1st Year Agricul. <i>a b</i> Agl. Maths. <i>a b</i> Vety. Sci. <i>a b</i> 9.30—11.30. Forestry. <i>c</i> | Honours Greek. Matric. Latin. Inter. Literature. Final Literature. Honours German. Final Physics II. Zoology. <i>a b</i> Med. Biol. <i>a b</i> 2nd Year Mech. Engineering. Metallurgy. Tanning Prin. 2nd Year Agri. <i>a b</i> Phys., &c. (Agl.) <i>a b</i> | Matric. Greek. Final Latin. French II. Int. Anct. History. Reading (for 1st Year Women K.S.) Math. VI. Chemistry (General Course). 12. Organ. Chem. (Honours) <i>a b</i> Natural History. <i>a b</i> Mining Mineralogy. Agl. Geology. <i>a b</i> 11.30—1. Object Drawing. Agl. Chem. <i>a b</i> Poultry. <i>c</i> |

a—1st Term. *b*—2nd Term. *c*—3rd Term.

DAY CLASSES.

| 2—3. | 3—4. | 4—5. | 5—6. |
|--|--|---|--|
| <p>Final French. Elem. German. Economics (1st Year) Mathematics I. and III. 2—5. Practical Zoology. <i>a b</i> 2—5. Pract. Med. Biol. <i>a</i> 2—4. Agl. Botany. <i>ab</i> Final Geology. Agl. Engineering. <i>ab</i> 2—4. Elec. Design. 2—5. 2nd Year Text. Ind. Agri. Chem. <i>c</i></p> | <p>Intermediate Greek. Matric. French. Intermed. German. Education (3rd Year A) Mathematics II. Int. Physics (Exercise Class). Mining Maths. <i>a</i> 1st Year Coal Mining. <i>b c</i></p> | <p>French III. Honours French. Matric. German. Education (1st Year) Mathematics V. 1st Year Engineering. Elect. Eng. II. Mining Engrg. <i>a c</i> Coal Mining I. Mining Maths. <i>b</i>. Vety. Sci. <i>a b</i> English Law.</p> | <p>5.30—7. Mining Engrg. Lab.</p> |
| <p>Latin Grammar. Higher Commercial German. 2—5. Sanit. Chem. Botany Elem. <i>c</i> 2—4. Practical Agri. Geology. <i>a b</i> 2—5. 1st Year Text. Ind. 2—4. Cloth Finishing. Art for 2nd year K.S.</p> | <p>French Literature <i>a b</i> French Revision <i>c</i> Lower Commercial German. 3—5. Practical Botany. <i>c</i> 2nd Year Coal Mining. Commercial Law.</p> | <p>German Literature Economic Geog. (1st. Year.) Chem. of Mining. <i>a</i> Geology of Coal Mining. <i>b c</i> 2nd Year Civil Engineering. Elect. Eng. III. Woollen Yarn (1st Year). <i>a b</i> Dyeing III. <i>a b</i> Dyeing IV. <i>c</i></p> | <p>5.30—7. Mining Surveying, &c. <i>a c</i> 5.30—7. Mining Geol. Lab. <i>b</i></p> |
| <p>Final French. Elem. German. Logic. Economics (1st Year) Mathematics I. & III. 2—4. Agric. Bot. <i>a b</i> Final Geology. Agricul. Engrg. <i>a b</i> 2—4. Textile Art (1st and 3rd Years).</p> | <p>Intermediate Greek. Matric. French. French Elocution (2nd Year). <i>a b</i> Intermed. German. Accountancy. (1st Year.) Education (3rd Year B) Mathematics II. Int. Physics. Roman Law</p> | <p>French III. Honours French. Matric. German. Accountancy (2nd Year). Education (1st Year). Mathematics V. Int. Physics. 1st Year Engineering. Woollen Yarn (2nd Year). <i>a b</i> Law—Jurisprudence.</p> | <p>Reading (for 1st Year Men K.S.)</p> |

Classes not marked meet throughout the Session.

GENERAL TIME TABLE

| | 9.30—10.30 | 10.30—11.30. | 11.30—12.30. |
|-----------|--|--|---|
| THURSDAY. | Honours Latin. Final Anct. Hist. (Roman) Education (2nd Year). Matic. Physics. Int. Physics (Exercise Class) Ad. Chm. III. Non-Mets. Physical Chem. <i>b c</i> 9.30—11.30. Forestry. <i>c</i> 3rd Year Civil Engrg. 9.30—12.30. Elec. Design. 9.30—11.30. 1st Year Text. Ind. 9.30—12.30. Textile Art (2nd and 3rd Years). Dyeing I. <i>a</i> Dyeing II. <i>b</i> 1st Year Agricul. <i>a b</i> Chem. (Agl.) <i>a b</i> Vety. Science. <i>a b</i> Dairying. <i>c</i> | Honours Greek. Matic. History. 10—12. Pract. Med. Org. Chem. 3rd Year Mech. Engineering. Leather Dyeing. <i>a</i> Leather Currying. <i>b</i> Leather Microscopy. <i>c</i> 2nd Year Agricul. <i>a b</i> Phys. & c. (Agl.) <i>a b</i> Agl. Maths. <i>c</i> | Matic. Latin Comp. 12. Organic Chem. Zool. Revision. <i>c</i> Econ. Entomology. <i>a</i> 1st Year Textile Colouring. <i>a b</i> Agl. Chem. <i>a b</i> Tutorial Agricul. <i>a b</i> Agl. Surveying. <i>c</i> |
| FRIDAY. | Final Greek II. Intermediate Latin. Final German. Mathematics IV. & VII. Adv. Chem. II. Metals. Hist. Chem. <i>a</i> 9.30—11.30. Pract. Zool. Revision. <i>c</i> 9.30—11.30. Pract. Econ. Entom. <i>a</i> 9.30—11.30. Nat. Hist. <i>ab</i> Geography. <i>b c</i> Engineering IIA. Elect. Engineering I. Mining. 9.30—11.30. 2nd Year Text. Ind. Agl. Bookkeeping <i>a b</i> Dairying. <i>c</i> | Matic. Latin. Inter. Literature. Final Literature. Honours German. Final Physics I. Zoology. <i>a</i> Botany Elem. <i>b</i> Med. Biol. <i>a b</i> 2nd Year Mech Engineering. Tanning Prin. 2nd Year Agricul. Agl. Maths. <i>c</i> | Matic. Greek. Final Latin. French II. Math. VI. Chemistry (General Course). 12. Organic Chem. (Honours) <i>a b</i> Mining Mineralogy. Agl. Geology. <i>a b</i> Cloth Finishing. <i>a b</i> Agricul. Chem. <i>a b</i> Tutorial Agricul. <i>a b</i> Agl. Surveying. <i>c</i> |
| SATURDAY. | Elementary Greek. Honours Latin. Matic. Physics. (Exercise Class). 9.30—12.30. Genl. Elem. Sci. (Phys. and Chem.) Adv. Chem. III. Non-Metals. Physical Chem. <i>b c</i> 9.30—12.30. Botany. 9.30—12.30 Nature Knowledge. Machine Design. | Honours Latin Comp. 10.15—12.15. Elementary French Training Class. 10.15—12.15. Ger. Training Class. Leather Dyeing. <i>a</i> Leather Currying. <i>b</i> Leather Microscopy. <i>c</i> 3rd Year Mechanical Engineering. 11—1. Horticulture (at Garforth). | Honours Greek Comp. Latin IV. 12. Organic Chem. |

a—1st Term *b*—2nd Term. *c*—3rd Term.

DAY CLASSES. (*Continued.*)

| 2-3. | 3-4. | 4-5. | 5-6. |
|---|---|---|--------------------------------------|
| <p>Matric. Literature. <i>b c</i> Higher Commercial German. Reading (for 2nd Year K.S.).</p> <p>2-5. Sanit. Chem. Botany Elem. <i>c</i> Agl. Engrg. <i>a b</i></p> <p>2-5. 1st Year Text. Ind</p> <p>2-4. Cloth Finishing.</p> <p>2-4. Textile Art (2nd and 3rd Years). Art for 1st and 2nd Year K.S.</p> | <p>Lower Commercial German.</p> <p>3.15-4.45. Criticism Lesson (Education Course).</p> <p>3-5. Practical Botany. <i>c</i></p> <p>Commercial Law.</p> | <p>Economic Geog. (1st Year).</p> <p>2nd Year Civil Engineering.</p> <p>Worsted Yarn. (2nd Year) <i>a b</i></p> <p>Dyeing III. <i>a b</i></p> <p>Dyeing IV. <i>c</i></p> <p>English Law.</p> | <p>Music (1st and 2nd Year K.S.)</p> |
| <p>Final French. Elem. German. Logic.</p> <p>Economics (1st Year)</p> <p>Mathematics I. and III.</p> <p>2-4. Pract. Med. Biol. <i>b</i></p> <p>Agric. Botany. <i>a b</i></p> <p>Final Geology.</p> <p>2-5. 2nd Year Text. Ind.</p> <p>Agl. Chem. <i>c</i></p> | <p>Intermediate Greek</p> <p>Matric. French.</p> <p>Int. German.</p> <p>Education (3rd Year B).</p> <p>Mathematics II.</p> <p>Int. Physics.</p> <p>Roman Law.</p> | <p>French III.</p> <p>Honours French.</p> <p>Matric. German.</p> <p>Education (1st Year).</p> <p>Mathematics V.</p> <p>Int. Physics.</p> <p>1st Year Engineering.</p> <p>Electrical Design.</p> <p>Worsted Yarn. (1st Year) <i>a b</i></p> <p>Constitution Law.</p> | |
| <p>2-4. Plant Physiology (at Garforth).</p> | <p>3-5. Adv. French Training Class.</p> | | |

Classes not marked meet throughout the Session.

Course for the First Examination in Medicine

Time Table—First and Second Terms

| | 9.30—10.30. | 10.30—11.30. | 11.30—12.30 | 2.0—3.0. | 3.0—4.0. | 4.0—5.0. |
|------|---|-------------------------------------|--------------------------|---------------------------|-----------|---------------|
| MON. | | Zoology Lect | Chem. Lect. (Gen. C.) | Zoology (Laboratory Work) | 2.0—5.0 | |
| TUE. | *Zoology (Laboratory Work) †Botany (Laboratory Work) | | 9.30—12.30 9.30—12.30 | Chemical Laboratory | 2.0—5.0 | |
| WED. | | Zoology Lect. | Chem. Lect. (Gen. C.) | Chem. Tutorial. | .. | Physics Lect. |
| THU. | Physics. Lect. | | | Chemical Laboratory | 2.0—5.0 | |
| FRI. | | *Zoology (Lect.) †Botany (Lect.) | Chem. Lect. (Gen. C.) | Chem. | Lab. 2—4. | Physics Lect |
| SAT. | Physical Laboratory | | 9.30—12.30 | .. | .. | .. |

* 1st Term. † 2nd Term.

Third Term

| | 9.30—10.30. | 10.30—11.30 | 11.30—12.30 | 2.0—3.0. | 3.0—4.0. | 4.0—5.0. |
|------|----------------------------|-----------------|-------------|---------------------|------------|-------------|
| MON. | Botany. | Botany Lab. | Chem. Lect. | Chemical Laboratory | 2.0—5.0 | |
| TUE. | Chemical | Laboratory, | 9.30—12.30 | Botany Lect. | Botany Lab | 3.0—5.0 |
| WED. | Botany. | Botany Lab. | Chem. Lect. | Chem. Tutorial. | .. | Phys. Lect. |
| THU. | Phys. Lect. | Chem. Tutorial. | Zool. Revn. | Botany Lect. | Botany Lab | 3.0—5.0 |
| FRI. | Zool. Revn. 9.30—11.30. | Laboratory. | Chem. Lect. | Chem. | Lab. 2—4. | Phys. Lect. |
| SAT. | Physical | Laboratory, | 9.30—12.30 | .. | .. | .. |

This Course will meet the requirements of students preparing for the First examination in Medicine of the University of Leeds. It includes lectures in Chemistry, Physics, Zoology and Botany, with the requisite attendance in the Chemical, Physical, and Biological laboratories.

Composition fee for the course, including Union fee (excluding Zoological Revision Class) £26 10s. 6d.

Students preparing for the Conjoint Board Examinations (L.R.C.P. and M.R.C.S.) will attend classes in Physics (lectures and laboratory as above), Chemistry (lectures and laboratory as above), and Biology (see page 222). Composition fee for the course (including Entrance fee and Union fee), £22 17s. 0d.

DEGREES, EXAMINATIONS, & COURSES OF STUDY IN THE FACULTY OF MEDICINE

The Degrees in Medicine and Surgery shall be :

Ordinance.

Bachelor of Medicine and Bachelor of Surgery
(M.B. and Ch.B.)

Doctor of Medicine (M.D.)

Master of Surgery (Ch.M.).

Degrees of Bachelor of Medicine and Bachelor of Surgery

Candidates for the degrees of Bachelor of Medicine and of Surgery are required to present certificates showing that they will have attained the age of twenty-one years on the day of graduation, and that they have attended courses of instruction approved by the University extending over not less than five years, two of such years at least having been passed in the University subsequently to the date of passing the First examination.

During the first four years, a year of medical study must include attendance upon at least *two* of the prescribed courses of lectures or laboratory work, or one such course and hospital practice, in each term, if that year is to count as part of the degree course. In the fifth year clinical work will suffice. The attendance must be given at the University or at a College, Medical School, or Hospital recognised by the University. Regulations

Candidates for the degrees of Bachelor of Medicine and of Surgery are required to satisfy the Examiners in the several subjects of the following examinations, entitled respectively : Ordinance.

¹ The Matriculation examination is held twice in each calendar year, in July and in September.

The dates for the subsequent examinations have not yet been fixed, but will probably be as follows :

The First examination in June and in September.

The Second examination in March and in July.

The Final examination in March and in October.

The Matriculation examination, or such other examination as may have been recognised by the University in its stead; the First examination; the Second examination; the Final examination.

Matriculation Examination

Regulations. Candidates presenting themselves for the Matriculation examination in the Faculty of Medicine are required to satisfy the Examiners in :

1. English (Language *or* Literature), and English History
2. Mathematics
3. Latin
4. *Two* of the following, *one* of which must be a language :
 - i. Greek
 - ii. French
 - iii. German
 - iv. Some other modern language approved by the Board
 - v. Elementary Mechanics
 - vi. Chemistry
 - vii. Geography or Natural History.

Candidates who have passed the Matriculation examination in five subjects, but have not included both Latin *and* either Greek or a modern language, will be deemed to have passed the Matriculation examination (Faculty of Medicine), provided they satisfy the Examiners in the subject omitted.

The Secretary to the Joint Matriculation Board is authorised to grant a certificate for the purpose of registration by the General Medical Council to candidates who have satisfied the Examiners in English subjects, Mathematics, Latin, and another language, although they may not have passed the Matriculation examination. This certificate shall not entitle the candidates to proceed to degrees in any of the Universities.

Candidates for entrance to the Faculty of Medicine who have already obtained the certificate of having satisfied the Examiners in English subjects, Mathematics, Latin, and another language, will be deemed to have passed the Matriculation examination (Faculty of Medicine), provided they satisfy the Examiners in one other subject in the Matriculation examination.

For a list of the examinations recognised in lieu of the Matriculation examination see the prospectus of the School of Medicine.

The Joint Matriculation Board has discretionary power to accept other examinations of at least an equal standard from candidates for the Faculty of Medicine.

First Examination

The First examination shall consist of two parts :

Ordinance.

PART I. Physics
Chemistry.

PART II. Biology.

Candidates will be allowed to pass the two parts separately.

Candidates, before presenting themselves for the First examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the Matriculation examination.

Candidates who have passed the Intermediate examination in the Faculty of Science in Chemistry, Physics, and Biology will, on payment of the required additional fee, be regarded as having passed the First examination for the degrees of Bachelor of Medicine and Bachelor of Surgery.

The names of candidates who have satisfied the Examiners in either part of the First examination shall be published in alphabetical order.

Candidates for the First examination are required to furnish certificates of having attended during at least *one year* the following courses of instruction either in the University or in an institution recognised for this purpose by the University :

Regulations.

1. Chemistry, Inorganic and Organic : lectures and laboratory work.

2. Biology (Zoology and Botany): lectures and laboratory work.

3. Physics: lectures and laboratory work.

The examination will include laboratory work in the three subjects.

Second Examination

Ordinance. The Second examination shall consist of two parts:

PART I. Anatomy

Physiology.

PART II. Materia Medica

Pharmacy.

Candidates will be allowed to pass the two parts separately.

Candidates, before presenting themselves for the Second examination, are required to furnish certificates of having attended courses of instruction in accordance with the Regulations of the University, and to have passed the First examination.

The names of candidates who have satisfied the Examiners in either part of the Second examination shall be published in alphabetical order.

Regulations. Candidates for the Second examination are required to have passed the First examination, and to have attended complete courses of instruction, approved by the University, in Anatomy and in Physiology during four terms; in Materia Medica and in Pharmacy for one term. The certificates must shew (1) that dissection has been practised during five terms at least; (2) that laboratory instruction, approved by the University, has been received in Physiology; (3) that practical instruction, approved by the University, has been received in Materia Medica and Pharmacy.

Subjects of examination

PART I.

Anatomy. Candidates may, at the discretion of the Examiners, be required to perform actual dissection.

Physiology includes laboratory work in Physiological Chemistry, Histology, and Experimental work.

PART II.

Materia Medica and Pharmacy. Candidates will be required to recognise drugs, and to compound medicines.

Candidates may pass in each part separately.

Candidates who fail to satisfy the Examiners in Part I. or Part II. must before being readmitted to examination produce evidence of having pursued such further study as may have been required by the Examiners.

Final Examination

The subjects of the Final examination are as follows : Ordinance.

- i. Pharmacology and Therapeutics
- ii. Pathology and Bacteriology
- iii. Forensic Medicine and Toxicology and Public Health
- iv. Obstetrics and Gynæcology
- v. Surgery : Systematic, Clinical and Practical
- vi. Medicine : Systematic and Clinical, including Mental Diseases and Diseases of Children.

Candidates may either present themselves in all the six subjects of examination on the same occasion, or may pass the examination in two parts, the first part consisting of two or three of the Subjects i, ii, and iii; the second part consisting of the remaining subjects.

Candidates who fail to satisfy the Examiners in the first part must either present themselves again in the subjects as selected, or in all the three subjects of the first part, or in all the six subjects of examination.

Candidates, before presenting themselves for the first part or the second part of the Final examination, are required to have passed the Second examination. and to furnish certificates of having attended courses of instruction, in accordance with the Regulations of the University.

Candidates for the first part of the examination must have completed the eleventh term of medical study in accordance with the Regulations of the University.

Candidates for the second part of the examination, or for the whole examination, must have completed the fifth year of medical study in accordance with the Regulations of the University.

The names of candidates who have satisfied the Examiners in the first part of the Final examination shall be published in alphabetical order.

The names of candidates who have satisfied the Examiners in all the subjects of the Final examination, and are recommended for degrees, shall be published as follows :

1. Those awarded First Class Honours,
2. Those awarded Second Class Honours,
3. Those who have satisfied the Examiners.

The names shall be in alphabetical order in each case.

Certificates of attendance

Regulations.

Candidates, before presenting themselves for the first part or the second part of the Final examination, are required to have passed the Second examination, to have completed the eleventh term or the fifth year, as the case may be, of medical study, and to furnish certificates of having attended courses of instruction, approved by the University, in the University, or in a Medical School recognised for this purpose by the University, in the subjects in which they offer themselves for examination.

Candidates are required to furnish certificates as follows :

A. Of having attended courses of instruction, approved by the University, in the University or in a Medical School or Hospital recognised for this purpose by the University, in the following subjects :

1. Pharmacology and Therapeutics, one term.
2. Pathology and Bacteriology, three terms.

The certificate in Pathology and Bacteriology must in all cases testify that the candidate has attended a course of laboratory instruction in these subjects, approved by the University.

3. Forensic Medicine, one term.

The certificate in Forensic Medicine must in all cases testify that the candidate has attended a course of practical instruction in Toxicology, approved by the University.

4. Public Health, one term.
5. Obstetrics and Gynæcology, two terms.

The certificate in Obstetrics and Gynæcology must in all cases testify that the candidate has attended courses of practical instruction approved by the University, in the use of obstetrical and gynæcological instruments.

6. Systematic Surgery, two terms ; Practical Surgery, two terms.

7. Systematic Medicine, four terms.

The certificate in Medicine must in all cases testify that the candidate has attended, during one term in each case, courses of instruction approved by the University in (a) Mental Diseases ; (b) Infectious Diseases.

B. In respect of Hospital work.

1. In Medicine and Surgery, of having attended the medical and surgical practice of a hospital or hospitals, approved by the University, during at least three years, of which years two at least must be subsequent to the date of passing the Second examination, except when exemption has been granted by the Senate, after report from the Board of the Faculty of Medicine Clinical Medicine, two years of clinical lectures Clinical Surgery, two years of clinical lectures.
2. In Pathology and Morbid Anatomy, of having attended during at least twelve months demonstrations in the post-mortem room of a hospital, including practical instruction.
3. In Obstetrics, of having attended not less than twenty cases of labour, at least five of which shall have been conducted under the direct supervision of a registered practitioner, and of having continued such attendance throughout the puerperal period.
4. In Gynæcology, of having, during at least three months, received in either a general or a special hospital, approved by the University, such clinical instruction in the diseases peculiar to women as shall be approved by the University.
5. Of having received clinical instruction in diseases of the eye, ear, throat, and skin.
6. Of having acquired proficiency in vaccination.

7. Of having acted as a Dresser for six months in the Surgical wards, as a Clinical clerk for six months in the Medical wards, and as a clerk for three months in the post-mortem room of a hospital recognised by the University.

Detailed subjects of examination

PHARMACOLOGY AND THERAPEUTICS.

PATHOLOGY AND BACTERIOLOGY.

Candidates will be examined practically on Bacteriology, Pathological Anatomy, Histology, and Chemistry.

FORENSIC MEDICINE AND TOXICOLOGY AND PUBLIC HEALTH.

Candidates will be required to conduct a qualitative analysis of poisonous substances selected from the following list :

CLASS I. (In simple solution) Carbolic Acid, Alcohol, Chloroform, Chloral Hydrate, Strychnine, Brucine, Morphine, Meconic Acid.

CLASS II. (In combination with various organic substances) Mineral Acids, Oxalic Acid, Hydrocyanic Acid and the Cyanides, Caustic Alkalies, Phosphorus, Compounds of arsenic, antimony, mercury, lead, barium, zinc, copper, and silver.

They may also be required to determine the character of stains and stained fabrics, microscopically and chemically, and to recognise poisonous articles of the *materia medica*.

OBSTETRICS AND GYNÆCOLOGY.

Candidates will be required to shew their practical acquaintance with obstetrical and gynæcological manipulations and instruments by the use of the phantom or otherwise, and will also be examined on museum preparations.

SURGERY : SYSTEMATIC, CLINICAL, AND PRACTICAL.

Candidates will be examined on the use of surgical instruments and apparatus, and on museum preparations ; they will also be required to perform operations on the dead body.

Candidates, in order to pass, must satisfy the Examiners in the clinical part of the examination.

MEDICINE : SYSTEMATIC AND CLINICAL, INCLUDING MENTAL DISEASES AND DISEASES OF CHILDREN.

Candidates, in order to pass, must satisfy the Examiners in the clinical part of the examination.

In determining the award of Honours account will be taken of the results of the Second examination.

Candidates who fail to satisfy the Examiners in any subject of the examination must, before being re-admitted to examination, produce evidence of having pursued such further study as may have been required by the examiners.

Degree of Doctor of Medicine

No candidate shall be admitted to the degree of Doctor of Medicine unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees. Ordinance.

Candidates for the degree of Doctor of Medicine are required to present a dissertation, and, if the dissertation be accepted, to pass an examination. The dissertation, of which the subject must previously have received the approval of the Board of the Faculty of Medicine, must embody the results of personal observations or original research, either in some department of medicine or of some science directly related to medicine, provided always that original work, published in scientific journals or in the Proceedings of learned societies, or separately, shall be admissible in lieu of or in addition to a dissertation specially written for the degree. Candidates will be required to write a short extempore essay on some topic connected with medicine, and to answer questions on the history of medicine. They will also be examined orally on the dissertation or other work submitted. Any candidate may be exempted from a part or the whole of the examination if the Board of the Faculty so decide. No candidate will be admitted to the degree unless his application, after report from the Board of the Faculty of Medicine, shall have been accepted by the Senate.

The names of candidates who have been approved for the degree of Doctor of Medicine shall be published in alphabetical order.

Candidates for the degree of Doctor of Medicine are required to furnish three copies (printed or type-written) of the dissertation or published work which they desire to submit, together with any drawings or specimens which may be necessary for their illustration. These copies shall be sent in to the Registrar and will be retained by the University. Regulations.

Degree of Master of Surgery

Ordinance. No candidate shall be admitted to the degree of Master of Surgery unless he has previously received the degrees of Bachelor of Medicine and Bachelor of Surgery, and at least one year has elapsed since he passed the examination for those degrees.

Every candidate before presenting himself for the examination for the degree of Master of Surgery, is required to have graduated as Bachelor of Medicine and Bachelor of Surgery, and to furnish certificates of attendance in accordance with the Regulations of the University.

Subjects of Examination.

Surgical Anatomy
Surgery
Operative Surgery
Clinical Surgery
Ophthalmology
Pathology and Bacteriology.

The names of candidates who have satisfied the Examiners shall be published in alphabetical order.

Regulations. Candidates, before admission to the examination for the degree of Master of Surgery, are required to furnish certificates which shall be deemed satisfactory by the University that they, since taking the degree of Bachelor of Medicine and of Surgery, have held, for not less than six months, a Surgical appointment in a public hospital, or other public institution affording full opportunity for the study of Practical Surgery.

Candidates proposing to present themselves for this examination are required to give notice, in writing, to the Registrar and pay the fee on or before June 1st.

Candidates for the degree of Master of Surgery are also required to furnish certificates :

1. Of having attended a special course of instruction on Operative Surgery, approved by the University, and of having personally practised the principal surgical operations on the dead body.

2. Of having attended a systematic course of instruction, including practical work, approved by the University, on Bacteriology.
3. Of having attended a course on Ophthalmology, and of having received instruction in Ophthalmic Surgery approved by the University.

DIPLOMA IN PUBLIC HEALTH

The examination is held yearly, beginning about the middle of July, under the following regulations :

1. The examination is in two parts, and is written, oral, and practical.

2. Candidates, before entering for either part of the examination, must have held for not less than twelve months a registrable qualification in Medicine, Surgery, and Midwifery, and must present satisfactory certificates,

i. Of having attended an approved course of instruction in Public Health in the University, or in a College or Medical School recognised for this purpose by the University.

ii. Of having attended, after obtaining a registrable qualification, during at least six months practical instruction in laboratories approved by the University, the courses including Chemistry as applied to Public Health, Bacteriology, and the Pathology of those diseases of animals which are communicable from animals to man.

iii. Of having, after obtaining a registrable qualification, attended during not less than three months the clinical practice of a hospital for infectious diseases approved by the several licensing bodies recognised under the Medical Act.

iv. Of having, after obtaining a registrable qualification, during six months (of which at least three months shall be distinct and separate from the period of laboratory instruction required under ii), been diligently engaged in acquiring a knowledge of the duties, routine and special, of Public Health administration under the supervision of the medical officer of health of a

¹ May be modified in the case of practitioners qualified before 1890.

county, or of a single sanitary district having a population not less than 50,000, or a medical officer of health devoting his whole time to Public Health work, or a medical officer of health who is also a teacher in the Department of Public Health of a recognised Medical School.

3. Candidates may present themselves for Parts I and II separately or at the same time, provided that no candidate be admitted to Part II unless he has already passed in Part I. No candidate's name will be published until he has satisfied the Examiners in both parts of the examination.

4. The fee for each part is £5 5s., and must be paid on or before July 1 in each year. For any subsequent examination in the same part the fee will be £3 3s.

Every candidate who has passed both parts of the examination, and who is legally registered, will receive a diploma in Public Health.

Subjects of Examination

Part I

1. CHEMISTRY AS APPLIED TO PUBLIC HEALTH :

Chemistry, with special reference to the examination of air and water. Methods of qualitative and quantitative analysis.

2. PHYSICS AS APPLIED TO PUBLIC HEALTH :

Elements of Heat, with special reference to warming, ventilation, and meteorology. Meteorological instruments and their use.

3. ENGINEERING AS APPLIED TO PUBLIC HEALTH :

Water supply. Drainage, sewerage, and disposal of refuse. Construction of dwellings, schools, hospitals, including their warming and ventilation. Geological data referring to the above. Interpretation of plans.

4. MICROSCOPY AS APPLIED TO PUBLIC HEALTH :

Foods, their adulterations, contaminations, and parasites. Air and water, their microscopical impurities.

5. PRACTICAL PATHOLOGY AND BACTERIOLOGY :

Practical Bacteriology, detection and cultivation of vegetable parasites, bacteriological analysis of air and water. Recognition of parasites and of the lesions which they produce in man. Recognition of diseased meat.

Part II

1. *ÆTIOLOGY OF DISEASE :*

Pathology of epidemic and endemic diseases, including diseases of animals communicable to man. Influence of unwholesome food, air, water, occupation, dwelling, climate, season, soil.

2. *SANITARY LAW AND ADMINISTRATION :*

Domestic and general sanitation of houses, villages, and towns.

Regulation of offensive, dangerous, or unhealthy trades and occupations. The prevention and control of epidemic disease by isolation, disinfection, vaccination, and other methods. Statutes and bye-laws relating to Public Health.

3. *VITAL STATISTICS.*

4. *SANITARY REPORTING :*

The candidate will be required to visit and report upon the sanitary condition of some locality assigned to him by the Examiners.

Order of Examination

Part I

The examination will include :

1. A two hours' written examination on Chemistry as applied to Public Health.
2. A four hours' practical and oral examination on Chemistry as applied to Public Health.
3. A three hours' written and oral examination on Physics and Engineering as applied to Public Health.
4. A four hours' practical and oral examination on bacteriology, the pathology of infectious diseases, diseased meat, and the use of the microscope as applied to the examination of food, air, and water.

Part II

The examination will include :

1. A three hours' written examination on the *Ætiology of Disease*.
2. A three hours' written examination on Sanitary Law and Administration, and on Vital Statistics.
3. Sanitary reporting.
4. Oral examination on the above subjects.

THE SCHOOL OF MEDICINE

The lecture and laboratory courses for students in the Faculty of Medicine, except the courses in Physics, Chemistry, and Biology, belonging to the preliminary scientific year of study, are held in the School of Medicine of the University, in Thoresby Place.

Session 1905-6

The University Session or academic year in the School of Medicine is divided into three terms. The first term begins Monday, October 2, and ends Thursday, December 21, 1905; the second term begins Wednesday, January 3, 1906, and ends Saturday, March 24; the third term begins Monday, April 23, and ends Friday, July 13.

The terms for students pursuing the first year's course of study are the ordinary University terms, see p. 107.

Admission of Students

The Dean will enter students in the School of Medicine for their courses of lectures from 9.30 to 10.30 a.m., from October 2 to 5; and from April 23 to 25. At the same time, fees will be received by the Registrar. Cheques should be made payable to "The University of Leeds," and crossed "Beckett & Co."

The Dean attends at his office, in the School of Medicine, from 9 to 10 a.m. daily, and can be seen at other times by appointment. Enquiries about medical studies should be addressed to him.

Applications (with fee, £2 2s.) to attend the instruction on Infectious Diseases at the Leeds City Hospitals, and applications to attend instruction in Vaccination, must be lodged with the Dean in the first week of each term.

Enquiries relating to attendance at the Infirmary should be addressed to the Secretary of the Faculty of the General Infirmary, Mr. Walter Thompson, 4 Park Square, between the hours of 11 a.m. and 1 p.m.

Regulations

1. All students are required to enrol their names at the Dean's office within five days from the beginning of each

session. Students who from any unavoidable cause are prevented from personally attending at that time must communicate with the Dean by letter.

2. Should a student change his residence during the session, he must inform the Dean of the change of his address without delay.

3. Regular, punctual, and orderly attendance at lectures, class-examinations, and demonstrations is required of every student, in order that he may obtain certificates of attendance. In the case of persistent neglect of work, repeated failure at professional examinations, or unreasonable delay in presenting himself for such examinations, a student may be required to withdraw from the University.

4. In case of illness or other unavoidable cause of non-attendance at any lecture, demonstration, or class examination, a written explanation, accompanied by a medical certificate, where necessary, must be sent to the lecturer, with as little delay as possible, otherwise excuses for absence cannot be accepted. Hospital work is not counted as an excuse for non-attendance upon lectures excepting in the case of the week's casualty dressership and for attendance upon actual cases of midwifery, all of which must be duly certified.

5. Prizes will be granted only when the work and conduct of the student are satisfactory, and certificates or prizes may be refused on the ground of unsatisfactory conduct.

6. Smoking is allowed only in the Students' Common Room, the Refectory after 1 p.m., and under certain restrictions in the Dissecting Room.

7. Students will be required to make good, to the satisfaction of the Council, any loss, wilful damage or injury they may occasion to the property of the University.

8. Students in the School of Medicine are amenable to the discipline and general regulations of the University, as well as to the rules made by the Board of the Faculty of Medicine. Violation of these regulations and rules renders a student liable to immediate dismissal, and to the forfeiture of all fees, certificates, and privileges as a student of the University. (See also page 108.)

9. Every student is required on entering the School to sign the following declaration :

I, the undersigned, being a student in the School of Medicine of the University of Leeds, hereby undertake to comply with all rules and regulations of the University, and to conduct myself on all occasions in an orderly manner. I fully understand that no allowance whatever will be made, and that I have no claim upon the Council of the University in respect of any fees paid by or due from me, in case such fees are forfeited by any irregularity or misconduct on my part.

Fees

Fees are payable in advance to the Registrar, and courses of lectures may be paid for separately, or by means of a composition fee. An Entrance fee of £1 1s. is charged to those who have not previously pursued studies in the University, and an annual fee of 10s. 6d. for the University Union (see page 385).

Note.—The fees for instruction in Infectious Diseases and for instruction in Vaccination are to be paid to the Dean, by whom tickets of admission to the classes will be issued ; and the fees for hospital practice (including clinical lectures) to the Treasurer of the Infirmary Faculty, Mr. W. Thompson, 4, Park Square.

The fees for each course will be found appended to the syllabus of the course.

Composition Fees

These fees do not include attendance on instruction in Vaccination or in Infectious Diseases.

(A) For students preparing for University degrees, who have already taken the course of instruction for the First M.B. examination of the University, or the Preliminary Scientific (M.B.) examination of the University of London, the fee is £67 4s. if paid in one sum on entrance, or £34 13s. on entrance and £34 13s. at the end of twelve months, and entitles to attendance upon one course of the subjects in Sections I and II. The privilege extends over six years from the date of the first instalment.

(B) For students preparing for University degrees who have passed the Second M.B. examination (Anatomy, Physiology, and Materia Medica), the fee is £43 1s., and entitles to attendance upon one course of the subjects in Section II. The privilege extends over four years only.

SECTION I.

Descriptive Anatomy, Junior and Senior Sections.

Use of Dissecting Room with tutorial instruction for two sessions.

Physiology, general and advanced courses.

Practical Physiology and Histology.

Materia Medica.

SECTION II.

Pharmacology and Therapeutics.

Practical Pharmacy.

Pathology and Morbid

Anatomy.

Practical Pathology.

Medicine.

Do. a second course.

Surgery.

Practical Surgery.

Obstetrics.

Gynæcology.

Forensic Medicine.

Practical Toxicology.

Mental Diseases.

Ophthalmology.

Public Health.

Applied Anatomy.

(C) For students taking courses for a diploma, who have attended the prescribed courses in Chemistry, Chemical Physics, and Elementary Biology, the fee is £67 4s. if paid in one sum on entrance, or £34 13s. on entrance and £34 13s. at the end of twelve months, and entitles to attendance upon one course of the subjects in Sections III and IV, covering the courses of study required for the London Conjoint Examining Board, the Society of Apothecaries, or the Edinburgh and Glasgow Conjoint Board. The privilege extends over six years only from the date of the first instalment.

(D) For students taking courses for a diploma who have passed a Second Professional Examination (Anatomy, Physiology, and Materia Medica), the fee is £38 17s., and entitles to attendance upon one course of each subject in Section IV. The privilege extends over four years only.

SECTION III.

Descriptive Anatomy, Junior and Senior Sections.

Use of Dissecting Room with tutorial instruction for two sessions.

Physiology, elementary and general courses.

Practical Physiology and Histology.

Materia Medica.

Pathology and Morbid

Anatomy.

Practical Pathology.

Medicine.

Do. a second course.

Surgery.

Practical Surgery.

Obstetrics.

Gynæcology.

Forensic Medicine.

Mental Diseases.

Ophthalmology.

Public Health.

Applied Anatomy.

SECTION IV.

Pharmacology and Therapeutics.

Practical Pharmacy.

Additional courses of lectures and practical or tutorial classes which may be rendered necessary by failure to pass any examination, or by the refusal of the Board of the Faculty of Medicine to certify satisfactory attendance on any course will be charged for at the full fee.

Library

The Library contains a valuable collection of books, composed of the united libraries of the School of Medicine and of the Leeds and West Riding Medico-Chirurgical Society, and is being continually increased. The Library of the Old Infirmary, rich in medical classics, became the property of the School of Medicine in 1865.

Rules

1. The Library is open to students daily, between the hours of 9 a.m. and 5 p.m., except on Saturdays, when it will be closed at 1 p.m. During these hours, books can be obtained for use in the Library on application to the Assistant Librarian.

2. Students wishing to borrow books for home use are allowed to do so under the following regulations :—

(a) Every student wishing to take books away from the Library shall deposit half-a-guinea as caution money; this sum, or the balance of it remaining shall be refunded to the depositor on the return of his Library card.

(b) The student will, on payment of the deposit, receive a Library card with his name upon it. This card must always be presented to the Assistant Librarian or his substitute whenever the student desires to borrow a book. The name of the book and date of issue will be entered upon the card, which will then be placed on the shelf in the place of the book borrowed. The card will be given back to the student when the book is returned.

(c) Books borrowed for home use must be returned to the Library within two weeks from the date of issue. One volume only can be borrowed at a time. A fine of 2d. a day is incurred for every day that it has been detained beyond the time allowed.

(d) No periodical for the current year may be removed from the Library.

(e) In case of loss of or damage to any book, the loss or damage must be made good by the borrower.

(f) Every book must be returned to the Library at the end of each term.

NOTE.—Practitioners residing in Leeds or its neighbourhood may be admitted to the use of the Library upon certain conditions, and upon the payment of a subscription.

Museums

The MUSEUM OF PATHOLOGY contains, in addition to preparations illustrating the ordinary pathological processes, many rare specimens, some of historical interest. It draws largely for its supply from the General Infirmary, as well as from other institutions in the City. A collection of microscope sections from specimens in the Museum is available for the use of students on application.

A complete type collection of MATERIA MEDICA specimens is also placed here for the convenience of students.

The ANATOMY MUSEUM AND BONE ROOM adjoins the Dissecting Room, and has been fitted up, under the direction of the Professor of Anatomy, with a valuable collection of specimens specially arranged for study, which are also used in illustration of the lectures on Anatomy. Amongst them are a complete set of bones marked with the muscular attachment, and mounted in revolving cases; and several series of wax models, illustrating the development of the foetus.

A collection of OLD INSTRUMENTS, Surgical, Obstetrical, and Medical, of disused type or of historical value, is being formed. Many of considerable interest have already been obtained, and additional contributions will be gladly received by the Hon. Curator, Prof. C. J. Wright.

Lockers

These are provided for the safe keeping of coats, books, &c. The rent is 2s. 6d. per annum, commencing October 1 or May 1, with a deposit of 1s., which will be returned when the key is given up, if the locker is undamaged.

Refectory

A well appointed Refectory, which is open daily, excepting Saturdays, has been provided in the School of Medicine. It is under the combined management of the Board and of the Students' Representative Council. Dinner is served from 12 to 2 p.m. Tea, coffee, and light refreshments may be obtained until 5 p.m.

Dinners for each separate term may be compounded for by special arrangement.

LECTURES AND CLASSES

I. COURSES HELD IN THE UNIVERSITY BUILDINGS, COLLEGE ROAD

Physics

Professor STROUD Mr. ALLEN
and Demonstrators

The course designed to meet the wants of candidates for the First M.B. examination of the University of Leeds or the Preliminary Scientific (M.B.) examination of the University of London, will consist of two experimental lectures and one calculation class, weekly throughout the session, Monday, Wednesday, and Friday, at 3 p.m. Fee, £3 13s. 6d.

The Physical laboratory is open daily. A special course of Practical Physics for medical students will be held on Saturday mornings, from 9.30 to 12.30, throughout the session. Fee, £3 3s.

For further information see page 211.

Chemistry

Professor SMITHELLS Professor COHEN
and Demonstrators

I. General Course

Part I. Inorganic Chemistry: during the first and second terms. Mondays, Wednesdays, and Fridays, at 11.30 a.m. Tutorial class on Wednesdays, at 2 p.m.

Part II. Organic Chemistry: during the third term. Mondays, Wednesdays, and Fridays, at 11.30 a.m. Tutorial class on Thursdays, at 10.30 a.m.

Fee for the whole course (including tutorial class) £4 4s.; for part I, £3 13s. 6d.; for part II, £1 1s.

See p. 215.

II. Practical Chemistry

Mondays, 2 to 5, and Fridays, 2 to 4, throughout the session. Tuesdays, 2 to 5, in the first term, and Tuesdays, 9.30 to 12.30, in the second term. For details see p. 217, for the fee see p. 112.

III. Organic Chemistry

Lectures at 12 noon on Tuesdays, Thursdays, and Saturdays throughout the session. Fee, £3 13s. 6d.

See p. 216.

IV. Practical Organic Chemistry

Third term, from 10 to 12 noon on Tuesdays and Thursdays. Fee, £2 2s.

N.B. Courses III and IV are suitable for students preparing for the Intermediate M.B. examination of the University of London.

V. Sanitary Chemistry

For practitioners who are preparing for a diploma or degree in Public Health.

Tuesdays and Thursdays, from 2 to 5 p.m., during the second term. For further details, see p. 218.

Fee, £5 5s.

N.B.—For students who wish to take additional practical work of whatever kind, the Chemical laboratories are open daily from October to June inclusive.

Biology

Professor MIALL

Dr. SMITH

Mr. TAYLOR

Mr. WALKER

Mr. UNWIN

For full details of the various courses see under the Department of Biology, page 220.

1. For students preparing for medical diplomas: Course II, Medical Biology, page 222.

During the first term the lectures will be given on Mondays, Wednesdays, and Fridays, at 10.30 a.m.; demonstrations and practical work on Mondays, from 2 to 5, Tuesdays, from 9.30 to 12.30, and Thursdays, from 10.30 to 12.30. During the second term, lectures as before; laboratory work on Wednesdays and Fridays, from 2 to 4 p.m. Fee, text books, and class regulations as for Elementary Biology for students preparing for University degrees.

Each student will be required to provide himself with a microscope, a dissecting case, a biological drawing book, and some simple instruments for microscopic work. The Professor will be glad to advise students on these points.

2. Students preparing for the First M.B. examination of the University of Leeds, or the Preliminary Scientific (M.B.) of London, should take the courses in Zoology and Botany, which form part of a special course qualifying for these examinations. See Course I, Elementary Biology, page 220.

3. Students preparing for the Fellowship examination of the College of Surgeons of England may take a three months' course of Zoology in the first term (October—December), including not less than four hours' practical work per week. Fee, £3 3s.

4. Where Botany is required for any of the medical examinations, the ordinary course (Course I, Botany, page 221) should be taken. Fee, £5 5s.

II. COURSES HELD IN THE SCHOOL OF MEDICINE

Anatomy

Professor GRIFFITH Mr. JAMIESON
Mr. TEALE Mr. DOBSON
Mr. GOUGH

I. Descriptive Anatomy

Lectures daily at 9.15 a.m., during the first and second terms.

The systematic course of lectures is, for convenience of teaching, divided into two parts.

The first part is intended for first year's students, and treats especially of osteology and the anatomy of the joints and limbs.

The second part deals with the anatomy of the head and neck, thorax and abdomen; and particular attention is paid to the nervous system and the organs of special sense. *Students are required to attend both parts before they are entitled to signature for one full course of Anatomy.*

Fee for each part, £5 5s.

Systematic tutorial classes are held in connection with the October course.

II. Practical Anatomy

The dissecting room is open daily from 9 a.m. till 5 p.m., throughout the session, the work of the students being constantly supervised by the Demonstrators, who attend daily. Tutorial classes and examinations are held daily on recent dissections and on preparations from the anatomical museum; and special instruction is given to all students who are about to present themselves for examination, particularly to those preparing for the higher examinations, such as University degrees and the Primary F.R.C.S., Eng.

Only those students are admitted into the Dissecting-room who have entered for the Anatomy course, or who have paid the fee for the use of the room.

| <i>Fees</i> | £ | s. | d. |
|---|---|----|----|
| Use of Dissecting-room, along with tutorial instruction, during attendance on the anatomical course, covering two sessions | 5 | 5 | 0 |
| Use of Dissecting-room, along with tutorial instruction, for every three months or portion of three months during the two years subsequent to the above period | 2 | 2 | 0 |
| Use of Dissecting-room, along with tutorial instruction under all other circumstances, for three months, £3 3s.; for six months | 5 | 5 | 0 |

III. Applied Anatomy

The class meets on Tuesdays and Fridays at 9 a.m., during the third term, in the Anatomy Theatre. It is intended for senior students and for qualified practitioners. It deals with the application of anatomical facts to medicine and surgery, and is fully illustrated by dissections, diagrams, and the living model.

Fee, £2 2s.

Physiology and Histology

Professor BIRCH

Mr. CLARK

I. General Course of Lectures

This course of lectures deals with Physiology generally, and is illustrated by experiments. Mondays, Wednesdays, Thursdays, Fridays, at 2 p.m., during the first and second terms.

Fee, £8 8s.

II. Advanced Lectures

About 18 lectures, on Tuesdays in the first and second terms, to be attended by students in the session succeeding that in which they have attended Course I.

Fee, £2 2s.

III. Elementary Course

About 18 Lectures, on Mondays and Wednesdays at 2 p.m. during the third term. This course is for Non-University students, to be attended during their first summer of study, whether they enter in May or October.

Fee, £2 2s.

NOTE: *The complete "Course" consists of Course I, together with Course II or III.*

IV. Microscopical Demonstrations

are held at 11 a.m. every Saturday throughout the session, and are open to all students attending courses of Physiology.

V. Practical Physiology

This course is divided into two parts ; and students are required to attend both parts before they are entitled to signature for a course of Practical Physiology.

Part I. Practical Histology

During the third term, on Mondays, Wednesdays, and Fridays, for about two hours in the morning.

Students are required to provide themselves with the following : (1) A microscope of good construction, provided with 1 inch and $\frac{1}{6}$ inch objectives, which should be submitted for approval to the Professor on the first day of the session. The Professor will be glad to assist students in the choice of an instrument. (2) Some accessories, a list of which can be had on application.

Part II

extends through the first and second terms.

This covers the work in chemical and experimental Physiology required by the University.

Fees : for part I, £6 6s. ; for part II, £4 4s.

VI. Physiological Demonstrations and Catechetical Classes
are held during the session at such times as may be found convenient.

VII. Recapitulatory Class

A short laboratory course for students who desire to recapitulate their laboratory work. Classes will be formed in the second and third terms, and will meet twice a week, at times to be arranged.

Fee, £2 2s.

VIII. The Physiological Laboratories

are open daily during University hours for practical work ; the fees are on the same scale as in the other laboratories of the University ; see page 112.

**Materia Medica, Pharmacology, and
Therapeutics**

Dr. TREVELYAN

Mr. GOUGH

I. Materia Medica

Tuesdays, Fridays, and Saturdays in the third term, at 9 a.m.

This course will treat of the sources, preparation, physical characters, pharmacopœial combinations, tests, doses, and general uses of the principal drugs. In addition to the lectures there will be catechetical teaching and demonstrations on specimens.

Fee, £4 4s.

II. Practical Pharmacy

Mondays and Wednesdays in the third term, 3.30 to 5 p.m.

The course will include general pharmaceutical processes ; prescriptions ; weights and measures ; the compounding of a large series of typical prescriptions, including mixtures, pills, powders, emulsions, tinctures, lotions, inhalations, plasters, ointments, &c. The best methods of dispensing the principal drugs. Incompatibility.

The testing of important drugs for impurities and adulterations is also taught to students preparing for University degrees.

Fee, £3 3s.

III. Pharmacology and Therapeutics

Mondays and Thursdays in the second term, at 12 noon.

The subjects treated of will be the general principles of the treatment of disease; the physiological and therapeutic action of the principal drugs; methods of administering medicines and of using various therapeutic appliances; heat, cold, massage, electricity; dietetics; influence of climate and health resorts.

Fee, £3 3s.

Pathology and Bacteriology

Professor GRÜNBAUM

Mr. SCOTT

Mr. KNAGGS

I. General Course of Lectures

This course deals with Pathology and Bacteriology generally. Tuesday, Wednesday and Friday at 12 o'clock, in the first and second terms.

II. Practical Pathology and Bacteriology

In this class practical instruction is given in Morbid Histology, Bacteriology and Pathological Chemistry. Students will make and mount preparations for microscopical examination and will make bacteriological investigations required for diagnosis. Monday 4 to 5, Tuesday and Thursday from 12 to 1.30 p.m. during the third term.

Each student must provide himself with a good microscope, having an oil immersion lens, and with the usual accessories.

III. Tutorial Classes in Surgical and in General Pathology will be held by Mr. Knaggs and by Mr. Scott, as may be arranged from time to time.

IV. Clinical Pathology

A postgraduate practical class in this subject will be held during the first term, on Wednesday at 4 p.m.

V. Bacteriology for the Diploma in Public Health

This course will be held on Wednesday and Thursday in the third term, at 4 p.m. It will include practical instruction in the pathology of those diseases of animals which are communicable to man.

VI. The Laboratories of Pathology and Bacteriology

are open daily for research work. The fees are on the same scale as in other laboratories of the University.

In this department the various bacteriological and pathological investigations required by county and municipal authorities and by private practitioners are carried out.

Forensic Medicine and Toxicology

Professor CAMPBELL

Dr. EURICH

I. Forensic Medicine

Tuesdays, Wednesdays, Thursdays, and Fridays at 4 p.m. during the third term.

The qualifications, duties, and responsibilities of medical witnesses.

Questions concerning age, sex, identity, insanity and life insurance.

Death :—Real and apparent death ; date of death ; causes of sudden and violent death ; post-mortem examinations.

Death by wounds ; by lightning, burns, cold and starvation ; by drowning, hanging, strangling and suffocation.

Rape ; pregnancy ; delivery ; the legitimacy of children ; abortion ; infanticide.

Toxicology :—general considerations respecting poisoning ; toxicological processes and the evidence of poisoning ; symptoms of special poisons ; treatment and analysis.

Fee, £3 3s.

II. Practical Toxicology

The class meets on Thursdays and Fridays from 3 to 5 p.m., in the third term, from early in June to the middle of July, and students receive practical instruction in the methods of detecting the commoner poisons, including prussic acid and the cyanides, carbolic acid, oxalic acid, and the oxalates, arsenic and metallic poisons, mineral acids, caustic alkalis, alcohol, chloral and chloroform, alkaloids, &c.

Fee, £2 2s.

A fee of 3s. is charged for the use of apparatus and chemicals.

Public Health

Professor CAMERON

Summer Course

Wednesdays and Saturdays, at 9 a.m., during the third term.

Comparison of rates of mortality in town and country. Epidemic and endemic diseases and their prevention. Isolation hospitals. Disinfection and disinfectants. Influence of occupation on health. Factory and workshop legislation.

Meaning to be attached to death rates. How they are affected by constitution of the population in regard to age and sex.

Registration of births. Certificates of causes of death, for burial, for cremation.

Notification of infectious diseases.

The dwelling: site, subsoil, aspect, structure, lighting, ventilation, drainage, overcrowding.

Public and private water supplies, their dangers.

Disposal of refuse, including sewage.

Visits to works, &c.

Fee, £3 3s.

Principles and Practice of Medicine

Professor BARRS.

Mondays, Wednesdays, and Fridays, at 9 a.m., during the first and second terms.

The complete course extends over two years. It is divided into the following sections:

Diseases of the nervous system.

Diseases of the organs of circulation.

Diseases of the organs of respiration.

Diseases of the digestive and blood-forming organs.

Diseases of the kidneys.

Infectious and contagious diseases, fevers, diphtheria, syphilis, hydrophobia, &c.

Parasites.

Diseases of the skin.

Diseases of special trades.

Fee, £6 6s.

Surgery

Professor LITTLEWOOD

I. Systematic Surgery

Professor LITTLEWOOD

Tuesdays, Thursdays, and Saturdays, at 9 a.m., during the first and second terms.

The course comprises the following subjects :

The process of repair.

Inflammation ; suppuration ; ulceration.

The constitutional effects of injury ; shock, fever, delirium, &c.

Injuries and wounds, including special injuries of head, spine, throat, chest, and abdomen.

Special fractures and dislocations.

Surgical diseases ; gangrene ; erysipelas ; septicæmia ; pyæmia ; tetanus.

Tumours ; tubercle ; venereal diseases.

Surgical diseases of special parts :—skin, lymphatic system, vascular system, nervous system, bones, joints, &c.

Deformities. Plastic and orthopædic surgery.

Abdominal surgery, including hernia.

Diseases of the urinary and generative organs.

Fee, £6 6s.

II. Practical Surgery

Tuesdays and Thursdays at 4 p.m., during the first and second terms.

In this are comprised :

1. A course of bandaging and application of splints and other appliances.

2. Demonstrations and descriptions of instruments and surgical appliances used in diagnosis or treatment.

3. The application of anatomical knowledge to the investigation of surgical diseases.

4. Methods of reducing dislocations, setting fractures and dressing wounds.

5. A course of operations performed on the dead body before the class, the members of which will be required to operate.

Fee, £4 4s.

III. Operative Surgery

During the third term classes will be formed for the performance of operations on the dead body, under the superintendence of the lecturer. As all the important operations will be done by the students, every opportunity will be given for gaining practical experience in this branch of surgery. Fee, £12 12s. divided in equal shares among a class of not more than four students.

Obstetrics

Professor WRIGHT

Dr. CROFT

Mondays, Wednesdays, Fridays, and Saturdays, at 12, during the third term. Demonstrations on Thursdays at 9 a.m.

Pelvis and female organs of generation.

Fœtus and membranes.

Signs, disorders, and complications of Pregnancy.
Abortion.

Labour—(1) Natural, its mechanism and management; the puerperal state. (2) Abnormal—Lingering, precipitate and obstructed labour. (3) Preternatural. (4) Instrumental—Forceps, version, craniotomy, and its alternatives. (5) Complications and accidents of labour.

Diseases of the puerperal state.

The various presentations will be demonstrated on the Phantom, and practical instruction given in the use of obstetrical instruments.

A series of demonstrations is given by Dr. Croft during the summer session, attendance upon which is required from all students taking the course of Obstetrics. Tutorial classes are also held from time to time for students preparing for their final examinations.

The necessary facilities are given by the Maternity department of the Infirmary for students to attend cases of labour.

The Maternity clerkship must not be taken until after the attendance upon this course of lectures and demonstrations has been completed.

Fee, £5 5s. ; together with Gynæcology, £6 6s.

Gynæcology

Dr. HELLIER

Mondays and Wednesdays at 4 p.m. during the first term: Methods of physical diagnosis in diseases peculiar to women; observations on the surgical anatomy of the female pelvis; functional and organic affections of the female pelvic organs; relation of the above diseases to the body generally.

Dr. Hellier will also give instruction in the diseases of new-born children, and in the management of infancy, including infant feeding.

Fee, £3 3s. ; together with Obstetrics, £6 6s.

Mental Diseases

Mr. BEVAN LEWIS

Systematic lectures are given at the School of Medicine on Tuesdays at 4 p.m., and clinical lectures and demonstrations at the West Riding Asylum, on Fridays, at 3.30 p.m., during the third term.

In the systematic lectures, the pathology, symptoms, medico-legal relations and treatment of insanity will be discussed.

The clinical course will embrace: Illustrations of the various forms of mental disease; instruction in the method of examining insane persons; practical demonstration on the moral and therapeutic treatment of the insane; compulsory feeding, &c. ; filling up certificates of insanity.

The pathological aspects of insanity will be freely illustrated by morbid specimens and microscopic preparations from the museum of the Asylum.

Fee, £3 3s.

Text Books

Blandford's *Insanity and its Treatment*
Clouston's *Mental Diseases*

Ophthalmology and Otology

Mr. SECKER WALKER

Tuesdays and Fridays, 9 a.m., during the third term.

Ophthalmology: Surgical anatomy of the eye, theory of the ophthalmoscope, retinoscopy; emmetropia, hypermetropia, myopia, astigmatism; theory of accommodation; diseases of the conjunctiva and cornea, of the iris, ciliary body and choroid; cataract; glaucoma; diseases of the retina and optic nerve; functional diseases of the eye; affections of the ocular muscles and lacrymal apparatus; diseases of the orbit and eyelids.

Otology: Diseases of the external ear; diseases of the middle ear, their connection with naso-pharyngeal disorders; disease in the mastoid process, its extension to the cranial cavity; diseases of the internal ear.

Fee, £3 3s.

III. COURSES OF INSTRUCTION FOR CANDIDATES PREPARING FOR PUBLIC HEALTH DIPLOMAS

By the regulations of the General Medical Council candidates for these diplomas cannot be examined unless they have held a registrable qualification in Medicine, Surgery, and Midwifery for not less than twelve months, during which period they must have attended, for at least six months, courses of practical laboratory instruction, and have studied sanitary work under a Medical Officer of Health.

The regulations of the University for the diploma in Public Health are in accordance with the above requirements.

The following courses of instruction are arranged to prepare for the University diploma, and for those of other examining bodies:—

1. Sanitary Chemistry. This will be held in the Chemical laboratory, College Road, on Tuesdays and Thursdays, from 2 to 5 p.m., during the second term. The hours are subject to re-arrangement. It will include

practical instruction or demonstrations in the examination of water, air and foods; and in the properties of gases, the laws of heat and the use of meteorological instruments.

Fee, £5 5s.

For detailed syllabus see page 218.

2. Bacteriology. This course will be held at the School of Medicine at 4 p.m. on Mondays and Thursdays during the third term, and will include practical instruction in the pathology of those diseases of animals which are communicable from animals to man.

Fee, £5 5s.

Syllabus

General sketch of bacteria.

Preparation of nutrient media. Sterilisation.

Methods of cultivation. Inoculation.

Microscopical examination and methods of staining.

Examination of the chief pathogenic bacteria—anthrax, tubercle, typhoid, cholera, diphtheria, &c.

Methods of bacteriological examination of air, water, food.

Each student must be provided with a microscope approved by the Professor. The microscope must have an immersion lens and a condenser.

3. Attendance at a Hospital for Infectious Diseases. A special course is given in the Leeds City Hospitals in accordance with the requirements of the General Medical Council; this includes instruction in administration.

Fee, £5 5s.

4. Practical Work in Sanitation. With the sanction of the Sanitary Authorities of Leeds, the Medical Officer of Health arranges courses of six months' instruction in out-door and office sanitary work, as required by the General Medical Council and the examining Boards. Fee for the course, ten guineas, which is payable in advance to Dr. Spottiswoode Cameron, at his office, 41, Park Square, between 10 and 11 a.m.

The fees for bacteriology and hospital practice in infectious diseases are to be paid to the Dean.

The University entrance fee of £1 1s. is charged to those who have not previously been students of the University.

HOSPITAL PRACTICE

1. For certain degrees (*e.g.*, Leeds) three years' hospital practice is necessary, and one of these may be taken before the 2nd M.B. examination has been passed. Students intending to take such degrees should enter their names upon the Infirmary Register at *the beginning of the third year of their studies in medicine*. Failure to do this will prevent them from completing the necessary attendance by the time when they would normally present themselves for the Final examination.

2. In order to be entered upon the Infirmary register a student must first pay his fees to the Treasurer of the Faculty (Dr. Barrs), at 25A, Park Square, and then interview the Secretary of the Faculty (Mr. W. Thompson), at 4, Park Square, from whom advice can be obtained in arranging his work at the Infirmary.

3. An introductory class for students who are commencing their attendance at the Infirmary is held twice a year, *viz.*, in April and October. It consists of 15 demonstrations or lectures on elementary subjects, and is conducted by the resident, medical, surgical, and ophthalmic officers. Students are required to attend this class as soon as possible after passing the Second M.B. or a corresponding examination, and before holding any Infirmary appointment.

4. The attention of students is directed to the necessity for carefully arranging, beforehand, the time at which they propose attending at the Fever hospital, as during the period of such attendance they are excluded from the surgical, ophthalmic and gynæcological wards and cannot act as maternity clerks.

Full information as to clinical instruction is contained in the prospectus of the Faculty of Medicine.

Leeds General Infirmary.—The medical and surgical practice required by Medical Students is taken at this Institution, which offers abundant opportunities for clinical study. Situated in the centre of a densely populated manufacturing and mining district, and drawing patients also from a wide surrounding area, its wards present an

ample field for the study of diseases and injuries. The concentration of medical, surgical, gynæcological, ophthalmic, aural and children's diseases in one hospital leads to much economy in time and labour.

The nature of the work done in the Leeds Infirmary makes the clerkships and dresserships of great value, and the resident appointments involve so much practical work and personal responsibility as to give the holders a very varied and valuable experience. A full account of the arrangements for clinical teaching, and of the appointments offered to students, will be found in the special prospectus of the Faculty of Medicine.

The Leeds Public Dispensary.—About 30,000 medical and surgical cases are treated annually, partly as out-patients, and partly at their own homes. There are three Resident Medical Officers, to each of whom a separate district of the city is assigned.

The practice of the Dispensary is open to any student on application to one of the Honorary staff, whose hours for seeing out-patients are as follows:—

Consulting Physician.

Dr. C. M. CHADWICK.

Physicians.

Dr. WARDROP GRIFFITH (Tuesday), at 3 p.m.

Dr. TREVELYAN (Thursday), at 3 p.m.

Dr. TELLING (Wednesday), at 1.30 p.m.

Surgeons.

Mr. ROWE (Wednesday), at 3 p.m.

Mr. D. SEATON (Thursday), at 2 p.m.

Mr. LEE WELLS (Tuesday), at 2 p.m.

Ophthalmic Surgeon.

Mr. MICHAEL A. TEALE (Monday), at 2 p.m.

Leeds City Fever and Small Pox Hospitals

Students are admitted at the Leeds City Hospitals (Medical Superintendent, Mr. E. A. Pearson) on having obtained sanction from the Dean of the Faculty of Medicine, subject to such regulations as may be made from time to time by the Leeds City Council

Attendance at a Fever hospital is compulsory upon students registered since January, 1892, who are preparing for the degrees of the Leeds or London Universities, or for the diploma of the London Colleges of Physicians and Surgeons. It is also required by some of the other examining bodies.

Students must abide by the rules laid down as to disinfection and other matters, and must satisfy the Corporation authorities that they are sufficiently protected against small pox by vaccination.

At the Small Pox hospital a minimum period of one week's residence may be required with payment in advance of 12s. a week for board and lodging.

The periods of attendance, each of three months, will commence on January 1, May 1, and October 1, the hospitals not being open to students during April, August, or September. Names must be entered, and the fee paid to the Dean, during the first week of the term. Clinical lectures on infectious diseases will be given by the Medical Superintendent of the hospitals, and the attendance of students at these lectures and on the practice must be completed during the term for which they enter.

Those desirous of attending the practice outside the ordinary classes or clinical instruction, and not requiring a certificate of their attendance, must apply for permission to the Medical Officer of Health, Dr. J. S. Cameron, at his office in 41, Park Square, between the hours of 10 and 11 a.m.

Fees for the three months' course attendance on two days a week, £2 2s.

Hospital for Women and Children. A limited number of senior students can here receive instruction in the practical treatment of diseases of women. The hospital is recognised for this purpose by the University of Leeds. Application to be made to one of the Honorary Staff: Mr. C. J. Wright, Dr. E. O. Croft, Mr. Walter Thompson, or to the Hon. Assistant Physician, Dr. Telling. A new building for 55 beds has lately been erected, including a maternity department for five lying-in cases.

West Riding Lunatic Asylum, Wakefield. This institution, which accommodates 1,860 patients, offers unusual advantages to those who desire to make themselves conversant with the treatment and management of the insane. Further accommodation in connection with the Asylum for 280 patients has been provided by the erection of a hospital for the treatment of acute insanity, and a separate home for 70 imbecile and idiot children has been lately opened. Clinical lectures and demonstrations are given at the Asylum in connection with the systematic lectures on insanity delivered at the School of Medicine, by Mr. W. Bevan Lewis, Medical Director of the Asylum.

Instruction in Vaccination is given under the Local Government Board at the General Infirmary on Thursdays at 3 p.m., by Mr. A. T. Bacon, Instructor in Vaccination. Classes begin in October, February, and May. Each class consists of seven meetings, six of which must be attended, four of them consecutively.

Fee, £1 1s. 6d. Application to be made, and fees paid to the Dean.

EVENING CLASSES¹

The Session is divided into two terms, which respectively begin on Wednesday, October 4, 1905, and Wednesday, January 10, 1906.

Opening Lectures

EVENING TEXTILE INDUSTRIES.—Introductory Lecture by Prof. Beaumont, on Wednesday, October 11 at 7.30 p.m.

EVENING LEATHER INDUSTRIES.—Introductory Lecture by Prof. Procter, on Wednesday, October 4 at 7 p.m.

Admission free to the above Lectures.

Scholarships and Exhibitions

The Scholarships and Exhibitions tenable by Evening students are the Leeds City Council Evening Class Exhibitions, the Baines Free Scholarships, and the Clothworkers Evening Scholarships for the Department of Textile Industries. For particulars see in the list of University Scholarships, page 347.

The examination for the Textile Scholarships will be held on April 25, 1906.

GERMAN LANGUAGE AND LITERATURE

Mr. GOUGH

A Class will be held on Mondays from 7 to 9 p.m., during the first and second terms, beginning October 9. It should be joined only by students who possess at least an elementary knowledge of the language. Grammar, composition, translation, and pronunciation will be studied, and much attention will be given to conversation. N.B.—The hours of this class may be altered to suit the convenience of students.

Fee, £1 10s. for two terms, or 15s. for one term.

Text Books

Kuno Meyer, *German Grammar*, parts i and ii (Sonnenschein).

Second German Reader and Writer (Sonnenschein).

Chamisso, *Peter Schlemihl*, ed. Buchheim (Clarendon Press).

¹ A more detailed syllabus of the classes in the Engineering and Textile Industries Departments is contained in the special prospectus of Evening Classes.

ECONOMICS

Professor CLAPHAM

Railway Lectures

A course of eight lectures, dealing with some of the general principles of Railway Economics and Railway History, will be given by Professor Clapham. The course will begin on Friday, October 20, at 8 p.m. The subjects of the lectures will be :

1. The development of the means of transport in the nineteenth century.
2. The theory of railway rates.
3. Passenger traffic and passenger rates in England and abroad.
4. Goods traffic and goods rates.
5. Railway competition and combination in England and the U.S.A.
6. State supervision and control of railways.
7. State support and state ownership of railways.
8. Railway statistics.

A course of eight lectures on the Law of Carriage by Railway will be given by Mr. Goadby beginning in January 1906.

Fee for each course, 4s.

Lectures for Banking Students

Three courses of lectures specially intended for students preparing for the examinations of the Institute of Bankers or similar examinations.

Economics

A course of twenty lectures, suitable for the examinations in Political Economy of the Institute of Bankers, will be given by Professor Clapham. The course will begin on Friday, October 13, at 6.30 p.m.

Commercial Law

Two courses of ten lectures each will be given by Professor Phillips and Mr. Goadby. Before Christmas Mr. Goadby will lecture on Banking Securities and kindred

topics ; after Christmas Professor Phillips will deal mainly with Bills of Exchange. The course will begin on Friday, October 13, at 7.30 p.m.

Accountancy

A course of twenty lectures arranged to meet the requirements of candidates for the Final examination of the Institute in Book-keeping will be given by Mr. Shaw. The course will include (1) general principles of double entry book-keeping, (2) use of the various subsidiary books leading up to the ledger, (3) trial balance, (4) preparation of the trading account, profit and loss account, and balance sheet, (5) accounts of limited liability companies, (6) criticism of balance sheets, (7) partnership and other complicated accounts.

The course will begin on Wednesday, October 11, at 6.30 p.m.

Fee for each of the three courses, 10s.

MATHEMATICS

Mr. WATSON

A class will be held during the first and second terms on Thursdays, beginning on October 5, dealing with the elements of the Differential and Integral Calculus with applications to mechanics, physics and engineering. Students taking the class should have a good knowledge of algebra and elementary trigonometry.

The class will not be held unless at least six students present themselves.

A meeting to make arrangements with regard to the time &c., will be held on Thursday, October 5, at 7 p.m.

Fee 15s. ; for one term 7s. 6d.

PHYSICS

Mr. ALLEN

The Physical laboratory will be open on Thursday evenings during the first and second terms, from 7 to 9.30 p.m., beginning October 5.

Two classes will be formed ; the first is designed to prepare teachers and others for the Intermediate examination of the University of London, the second course will prepare for the Final B.Sc. examination.

Fee, £2 2s.

GEOLOGY

Professor KENDALL

Geology applied to Sanitary and Civil Engineering

On Mondays, during the second and third terms, at 5 p.m.

SYLLABUS. Stratified rocks, their mode of origin and physical peculiarities. Forms of stratification, folds, joints, and faults.

General succession and lithological characters of the stratified rocks.

The origin and distribution of the drift deposits.

British rainfall, its measurement and variations. The destination of this water. Evaporation, discharge by rivers and percolation, how they are proportioned and upon what conditions they depend. The mode and rate of percolation of underground water. The water-bearing capacity of sandstones and limestones. How water is stored in these rocks.

The principal water-bearing strata of Britain, and the character of the supplies which they yield. Some detailed examples of the supply of water from deep wells.

The application of geological knowledge to selection of sites for bridges, roads, tunnels, puddle-trenches, sewage-farms, &c.

Fee, 10s. 6d.

CIVIL AND MECHANICAL ENGINEERING

Professor GOODMAN Mr. GILCHRIST

Mr. MACLACHLAN Mr. DUNCAN

The evening courses are arranged to cover the work required for the examination for Associate membership of the Institution of Civil Engineers.

Lectures**Course A**

On Tuesdays during the first and second terms at 8 p.m.

A course of about twenty lectures will be given by Mr. MacLachlan on the Theory of Heat Engines.¹

Fee, 10s. 6d.

¹ For further details see Evening Class Prospectus.

Course B

On Fridays during the first and second terms at 7.45 p.m.

A course of about twenty lectures will be given by Mr. Gilchrist on Railways and Tramways.¹

Fee, 10s. 6d.

Laboratory Work

The following courses of instruction will be given in the Engineering laboratory during the first and second terms, on Wednesdays, from 7.30 to 9.30 p.m.

Course A. Testing of Materials

The testing of iron, steel, alloys, &c., in tension, torsion, compression, bending, and punching. This work is done on:

1. A 100-ton Buckton testing machine, fitted with an autographic recorder.
2. An Olsen machine of 50,000 lbs. capacity.
3. A Denison machine of 5,000 lbs. capacity.
4. Special appliances for torsion testing.

Course B. Steam, Gas, and Oil Engines

Testing pulsometer, indicating and testing steam, gas, and oil engines, testing a De Laval steam turbine. Steam boiler and engine trials. The indicating and testing work is done on a 70 h.p. compound Willans engine; a 30 h.p. Fowler compound engine; a small fan engine; two gas engines, one of 60 h.p. and one of 15 h.p.; and a Campbell 13 h.p. oil engine.

Course C. Hydraulics

Experiments on the flow of water over weirs and through orifices, the friction of water in pipes, the pressure of jets on surfaces, the bursting strength of pipes, &c., by a Berry's high pressure test pump.

Tests of a Pelton wheel; a Gilkes' turbine, fitted with a Kent Venturi water meter; a 6" x 4" Green reciprocating pump; a Hett centrifugal pump.

Each student must confine himself to one of the three courses detailed above. Only those students will be admitted who can give evidence of possessing an elementary knowledge

¹ For further details see Evening Class Prospectus.

of testing for course A., of steam and heat for course B., of hydraulics for course C. If intending students cannot produce certificates or other evidence of possessing such knowledge an examination paper will be set in the several subjects.

Fee, £1 11s. 6d.

The laboratory will open on Wednesday, October 4.

ELECTRICAL ENGINEERING

Mr. PARR

Two separate evening courses of instruction (A & B) are given in Electrical Engineering, each consisting of a course of lectures together with a corresponding course of practical work in the laboratories. Course B forms a continuation of Course A. The laboratory work in each course is specially designed with the view of assisting students in understanding the lectures. Lectures and laboratory work may be taken separately, but students are advised to take both together. The two complete courses A & B practically cover the ground for the Preliminary, Ordinary, and Honours grades of the Electro-technological Examinations in Electric Lighting and Transmission of Power of the City and Guilds of London Institute.

Each lecture or laboratory course comprises 20 attendances. A course of instruction in jointing electrical cables and wires is also given which may be taken either as a separate course or in lieu of part of the above experimental courses. The jointing course is held on one of the two evenings allotted to laboratory practice in the Electrical Engineering laboratories.

More complete information will be found in the special prospectus of the Engineering Departments, to be obtained from the Registrar.

Course A

Lectures on Thursdays from 7 to 8 p.m. during the first and second terms, beginning October 5.

Fee, 10s. 6d.

Text books recommended

S. P. Thompson's *Elementary Lessons in Electricity and Magnetism* (Macmillan, 4s. 6d.); Ayerton's *Practical Electricity* (Cassell, 10s. 6d.); Slingo & Brooker's *Electrical Engineering* (Longmans, 12s.); Maycock's *Electric Lighting and Power Distribution*, vol. i (Whittaker & Co., 6s.); Parr's *Electrical Engineering in Theory and Practice* (Macmillan, about 12s.); Parr's *Electrical Engineering Measuring Instruments* (Blackie, 9s. net.)

Laboratory work on Mondays from 7 to 9 p.m. during the first and second terms, beginning October 9.

Fee, £1 11s. 6d.

For the laboratory course students are strongly recommended to get Parr's *Practical Electrical Testing* (Longmans, 6s. 6d. net.)

Course B

Lectures on Thursdays from 8.5 to 9.5 p.m. during the first and second terms, beginning October 5.

Fee, 10s. 6d.

The following books may be consulted with advantage—S. P. Thompson's *Dynamo-Electric Machinery* (Spon, 24s.); Kapp's *Electric Transmission of Energy* (Whittaker, 10s. 6d.); J. A. Fleming's *Alternate Current Transformers*, vols. i and ii (*Electrician* Office, 18s.); Munro & Jameson's *Pocket Book of Electrical Rules and Tables* (Griffin & Co., about 10s. 6d.); Rhodes's *Alternating Currents* (Longmans); Lupton, Parr, & Perkin's *Electricity as applied to Mining* (Crosby Lockwood, 9s. net).

Laboratory work on Tuesdays, from 7 to 9.30 p.m., during the first and second terms, beginning October 10.

Fee, £1 11s. 6d.

Text Book

Parr's *Advanced Electrical Engineering Testing* (Chapman & Hall, 9s. net).

Jointing Course

Practical work on Mondays and Tuesdays, from 7 to 9 p.m., beginning October 10.

Fee, £1 1s.

TEXTILE INDUSTRIES

Professor BEAUMONT

Mr. HOLLIS Mr. YEWDALE

Mr. WHOWELL

Experimental Weaving on hand and power looms forms an important part of the evening courses of instruction in

this Department. Each student is supplied with a pattern loom on which he receives practical instructions in cloth structure, the composition of patterns, and the methods of colouring designs with fancy yarns in wool, worsted, cotton, silk, mohair, and other materials. The lecture courses are devoted to the principles of textile design, the structure of cloths, the calculation of goods, the construction of looms and machinery, and the various processes of woollen and worsted cloth manufacture.

I. First Year Course in Weaving

Lectures and instructions on Tuesdays and Fridays from 7.30 to 9 p.m., during the first and second terms, beginning October 6.

Fee, £1 1s. per term, or £2 2s. per session. Students paying in advance for the whole session receive a design book free of charge.

II. Second Year Course in Weaving

Members of this class are expected to take the course of lectures on Textile Colouring. See page 322.

The class meets during the first and second terms on Wednesdays from 7.15 to 9.15, the first hour being devoted to Designing and Pattern Analysis, and the second hour to lectures. Experimental Weaving on alternate Fridays, 7 to 9 p.m.

Fee, £1 1s. per term, or £1 11s. 6d. per session, if paid in advance.

III. Third Year Course in Weaving

Lectures on Wednesdays, during the first and second terms, beginning October 11, from 7.15 to 8.15 p.m., followed by Designing and Pattern Analysis from 8.15 to 9.15. Practical Weaving on alternate Fridays, from 7 to 9 p.m.

In designing, the students may devote their attention to any special branch of manufacture in which they are principally interested.

The looms for the use of third year students are mounted to weave backed and double-make goods, textures for trouserings, suitings, mantlings, &c.; also for Jacquard

patterns in dress, vestings, rugs, and shawls. Students have the privilege of making experiments on any of the looms, and every facility is afforded them in original work.

Fee, £1 1s. per term, or £1 11s. 6d. per session, if paid in advance.

IV. First Year Course in Textile Colouring

A course of twenty lectures on Colour in relation to Textile Design will be given on Mondays from 7.15 to 8.15 p.m., followed by demonstrations in preparing colour sketches, from 8.15 to 9.15 p.m., beginning October 9.

Fee for the course, £1 1s.

V. Second Year Course in Textile Colouring

A course of twenty lectures on the Colouring of Backed and Compound Fabrics will be given on Mondays from 8.15 to 9.15 p.m., preceded by pattern sketches and exercises in colouring from 7.15 to 8.15 p.m., beginning October 9.

Fee for the course, £1 1s.

Text Books

Beaumont's *Woollen and Worsted Cloth Manufacture* (Bell, 7s. 6d.).

Beaumont's *Colour in Woven Design*.

DYEING

Professor GREEN Mr. STEVEN

The courses of instruction will consist of Lectures and Experimental Dyeing, either of which can be attended separately.

Lecture Course

A course of twenty lectures on the technology of the Textile Fibres, Dyeing and Dyeing Materials will be given during the first and second terms on Mondays from 7 to 8 p.m., beginning October 9.

The course is intended to meet the needs of practical men.

The following subjects will be treated of :

Brief History of Dyeing.—Theories of the dyeing process. Various textile fibres.

The Wool Fibre and its properties.—The cause of the felting of wool ; action of various acids and alkalis on wool ; cotton, and silk, the nature of wool-grease (yolk) ; the method of distinguishing wool from other fibres, &c.

The Scouring of Wool.—Yarn scouring ; cloth scouring ; crabbing ; chemicals and machinery employed ; defects caused by imperfect scouring ; the recovery of grease from waste scouring liquors, &c.

The Bleaching of Wool and Cotton.—Gas bleaching ; wet bleaching ; bleaching with hydrogen dioxide ; the blueing of wool ; lime bowking of cotton ; bleaching with hypochlorite, &c.

The influence of water during scouring and dyeing ; the detection of lime, iron, &c., in water ; Clarke's soap test ; the methods of softening hard water, &c.

The Mordanting of Wool and Cotton.—The method of mordanting with bichromates, chromium fluoride, copperas, tin spirits, &c. ; the use and abuse of mordants ; the utility of tartar, oxalic acid, &c., along with mordants ; cotton mordants for mixed goods, &c.

The Dyeing of Wool and Cotton.—The one dip, two bath, and saddening methods.

Machinery used in Dyeing.

Colouring Matters.—Natural and artificial dyestuffs. Coal-tar distillation. Classification of natural and artificial dyestuffs according to their dyeing properties ; acid colours ; basic colours ; salt or substantive colours ; mordant colours ; developed colours ; vat colours ; sulphide colours, &c. The general methods of application of the above classes of dyestuffs. Consideration of individual colours with respect to their fastness to various agents. Defects in dyeing and methods of rectifying the same. Dyestuffs suitable for various classes of goods. Burl dyeing. Union dyeing. Stripping and dyeing of shoddy.

Fee 10s. 6d.

Experimental Dyeing Course

This class is held on Mondays, between 8 and 10 p.m., during the first and second terms. It is intended for apprentice and foreman dyers, or others engaged in practical

work during the day, and will also be found useful for all those who in their daily business handle dyed materials. No previous knowledge of dyeing is required from those attending.

Students in this class will make systematic dyeing trials with the different groups of natural and artificial dyestuffs.

Fee for the session (if paid in advance), £1 11s. 6d.; for one term, 17s. 6d.

LEATHER INDUSTRIES

Professor PROCTER

Mr. KOPECKY Mr. BRUMWELL

First Term

During the first term a course of about ten lectures and practical demonstrations will be given by Mr. Kopecky on the Principles of Currying. The introductory lecture will be given by Professor Procter at 7 p.m., on Wednesday, October 4, and will be free, and the department will be open after the lecture for inspection. The subsequent lectures of the course will be given by Mr. Kopecky on succeeding Wednesdays during the term, at 7 p.m., followed by practical demonstration of the processes described. These lectures are intended to form the fourth section of a complete course on the principles of Leather Manufacture, extending over several sessions, and as nearly as possible of the same completeness as the day lectures on the subject.

Fee for lectures and demonstrations, 17s. 6d.

Second Term.

During the second term a course of lectures on Modern American Leather Manufacture will be given by Mr. Kopecky, who has just visited the United States. The lectures will begin at 7 p.m., and the laboratory will be open for practical work on oils and fats from 8 to 9.30 p.m. on Wednesdays during the term.

Fee for the Leather Dyeing course 17s. 6d.; for both courses if paid at the beginning of the first term, £1 11s. 6d.

EXTENSION LECTURES

The University is prepared to provide Extension lectures in various branches of Literature, Science and Art, and in Technical subjects. A syllabus of lectures has been prepared by the Hon. Secretary to the Extension Lecture Committee, Dr. F. W. Moorman, and is obtainable from the Registrar.

Courses of County lectures in Coal Mining are also delivered in various coal mining districts, consisting of twelve lectures each, and comprising four lectures on the Chemistry and four on the Geology of Coal Mining, with four lectures on the Theory and Practice of Mining. Application for courses of lectures should be made to the Registrar, at the University, Leeds.

COUNTY LECTURES, DAIRY INSTRUCTION, &c.

The County Councils of the three Ridings of Yorkshire make annual grants to the University to enable it to carry out a system of instruction on subjects connected with Agriculture, and in the case of the West Riding to give practical instruction also in dairy work at various centres.

The members of the staff engaged in this work are: Prof. R. S. Seton, Mr. R. W. Haydon, Mr. Charles F. Archibald, Mr. H. G. Bowes, Mr. J. G. Stewart, Mr. F. Parton, Mr. T. Redington, Mr. A. Gaut, Miss McKerrrow, and Mr. W. Jones Anstey.

County Lectures

Each course consists of five or ten lectures given in the evenings at intervals of one week. Each lecture may be followed by a class at which questions may be asked of the lecturer. Before the University enters into any arrangements with a locality for the delivery of such a course of lectures, a Local committee must be appointed, with a secretary to correspond with the University. The Local committee will be required to guarantee a certain average attendance, also the local expenses, consisting of hire of hall, advertising, &c. With these exceptions the lectures will be given free.

The subjects treated in the several courses embrace: Results of Garforth experiments, soils and their properties, manures, farm crops, insect pests and diseases of crops, the management of grass land, live stock and feeding stuffs, dairying and poultry keeping, horticulture and fruit culture, small farming and gardening, management of allotments, veterinary subjects, such as prevention of common diseases, hygiene, &c., the foot of the horse, and the principles of horse shoeing.

Dairy Instruction

The new Dairy School at Garforth is open for practical instruction during the summer months. Courses of six weeks' duration are given in butter and soft cheese making.

The fee for the course is £3.

Single demonstrations on butter-making are given at centres in the East and West Ridings, in the interval between the courses held at Garforth.

Field Experiments

The Agricultural department of the University undertakes the laying out and supervision of field experiments to illustrate the principles of agricultural and horticultural practice.

Reports on these experiments may be had on application to the Professor of Agriculture.

Instruction in Horticulture in Schools in the West Riding

The Agricultural department of the University supervises the instruction in horticulture given in school gardens connected with various evening continuation schools in the West Riding.

Instruction in Horticulture at Garforth

A course of Horticulture and Experimental Plant Physiology will be conducted on Saturdays at the Manor Farm, Garforth, beginning on September 9, 1905, and ending about the end of the following May. The class is for teachers of Horticulture and those intending to teach this subject. The mornings will be given to the discussion of the principal horticultural processes and their actual practice in the garden, and the afternoons to botany.

The fee for the course is £1 12s. 6d.

Instruction in Farriery

Instruction in Horse Shoeing has been provided for and takes the form of practical demonstrations in the making of shoes and the shoeing of horses in smithies easily accessible to apprentice smiths in different localities. The work is so arranged that the apprentices attend one afternoon or evening in each week during the period the Instructor is in attendance. The classes are preceded by a lecture on the foot of the horse and the principles of horse shoeing, and at the conclusion of the lecture those smiths who intend to join the practical class are asked to give in their names.

FELLOWSHIPS, SCHOLARSHIPS, EXHIBITIONS, BURSARIES, FREE STUDENTSHIPS, AND PRIZES

The Salt Scholarship, founded by the late Sir Titus Salt, Bart., in 1875, is instituted for the encouragement of students who intend to avail themselves thoroughly of the teaching offered by the University. It is awarded for proficiency in Language and Literature.

The Clothworkers' Scholarships, founded in 1875, are maintained by the Worshipful Company of Clothworkers of the City of London, and are for students attending the departments of Textile Industries and Art in the University.

The Akroyd Scholarships, founded in 1875, are maintained by funds accruing from the Akroyd Trust, and are intended for the encouragement of the study of Natural Science. Candidates for these Scholarships must be of the male sex.

The Brown Scholarships were endowed in 1877 by the late Henry Brown, Esq., of Bradford and Rawdon, who bequeathed £5,000 to the Yorkshire College, for the purpose of founding five or more Scholarships to be called the Brown Scholarships, for students attending the said College and receiving instruction in the various branches of those Sciences which are applicable to the Industrial Arts. In case of equality of candidates a preference is to be given to residents in Bradford or natives of Bradford.

The Baines Scholarships, founded in 1885, are established by the University in consideration of the sum of £3,000 which was raised to commemorate the public services of the late Sir Edward Baines. One-half of the sum annually devoted to this purpose is awarded by the University to candidates who have attended a Public Elementary School within the City of Leeds; the other half to such candidates as the Yorkshire Union of Mechanics' Institutes shall, after examination, select. Particulars of the latter Scholarships may be obtained from the Secretary of the Yorkshire Union of Mechanics' Institutes, South Parade, Leeds.

The Emsley Scholarship was endowed in 1886 by the late Thomas Emsley, Esq., of Burley-in-Wharfedale, who bequeathed £1,000 for the purpose of founding one or more Scholarships in the Yorkshire College.

The Craven Scholarship was established in the year 1887, by a number of the Engineers of Leeds, in recognition of the services rendered by the late Joseph Craven, Esq., to the Mechanical Engineering Trades of the District.

The Medical Scholarship was instituted by the Leeds School of Medicine in 1888, and the *Infirmiry Scholarship* in the same year by the Faculty of the Leeds General Infirmiry.

Since 1891 the Commissioners for the Exhibition of 1851 have placed at the disposal of the Yorkshire College, now the University of Leeds, the nomination to one *Scholarship* each year, for the endowment of scientific research. The Scholarship is of the annual value of £150 and is ordinarily tenable for two years.

The Leeds City Council Scholarship, Free Studentships, and Evening Class Exhibitions were founded by the Council, in 1892, out of the sum voted by the Leeds City Council. The Scholarship and Free Studentships are tenable in the Day Classes of the University, and the Exhibitions in the Saturday or Evening Classes.

The Leighton Trustees' Scholarships were instituted in 1894 by the Trustees of the late Mrs. Isabel Leighton of Leeds, for the assistance of students of the University who have attended a public elementary school in the City of Leeds.

The Tannett-Walker Bursaries were instituted in 1900 by F. W. Tannett-Walker, Esq., of Leeds, for the assistance of Scholars and Free Students of the University in the department of Engineering. They are limited to students who have attended a public elementary school in Hunslet.

The Wheatley Scholarship was established by the University in 1903, in consideration of the sum of £1,500 given by the Misses Robinson of Mirfield and Mrs. Steele of Kettering, in memory of the late Charles Wheatley, Esq., of Mirfield. In case of equality of candidates, a preference is to be given to residents in Mirfield.

The William Summers Scholarship was founded by Mr. and Mrs. Buckley, of Ryecroft Hall, Audenshaw, near Manchester, in memory of William Summers, Esq., late M.P. for Huddersfield, and for many years a member of the Court of the Victoria University, for the purpose of assisting students resident or educated in Huddersfield.

The Gilchrist Studentship in Modern Languages was instituted in 1905 by the Gilchrist Educational Trust, founded by Dr. Gilchrist, who died in 1841, for "the benefit, advancement and propagation of education and learning in every part of the world, as far as circumstances permit."

Dates of Examination, 1906

The examination for the Akroyd, Brown, Leeds City Council, Baines, Emsley, Summers, and Medical Scholarships will be held in connection with the Matriculation examination early in July, 1906. Forms of application for the examination may be obtained from the Registrar, to whom they must be returned, properly filled in, not later than May 1, 1906.

The Infirmary Scholarship is awarded on the results of the first M.B. examination held in June. Candidates must send their names to the Secretary of the Faculty, General Infirmary, Leeds, on or before May 1, 1906.

The examinations for the Salt, Craven and Textile Day Scholarships will begin on Tuesday, May 15, 1906. Entries must be made not later than May 1.

The examination for the Clothworkers' Evening (Textile Industries) Scholarships will be held on Wednesday, April 25, 1906. Entry forms must be sent in to the Registrar not later than April 1, 1906.

For the date of the examination for the Leeds City Council Evening Class Exhibitions apply to the Secretary, Higher Education Department, Leeds City Education Committee.

GENERAL REGULATIONS

Applicable to all Scholarships

1. No Election to a Scholarship will take place unless the candidate has attained a sufficient standard of merit.

2. All Scholarships are held subject to the good behaviour of the Scholar. The Council reserves the power to determine the tenure of a Scholarship for the Scholar's irregularity in attendance at lectures, or for any other sufficient cause. A Scholar who fails in any University examination for which he prepares in the University, or who is reported unsatisfactory in the aggregate of his terminal examinations during the session, will forfeit his Scholarship, unless his retention of it be specially recommended by the Senate.

3. Scholars are required to devote the whole of their time to their studies. Except in special cases, the undertaking by a Scholar of outside work, such as teaching, or the acceptance of any post of profit outside the University will involve surrender of the Scholarship, unless such work be undertaken with the sanction of the Vice-Chancellor. The Clothworkers' Scholars and others preparing for any profession or trade, the principles of which are taught in the University, will be granted special exemption from this rule if the Senate is satisfied that an adequate cause has been shown for such exemption, and approves the arrangement proposed in each particular case.

4. The Senate reserve power to declare any Scholarship or Exhibition vacant or to reduce its value on the ground that the Scholar has previously or subsequent to his election acquired another Scholarship.

5. Scholars who are preparing for University degrees are required to present themselves for the degree examinations of the University of Leeds, and are not allowed (except by the special permission of the Senate) to present themselves for the examinations of any other University.

Applicable to Entrance Scholarships

6. Candidates for an Entrance Scholarship may be required to undergo a *viva voce* examination, in addition to the examination by written papers.

Applicable to Senior Scholarships

7. A student holding a Senior Scholarship open only to registered Students of the University, will not be allowed to compete a second time for a Scholarship without the express permission of the Senate.

I. TENABLE ONLY BY GRADUATES OF THE UNIVERSITY

1. University Fellowships and Scholarships

A limited number of Fellowships and Scholarships may be awarded by the Council to students who have shown special merit in the Final examinations in the Honours Schools of the University, for the purpose of assisting them to prosecute research and study of a post-graduate character.

University Fellows

- 1905 Marshall, Joseph, B.Sc. (Chemistry). £100.
Waterhouse, Osborn, B.A. (English). £100.

University Scholars

- 1905 Armes, Henry Percy, B.Sc. (Chemistry). £50.
Gunnell, Doris, B.A. (Modern Languages). £50.
Holmes, Carrie, B.A. (English). £50.
Edwards, Maud Mary, B.A. (Modern Languages). £25.
Gregory, Frederick Maurice, B.Sc. (Engineering). £25.

2. Gilchrist Studentship in Modern Languages

This Studentship, of the value of £80, tenable for one year, is open for graduates of either sex who have taken Honours in Modern Languages in the Final degree examination of the University, and who are proposing to enter the profession of teaching in secondary schools. The purpose of the Studentship is to enable the holder to pursue a special course of study abroad with a view to qualifying himself (or herself) for teaching modern languages in a secondary school.

The regulations are as follows:

1. The Studentship is awarded annually by the Gilchrist Trustees.

2. Candidates must have obtained Honours in Modern Languages in the Final examination for a degree, and be recommended by the University after consultation with the Professors concerned, and after special inquiry into the suitability of the candidates for the profession of teacher in a secondary school. If possible, two names shall be submitted each year to the Trustees for their consideration. Save in exceptional circumstances, of which the Trustees shall be the sole judges, the examination must be that immediately preceding the date of application.

3. The holder of the Studentship will be required to follow a course of preparation for the profession of Modern Language teacher, and must submit his (or her) proposed course of work for the approval of the Trustees, who will take steps to satisfy themselves that the course of preparation proposed to be undertaken is suitable for the purpose in view.

4. The tenure of the Studentship is for one year beginning on the date of election, and the emoluments will be paid half yearly by the University on production of evidence that the proposed course of preparation is being satisfactorily carried out.

5. The Student will be required, at the expiration of the tenure of the Studentship, to make a report to the University, setting out the course of work and preparation which has been pursued, and this report together with a covering communication from the University shall be forwarded to the Trustees.

II. 1851 EXHIBITION SCIENCE SCHOLARSHIP

The Commissioners for the Exhibition of 1851 have placed at the disposal of the University the nomination to one Scholarship of the annual value of £150, tenable ordinarily for two years, and in rare instances for three years. The continuation each year after the first will depend upon the work done in the previous year being satisfactory to the Scientific Committee appointed by the Commissioners.

The Scholarship is limited to those branches of science (such as Physics, Mechanics, and Chemistry), the extension of which is specially important for our national industries.

Candidates must (*a*) be British subjects ; (*b*) be *bonâ fide* students of science of three years' standing at least in Universities or Colleges in which special attention is given to scientific study ; (*c*) either have been engaged in study at the University for a full year prior to the 1st of April following the date of application, or have been students of the University for a full year ending within twelve months prior to the 1st of April following the date of application,

and, having since ceased to be students, have been engaged solely in scientific study; (*d*) indicate high promise of capacity for advancing science or its applications by original research.

A recommendation can only be made in favour of a student who has already given proof of both ability and desire to make original investigations. In the opinion of the Commissioners the most suitable evidence that a candidate possesses these qualifications is a satisfactory account of a research already completed by him, and they will decline to confirm a recommendation unless such an account is furnished, or there is other equally distinct evidence that the qualifications of the candidate are such as are above indicated.

Applications will be received by the Registrar of the University up to the last day of February in each year.

| | |
|-----------|-----------------------------------|
| 1891-4 | Ingle, Harry, B.Sc. |
| 1892-4 | Mann, Harold Hart, B.Sc. |
| 1893-6 | Myers, John Ellis, B.Sc. |
| 1894-6 | Dent, Frankland, B.Sc. |
| 1896-9 | Dawson, Harry Medforth, B.Sc. |
| 1897-1900 | Wilson, Harold Albert, B.Sc. |
| 1898-1901 | Calvert, Harry Thornton, E.Sc. |
| 1899-1902 | Skirrow, Frederick William, B.Sc. |
| 1900-03 | Varley, William Mansergh, B.Sc. |
| 1901-4 | Denison, Robert Beckett, B.Sc. |
| 1902-5 | Dakin, Henry Drysdale, B.Sc. |
| 1903-6 | Gaunt, Rufus, B.Sc. |
| 1904-6 | Raper, Henry Stanley, B.Sc. |
| 1905-7 | Zortman, Israel Hyman, B.Sc. |

III. SCHOLARSHIPS OPEN TO THE COMPETITION OF STUDENTS OF THE UNIVERSITY ONLY

i. Tenable in the Faculties of Arts, Science and Technology

Leighton Trustees' Scholarships

Candidates for these Scholarships must be registered students of the University of not less than two terms standing. They must have attended a Public Elementary school or schools in the City of Leeds for not less than three years.

Three Scholarships are ordinarily offered each year, each of the annual value of £10, and tenable for two years, subject to the reports on the student's work during the first year of tenure being satisfactory.

The Scholarships will not be awarded on any special examination, but those students who are desirous of becoming candidates are required to send in their names to the Registrar not later than May 1 in each year.

In recommending candidates for appointment, the Senate will be guided by the position held by the candidates in their terminal examinations, and also by their general work and conduct. The need of the applicants for pecuniary assistance will also be taken into consideration.

The Scholarships are tenable by day students pursuing any course of study in the Faculties of Arts, Science and Technology, and may, with the consent of the Trustees, be held in conjunction with any other Scholarship.

The election will be made in the third term of the session, provided that there be suitable applicants.

| | | | |
|------|-------------------------------|------|---------------------------|
| 1894 | Gough, William | 1902 | Calam, Harold |
| 1895 | Hampshire, Florence Elizabeth | | Landman, Samuel |
| 1896 | Shacksnovis, Reuben | | Stead, Frank Cawthron |
| 1897 | Porritt, Florence Mary | 1903 | Appleyard, John Ernest |
| | Scholes, Thomas Wilfrid | | Robinson, Lilian Dorothea |
| 1898 | Gawler, Robert | | Waite, Joseph Henry |
| 1899 | Crosfill, John | 1904 | Carlton, George |
| | Phillipson, Coleman | | Westerdale |
| 1900 | Savage, Hilda | | Maddison, Wilfred Guy |
| | Robinson, Ethel Margaret | | Thorp, George |
| 1901 | Burgess, Lillie | 1905 | Lacy, Arthur |
| | Scholefield, Fred | | Vernon, Edgar |

2. Tenable in the Faculty of Arts

Salt Scholarship

Candidates for this Scholarship must be scholars or registered students of the University in at least their second term.

The value of the Scholarship is £20 a year, and it is tenable for two years.

Candidates will be required to present themselves for examination in

1 English Essay.

2 Latin.

3 *Two* of the following subjects :

Greek, French, German, Ancient History,
Modern History, English Language, English
Literature, Logic, Psychology and Ethics.

Candidates must have attended registered courses in the University in each of the subjects offered for examination.

The Scholar elected will be required to pursue a course of study at the University preparatory for a degree in Arts of the University of Leeds.

| | | | |
|------|-------------------------|------|---------------------------|
| 1882 | Wright, Benjamin | 1897 | Robinson, Elizabeth Clare |
| 1885 | Barker, Arthur Henry | 1899 | Melville, Ellen Louisa |
| 1887 | Jackson, Thomas Chalice | 1901 | Stevenson, Ethel Mary |
| 1891 | Hurst, Thomas Ockerby | 1903 | Davis, William Hathaway |
| 1893 | Cleasby, Mabel | 1904 | Landman, Samuel |
| 1895 | Hornby, George Goodall | | |

3. Tenable in the Faculty of Medicine

Infirmary Scholarship

The Faculty of the Leeds Infirmary offer a Scholarship of the value of 40 guineas. The Scholarship consists of a free ticket to the clinical teaching of the Leeds Infirmary, and the holder will be required to enter as a student for the whole medical curriculum at the University in the session following the date of examination.

The Scholarship is awarded, after a report from the examiners, on the results of the First M.B. examination of the University of Leeds, held in June of each year. In former years it was awarded as an Entrance Scholarship, on the results of an examination in Arts subjects.

Further particulars may be obtained from the Secretary of the Faculty, General Infirmary, Leeds.

| | | | |
|------|-----------------------------|------|----------------------------|
| 1889 | Fearnside, Philip Henry | 1898 | Heald, Samuel Linley |
| 1890 | Gross, Phineas | 1899 | Smailes, William Herbert |
| 1891 | Greenwood, Henry Harold | 1900 | Gough, Alfred |
| 1892 | Field, Richard Cullingworth | 1901 | Rawlings, Harry Richardson |
| 1893 | Dewhirst, Wilfrid Arthur | | |
| 1894 | Andrews, Joseph Dalby | 1902 | Pickles, William Norman |
| 1895 | Pegler, William Vernon | 1903 | Carlton, George Westerdale |
| 1896 | Matthews, Crawford Tait | 1904 | No award |
| 1897 | Middlemiss, James Ernest | 1905 | No award |

IV. SCHOLARSHIPS OPEN BOTH AS ENTRANCE SCHOLARSHIPS AND TO STUDENTS OF THE UNIVERSITY

Tenable in the Faculty of Technology

Clothworkers' Company Day Scholarships for the Textile Industries Department

The Worshipful Company of Clothworkers of the City of London offer, in connection with the Department of Textile Industries in the University of Leeds, four Day Scholarships each of the value of £15 15s.

Each Scholarship is tenable for one year. Students holding Day Scholarships will be required to attend an Advanced Course in Textile Industries, and the Senior Class in Applied Art. The Day Scholarships are only tenable by students not more than twenty-four and not less than sixteen years of age on the 1st of October following the date of examination.

Students holding Scholarships are expected to present themselves for examination (in the University) by the City and Guilds of London Technical Institute, in one of the following subjects, viz.: Textile Fabrics—Spinning and Weaving of (a) Wool and Worsted, (b) Cotton, (c) Linen, (d) Silk.

Candidates for Day Scholarships will be required to undergo a preliminary examination in English Dictation and Composition, Arithmetic and Algebra, as far as simple equations, and a further competitive examination in Designing of Single and Backed Cloths, Loom Construction, and the Processes of Manufacturing, and in Freehand Drawing and Elementary Decorative Design.

Students are not allowed to hold a Clothworkers' University Scholarship concurrently with any other Scholarship offered by the Clothworkers' Company.

| | | | |
|------|------------------------------|------|-------------------------|
| 1901 | Grimshaw, Norman | 1903 | Horsham, Wilfred Robert |
| | Wilson, Stanley Ewart Ashley | | Beaumont, Frank |
| | Brigg, Lawrence Heriot | 1904 | Whitworth, Abraham |
| | O'Flynn, James | | Hart, Harry Leatham |
| 1902 | Mellor, Cecil Smith | | Horsham, Wilfred Robert |
| | Duncan, Harold | | Holloway, Joseph |
| | Gaunt, Frederick William | 1905 | Mills, James |
| | Munro, William Thow | | Hart, Harry Leatham |
| 1903 | Smith, Lister | | Bradley, Jim |
| | Rayner, Harold Kingsbury | | Broadbent, Lees |
| | Hodgson | | |

V. ENTRANCE SCHOLARSHIPS

1. Tenable in the Faculties of Arts, Science,
and Technology

Leeds City Council Scholarship

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination. The Scholarships can be held only by students living with their parents or guardians resident in the City of Leeds.

The Scholarship is of the annual value of £50, and will be tenable, subject to the continuance of an adequate grant by the City Council, for three years.

The scholar will be required to pursue such a course of study in the University as shall, in the opinion of the Senate, constitute an effective preparation for a degree in Arts or Science, or for the pursuit of some branch of industry, instruction in the principles of which is given in the University.

Leeds City Council Scholarships are not tenable by students who propose to enter, or who have already entered, on courses of study in the Faculty of Medicine, unless they are reading for the B.Sc. degree of the University of Leeds.

The Scholarship will be awarded on the results of the July Matriculation examination, at which special papers may be set on certain subjects. Particulars will be obtainable from the Registrar in December, 1905.

| | | | |
|------|--------------------------|-------------------|--------------------------|
| 1892 | Hefford, Charles Nelson | 1900 | Cunningham, Jean Orme |
| 1893 | Watson, Herbert Wood | 1901 | Phillipson, Abran |
| 1894 | Cooper, Albert Henry | 1902 | Mellor, Fred |
| 1895 | Findlay, Mary Grace | 1903 | Klein, Harris |
| 1896 | Whiteley, Charles Edward | 1904 | Crowther, William Edmund |
| 1897 | Chapman, Fitzroy Tozer | 1905 ² | Simpkiss, Nellie |
| 1898 | Gray, Arthur Lambert | | Webster, Herbert William |
| 1899 | Grant, Frederick Ernest | | |

Leeds City Council Free Studentships

The regulations are under revision.

² Scholarship divided.

Emsley Scholarship

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

There will, as a rule, be offered one Scholarship annually, of the value of £20, tenable for two years.

The Scholar will be required to pursue a course of study prescribed for a degree in Arts or Science of the University, or an alternative course in the Faculties of Arts, Science, and Technology, expressly approved by the Senate.

The Scholarship is not tenable in the Department of Textile Industries.

The Scholarship will be awarded on the results of the July Matriculation examination, at which special papers may be set on certain subjects. Particulars will be obtainable from the Registrar of the University in December, 1905.

| | | | |
|------|----------------------------------|------|---------------------------|
| 1887 | Croft, Emily | 1896 | Christien, Alfred Eustace |
| 1888 | Houfton, Ernest Henry | 1897 | Oddy, Annie Maude |
| 1889 | Hurst, Thomas Ockerby | 1898 | Hunt, Arthur Douglas |
| 1890 | Byles, William Esdaile | 1899 | Robinson, Ethel Margaret |
| 1891 | Oyston, William Fletcher | 1900 | Findlay, George Hindson |
| 1892 | Jackson, Edwin | 1901 | Landman, Samuel |
| 1893 | Bell, Ambrose John | 1902 | Conyers, Hilda |
| 1894 | Barley, Bunten Archibald Hurd | 1903 | Bibby, Edward Ernest |
| 1895 | Corrie, William Edward | 1904 | Brook, Annie |
| | | 1905 | Leslie, May Sybil |

Baines Scholarship

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination. They must have attended a Public Elementary School in the City of Leeds.

There will be offered in each year one Baines Scholarship, of the value of £20 a year, tenable for two years.

The Baines Scholars will be required to pursue a course of study prescribed for a degree in Arts or Science of the University, or an alternative course in the Faculties of Arts, Science, and Technology, expressly approved by the Senate.

The Scholarship is not tenable in the Department of Textile Industries.

The Scholarships will be awarded on the results of the July Matriculation examination, at which special papers may be set on certain subjects. Particulars will be obtainable from the Registrar of the University in December, 1905.

| | | | |
|------|-------------------------------|------|---------------------------|
| 1886 | Hutchinson, Herbert | 1898 | Stevenson, Ethel Mary |
| 1888 | Legg, Thomas Percy | 1899 | Savage, Hilda |
| 1891 | Dawson, Harry Medforth | 1900 | McKeand, Maggie Woodrow |
| 1892 | Parker, George Robert | 1901 | Calam, Harold |
| 1894 | Hampshire, Florence Elizabeth | 1902 | Robinson, Lilian Dorothea |
| 1895 | Warmington, Edith | 1903 | Wilson, Florence Grey |
| 1896 | Scholes, Thomas Wilfrid | 1904 | Hargreaves, Edith |
| 1897 | Westerman, Ethel | 1905 | Christie, John Hugh |

2. Tenable in the Faculty of Arts

Wheatley Scholarship

Candidates for this Scholarship must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

The Scholarship is of the annual value of £25, tenable for three years, and will be awarded as often as the funds at the disposal of the Trust admit.

The Scholar elected will be required to pursue a course of study at the University preparatory for the B.A. degree of the University.

The Scholarship will be awarded on the results of the July Matriculation examination, at which special papers may be set on certain subjects. Particulars will be obtainable from the Registrar of the University in December, 1905.

| | |
|------|---------------------------|
| 1904 | Scholes, Katharine Louise |
| 1905 | Frank, Dorothea Ethel |

William Summers Scholarship

The regulations under which this Scholarship is awarded are as follows :

(1) There shall be one Scholarship tenable for three years.

(2) The examination for the Scholarship is the Joint Matriculation examination held in June in each year in the following subjects :

English (Language *or* Literature) and English History
Mathematics

Three of the following :

Greek

Latin

French

German.

(3) The Examiners for the Scholarship shall be the University Examiners appointed to conduct the Matriculation examination in the year in question.

(4) The Scholarship shall be awarded by the Senate.

(5) Any accumulations of the Scholarship Fund shall be expended by the Council as it may from time to time determine in prizes or exhibitions for candidates who shall have acquitted themselves sufficiently well in the examination without having obtained the Scholarship.

(6) Candidates for the Scholarship must have been resident in the Parliamentary Borough of Huddersfield during one full year previous to the 1st of June of the year in which they compete, or must have attended a public school in the said Borough for the same period.

(7) The successful candidate shall be required to pursue in the University of Leeds a regular course of study in one of the following Honours Schools : (1) Classics ; (2) History ; (3) English Language and Literature ; (4) Philosophy ; (5) Mathematics or any other Honours School in the Faculty of Arts, approved by the Senate. Such course shall be commenced in the October next after election to the Scholarship.

3. Tenable in the Faculties of Science and Technology

Brown Entrance Scholarships

Candidates for these Scholarships must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

In general there will be offered in each year one or two Scholarships of £40 a year, each tenable for two years, with power of extension. Applications for extension must be sent to the Registrar before the end of the second term.

A preference will be given, *ceteris paribus*, to candidates who have declared their intention of entering some industry, instruction in the principles of which is given in the University, or of engaging in the teaching of Science. In the case of equality of candidates, a preference will be given to residents in Bradford or natives of Bradford.

Brown Scholars will be required to pursue a course of scientific or technical study which will qualify for a degree in Science, or for a diploma of the University, or otherwise to devote themselves, in a manner approved by the Senate, to the study of one or more branches of pure or applied science taught in the University.

Brown Scholarships are not tenable by students who propose to enter, or who have already entered on courses of study in the Faculty of Medicine, unless they are reading for the B.Sc. degree of the University of Leeds.

The Scholarships will be awarded on the results of the July Matriculation examination, at which special papers may be set on certain subjects. Particulars will be obtainable from the Registrar of the University in December, 1905.

| | | | |
|------|---------------------------|------|---------------------------|
| 1880 | Senior, William Ottè | 1892 | Conyers, James Reeve |
| | Skirrow, Benjamin Beck | 1893 | Chapman, Harold Percy |
| 1881 | Overend, Wilkinson | 1894 | Dalton, John Edwin |
| | Easterfield, Thomas Hill | 1895 | Leach, Elsie |
| 1882 | Courtice, George Robert | | Robinson, Elizabeth Clare |
| | Aulton | 1896 | Blackburn, William |
| 1883 | Teanby, George William | | Broughton |
| | Alvey | | Hinchcliff, Joseph Henry |
| 1885 | Marriner, William Wright | 1897 | Forsyth, Christina Brand |
| 1886 | Jennison, Francis Herbert | | Hunt, Francis William |
| 1887 | Hartley, Thomas | 1898 | Hummel, Alfred Roland |
| 1888 | Mann, Harold Hart | | Ure |
| | Parkin, Ernest | | Lodge, Harry Livingstone |
| 1889 | Smith, James Cowlshaw | 1899 | Goodson, Ethel Elizabeth |
| | Cobb, John William | | Grimshaw, Norman |
| 1890 | Crouch, John Peachey | 1900 | Gough, Alfred |
| | Norman, Frank Meade | 1901 | Booth, Meyrick |
| | Peatfield, Albert Edward | 1902 | Armes, Henry Percy |
| 1891 | Dewhirst, Wilfrid Arthur | | Crosland, Percy Field |
| | Liversidge, Will | | Lord, William Ernest |
| | French, James Wilson | 1903 | Hodsman, Henry James |
| | Duncan, John | 1904 | McGill, Ernest Arthur |
| 1892 | White, Arthur Lee | 1905 | Barker, Christopher James |
| | Barber, John Watson | | Watson, James Arthur |

Akroyd Entrance Scholarships

Candidates for these Scholarships must not have been previously registered students of the University, and must be under the age of nineteen years on the 30th of September following the date of examination.

In general there will be offered in each year one or two Scholarships of £40 a year, each tenable for two years, with power of extension. Applications for extension must be sent to the Registrar before the end of the second term.

Women are not eligible to the Akroyd Scholarship.

Akroyd Scholars will be required to pursue such a course of study in the Faculties of Arts, Science, and Technology, as shall, in the opinion of the Senate, constitute an effective preparation for a degree in Science or for a scientific calling.

Akroyd Scholarships are not tenable by students who propose to enter, or who have already entered on a course of study in the Faculty of Medicine, unless they are reading for the B.Sc. degree of the University of Leeds.

The Scholarships will be awarded on the results of the July Matriculation examination, at which special papers may be set on certain subjects. Particulars will be obtainable from the Registrar of the University in December, 1905.

| | | | |
|------|-----------------------------|------|----------------------------|
| 1877 | Bothamley, Charles Herbert | 1884 | Pocklington, Henry Cabourn |
| 1878 | Briggs, William | | Thompson, George Robert |
| | Ingle, Herbert | | Booth, Robert Davis |
| 1879 | Wilson, Albert Edward | 1885 | Duncan, William |
| | Atkinson, Thomas Francis | | Watmough, Benjamin |
| 1880 | Stables, William Herbert | | Dains, Herbert Henry |
| 1881 | Taylor, Arthur | 1886 | Hunt, Tom Harold |
| 1882 | Wright, Joseph | | Ives, James Percy |
| | Allen, Harold Newman | | Sykes, Ernest |
| | Hurtley, William Holdsworth | 1887 | Holmes, Harry Slater |
| | Wright, George Ward | | Booth, Frederick William |
| 1883 | Dibb, John Hustwick | | Horrell, Ernest Charles |
| | Speak, Savannah Johnson | 1888 | Miall, Stephen |
| | Tucker, Clara | | Nicholls, Percy |
| | Hick, Herbert Edward | | Myers, John Ellis |
| | Wilson, Edwin | | Sowry, George Herbert |
| 1884 | Fry, Ernest Bickersteth | 1889 | Porter, John Fletcher |
| | Moore, Ira | | Sunderland, Arthur |
| | Wheelwright, Edwin | | Acott, Richard Harry |
| | Whitfield | | Midgley, Harry |

| | | | |
|------|--------------------------------|------|--------------------------|
| 1890 | Mitchell, Clifford | 1899 | White, Herbert Leslie |
| | Archdeacon, William Henry | 1900 | Scholefield, Fred |
| 1891 | Holt, John Lupton | | Willey, Edward |
| | Halliwell, Edward | 1901 | Radcliffe, Norman Brooke |
| 1892 | Turton, Edward | | Zortman, Israel Hyman |
| | Brown, James Herbert | 1902 | Brown, John Duncan |
| 1893 | Gough, William | | Hollins, Cecil |
| 1894 | Calvert, Harry Thornton | 1903 | Harris, Marks Solomon |
| 1895 | Grocock, Henry Lloyd | | Horsfall, Ronald Smith |
| | Robinson, Harold | 1904 | Davies, Hamilton |
| 1896 | Shepherd, Arthur Burton | | Sinson, Israel Lewis |
| 1897 | Middlemiss, James Ernest | 1905 | Jenkins, Gilbert Ramsden |
| 1898 | Livesey, Charles Edwin Leonard | | Marshall, Francis |
| | | | Riley, Frank |

4. Tenable in the Faculty of Technology

Craven Scholarship

Candidates for this Scholarship must not have been previously registered students of the University and must be under the age of nineteen years on the 30th of September following the date of examination.

The Scholarship is of the annual value of £25, and is tenable by Engineering students for two years, subject to the conditions as to conduct and attendance laid down in the University Calendar. Not less than three-fourths of the value of the Scholarship is to be spent in fees. The balance will be paid to the scholar in cash.

Candidates must have been, previous to the day of examination, resident in the City of Leeds for a period or periods amounting together in the aggregate to at least five years, and be so resident at the time they present themselves for examination.

Candidates will be examined in (1) English Dictation and Composition ; (2) English Language and General Geography ; (3) Mechanics ; (4) Mathematics (Arithmetic ; Algebra, including quadratic equations ; Euclid, books i to iii ; Elementary Trigonometry).

| | | | |
|------|----------------------------|------|------------------------|
| 1888 | Banks, Arthur | 1900 | Anderson, Robert |
| 1890 | Perkin, Herbert | 1901 | Frazer, Edgar Hamilton |
| 1892 | Hammond, Joseph Wetheril | 1903 | Maddison, Wilfred Guy |
| 1894 | Millard, Frederick Stanley | 1905 | No award |
| 1900 | Sturgeon, Robt. Alexander | | |

Tannett-Walker Bursaries

Mr. F. W. Tannett-Walker offers a Bursary of £25 per annum, tenable for three years, to holders of Scholarships or Free Studentships at the Leeds University, who are preparing to follow the profession of an Engineer, under the following conditions:

(1) The recipient must have attended a public elementary school in Hunslet at some period of his school career, although he need not have taken his University Scholarship directly from such school.

(2) He must at the time of his election to the Bursary declare his intention of attending an approved course of education in the University for a period of not less than three complete sessions. This course will, as a rule, be that set out in the University Calendar as required for the Degree of B.Sc. in Engineering of the University, either for an Ordinary or an Honours degree.

Mr. Tannett-Walker offers one such Bursary in each year, so that if an election were made each year, there might be three recipients of these Bursaries in the University at the same time.

In addition to these Bursaries, Mr. Tannett-Walker offers to take into the works of Messrs. Tannett-Walker & Co. Limited, Engineers, Hunslet, the scholar who has passed successfully through his University course, on the same footing as a premium apprentice, without requiring any premium from him, but giving to him the same amount of wages as would be earned by an ordinary apprentice.

These Bursaries will not be awarded on the result of a special examination, but holders of Scholarships and Free Studentships, who have complied with the above conditions, are required to make application for them, by letter addressed to the Vice-Chancellor, as soon as possible after the elections to the Scholarships have been announced.

1900 Anderson, Robert

1904 McGill, Ernest Arthur

5. Tenable in the Department of Medicine**Medical Scholarship**

A Scholarship is offered, consisting of a free admission to the courses of lectures and practical instruction

covered by the composition fee of sixty-four guineas. The Scholarship will be awarded upon the results of the Joint Matriculation examination, on the report of the examiners concerned, to a candidate for the Scholarship who has passed in all the subjects required to be passed by students on entering on a Medical course, and who has signified his intention of entering the University of Leeds as a Medical Student. Names of candidates will be received by the Registrar of the University up to May 1.

Candidates must be under the age of twenty years on the 30th of September following the date of examination.

The successful candidate will be required to enter at the University of Leeds as a student in the Faculty of Medicine, in the October immediately following the examination, to pursue, at the University of Leeds and at the General Infirmary at Leeds, the curriculum for a medical degree in the University of Leeds; and to proceed to such degree. But should the successful candidate desire to take a degree in Science or a fuller course of scientific work, before entering upon his professional studies, he shall give immediate notice of his wish to the Senate, which may, if it so determine, allow his holding of the Scholarship to be postponed for one year only, during which time he shall pursue such course of study at the University as the Senate may authorise.

NOTE. Up to 1905 this Scholarship was restricted to students who had passed the First M.B. examination (Victoria or Leeds), or the Preliminary Scientific examination (London) and was awarded on the results of an examination upon the subjects of the First M.B. examination (Victoria or Leeds).

| | | | |
|------|-----------------------------|------|---------------------------|
| 1889 | Houfton, Ernest Henry | 1897 | Coupland, James Alane |
| 1890 | Callum, Harold Sidney Hill | 1898 | Middlemiss, James Ernest |
| 1891 | Greenwood, Henry Harold | 1899 | Boyle, Alan |
| 1892 | Towse, Walter | 1900 | Edmondson, Watts |
| 1893 | Field, Richard Cullingworth | 1901 | Gough, Alfred |
| 1894 | Turton, Edward | 1902 | Booth, Sydney Herbert |
| 1895 | Gough, William | | Rawlings, Harry |
| 1896 | Radcliffe, Percy Alexander | | Richardson |
| | Hurst | 1903 | Hamilton, William Douglas |

IV. EVENING SCHOLARSHIPS AND EXHIBITIONS

Leeds City Council Evening Class Exhibitions

For particulars of these Exhibitions application should be made to the Secretary, Higher Education Department, Leeds City Education Committee.

Edward Baines Free Scholarships

Ten Scholarships (of an aggregate annual value of £40) are given in teaching and text books. Candidates' names must be sent to the Secretary of the Yorkshire Union of Mechanics' Institutes, South Parade, Leeds, by the last day in August in each year.

The candidates for these Scholarships must have been members of some institution in the Union three months previous to the date of their candidature. They may be of either sex, but no Teachers or Assistant Teachers are admissible. *The Candidates must be in circumstances to require free Scholarships.*

The successful candidates will receive free instruction for one year, and will be provided with necessary text books.

Clothworkers' Company Scholarships for the Textile Industries Department

The Worshipful Company of Clothworkers of the City of London offer, in connection with the Department of Textile Industries in the University of Leeds, six Evening Scholarships, each of the value of £2 2s.

Each Scholarship is tenable for one year. Students holding Evening Scholarships will be required to attend one of the Advanced Evening Classes in the Department of Textile Industries.

Students holding Scholarships are expected to present themselves for examination (in the University) by the City and Guilds of London Technical Institute, in one of the following subjects, viz.: Textile Fabrics—Spinning and Weaving of (a) Wool and Worsted, (b) Cotton, (c) Linen, (d) Silk.

Candidates for Evening Scholarships will be examined in the Processes of Textile Manufacturing and in Elementary Designing

VI. CITY AND COUNTY COUNCIL SCHOLARSHIPS

Scholarships are offered by the Leeds City Council and the County Councils of the North, East, and West Ridings of Yorkshire, tenable at the University of Leeds in common with other Institutions, in scientific and technical subjects, including Agriculture. In the West Riding exhibitions are also offered in Coal Mining, and Free Studentships tenable at the University.

For further information apply as follows :—

For Leeds City Council Scholarships : The Secretary, Higher Education Department, Leeds City Education Committee.

For North Riding Scholarships : The Secretary, County Education Offices, Northallerton.

For East Riding Scholarships : The Clerk, East Riding County Council, Beverley.

For West Riding Scholarships and Free Studentships : The Director, Education Department, County Hall, Wakefield.

VII. FORMER SCHOLARSHIPS, NOW DISCONTINUED**Akroyd and Brown Senior Scholarships**

Formerly part of the income of the Akroyd and Brown Scholarship funds was applied to the maintenance of Senior Scholarships, awarded after examination to registered students of the University, and tenable in the Faculties of Science and Technology, but the Senate resolved on May 15, 1905, to apply such income to the continuance of Scholarships originally awarded as Entrance Scholarships.

Akroyd Senior Scholars

| | | | |
|------|--------------------------|------|---------------------------|
| 1882 | Parkin, Alfred | 1887 | Hastings, Hugh |
| 1883 | Taylor, Arthur | 1888 | Stoney, William Walter |
| 1884 | Wright, Joseph | 1889 | Ingle, Harry |
| 1885 | Speak, Savannah Johnson | 1890 | Miall, Stephen |
| 1886 | Wilks, Stephen Longmore | | Mann, Harold Hart |
| | Butterworth | 1891 | Cobb, John William |
| | Wheelwright, Edwin Whit- | 1892 | Archdeacon, William Henry |
| | field | 1893 | Wise, Julian Stanton |
| | Courtice, George Robert | | Welpton, William Parker |
| | Aulton | | Guthrie, Thomas |

| | | | |
|------|-------------------------|------|-------------------------|
| 1894 | Wilson, Harold Albert | 1898 | Shepherd, Arthur Burton |
| | Haworth, Frederic | 1899 | Hunt, Francis William |
| 1895 | Rigby, William | | Gawler, Robert |
| | King, Herbert | 1900 | Grant, Charles Henry |
| 1896 | Calvert, Harry Thornton | | Thompson, John Thomas |
| | Jowett, Albert | 1901 | Denton, Ernest |
| | Tansley, George Edward | | Gray, Arthur Lambert |
| 1897 | Storr, Bertram Vincent | 1902 | Raper, Henry Stanley |
| | Cooper, Albert Henry | 1903 | Zortman, Israel Hyman |
| 1898 | Grocock, Henry Lloyd | 1904 | Phillipson, Abram |

Brown Senior Scholars

| | | | |
|------|-----------------------------|------|----------------------------|
| 1880 | Ingle, Herbert | 1892 | Davis, Frederick William |
| | Passavant, Laura Maude | | Daniel |
| 1881 | Wilson, Albert Edward | | Marsland, Roland |
| | Armstrong, Wilhelmina | 1893 | Dawson, Harry Medforth |
| | Maria | | Motley, Parker |
| 1882 | Senior, William Ottè | 1894 | Eurich, Hermann Oskar |
| | Stables, William Herbert | 1895 | Guthrie, Thomas |
| 1883 | Allen, Edgar Johnson | 1896 | Dalton, John Edwin |
| | Ahrons, Ernest Leopold | 1897 | Broadbent, Francis James |
| 1884 | Potter, Arthur Edward | | Skirrow, Frederick William |
| | Schmitz, Herman Emil | 1898 | Findlay, Mary Grace |
| 1885 | Dibb, John Hustwick | 1899 | Whiteley, Charles Edward |
| | Hurtley, William Holdsworth | 1900 | Chapman, Fitzroy Tozer |
| 1886 | Pocklington, Henry Cabourn | | Unwin, Ernest Ewart |
| | Thompson, George Robert | 1901 | Hummel, Alfred Roland |
| 1887 | Duncan, William | | Ure |
| | Thorpe, Walter | | Stoddard, Arthur Askwith |
| 1888 | Sykes, Ernest | 1902 | Dell, John Alexander |
| 1889 | Watson, Frank Leslie | | Goodson, Ethel Elizabeth |
| 1890 | Nicholls, Percy | 1903 | Calam, Harold |
| | Myers, John Ellis | | |

VIII. PRIZES

Gladstone Memorial Prize

The Committee of the Gladstone Liberal Memorial Prize Fund have established Gladstone Memorial Prizes to be given in books at various Universities and Colleges for special proficiency in Political Science and Economics. An annual prize of £5 has been offered to and accepted by the Council of the University, and will be awarded under the following conditions:

1. The prize will be awarded for an Essay on some subject connected with History or Political Science or Economics.

2. It will be open to competition among all students of Day Classes of the University who are in attendance upon University Lectures for not less than four hours per week. The Essays sent in are to be anonymous, and are to bear a motto.

3. No student who has once obtained the Prize may compete a second time.

The Essay must be sent in to the Professor of History not later than the end of September.

1902 Savage, Hilda, B.A.

1903 Davis, William Hathaway,
B.A.

Leblanc Medal

The Leblanc Memorial Committee presented the Victoria University with a portion of the surplus from the fund raised in France for the erection of a statue of the distinguished chemist, Nicolas Leblanc, the amount to be devoted to the encouragement of the study of Chemistry. On the foundation of a separate University in Leeds a share of the fund was vested in the University of Leeds.

A bronze medal will be awarded to the candidate in the Final examination in the Honours School of Chemistry, who, having been placed in the first or second class, shall be recommended by the Examiners for distinction in Technological Chemistry or Metallurgy.

1891 Ingle, Harry

1898 Skirrow, Frederick William

1892 Mann, Harold Hart

1905 Davies, Arthur Hugh

Thorp Prizes in Forensic Medicine and Hygiene

These prizes, amounting altogether in value to the sum of fifteen pounds, were instituted by the late Dr. Disney L. Thorp, one of the original founders of the Leeds School of Medicine, and are awarded at the close of every Summer Session, in accordance with such regulations as may be made from time to time.

In Forensic Medicine

1900 Gough, William, B.Sc.

1903 No award

1901 Cundall, Edward

1904 Parkinson, Alfred Howard

1902 Boyle, Alan

In Public Health

1900 Radcliffe, Adolphus Harold

1903 Legge, James Huntly

1901 Braithwaite, Leonard Ralph

1904 No award

1902 Tomlin, Herbert

Thorp Prize Essay

A sum of fifteen pounds is offered every three years for an essay or original research on some subject connected with Forensic Medicine or Public Health. The competitors must have received all their medical education at the University of Leeds, and must have completed it and received their degree or diploma not more than three years before the competition. The scope and nature of the essay or research may be either physical, chemical, microscopical, physiological, clinical or statistical, but its subject must have received the approval of the Board of the Faculty of Medicine one year before the award is made. The successful essay or paper with the drawings and specimens by which it may be illustrated will become the property of the University. The prize will next be awarded in October, 1907.

Hardwick Prize in Clinical Medicine

This prize, of the value of ten pounds, is given annually on a competition which begins on the third Monday in May. Candidates must have been students in the School of Medicine of the University of Leeds for not less than three winter and two summer sessions; they must be attending the medical practice of the Leeds Infirmary; and they must have held or be then holding the office of Clinical Clerk in that Institution.

| | | | |
|------|--------------------------|------|-------------------------|
| 1900 | Willans, Charles Rudolph | 1903 | Matthews, Crawford Taft |
| 1901 | Saville, Edwin | 1904 | Tomlin, Herbert |
| 1902 | Coupland, James Alane | 1905 | Gough, Alfred |

McGill Prize in Clinical Surgery

This prize, of the value of ten pounds, is given annually on a competition which takes place in the month of May. Candidates must be students in the School of Medicine of the University of Leeds who have not at the time of the examination entered on their sixth winter session, and who have held at the Leeds Infirmary the following appointments:—Casualty dresser, out-patient and in-patient dresser, ophthalmic dresser, in-patient and out-patient medical clerk, post-mortem clerk, and gynæcological clerk.

| | | | |
|------|-----------------------|------|----------------------------|
| 1900 | Gough, William | 1903 | Braithwaite, Leonard Ralph |
| 1901 | Keeling, Hugh Neville | 1904 | Brierley, Wilfred Edward |
| 1902 | Coupland, James Alane | | |

Scattergood Prize

This prize, instituted in memory of the first Dean of the Medical Department, Yorkshire College, is awarded annually to the most distinguished student in the class of Obstetrics. The value of the prize is five pounds.

| | | | |
|------|-----------------|------|--------------------------|
| 1900 | Acomb, John | 1903 | Smailes, William Herbert |
| 1901 | Coates, Richard | 1904 | No award |
| 1902 | Tomlin, Herbert | | |

Gold Medal

A Gold Medal of the value of ten pounds, formerly presented by the Treasurer, and since 1901 by the Faculty of the Infirmary, is awarded on the collated results of the prize examinations in the following subjects :—(1) Surgery ; (2) Medicine ; (3) Pathology ; (4) Obstetrics (Scattergood Prize) ; (5) Forensic Medicine (Thorp Prize) ; (6) Clinical Medicine (Hardwick Prize) ; (7) Clinical Surgery (McGill Prize) ; (8) Gynæcology ; (9) Public Health (Thorp Prize) ; (10) Pharmacology and Therapeutics ; (11) Practical Surgery ; (12) Ophthalmology ; (13) Mental Diseases. To qualify for the Gold Medal the candidate must have attended all his final classes, *i.e.*, must have completed and not have exceeded his fifth year of study, and must present four prizes or their equivalent. Should a student desire to spend an additional year antecedent to the study of the subjects in part ii in preparing for a Science degree, Honours, or the Primary Fellowship R.C.S. Eng., such time need not be counted as one of the five years. Of these prizes one must be either the Surgery or the McGill Prize, and another either the Medicine or the Hardwick Prize.

| | | | |
|------|-----------------------|------|----------|
| 1900 | Gough, William, B.Sc. | 1903 | No award |
| 1901 | Saville, Edwin | 1904 | No award |
| 1902 | Coupland, James Alane | | |

Silver Medal

The Junior Medal (Silver) is awarded upon the results of the prize examinations in the following subjects :—(1) Junior Anatomy ; (2) Senior Anatomy ; (3) Physiology ; (4) Practical Physiology (including the experimental portion of part ii) ; (5) Materia Medica ; that is to say, upon the subjects of the second Winter, second Summer, and third Winter in the "Normal Course." To qualify, the candidate must obtain two prizes or their equivalent.

| | | | |
|------|----------------------------|------|---------------|
| 1899 | Coupland, James Alane | 1903 | Gough, Alfred |
| 1900 | Braithwaite, Leonard Ralph | 1904 | No award |
| 1901 | Boyle, Alan | | |

Class Prizes

Book prizes and Certificates of Honour are given in the various classes in the School of Medicine at the end of each session.

FELLOWS, 1905

| | Date of Election. | |
|---|-------------------|--------------------------|
| <i>University Fellow in English Language and Literature</i> ... | 1905 | Waterhouse, Osborn, B.A. |
| <i>University Fellow in Chemistry</i> ... | 1905 | Marshall, Joseph, B.Sc. |

SCHOLARS, 1905

| | Date of Election | |
|----------------------------------|------------------|-----------------------------------|
| <i>University (English)</i> ... | 1905 | Holmes, Carrie, B.A. |
| " (<i>Modern Languages</i>) | 1905 | Gunnell, Doris, B.A. |
| " " | 1905 | Edwards, Maud Mary, B.A. |
| " (<i>Chemistry</i>) | 1905 | Armes, Henry Percy, B.Sc. |
| " (<i>Engineering</i>) | 1905 | Gregory, Frederick Maurice, B.Sc. |
| 1851 <i>Exhibition</i> ... | 1903 | Gaunt, Rufus, B.Sc. |
| " " ... | 1904 | Raper, Henry Stanley, B.Sc. |
| " " ... | 1905 | Zortman, Israel Hyman |
| <i>Salt</i> ... | 1904 | Landman, Samuel |
| <i>Leighton</i> ... | 1904 | Carlton, George Westerdale |
| " | 1904 | Maddison, Wilfred Guy |
| " | 1904 | Thorp, George |
| " | 1905 | Lacy, Arthur |
| " | 1905 | Vernon, Edgar |
| <i>Clothworkers' Textile</i> ... | 1904 | Hart, Harry Leatham |
| " " ... | 1905 | Bradley, Jim |
| " " ... | 1905 | Broadbent, Lees |
| " " ... | 1905 | Mills, James |
| <i>Dyeing</i> | 1905 | King, Percival Edgar |
| " | 1905 | Crosland, Percy Field |
| <i>Leeds City Council</i> ... | 1903 | Klein, Harris |
| " " ... | 1904 | Crowther, William Edmund |
| " " ... | 1905 | Simpkiss, Nellie |
| " " ... | 1905 | Webster, Herbert William |

| | | | | |
|---------------------------------|-----|-----|------|----------------------------|
| <i>Wheatley</i> | ... | ... | 1904 | Scholes, Katharine Louise |
| " | ... | ... | 1905 | Frank, Dorothea Ethel |
| <i>Brown Entrance</i> | ... | ... | 1902 | Armes, Henry Percy |
| " | " | ... | 1902 | Crosland, Percy Field |
| " | " | ... | 1903 | Hodsman, Henry James |
| " | " | ... | 1904 | McGill, Ernest Arthur |
| " | " | ... | 1905 | Barker, Christopher James |
| " | " | ... | 1905 | Watson James Arthur |
| <i>Akroyd Entrance</i> | ... | ... | 1903 | Horsfall, Ronald Smith |
| " | " | ... | 1904 | Davies, Hamilton |
| " | " | ... | 1904 | Sinson, Israel Lewis |
| " | " | ... | 1905 | Jenkins, Gilbert Ramsden |
| " | " | ... | 1905 | Marshall, Francis |
| " | " | ... | 1905 | Riley, Frank |
| <i>Emsley</i> | ... | ... | 1904 | Brook, Annie |
| " | ... | ... | 1905 | Leslie, May Sybil |
| <i>Baines</i> | ... | ... | 1904 | Hargreaves, Edith |
| " | ... | ... | 1905 | Christie, John Hugh |
| <i>Tannett-Walker Bursary</i> | ... | ... | 1904 | McGill, Ernest Arthur |
| <i>Leeds C.C. Free Students</i> | ... | ... | 1903 | Carlton, George Westerdale |
| " | " | ... | 1903 | Findlay, Sarah Kennedy |
| " | " | ... | 1903 | Illingworth, Maria Emma |
| " | " | ... | 1904 | Cross, William Ernest |
| " | " | ... | 1904 | Daykin, John Bertram |
| <i>Medical</i> | ... | ... | 1902 | Booth, Sydney Herbert |
| " | ... | ... | 1902 | Rawlings, Harry Richardson |
| " | ... | ... | 1903 | Hamilton, William Douglas |
| <i>Infirmery</i> | ... | ... | 1901 | Rawlings, Harry Richardson |
| " | ... | ... | 1902 | Pickles, William Norman |
| " | ... | ... | 1903 | Carlton, George Westerdale |
| <i>Clothworkers' Evening—</i> | | | | |
| <i>Second year</i> | ... | ... | 1905 | Best, James Walter |
| " | " | ... | 1905 | Garbutt, Edward Culpan |
| " | " | ... | 1905 | North, Charles Clifford |
| " | " | ... | 1905 | Wilkinson, Edward William |
| <i>Third year</i> | ... | ... | 1905 | Coldwell, Frank Kenyon |
| " | " | ... | 1904 | Sykes, Harry |

GRADUATES OF THE UNIVERSITY OF LEEDS

Honorary Graduates

Doctor of Laws

- | | |
|---|---|
| 1904 Lady Frederick Cavendish The Archbishop of York The Duke of Devonshire The Earl of Harewood Viscount Cross Lord Herries Lord Allerton The Right Honourable Arthur Herbert Dyke Acland Sir Francis Sharp Powell, Bart., M.P. | 1904 Sir John Barran, Bart. (since deceased) Sir Charles Hubert Hastings Parry, Bart. Sir Alexander Campbell Mackenzie Sir Charles Villiers Stanford Sir Edward Elgar Sir William Bousfield Charles George Milnes Gaskell Henry Walford Davies Charles Wood |
|---|---|

Doctor of Letters

- | | |
|--|---|
| 1904 Sir Albert Kaye Rollit, M.P. Alfred Austin | 1904 Andrew Martin Fairbairn Joseph Wright |
|--|---|

Doctor of Science

- | | |
|---|---|
| 1904 The Earl of Rosse Lord Kelvin Sir Isaac Lowthian Bell, Bart. (since deceased) Sir James Kitson, Bart., M.P. Sir William Henry Broad- bent, Bart. Sir Arthur William Rücker | 1904 Thomas Edward Thorpe Claudius Galen Wheelhouse Jonathan Hutchinson Thomas Pridgin Teale John Hughlings Jackson Louis Compton Miall Tempest Anderson Arthur William Mayo Robson |
|---|---|

Graduates

Faculty of Arts (including Commerce and Law)

Master of Arts

- | | |
|---|--|
| 1905 Briggs, Maude 1905 Robinson, Ethel Margaret 1905 Savage, Hilda | 1905 Scholes, Thomas Wilfred 1905 Wilson, George William. |
|---|--|

Bachelor of Arts

| | | | |
|------|---|------|-------------------------------------|
| 1905 | Armitage, John Henry | 1905 | Holmes, Ethel |
| 1905 | Atkinson, Janet | 1905 | Howarth, Fred |
| 1905 | Barras, Elsie Clara | 1905 | Hurst, Thomas Ockerby |
| 1905 | Bishop, Sarah Ellen | 1905 | Jowett, Jessie |
| 1905 | Blackburn, Elizabeth Maria | 1905 | Kitchener, Ernest Edward |
| 1905 | ¹ Braithwaite, William Dalston | 1905 | Lister, Martha |
| 1905 | Brigham, Fanny Muriel | 1905 | Maccoby, Sarah Judith |
| 1905 | Burgess, Lillie | 1905 | Mitchell, Myra |
| 1905 | Chard, Edith Annie | 1905 | Mountain, Eliza |
| 1905 | Conyers, Hilda | 1905 | Naylor, Nellie Noble |
| 1905 | Dalton, John Edwin | 1905 | Neville, Ethel May |
| 1905 | Davis, William Hathaway | 1905 | North, Fanny Caroline |
| 1905 | Denby, Maurice | 1905 | Owen, Florence |
| 1905 | Dickinson, Frederick Walter | 1905 | Parnaby, Margaret Ellen (Hudson) |
| 1905 | Dobson, Constance | 1905 | Porritt, Florence Mary |
| 1905 | Easterfield, Thomas Hill | 1905 | Raven, Hilda Mary |
| 1905 | ² Edwards, Maud Mary | 1905 | Ridge, William Sheldon |
| 1905 | Elliott, Spencer Hayward | 1905 | Robinson, Lilian Dorothea |
| 1905 | Fairbrother, Jessie | 1905 | Rogers, Hannah |
| 1905 | Foggitt, Emma | 1905 | Scruton, Harriett Annie |
| 1905 | Fox, Arthur Cunliffe | 1905 | Sheard, Dora |
| 1905 | Frank, Sarah | 1905 | Sheard, Mary Beatrice |
| 1905 | Garside, Bertha | 1905 | Skinner, Mabel |
| 1905 | Gascoigne, Evelyn May | 1905 | Turner, Harriet Marie |
| 1905 | Gray, Arabella Hyde Janet Ethel | 1905 | Walker, Ada |
| 1905 | Gray, Catherine Isabella | 1905 | Walker, Julia Beatrice |
| 1905 | ² Gunnell, Doris | 1905 | Wallace, Harry Bruce |
| 1905 | Hepworth, Frank | 1905 | ³ Waterhouse, Osborn |
| 1905 | Hepworth, Minnie | 1905 | Watson, George Alston |
| 1905 | Hield, Esther Margaret | 1905 | White, Ethel |
| 1905 | Hirst, Miriam | 1905 | Wilson, Florence |
| 1905 | Hitcham, Charlotte Elsie | 1905 | Wilson, Selina Ethel |
| 1905 | Holgate, Jane | 1905 | Wood, Jessie Graham |
| 1905 | ² Holmes, Carrie | 1905 | Wrigley, Isaac |

Bachelor of Laws

| | | | |
|------|-----------------------|------|--------------|
| 1905 | Lee, Edmund | 1905 | Sykes, James |
| 1905 | Robson, William Newby | | |

Faculties of Science and Technology

Doctor of Science

| | | | |
|------|--------------|------|---------------------------------------|
| 1905 | Ingle, Harry | 1905 | ⁴ Varley, William Mansergh |
|------|--------------|------|---------------------------------------|

¹ Headmaster of Ulster Provincial School, Lisburn.² University Scholar, 1905.³ University Fellow, 1905.⁴ Assistant Professor of Physics in the Heriot Watt College, Edinburgh

Master of Science

| | | | |
|------|--|------|---|
| 1905 | Agar, Herbert William | 1905 | Jackson, Harry Percival |
| 1905 | Andrews, William Allen | 1905 | ⁶ Jowett, Albert |
| 1905 | ¹ Beaumont, Roberts | 1905 | ⁷ Kendall, Percy Fry |
| 1905 | Briggs, Samuel Henry | 1905 | King, Herbert |
| | Clifford | 1905 | Kirby, Frederick Oscar |
| 1905 | ² Brown, Walter Henry | 1905 | ⁸ Lewis, William Bevan |
| 1905 | Calvert, Harry Thornton | 1905 | ⁹ Littlewood, Harry |
| 1905 | Cooper, Albert Henry | 1905 | Motley, Parker |
| 1905 | Copley, Frederick | 1905 | Norminton, Harold |
| 1905 | Denison, Robert Beckett | 1905 | ¹⁰ Parr, George Dudley |
| 1905 | ³ Dwerryhouse, Arthur Richard | | Aspinall |
| 1905 | Edwards, Ernest John | 1905 | ¹¹ Procter, Henry Richardson |
| 1905 | Gawler, Robert | 1905 | ¹² Raper, Henry Stanley |
| 1905 | ⁴ Goodman, John | 1905 | ³ Skirrow, Frederick William |
| 1905 | Grant, Charles Henry | 1905 | Thompson, John Thomas |
| 1905 | ⁶ Green, Arthur George | 1905 | ¹³ Walker, Henry Secker |
| 1905 | Hammerton, Jonas | 1905 | ¹⁴ Whiteley, Charles Edward |
| 1905 | Hefford, Charles Nelson | 1905 | ¹⁶ Wright, Charles James |
| 1905 | Hummel, John James | | |

Bachelor of Science

| | | | |
|------|--|------|-------------------------|
| 1905 | Ackroyd, John Prest | 1905 | Broadhead, James Arthur |
| 1905 | Allen, Lilian | 1905 | Brook, Harry |
| 1905 | Appleyard, John Henry Ross | 1905 | Bulman, John Arthur |
| 1905 | Armes, Henry Percy | 1905 | Burgess, William Ernest |
| 1905 | Barlow, Percival Smith | 1905 | Calam, Harold |
| 1905 | Barton, Edith Beatrice | 1905 | Cobb, John William |
| 1905 | Bennett, Hugh Garner | 1905 | Coxon, Lawrence Adams |
| 1905 | Booth, Meyrick | 1905 | Craig, David |
| 1905 | Boyd, Simeon | 1905 | Crawshaw, Annie |
| 1905 | Brier, Albert | 1905 | Crosfill, John |
| 1905 | Briggs, William | 1905 | Cunningham, Jean Orme |
| 1905 | ¹⁶ Brittain, Charles Edward | 1905 | Davies, Arthur Hugh |

¹ Professor of Textile Industries, University of Leeds.

² Clinical Lecturer in Surgery, University of Leeds.

³ Assistant Lecturer in Geology, University of Leeds.

⁴ Professor of Engineering, University of Leeds.

⁵ Professor of Dyeing and Tintorial Chemistry, University of Leeds.

⁶ Principal of the Central Pupil Teachers' Classes, Bury.

⁷ Professor of Geology, University of Leeds.

⁸ Lecturer on Mental Diseases, University of Leeds.

⁹ Lecturer on Practical and Operative Surgery, University of Leeds.

¹⁰ Lecturer on Electrical Engineering, University of Leeds.

¹¹ Professor of Chemistry of Leather Manufacture, University of Leeds.

¹² Principal of the Pupil Teachers' Centre, Batley.

¹³ Lecturer on Ophthalmology and Otology, University of Leeds.

¹⁴ Assistant Lecturer and Demonstrator in Chemistry, University of Leeds.

¹⁵ Professor of Obstetrics, University of Leeds.

¹⁶ Headmaster of Normanton Grammar School.

| | | | |
|------|---|------|-------------------------------------|
| 1905 | Davies, Ivor Parry | 1905 | Livesey, Charles Edwin |
| 1905 | ¹ Dawson, Harry Medforth | | Leonard |
| 1905 | Denbigh, George James | 1905 | Lodge, Harry Livingston |
| 1905 | Dickinson, Cyril | 1905 | Lord, William Ernest |
| 1905 | Dudley, James | 1905 | ⁶ Lowson, William |
| 1905 | Ellis, James John | 1905 | Manasseh, Antonius Joseph |
| 1905 | Everett, James Herbert | 1905 | Marriner, William Wright |
| 1905 | Fearnley, Lewis William | 1905 | Marsden, Ernest Vane |
| | Knapton | 1905 | Marshall, Herbert |
| 1905 | Finn, Cornelius Philip | 1905 | ⁷ Marshall, Joseph |
| 1905 | Forsyth, Christina Brand | 1905 | McCandlish, Douglas |
| 1905 | ⁸ Gaut, Robert Charles | 1905 | McCrae, Mary Walbrand |
| 1905 | Goddard, Clara Annie | | (Bruce) |
| 1905 | Gomersall, Ernest Edward | 1905 | Mellor, Fred |
| 1905 | Grant, Frederick Ernest | 1905 | Morris, Florence Annie |
| 1905 | Greenwood, Arthur | 1905 | Morrison, James Alexander |
| 1905 | ⁸ Gregory, Frederick Maurice | | Shepherd |
| 1905 | Gunter, John Henry | 1905 | Morton, Dora |
| 1905 | Haler, Percy James | 1905 | Moss, Charles Edward |
| 1905 | Hampshire, Florence | 1905 | Murphy, Harold Newton |
| | Elizabeth | 1905 | Nicholls, Percy |
| 1905 | Harding, Oswald Jackson | 1905 | Oddy, Annie Maude |
| 1905 | Hardy, Joseph | 1905 | Owen, Samuel Joseph |
| 1905 | Hartley, Percival | 1905 | Peacock, Arthur |
| 1905 | ⁴ Hefford, George Winfield | 1905 | Phillipson, Abram |
| 1905 | Heptinstall, Richard | 1905 | Pocklington, Henry Cabourn |
| 1905 | Hield, Mary Elsie | 1905 | Rayner, Herbert Emmett |
| 1905 | Hilary, Daisy | 1905 | Scholefield, Fred |
| 1905 | Hirst, Henry Reginald | 1905 | Scouller, Walter Daly |
| 1905 | Hobart, John William | 1905 | Scruton, Harold Adams |
| 1905 | Hobley, Robert Arthur | 1905 | Shacksnovis, Reuben |
| 1905 | Hummel, Alfred Roland Ure | 1905 | ⁸ Shorter, Sydney Alfred |
| 1905 | Hunt, Francis William | 1905 | Skirrow, Benjamin Beck |
| 1905 | Hunter, Herbert | 1905 | Slater, John Henry |
| 1905 | Hutchinson, Florrie | 1905 | Smith, Henry Archbold |
| 1905 | Hutton, Wilfred | 1905 | Sowerbutts, Edith Utley |
| 1905 | ⁶ Ingle, Herbert | 1905 | Standing, Edwin Mortimer |
| 1905 | Johnson, John William | 1905 | Stead, Frank Cawthron |
| | Haigh | 1905 | Stewart, Tom |
| 1905 | Kay, Douglas John | 1905 | Studley, Charles Wilcock |
| 1905 | Kaye, Edward Percy | 1905 | Taylor, Francis |
| 1905 | Knowles, George William | 1905 | Thompson, Hubert |
| 1905 | Langstaff, Bilton | 1905 | Thorp, Walter |

1 Lecturer on Physical Chemistry, University of Leeds.

2 Assistant Lecturer in Agriculture, Lancashire C.C.

3 University Scholar, 1905.

4 County Science Master to the Staffordshire County Council.

5 Agricultural Chemist to the Transvaal Government.

6 Assistant Lecturer and Demonstrator in Chemistry, University of Leeds.

7 University Fellow, 1905.

8 Assistant Lecturer and Demonstrator in Physics, University of Leeds.

| | | | |
|------|----------------------------------|------|-----------------------|
| 1905 | Tiffany, Frank | 1905 | White, Robert George |
| 1905 | Tiffany, Joseph Edgar | 1905 | White, William Henry |
| 1905 | Turner, Florence Mary | 1905 | Whitehead, Pollie |
| | Beatrice | 1905 | Whittaker, Croyden |
| 1905 | ¹ Unwin, Ernest Ewart | | Meredith |
| 1905 | Wagstaffe, George William | 1905 | Wilson, Frances Annie |
| 1905 | Walbank, Wilfrid Stephen | 1905 | Wise, Julian Stanton |
| 1905 | Walker, Joshua | 1905 | Wood, Margaret |
| 1905 | Warmington, Edith | 1905 | Zortman, Israel Hyman |
| 1905 | Whaley, James | | |

Faculty of Medicine

Doctor of Medicine

| | | | |
|------|---------------------------|------|----------------|
| 1905 | Parkinson, Arthur Stanley | 1905 | Turton, Edward |
| 1905 | Stoney, William Walter | | |

Bachelor of Medicine and Bachelor of Surgery

| | | | |
|------|------------------------------|------|----------------------------|
| 1905 | Anderson, William Jenkins | 1905 | Lister, Thomas Edmund |
| | Webb | 1905 | Mackenzie, Alexander |
| 1905 | Bailey, Fred | 1905 | Macvean, Herbert James |
| 1905 | Birtwhistle, Frederick Percy | 1905 | Maffin, Harry |
| | Hewetson | 1905 | Manknell, Arthur |
| 1905 | Braithwaite, Leonard Ralph | 1905 | Matthews, Crawford Tait |
| 1905 | Brierley, Wilfrid Edward | 1905 | Moorhouse, Charles Herbert |
| 1905 | Broadley, John | 1905 | Reed, John Arthur |
| 1905 | Brown, Henry | 1905 | Seaton, Douglas |
| 1905 | Cundall, Edward | 1905 | Smailes, William Herbert |
| 1905 | Darlow, Francis | 1905 | Smith, Charles Nixon |
| 1905 | Deane, Arthur Maslen | 1905 | Spink, Ernest William |
| 1905 | Dixon, Robert Garside | 1905 | Stansfield, Harry |
| 1905 | Eames, Charles William | 1905 | Stott, William Atkinson |
| 1905 | Fearnley, Harold | 1905 | Suggit, Bertram |
| 1905 | Gough, Alfred | 1905 | Todd, Aldred Bertram |
| 1905 | Greaves, Frederick William | | Slingsby |
| | Marshall | 1905 | Tomlin, Herbert |
| 1905 | Greenwood, Charles Henry | 1905 | Walker, Melville George |
| 1905 | Hayes, Frederick William | | Leslie |
| 1905 | Hopton, Ralph | 1905 | Wells, George Lee |
| 1905 | Hustler, George Herbert | 1905 | Whalley, Frederick |
| 1905 | Kellett, Alfred Featherstone | 1905 | Wilks, Stephen Longmore |
| 1905 | Ladell, Robert George Mac- | | Butterworth |
| | donald | 1905 | Willans, Charles Rudolph |
| 1905 | Legge, James Huntly | | |

¹ Demonstrator in Biology, University of Leeds.

DIPLOMAS (UNIVERSITY OF LEEDS)**Education**

- 1905 Barton, Edith Beatrice, B.Sc.

Commerce

- 1904 Whiting, John Roland

Mechanical Engineering

- 1905 Wharton, John

Electrical Engineering

- 1904 Foulds, John Rhodes
 1905 Chippindale, Isaac Murray
 Hamilton, James

Coal Mining

- 1904 Frazer, Edgar Hamilton
 Paterson, George Stewart
 Willey, Edward

Leather Manufacture

- 1904 Casaburi, Vittorio
 Doikawa, Saichiro
 Prévôt, Jules Mathieu

Certificates of Proficiency (Yorkshire College)**Engineering**

- | | | | |
|------|--|------|--|
| 1887 | Marriner, William Wright (<i>m</i>) | 1897 | Child, Francis (<i>m, e</i>) |
| | Parkin, Frederick William (<i>c, m</i>) | 1898 | Broadbent, Francis James (<i>c, m</i>) |
| 1890 | Sykes, Ernest (<i>c, m</i>) | | Day, George James (<i>m</i>) |
| 1891 | Nicholls, Percy (<i>c, m</i>) | 1898 | Wales, William Arthur (<i>m</i>) |
| | Watson, Frank Leslie (<i>c, m</i>) | 1901 | Chapman, Fitzroy Tozer (<i>e</i>) |
| 1893 | Marsland, Roland (<i>m</i>) | | McBretney, Walter (<i>e</i>) |
| 1894 | Firth, Harold William (<i>e</i>) | | Wood, William Wellesley (<i>e</i>) |
| | Tillotson, Fred (<i>e</i>) | 1902 | Pearson, Robert John Addi- son (<i>e</i>) |
| 1895 | Eurich, Herman Oskar (<i>m, e</i>) | 1903 | Ingleby, Henry Stockdale (<i>e</i>) |

c Certificate in Civil Engineering.*m* Certificate in Mechanical Engineering.*e* Certificate in Electrical Engineering.**Textile Industries**

- 1894 Sawyer, Edgar 1896 Barker, Alfred Edward

Dyeing

| | | | |
|------|--------------------------|------|---------------------------|
| 1888 | Booth, Robert Davis | 1898 | Pilgrim, Julius Aldred |
| | Briggs, Harold Midwood | | Wood, Percival John |
| 1892 | Sunderland, Arthur | 1899 | Newbury, Frederick George |
| 1893 | Carruthers, Walter Scott | 1900 | Horsfall, Louis Hubert |
| 1894 | Cope, Frank | | Wilkinson, Edward John |
| 1895 | Pate, Lewis | | |

Leather Industries and Chemistry

1900 Alan Guthrie

Leather Manufacture

| | | | |
|------|---------------------------|------|--------------------------|
| 1900 | Holmes, Harold Edwin | 1904 | Brown, Wallace |
| | Broadhead, William Edward | | Chadwick, Jesse |
| 1902 | Borghstijn, Adrianus | | Foulds, George Croft |
| | Jacobus | | Speeden, William Knowles |
| | Greatrex, Gilbert | | |

Agriculture

| | | | |
|------|------------------|------|--------------------------|
| 1896 | Popple, Lawrence | 1898 | Hinchcliff, Joseph Henry |
| 1897 | Cowling, Ralph | | |

**LEEDS GRADUATES OF VICTORIA
UNIVERSITY¹**

Faculty of Arts

Master of Arts

| | | | |
|------|-------------------------------|------|---|
| 1899 | Cleashy, Mabel | 1900 | ³ Priestley, Albert Weston, B.Sc. |
| 1900 | ² Hartley, Harold | | |
| 1903 | Hodgson, Charles Edward | 1902 | Scholes, Thomas Wilfrid |
| 1900 | Hornby, George Goodall | 1894 | Stables, William Herbert |
| 1902 | Horsfall, Francis Rodgers | 1904 | Stevenson, Ethel Mary |
| 1899 | James, Joseph Henry, LL.B. | 1898 | Stuart, Wilson, B.Sc. |
| 1902 | Marshall, Lizzie Backhouse | 1896 | Taylor, Frank Edward, M.Sc., M.B. |
| 1903 | Melville, Ellen Louisa | 1904 | Wynne, Arnold |

Bachelor of Arts

| | | | |
|------|------------------|------|----------------------------|
| 1904 | Airey, Millicent | 1903 | Barras, Elsie Clara |
| 1896 | Anderson, John | 1896 | Bishop, Sarah Ellen |
| 1898 | Ashworth, Norman | 1902 | Bradley, Florence Margaret |
| 1904 | Atkinson, Janet | 1901 | Briggs, Maude |

¹ Degrees obtained in 1904 were conferred by the Victoria University of Manchester.

² H.M. Assistant Inspector of Schools.

³ Inspector of Schools to the East Riding Education Committee.

| | | | |
|------|---------------------------------------|------|------------------------------|
| 1902 | Burgess, Lillie | 1904 | Mitchell, Myra |
| 1897 | Burley, Leo Le Gay | 1902 | North, Fanny Caroline |
| 1897 | Chard, Edith Annie | 1899 | Oliver, Lottie (Mrs. Sunman) |
| 1903 | Davis, William Hathaway | 1903 | Owen, Florence |
| 1904 | Denby, Maurice | 1899 | Parnaby, Harry |
| 1900 | Dixon, Annie | 1901 | Phillipson, Coleman |
| 1899 | Dobson, Constance | 1899 | Porritt, Florence Mary |
| 1904 | Dodgson, Sarah Alice | 1902 | Porteous, Geraldine Alberta |
| 1904 | Elliott, Spencer Hayward | 1900 | Precious, Julia Hopper |
| 1903 | Fairbrother, Jessie | 1904 | Raven, Hilda Mary |
| 1903 | Findlay, George Hindson | 1897 | Ridge, William Sheldon |
| 1904 | Fisher, Frederick Broughton | 1902 | Rigby, William, B.Sc. |
| 1902 | Garside, Bertha | 1896 | Rigg, Fred |
| 1897 | Gray, Arabella Hyde Janet Ethel | 1898 | Robinson, Elizabeth Clare |
| 1904 | Gray, Catherine Isabella | 1902 | Robinson, Ethel Margaret |
| 1898 | Hainsworth, Frederick | 1902 | Savage, Hilda |
| 1893 | Harvey, Thomas Edmund | 1903 | Scruton, Harriett Annie |
| 1904 | Hepworth, Frank | 1904 | Scruton, Kate Ellen |
| 1902 | Hepworth, Minnie | 1899 | Sheard, Mary Beatrice |
| 1899 | Hield, Esther Margaret | 1904 | Skinner, Mabel |
| 1903 | Hill, Mabel | 1898 | Smith, Lillie |
| 1898 | Holdsworth, Jennie | 1904 | Stapleton, Arthur Leonard |
| 1904 | Holgate, Jane | 1902 | Steele, Lily Henly |
| 1902 | Holmes, Ethel | 1901 | Swaine, George Arthur |
| 1896 | Howarth, Fred | 1900 | Walker, Ada |
| 1901 | Hudson, Margaret Ellen (Mrs. Parnaby) | 1902 | Walker, Julia Beatrice |
| 1892 | Hurst, Thomas Ockerby | 1903 | Wallhead, Elsie Adeline |
| 1903 | Johnson, Florence Annie | 1904 | Waterhouse, Osborn |
| 1904 | Kitchener, Ernest Edward | 1895 | Webb, Walter Herbert |
| 1904 | Landman, Samuel | 1903 | White, Ethel |
| 1904 | Linforth, Edith Mary Elizabeth | 1904 | Whitlock, Percy Oddie |
| 1899 | Lister, Martha | 1903 | Whitlow, John Penrose |
| 1903 | Mann, William Edward | 1901 | Wilson, Florence |
| 1903 | McKeand, Maggie Woodrow | 1898 | Wilson, George William |
| 1892 | Miall, Winifred (Mrs. H. W. T. Wager) | 1904 | Wilson, Mary Gertrude |
| | | 1903 | Wood, Jessie Graham |

Faculty of Science

Doctor of Science.

1904 Varley, William Mansergh

Master of Science

| | | | |
|------|-------------------------------------|------|-------------------------------|
| 1902 | Agar, Herbert William | 1901 | Beeley, Arthur |
| 1904 | Andrews, William Allen | 1903 | Briggs, Samuel Henry Clifford |
| 1899 | ¹ Bake, Henry John Tyack | 1899 | Brittain, Charles Edward |
| 1904 | Ballardie, George de Caynoth | 1902 | Chapman, Thomas William |

¹ Headmaster of the Knaresborough Grammar School.

| | | | |
|------|----------------------------------|------|------------------------------------|
| 1904 | Charlesworth, Arthur | 1902 | Hutton, William Austin |
| 1900 | Cooper, Albert Henry | 1901 | Jackson, Harry Percival |
| 1904 | Copley, Frederick | 1900 | ² Jowett, Albert |
| 1900 | Coulson, Alfred | 1901 | King, Herbert |
| 1899 | Davis, Frederick William | 1902 | Linskill, William Arthur |
| | Daniel | 1902 | Mann, Harold Hart |
| 1897 | Dent, Frankland | 1896 | Milner, Harold Wood |
| 1902 | Dwerryhouse, Arthur | 1898 | Motley, Parker |
| | Richard | 1903 | Norminton, Harold |
| 1901 | Findlay, Mary Grace | 1904 | Pearson, Robert John |
| 1900 | Forsyth, John Andrew | | Addison |
| | Cairns, M.B. | 1901 | Priestman, Harold |
| 1902 | Frankland, John Naylor | 1902 | Ramshaw, Walter |
| 1901 | Fry, George Cecil | 1903 | Russell, John Marshall |
| 1903 | Gawler, Robert | 1902 | Shepherd, Arthur Burton |
| 1904 | ¹ Gill, Edwin Leonard | 1900 | Skirrow, Frederick William |
| 1904 | Grant, Charles Henry | 1901 | Storr, Bertram Vincent |
| 1902 | Grocock, Henry Lloyd | 1898 | Taylor, Frank Edward, |
| 1900 | Harrison, William Hudson | | M.A., M.B. |
| 1898 | Haworth, Frederic | 1902 | Whiteley, Charles Edward |
| 1899 | Hefford, Charles Nelson | 1900 | ³ Wilson, Harold Albert |
| 1904 | Hummel, John James | | |

Bachelor of Science

| | | | |
|------|---|------|--------------------------|
| 1899 | Aitken, William | 1902 | Burgess, William Ernest |
| 1899 | Allison, John Raymond | 1904 | Bywater, William |
| 1904 | Anson, Emily | 1904 | Calam, Harold |
| 1897 | Appleyard, John Henry | 1897 | Calvert, Harry Thornton |
| | Ross | 1904 | Chadwick, Percival Wager |
| 1893 | Archdeacon, William Henry | 1896 | Chapman, Harold Percy |
| 1902 | Armes, Jane Prue | 1901 | Clark, James |
| 1897 | Armitage, George Herbert | 1903 | Cooper, William Arthur |
| 1902 | Aveyard, Ethel Ann | 1898 | Corrie, William Edward |
| 1896 | Balmforth, Edgar Nichols | 1902 | Coxon, Laurence Adams |
| 1897 | Barlow, Percy Smith | 1903 | Crawshaw, Annie |
| 1904 | Barton, Edith Beatrice | 1901 | Crosfill, John |
| 1895 | Boyd, Harold de Haven | 1900 | Crowther, Herbert |
| 1903 | Boyd, Simeon | 1902 | Cryer, Edward |
| 1895 | ⁴ Braithwaite, William Dalston | 1903 | Cunningham, Jean Orme |
| 1903 | Brayshay, Maurice William | 1897 | Cussons, John |
| 1902 | Brier, Albert | 1901 | Dakin, Henry Drysdale |
| 1904 | Broadhead, James Arthur | 1904 | Daykin, John Bertram |
| 1898 | Broadley, William | 1903 | Dell, John Alexander |
| 1902 | Brook, Harry | 1899 | Denison, Robert Beckett |
| 1901 | Bruce, Mary Walbrand | 1902 | Dennis, Herbert |
| | (Mrs. McCrae) | 1902 | Denton, Ernest |
| 1904 | Bulman, John Arthur | 1901 | Dickinson, Cyril |

¹ Curator of the Museum, Newcastle-on-Tyne.² Principal of the Central Pupil Teachers' Classes, Bury.³ Fellow of Trinity College, Cambridge.⁴ Headmaster of Ulster Provincial School, Lisburn.

| | | | |
|------|---------------------------|------|-------------------------------------|
| 1895 | Duncan, John | 1899 | Jackson, Arthur |
| 1901 | Edwards, Ernest John | 1904 | Jenkins, Richard Owen |
| 1903 | Ellis, James John | 1896 | Johnson, John William |
| 1902 | Embleton, John William | | Haigh |
| 1901 | Everett, James Herbert | 1900 | Jonas, Leslie |
| 1903 | Fearnley, Lewis William | 1903 | Kahan, Zelda |
| | Knapton | 1904 | Kay, Douglas John |
| 1901 | Finn, Cornelius Philip | 1900 | Kaye, Edward Percy |
| 1898 | Firth, Annie | 1902 | Kirby, Frederick Oscar |
| 1900 | Firth, Charles Turner | 1898 | Knight, John Arthur |
| 1900 | Flower, George William | 1903 | Langstaff, Bilton |
| 1900 | Forsyth, Christina Brand | 1898 | Leach, Elsie (Mrs. Thomas |
| 1903 | Gatecliff, John | | Guthrie) |
| 1903 | Gaunt, Louis Harry | 1903 | Lee, Haydn |
| | Armitstead | 1901 | Livesey, Charles Edwin |
| 1902 | Gaunt, Rufus | | Leonard |
| 1904 | Gaut, Robert Charles | 1901 | Lodge, Harry Livingstone |
| 1897 | Gill, John Frederic | 1900 | Mann, Ernest Edwin |
| 1902 | Gill, Percy Smith | 1897 | Marsden, Ernest Vane |
| 1898 | Gledhill, Luther | 1902 | Marshall, Herbert |
| 1904 | Gomersall, Ernest Edward | 1904 | Marshall, Joseph |
| 1902 | Goodson, Ethel Elizabeth | 1901 | Martin, Ethel Mary |
| | (Mrs. Osborne) | 1894 | Milner, John Edward |
| 1902 | Grant, Frederick Ernest | 1902 | Morris, Florence Annie |
| 1903 | Greenwood, Arthur | 1903 | Morton, Dora |
| 1896 | Grove, Thomas | 1898 | Moss, Charles Edward |
| 1901 | Gunter, John Henry | 1897 | Moys, Herbert |
| 1894 | Guthrie, Thomas | 1903 | Murphy, Harold Newton |
| 1901 | Haler, Percy James | 1902 | Myers, France |
| 1895 | Halstead, John Edward | 1891 | Nicholls, Percy |
| 1900 | Hamer, Ernest Fenton | 1902 | Oates, James Holroyd |
| 1896 | Hammerton, Jonas | 1898 | O'Brien, Henry Eoghan |
| 1898 | Hardaker, Walter Henry | 1900 | Oddy, Annie Maude |
| 1903 | Hartley, Percival | 1897 | Oddy, James |
| 1899 | Hatch, Herbert Andrew | 1891 | Parkin, Ernest |
| 1893 | Hefford, George | 1899 | Parkin, Jessie |
| 1901 | Heptinstall, Richard | 1899 | Peacock, Arthur |
| 1900 | Hield, Mary Elsie | 1894 | Peatfield, Albert Edward |
| 1899 | Hilliam, George | 1904 | Phillipson, Abram |
| 1900 | Hirst, Henry Reginald | 1902 | Pickering, Arthur |
| 1896 | Hobart, John William | 1904 | Pickersgill, Samuel Edwin |
| 1898 | Hobley, Robert Arthur | 1897 | Plugge, Arthur |
| 1901 | Hummel, Alfred Roland Ure | 1900 | Potter, Charles Etty |
| 1903 | Hummel, Ernest Lonsdale | 1897 | Priestley, Albert Weston, |
| 1900 | Hunt, Francis William | | M.A. |
| 1903 | Hunter, Herbert | 1904 | Radcliffe, Norman Brooke |
| 1903 | Hutchinson, Florrie | 1902 | ¹ Raper, Henry Stanley |
| 1891 | Ingle, Harry | 1895 | ² Rayner, Herbert Emmett |
| 1902 | Isle, William Collinson | 1902 | Redfern, Herbert Stanley |

¹ Principal of the Pupil Teachers' Centre, Batley.

² Principal U.M.F.C. College, Ningpo, China.

| | | | |
|------|---------------------------|------|---------------------------------------|
| 1903 | Rhodes, Edwin | 1902 | Taylor, Francis |
| 1902 | Rigby, Albert | 1903 | Tennant, Norman |
| 1896 | Rigby, William, B.A. | | Scholefield |
| 1903 | Rydall, George Herbert | 1903 | Thompson, Hubert |
| 1903 | Scholefield, Fred | 1901 | Thompson, John Thomas |
| 1899 | Scouller, Walter Daly | 1903 | ¹ Thompson, William Benson |
| 1899 | Shorter, Sydney Alfred | 1903 | Thorp, Samuel |
| 1897 | Slater, Alfred | 1899 | Tiffany, Joseph Edgar |
| 1903 | Slater, John Henry | 1898 | Todd, Reginald Austen |
| 1899 | Sloan, Robert John Joseph | 1903 | Turton, Edward, M.D. |
| 1904 | Smith, Arthur Clifford | 1901 | Unwin, Ernest Ewart |
| 1898 | Smith, Henry Lambert | 1904 | Waite, Joseph Harold |
| 1901 | Smith, John Edgar | 1897 | Walbank, Wilfrid Stephen |
| 1901 | Sowerbutts, Edith Utley | 1894 | Walker, Augustus John |
| 1903 | Spiegelhalter, Cecil | 1904 | Walker, Joshua |
| 1901 | Standing, Herbert Fox | 1903 | Warmington, Edith |
| 1904 | Standing, Margaret | 1896 | Watson, Herbert Wood |
| 1903 | Stead, Frank Cawthron | 1903 | Wetherall, Arthur |
| 1903 | Steinthal, Paul Telford | 1895 | Whaley, James |
| 1902 | Stelfox, Sydney Herbert | 1898 | Whitaker, John Stanley |
| 1901 | Stephenson, Isabel | 1897 | White, Ernest Clark |
| 1904 | Stewart, Tom | 1904 | White, Robert George |
| 1900 | Stocks, Arthur | 1895 | White, William Henry |
| 1902 | Stoddard, Arthur Askwith | 1899 | Whittaker, Croyden |
| 1897 | Stuart, Wilson, M.A. | | Meredith |
| 1897 | Studley, Charles Wilcock | 1901 | Willis, Fred |
| 1895 | Sugden, John Henry | 1900 | Wilson, Charles Richard |
| 1903 | Summers, Herbert Henry | 1904 | Wilson, Frances Annie |
| 1900 | Svensson, Gillis | 1904 | Zortman, Israel Hyman |
| 1897 | Tansley, George Edward | | |

Faculty of Law

Bachelor of Laws

| | | | |
|------|--------------------------|------|--------------------|
| 1903 | Jessop, Frederick Hubert | 1902 | Sykes, James |
| 1903 | Robson, William Newby | 1903 | Wade, James Mervyn |

Faculty of Medicine

Doctor of Medicine

| | | | |
|------|----------------------------|------|-----------------------|
| 1897 | Ligertwood, Charles Edward | 1901 | Trotter, Robert Hale |
| 1895 | Stoney, William Walter | 1903 | Turton, Edward, B.Sc. |

Bachelor of Medicine and Bachelor of Surgery

| | | | |
|------|----------------------------|------|------------------------------|
| 1899 | Anderson, William Jenkins | 1904 | Birtwhistle, Frederick Percy |
| | Webb | | Hewetson |
| 1900 | Anderton, Edward William | 1897 | Bollans, Robert Wilfred |
| 1903 | Appleton, Roy | 1904 | Boyle, Alan |
| 1904 | Ashmore, Patricius Wallace | 1903 | Braithwaite, Leonard Ralph |
| 1903 | Birkett, Harold Metcalfe | 1904 | Brierley, Wilfred Edward |

¹ Head of the Agricultural School, Downpatrick.

- | | | | |
|------|-------------------------------------|------|-----------------------------------|
| 1900 | Broughton, Alfred Galen Scheele | 1904 | Macvean, Herbert James |
| 1901 | Brown, Henry | 1903 | Maffin, Harry |
| 1901 | Brown, James William Henry | 1901 | Martin, Arthur Francis |
| 1903 | Brown, Thomas | 1897 | Mason, John Harold |
| 1902 | Burkhard, Alexander | 1903 | Matthews, Crawford Tait |
| 1902 | Butterworth, Robert Neilson | 1897 | Moorhouse, Charles Herbert |
| 1897 | Callum, Harold Sidney Hill | 1900 | Morrison, William Harold |
| 1899 | Campbell-Horsfall, Charles Edward | 1899 | Morton, Armitage |
| 1903 | Canter, William Hathin | 1903 | Mosley, Robert Vyvian Acton |
| 1898 | Carter, Godfrey | 1898 | Oyston, William Fletcher |
| 1903 | Coates, Richard | 1900 | Parkinson, Arthur Stanley |
| 1904 | Cundall, Edward | 1902 | Platts, Sydney |
| 1897 | Darlow, Francis | 1903 | Pollard, Percival |
| 1904 | Deane, Arthur Maslen | 1903 | Radcliffe, Adolphus Harold |
| 1898 | Dunk, Harry | 1901 | Radcliffe, Percy Alexander Hurst |
| 1898 | Firth, Arthur | 1899 | Reed, John Arthur |
| 1901 | Fletcher, Albert Herbert Bateson | 1896 | Rowling, Samuel Thompson |
| 1901 | Forster, Robert Thomas | 1901 | Saville, Edwin |
| 1901 | Forsyth, John Andrew Cairns, M.Sc. | 1899 | Scott, John Edmund Haigh |
| 1899 | Goodall, Joseph | 1894 | Seaton, Douglas |
| 1904 | Greaves, Frederick William Marshall | 1895 | Shaw, John Vincent |
| 1899 | Greenwood, Charles Henry | 1895 | Spink, Walter Lee |
| 1894 | Hainsworth, John William | 1898 | Spong, Ambrose |
| 1901 | Harrowell, Francis William | 1898 | Stansfield, Harry |
| 1904 | Hayes, Frederick William | 1903 | Steele, Percy Kingsley |
| 1904 | Heald, Samuel Linley | 1901 | Stott, William Atkinson |
| 1898 | Hime, Edward Maurice | 1903 | Sugden, Frank |
| 1899 | Hime, Henry Charles Rupert | 1904 | Suggit, Bertram |
| 1900 | Horsfall, Arthur Edward | 1901 | Sutcliffe, Joseph Herbert |
| 1899 | Illingworth, William Arthur | 1897 | Taylor, Frank Edward, M.A., M.Sc. |
| 1899 | Johnson, Frederick William | 1903 | Teasdale, John Camidge |
| 1893 | Jones, Clement Royds | 1901 | Thompson, Arthur Ralph |
| 1902 | Ladell, Robert George Macdonald | 1902 | Tinker, Ernest |
| 1897 | Lambert, John Reginald | 1904 | Tomlin, Herbert |
| 1899 | Lett, Hugh | 1898 | Trotter, Edward |
| 1902 | Longley, Joseph Alan | 1894 | Trumper, Oscar Bagster |
| 1902 | Maccormac, William Leonard | 1903 | Wilkinson, Sidney Carter |
| | | 1900 | Willans, Charles Rudolph |
| | | 1899 | Williams, David Owen |
| | | 1898 | Williamson, Joshua |
| | | 1904 | Young, Frederick William Baker |

Teachers' Diploma

- | | | | |
|------|------------------------------|------|--------------------------------|
| 1899 | Agar, Herbert William, M.Sc. | 1898 | Chapman, Thomas William, M.Sc. |
| 1903 | Aveyard, Ethel Ann, B.Sc. | 1904 | Crawshaw, Annie, B.Sc. |
| 1902 | Brier, Albert, B.Sc. | 1904 | Cunningham, Jean Orme |

| | | | |
|------|---|------|--|
| 1897 | Hartley, Harold, M.A. | 1902 | Martin, Ethel Mary, B.Sc. |
| 1895 | Haworth, Frederic, M.Sc. | 1901 | Oddy, Annie Maude, B.Sc. |
| 1904 | Hirst, Miriam, B.A. Lond. | 1897 | Priestley, Albert Weston, M.A., B.Sc. |
| 1897 | Hobart, John William, B.Sc. | 1903 | Stevenson, Ethel Mary, B.A. |
| 1898 | Jackson, Harry Percival, M.Sc. | | |
| 1904 | Linforth, Edith Mary Eliza- beth, B.A. | | |

FELLOWS, SCHOLARS, AND PRIZEMEN (VICTORIA UNIVERSITY)

University Fellowships

| | | |
|------|--------------------------|----------------|
| 1899 | Stuart, Wilson | <i>Arts</i> |
| 1900 | Stuart, Wilson | <i>Arts</i> |
| 1901 | Whiteley, Charles Edward | <i>Science</i> |

University Scholarships

| | | |
|-------------------|-----------------------------|--------------------|
| 1898 | Stuart, Wilson | <i>Philosophy</i> |
| 1899 | Cooper, Albert Henry | <i>Physics</i> |
| | Dwerryhouse, Arthur Richard | <i>Geology</i> |
| | Varley, William Mansergh | <i>Physics</i> |
| 1900 | Braithwaite, Leonard Ralph | <i>Medicine</i> |
| | Denison, Robert Beckett | <i>Chemistry</i> |
| 1902 | Stelfox, Sydney Herbert | <i>Engineering</i> |
| | Stoddard, Arthur Askwith | <i>Engineering</i> |
| 1903 | Raper, Henry Stanley | <i>Chemistry</i> |
| 1904 ¹ | Waterhouse, Osborn | <i>English</i> |
| | Zortman, Israel Hyman | <i>Physics</i> |

Derby Scholarship

| | |
|------|------------------------|
| 1899 | Frankland, John Naylor |
|------|------------------------|

John Bright Scholarship

| | |
|------|----------------------------|
| 1897 | Stuart, Wilson |
| 1899 | Hartley, Harold (prizeman) |

Mercer Scholarship

| | |
|------|-----------------------|
| 1901 | Dakin, Henry Drysdale |
|------|-----------------------|

Leblanc Prize

| | |
|------|----------------------------|
| 1891 | Ingle, Harry |
| 1892 | Mann, Harold Hart |
| 1898 | Skirrow, Frederick William |

¹ Victoria University of Manchester.

VICTORIA UNIVERSITY HONOURS SCHOOLS YORKSHIRE COLLEGE STUDENTS

History

- 1891 *Class 2* Stables, William Herbert
 Class 3 Taylor, Frank Edward
 1900 *Class 2* Scholes, Thomas Wilfrid
 1904¹ *Class 2* Davis, William Hathaway

English Language and Literature

- 1904¹ *Class 1* Waterhouse, Osborn
 Class 2 Denby, Maurice
 ,, Elliott, Spencer Hayward
 ,, Hepworth, Frank

Modern Languages and Literatures

- 1902 *Class 2* Robinson, Ethel Margaret
 ,, Stevenson, Ethel Mary
 1903 *Class 2* Mann, William Edward
 1904¹ *Class 1* Airey, Millicent
 Class 2 Dodgson, Sarah Alice
 Class 3 Raven, Hilda Mary

Philosophy

- 1898 *Class 1* Stuart, Wilson

Mathematics

- 1899 *Class 1* Frankland, John Naylor
 1900 *Class 2* Findlay, Mary Grace

Physics

- 1897 *Class 2* Hammerton, Jonas
 1899 *Class 1* Cooper, Albert Henry
 ,, Varley, William Mansergh
 1900 *Class 1* Shorter, Sydney Alfred
 1901 *Class 1* Grant, Charles Henry
 Class 2 Copley, Frederick
 Class 3 Andrews, William Allen
 1902 *Class 2* Denton, Ernest
 ,, Oates, James Holroyd
 Class 3 Goodson, Ethel Elizabeth
 1903 *Class 2* Thorp, Samuel
 1904¹ *Class 1* Phillipson, Abram

Chemistry

- 1891 *Class 1* Ingle, Harry
 1892 *Class 1* Mann, Harold Hart
 1893 *Class 1* Dent, Frankland

¹ Victoria University of Manchester,

- 1893 *Class 3* Archdeacon, William Henry
 1895 *Class 2* Fry, George Cecil
 " Guthrie, Thomas
 Class 3 Hirst, Henry Reginald
 " King, Herbert
 1896 *Class 1* Sugden, John Henry
 Class 2 Brittain, Charles Edward
 " King, Arthur
 Class 3 Watson, Herbert Wood
 1897 *Class 1* Wilson, Harold Albert
 Class 2 Harrison, William Hudson
 1898 *Class 1* Skirrow, Frederick William
 Class 2 Calvert, Harry Thornton
 " Storr, Bertram Vincent
 1899 *Class 2* Dobson, William Henry Noël
 1900 *Class 1* Denison, Robert Beckett
 Class 2 Shepherd, Arthur Burton
 1901 *Class 1* Dakin, Henry Drysdale
 " Whiteley, Charles Edward
 Class 2 Gawler, Robert
 1902 *Class 1* Briggs, Samuel Henry Clifford
 " Grant, Frederick Ernest
 " Taylor, Francis
 Class 2 Gaunt, Rufus
 " Norminton, Harold
 " Redfern, Herbert Stanley
 " Thompson, John Thomas
 Class 3 Coxon, Lawrence Adams
 1903 *Class 1* Raper, Henry Stanley
 " Scholefield, Fred
 Class 2 Ellis, James John
 Class 3 Rhodes, Edwin
 1904¹ *Class 1* Gatecliff, John
 " Hartley, Percival
 " Marshall, Joseph
 " Zortman, Israel Hyman
 Class 2 Calam, Harold
 " Chadwick, Percival Wager
 " Radcliffe, Norman Brooke
 Class 3 Barton, Edith Beatrice

Geology

- 1898 *Class 1* Jowett, Albert
 1899 *Class 1* Dwerryhouse, Arthur Richard

Zoology

- 1901 *Class 1* Standing, Herbert Fox
 1903 *Class 2* Dell, John Alexander

¹ Victoria University of Manchester.

Physiology

- 1897 *Class 2* Forsyth, John Andrew Cairns
 1901 *Class 3* Hummel, John James

Engineering

- 1891 *Class 1* Nicholls, Percy
 1893 *Class 2* Davis, Frederick William Daniel
 1896 *Class 2* Hefford, Charles Nelson
 1897 *Class 2* Oddy, James
 " Tansley, George Edward
 1898 *Class 2* Corrie, William Edward
 Class 3 Priestman, Harold
 1899 *Class 1* Linskill, William Arthur
 Class 2 Grocock, Henry Lloyd
 Class 3 Hutton, William Austin
 1900 *Class 1* Mann, Ernest Edward
 1901 *Class 2* Ballardie, George de Caynoth
 " Pearson, Robert John Addison
 1902 *Class 1* Stelfox, Sydney Herbert
 " Stoddard, Arthur Askwith
 " Wetherall, Arthur
 Class 2 Cryer, Edward
 Class 3 Kirby, Frederick Oscar
 1903 *Class 3* Brayshay, Maurice William
 " Slater, John Henry
 " Tennant, Norman Scholefield

Honours at M.B. and Ch.B. Examinations

- 1894 *Class 2* Seaton, Douglas
 " Trumper, Oscar Bagster
 1895 *Class 1* Ligertwood, Charles Edward
 Class 2 Shaw, John Vincent
 " Trotter, Robert Hale
 1896 *Class 2* Rowling, Samuel Thompson
 1897 *Class 2* Moorhouse, Charles Herbert
 " Taylor, Frank Edward
 1898 *Class 1* Trotter, Edward
 Class 2 Spong, Ambrose
 " Turton, Edward
 1899 *Class 2* Hime, Henry Charles Rupert
 " Illingworth, William Arthur
 " Morton, Armitage
 1901 *Class 2* Saville, Edwin
 1903 *Class 1* Braithwaite, Leonard Ralph
 Class 2 Steele, Percy Kingsley
 1904 *Class 2* Boyle, Alan
 " Tomlin, Herbert

First Classes at Final LL.B. Examination

- 1902 Sykes, James
 1903 Jessop, Frederick Hubert

UNIVERSITY OF LEEDS
EXAMINATION LISTS, 1905

Faculty of Arts (including Commerce and Law)

University Fellowship

*University Fellowship in English
Language and Literature* - - Waterhouse, Osborn

University Scholarships

*University Scholarship in English
Language and Literature* - - Holmes, Carrie
*University Scholarship in Modern
Languages and Literature* - Gunnell, Doris
Edwards, Maud Mary

Examinations for B.A. Degree with Honours

*English Language and
Literature* - - - Class 1. Gascoigne, Evelyn May
Holmes, Carrie
Class 2. Conyers, Hilda
*Modern Languages and
Literature* - - - Class 1. Edwards, Maud Mary
Gunnell, Doris

M.A. Examination

Latin and French - - - Wallace, Harry Bruce
History - - - Kitchener, Ernest Edward
Wilson, George William

Ordinary B.A. Final Examination

| <i>Div. 1.</i> | <i>Div. 2.</i> |
|----------------------------|---------------------------|
| Blackburn, Elizabeth Maria | Foggitt, Emma |
| Brigham, Fanny Muriel | Hitcham, Charlotte Elsie |
| Frank, Sarah | Jowett, Jessie |
| Hand, Thomas William | Maccoby, Sarah Judith |
| Naylor, Nellie Noble | Mountain, Eliza |
| Watson, George Alston | Neville, Ethel May |
| Wilson, Florence Grey | Robinson, Lilian Dorothea |
| | Rogers, Hannah |
| | Sheard, Dora |
| | Smith, Egerton |
| | Turner, Harriet Marie |

B.A. Intermediate Examination

September, 1904
Hand, William Thomas

June, 1905

| | |
|-----------------------------|---------------------------|
| Armstrong, Lilius Eveline | Hodges, Raymond John |
| Bartle, Ida | Jackson, Mabel |
| Boardman, Ernest Edmund | Lea, George William |
| Brown, Constance Mabel | Lidbetter, James Staples |
| Daykin, John Bertram | Moulden, John William |
| Donaldson, Laurence Richard | Murphy, Grace Louisa |
| Leverson | Naylor, Alice Maud |
| Findlay, Sarah Kennedy | Outram, Edith May |
| Flynn, Bridie | Scholes, Katharine Louise |
| Greening, Edward Baptist | Walker, Jessie |

L.L.B. Intermediate Examination*Div. 2.* Beecroft, Philip Beilby**Diploma in Education**

Barton, Edith Beatrice, B.Sc.

Faculties of Science and Technology**University Fellowship***University Fellowship in Chemistry* - Marshall, Joseph**University Scholarships***University Scholarship in Chemistry* - Armes, Henry Percy*University Scholarship in Engineering* Gregory, Frederick Maurice**Doctor of Science**

Dwerryhouse, Arthur Richard

Ingle, Harry

Mann, Harold Hart

Examinations for B.Sc. Degree with Honours

| | | | | | |
|--------------------|---|---|---|-----------------|----------------------------|
| <i>Mathematics</i> | - | - | - | <i>Class 2.</i> | Phillipson, Abram |
| <i>Physics</i> | - | - | - | <i>Class 1.</i> | Mellor, Fred |
| <i>Chemistry</i> | - | - | - | <i>Class 1.</i> | Armes, Henry Percy |
| | | | | " | Bennett, Hugh Garner |
| | | | | " | Davies, Arthur Hugh |
| | | | | <i>Class 2.</i> | Crosland, Percy Field |
| | | | | <i>Class 3.</i> | Booth, Meyrick |
| | | | | " | McCandlish, Douglas |
| | | | | " | Morrison, James Alexander |
| | | | | | Shepherd |
| <i>Botany</i> | - | - | - | <i>Class 2.</i> | Turner, Florence Mary |
| | | | | | Beatrice |
| <i>Physiology</i> | - | - | - | <i>Class 1.</i> | Lord, William Ernest |
| <i>Engineering</i> | - | - | - | <i>Class 1.</i> | Gregory, Frederick Maurice |
| | | | | <i>Class 3.</i> | Owen, Samuel Joseph |

M.Sc. Examination

| | | | | | |
|----------------------|---|---|---|---|------------------------|
| <i>Mathematics</i> - | - | - | - | - | Cooper, William Arthur |
| <i>Geology</i> - | - | - | - | - | Dudley, James |

Ordinary B.Sc. Final Examination

| <i>Div. 1.</i> | <i>Div. 2.</i> |
|--------------------------|---------------------------|
| Harding, Oswald Jackson | Allen, Lilian |
| Hutton, Wilfred | Craig, David |
| Standing, Edwin Mortimer | Davies, Ivor Parry |
| Thorp, George | Denbigh, George James |
| | Goddard, Clara Annie |
| | Hilary, Daisy |
| | Smailes, Alan |
| | Tiffany, Frank |
| | Wagstaffe, George William |
| | Whitehead, Pollie |

B.Sc. Intermediate Examination

| | |
|--------------------------|---------------------------|
| Ashby, William Ewart | Law, Marion Rosalina |
| Binns, Charles Henry | Loyd, Jessie |
| Birkhead, Florence Ethel | Outram, Nora Aline Jane |
| Bowes, George Robert | Pearce, Cyril Thomas |
| Brook, Annie | Procter, Herbert |
| Cameron, James Nield | Raistrick, John William |
| Crowther, William Edward | Sutcliffe, James |
| Elliott, Bertram Warren | Toothill, Joseph |
| Field, Margaret | Turner, Frederick William |
| Goddard, Edith Eleanor | Walker, Ernest Smith |
| Goodson, Arthur Godfrey | Walker, Leonard |
| Hansell, John Bentley | Watmuff, Reginald Jonas |
| Hargreaves, Edith | Woodhead, Arthur Edmund |
| Lacy, Arthur | |

Diplomas

| | | |
|---------------------------------|---|---------------------------|
| <i>Mechanical Engineering</i> - | - | Wharton, John |
| <i>Electrical Engineering</i> - | - | Chippindale, Isaac Murray |
| | | Hamilton, James |

Faculty of Medicine

Doctor of Medicine

Parkinson, Arthur Stanley

Final M.B. and Ch.B.

March, 1905

| | | | |
|----------------|--------------------------|-----------------|-------------------------|
| <i>Part I.</i> | Flint, Ethelbert Rest | <i>Part II.</i> | Bailey, Fred |
| | Kendall, Frank Edward | | Smith, Charles Nixon |
| | McKane, William Oliphant | | Todd, Aldred Bertram |
| | | | Slingsby |
| | | | Walker, Melville George |
| | | | Leslie |

July, 1905

- | | | | |
|----------------|---|-----------------|--|
| <i>Part I.</i> | Bibby, James Paley Hackworth, Vivian Cuthbert Hardy, Digby Wrangham Reed, Ernest William | <i>Part II.</i> | Dixon, Robert Garside Fearnley, Harold Gough, Alfred Hustler, George Herbert Lister, Thomas Edmund Whalley, Frederick |
|----------------|---|-----------------|--|

Second M.B. and Ch.B.*March, 1905**Part I. Anatomy and Physiology*

Dibb, William Land
Hamilton, William Douglas

July, 1905

- | | |
|---------------------------------------|---|
| <i>Part I. Anatomy and Physiology</i> | <i>Part II. Materia Medica and Pharmacy</i> |
| Perlman, Archie | Butler, William Harold Flint, Horace Lance Frobisher, James Hebblethwaite Martin Hepworth, Sidney Milverton Keswick, John Barton Thompson Mitchell, Guy Annesley Carter Nicol, George Colin Henderson Piercy, Bernard Charles Vallow, Harold |

First M.B. and Ch.B.*Part I. Chemistry and Physics*

Shaw, William
Sinson, Israel Lewis
Smith, Reginald Eccles
Thoseby, John Norman Lonsdale

Part II. Biology

Shaw, William
Smith, Reginald Eccles
Thoseby, John Norman Lonsdale

REGISTERED STUDENTS

Session 1904-5

Faculties of Arts (including Law, Science and Technology)

| | |
|--|--------------------------------------|
| Abbott, Claude | Bellitzay, Laura Gertrude |
| Abbott, Robert Eastoe | Bennett, Hugh Garner |
| Adkins, Edward William | Bentley, Hannah Grimshaw |
| Agar, Joseph Whitaker | Bentley, Reginald William |
| Alexander, Walter William | Bernstein, Isaac Barnett |
| Allen, Lillian | Berry, Harold |
| Ament, Robert | Bibby, Edward Ernest, <i>Emsley</i> |
| Anderson, Edward William Paley | <i>Scholar</i> |
| Anderton, Louisa | Bibby, Joseph Richard |
| Andrew, Walter Tom | Bielby, Percy |
| Appleby, Edgar Ingham | Billbrough, Edward Percival |
| Appleyard, John Ernest, <i>Leighton</i> | Billbrough, William Edward |
| <i>Scholar</i> | Binns, Charles Henry |
| Armes, Henry Percy, <i>Brown Scholar</i> | Birch, John Charters |
| Armitage, Samuel Reginald Cecil | Birkhead, Florence Ethel |
| Armitage, Sarah | Birtwhistle, Cecil Alexander |
| Armstrong, Lillias Eveline | Bishop, Sarah Ellen, B.A. |
| Armstrong, Prudence E. | Blackburn, Elizabeth Maria |
| Arrowsmith, Elsie | Blackburn, Harry Fowler |
| Ashburner, Frederick | Blackburn, James Arthur |
| Ashby, William Ewart | Blackburn, Robert |
| Asquith, George | Blackwood, Bertie |
| | Blakeman, Thomas William |
| Baddiley, James | Blamires, Charles Stephen |
| Bailey, Alfred Ernest | Bland, Henry Shaw |
| Baines, Gilbert | Boardman, Ernest Edmund |
| Bake, Henry John Tyack, M.Sc. | Booth, Aurelius John |
| Baker, Robert Medd | Booth, Meyrick, <i>Brown Scholar</i> |
| Balden, John Whiteley | Booty, Mabel Agnes |
| Barnes, Augustus Marsden | Borchardt, Miss |
| Bartle, Ida | Boucher, Carlos |
| Bartolazzi, Giovanni | Bowes, George Robert |
| Barton, Edith Beatrice, B.Sc. | Bradley, Jim |
| Batchelor, Noel Alton | Branson, Frederick Hartridge |
| Batley, Richard Clarkson | Bray, Edwin |
| Batman, Elsie | Brealey, George Edward |
| Battle, Alfred Ernest | Brennan, Thomas Bruno |
| Beard, Edith | Briggs, Margery Haining |
| Beaumont, Frank | Brigham, Fanny Muriel |
| Bedford, George Smith | Broadbent, Fred |
| Beecroft, Philip Beilby | Broadbent, Lees |
| Bell, Herbert Nutter | Brogden, Vivan |

- Brook, Annie
 Brown, Charles Suffield
 Brown, Clement
 Brown, Constance Mabel
 Brown, Wallace
 Brown, William Bethel
 Buckle, Alice
 Buckle, Violet Ethel
 Burley, Edith
 Butler, Arthur
 Butler, Charles
 Butler, Gabrielle Helen Holgate
 Butterworth, George William
 Byles, Dorothy
 Calam, Harold
 Cameron, James Nield
 Carlton, George Westerdale, *L. C. C.*
 Free Student, Leighton and
 Infirmiry Scholar
 Carton, Elizabeth Mary
 Cesaroni, Anselmo
 Chapman, Hannah Mabel
 Chapman, Harry Garfield
 Charles, Henry Ernest
 Cheadle, Hugh Wentworth
 Childe, John Thomas
 Chippindale, Isaac Murray
 Claridge, Margaret Elsie
 Clarke, Francis Eagle
 Clarkson, Alfred Bairstow
 Clayton, John Murray
 Clayton, William
 Cockerham, John Henry
 Cockshott, Eliza
 Constantine, Mary Frances
 Conyers, Hilda
 Cook, Charles William
 Cooper, John George
 Cooper, Nellie
 Cooper, William Claude
 Cope, Harry Douglas
 Corner, Arthur Edward
 Cragg, Wilfrid Balderstone
 Craig, David
 Crawshaw, John Charlesworth
 Cridland, Dorothy
 Crosland, Percy Field, *Brown*
 Scholar
 Cross, George Harold
 Cross, William Ernest, *L. C. C. Free*
 Student
 Crowther, Herbert
 Crowther, Jane Elizabeth
 Crowther, William Edmund, *L. C. C.*
 Scholar
 Croysdale, James
 Cullen, Patrick
 Cuthbertson, Frances Maud May
 Darycott, Ernest Jenkinson
 Davies, Arthur Hugh
 Davies, Hamilton, *Akroyd Scholar*
 Davies, Henry
 Davies, William Mason
 Dawson, Walter
 Day, Henry
 Daykin, John Bertram, *L. C. C. Free*
 Student
 Denbigh, George James
 D'Halluin, Jules Elie Constant
 Joseph
 Dickinson, George S.
 Dixon, Elizabeth
 Dobson, Maude Elizabeth
 Dodgson, Emma Maria
 Doi, Kokichiro
 Downend, George Frederick
 Draper, Alick Darby
 Drury, James
 Duckworth, William Henry
 Dudley, James
 Dudley, Nora
 Duff, Margaret Noble
 Duncan, Harold
 Durrant, Aubrey Percy
 Durrant, William
 Eagar, George Fraser Fitzgerald
 Earnshaw, David Oliver
 Eden, John William
 Edwards, Charles Stanstay
 Edwards, Maud Mary
 Elgey, James
 Elgey, William Thornhill
 Elliott, Bertram Warren
 Elliott, Henry
 Elliott, Thomas
 Ellis, Claude Douglas
 Ellis, George
 Ellis, John Newman
 Ellis, Kenneth Pearce
 Elmhirst, Richard
 Evans, Hugh Birkett

Everard, Thomas Benjamin
Everett, James Herbert, B.Sc.
Eyres, William

Fairley, Barker
Farrer, Robert Noel
Fenton, Edmund
Fester, Georg Gustav Anselm
Field, Margaret
Findlay, Alice Hellier
Findlay, George Hindson, B.A.
Findlay, Sarah Kennedy, L.C.C.

Free Student

Firth, Luther
Firth, William
Fleming, John
Fletcher, Alfred Edgar
Flynn, Bridie
Foggitt, Emma
Foggitt, George Herbert
Foord, Lawrence Barnard
Foster, Janet
Fottrell, Edward Joseph
Foulds, Frank Oswald
Fox, Thomas Alfred
Frank, George Herbert
Frank, Sarah
Frith, (Mrs.) Louisa

Gale, Florence
Gana, Vicente
Garner, John Henry
Gascoigne, Evelyn May
Gaunt, Thomas Henry
Gaunt, Thomas Huggan
Geach, Francis
George, Charles Harry Leather
Gibson, Edmund Herbert
Goddard, Clara Annie
Goddard, Edith Eleanor
Golding, Mary Muriel
Goodall, Eric William Aldrich
Goodman, Walter Neville
Goodson, Arthur Godfrey
Goodyere, John William
Gordon, Stephen Jefferson
Grace, George
Graham, John Luther
Grange, Charles D'Oyly
Gray, Alice Maud
Green, Digby

Greener, Kenneth Woodfal
Greenhalgh, John
Greening, Edward Baptist
Gregory, Frederick Maurice
Griffin, Walter
Gunnell, Doris

Hadwen, John Walter
Haigh, Arthur
Hallows, Norman Frederic
Hamilton, James
Hammett, Harry
Hammond, Ethel
Hammond, Mabel Marguerite
Hampson, William Robert, junr.,
Mus. Bac.

Hand, William Thomas
Hannigan, Annie
Hansell, John Bentley
Hanson, John, junr.
Harding, Oswald Jackson
Hardy, Thomas Lionel
Hargreaves, Dennis Walter
Hargreaves, Edith, *Baines Scholar*
Harrington, William Francis
Harris, John William
Harris, Marks Solomon, *Akroyd Scholar*

Harrison, George, L.R.C.P.
Harrison, Mary Emma Lewis
Harrop, Arthur
Hart, Harry Leatham, *Textile Scholar*

Hartley, John Thomas
Harvey, Reginald Simpson
Hastings, Margaret
Hatfield, Edith
Heald, Harry Mair
Henton, Meanwell
Hess, Arthur Frank
Hilary, Daisy
Hilary, Henry Oxtoby
Hill, James Howard
Hill, William Basil
Hinchliffe, Robert
Hirst, Miriam
Hitcham, Charlotte Elsie
Hobson, Charles Henry
Hodsman, Henry James, *Brown Scholar*
Hodson, Harry

Holgate, Edward
 Holgreaves, Daisy D.
 Hollenweger, Henry
 Hollins, Cecil, *Akroyd Scholar*
 Holloway, Harold Pierce
 Holmes, Alfred Kenward
 Holmes, Carrie
 Holroyd, Herbert
 Horn, Florence
 Horne, Arnold Cecil
 Horne, John Vincent
 Horrocks, Wilfred
 Horsfall, Ronald Smith, *Akroyd Scholar*
 Horsham, Wilfred Robert, *Textile Scholar*
 Howden, Ernest
 Howe, John Lomas
 Hoyle, Edward Joseph Theakston
 Hoyles, Percy
 Hudson, Edwin
 Hudson, Henry
 Humble, John Proudfoot
 Humble, William Franklin
 Hutchinson, George Hanley
 Hutchinson, Raymond Whitworth
 Hutchinson, Teasdale Hilton
 Hutton, Wilfred
 Illingworth, Albert Edward
 Illingworth, Maria Emma, *L. C. C. Free Student*
 Ingham, Harold Norman
 Ingle, Hilda Marjory
 Jackman, Elizabeth
 Jackman, Lydia
 Jackson, Colin Gyrth
 Jackson, Frederic
 Jackson, Mabel
 Jalland, Geoffrey
 Jamieson, James
 Jarrold, Samuel Thompson
 Jessop, Bertha
 Jessop, Ethel
 Johnson, Horace Swales
 Jones, Cyril Gordon
 Jones, John Rees
 Jones, Rose Hannah
 Jordan, Albert
 Jowett, Constance Edith
 Jowett, Jessie

Jowett, Madeline Blackburn
 Kendall, Evelyne
 Kenyon, Lilly E.
 Kershaw, James Leonard
 Kershaw, Sara Lizzie
 Kershaw, William Henry
 Kinder, Fred
 King, Alice Jane
 King, Charles Arthur
 King, Percival Edgar
 King, William Henry
 Kirk, John William, B.A.
 Kitchin, Malcolm
 Kitson, Nellie
 Klein, Harris, *L. C. C. Scholar*
 Knowles, Charles Haley
 Knowles, Henry Shervington
 Lace, Ernest William
 Lacy, Arthur
 Laister, Lambert
 Lambert, John Vollans
 Land, John Murgatroyd
 Landman, Samuel, *Salt Scholar*
 Langrick, Benjamin
 Laverack, Herbert John Stephenson
 Laverack, Marjorie
 Law, Marion Rosalind
 Lea, George William
 Leahy, Mary
 Lee, Edmund
 Levy, Henry
 Liddbetter, James Staples
 Lightfoot, Kenneth
 Lingard, Arthur
 Lishman, Florence May
 Lisle, Alice Sophia
 Lister, Mary Florence Grace
 Little, Harry Edgell, *L. C. C. Free Student*
 Littlewood, Fred
 Lloyd, Major
 Longsdon, Henry Serlo
 Lord, William Ernest, *Brown Scholar*
 Loyd, Jessie
 Lumb, Richard
 Lund, Annie
 Lyles, Aubrey Simister
 Lyth, John Christopher

- Maccoby, Sarah Judith
 MacKay, Alice Mary
 Macnaughton, Arthur William
 Macnaughton, Frederick George
 Maddison, Willfred Guy, *Craven and Leighton Scholar*
 Magoolaghan, Anna
 Mallalieu, Cloudesley
 Mallinson, Dorothy
 Manning, Paul
 Marchant, Benjamin William
 Marley, Wilfrid
 Marr, Henry Norrison
 Marriner, Kenneth Dalrymple
 Marsh, Edgar Arthur Jacques
 Martin, Alice Walford
 Martin, Marie Outram
 Marx, Emil, Ph. D., *Heidelberg*
 Matterson, William Colley Monkton
 Matthews, Felix Hackett
 Maud, Ida Marian
 McCandlish, Douglas
 McConnell, John William
 McGill, Ernest Arthur, *Brown Scholar*
 McKenzie, Victoria
 McLaren, Henry James
 McNatty, Gertrude
 McVeigh, Patrick Lawrence
 Mellor, Fred, *L.C.C. Scholar*
 Mende, Stephan
 Middleton, Henry Dubs
 Midgley, Mary Blanche Wearmouth
 Milligan, Cecil Cooper
 Mills, James
 Milnes, Orlando Barlow
 Mitchell, Margaret
 Mitchell, Miriam
 Mitchell, Percy
 Molland, Theodora Mary
 Montgomery, Raymond
 Moore, Arnold
 Morris, Edwin
 Morrison, Adam Murray
 Morrison, James Alexander
 Shepherd
 Moulden, John William
 Mountain, Eliza
 Mudd, Frances E.
 Mulcahy, Julia
 Mullen, Eliza
 Muller, Ernst Wilhelm
 Murfitt, Effie May
 Murphy, Bertha Mary
 Murphy, Grace Louisa
 Musson, John Percy
 Myers, Mary Alice
 Myers, Oliver
 Naylor, Alice Maud
 Naylor, Nellie Noble
 Nelson, Harriet
 Neville, Ethel May
 Nichol, Jessie Helen
 Nichol, Mary Elizabeth
 Nicholson, Ethel
 Nixon, Harry Horsley
 Norfolk, John Percy
 North, Fanny Caroline, B.A.
 North, Jessie
 Nutt, Elizabeth Ellen
 Oldroyd, William Leonard
 Oliver, Edward
 Ormerod, Beatrice
 Osborne, Frank Wellman
 Outram, Edith May
 Outram, Nora Aline Jane
 Owen, Florence
 Owen, Samuel Joseph
 Page, Alfred James
 Pape, Cecil George
 Pape, Leonard Stanley
 Parkin, Edwin
 Parry, Pierce
 Parry, William Edward Oswald
 Paterson, Annie Theresa
 Paterson, George Stuart
 Pattinson, John Lynn
 Peake, Christopher Boshier
 Peake, Geoffrey Copson
 Pearce, Cyril Thomas
 Pearson, Claudius Arthur
 Peck, Hubert Blackburn
 Pell, Albert Edward
 Penty, Percy Walter
 Perfect, Douglas
 Perkins, Sarah Elizabeth
 Petty, Joshua
 Phillipson, Abram, *Akroyd Scholar*
 Pickard, Kate

Pickersgill, Samuel Edwin
 Pickles, Edward Llewellyn
 Pickles, Frederick
 Plews, Robert Henry Cunningham
 Pollock, Charles Albert
 Pope, Martha
 Popplewell, Dorothea
 Popplewell, Lily
 Potts, Harry Hampson
 Potts, Roland Beeton
 Pownall, Arthur Hornby
 Poynting, Lucy Ellen
 Prest, Adeline Blanche
 Priestley, Ella
 Priestman, Howard
 Procter, Herbert
 Procter, Herbert Granville
 Procter, John Clifford
 Procter, Percy
 Pullan, Charles
 Pulleyn, James
 Pullon, John William
 Raistrick, John William
 Ramsdale, Ellen
 Raper, Robert Strothers
 Rawlins, Percy James
 Reader, Norbert Leo Maxwell
 Reason, Sydney
 Reece, Daniel Hawes
 Rein, Käthe
 Renton, Harold Ferdinand
 Reynolds, Leatham
 Rhodes, Norman
 Rhodes, Thomas Marsland
 Richardson, John Stocks
 Richardson, Stuart
 Richardson, Thomas Brook
 Richmond, Ada
 Rickaby, John Scofield
 Rideal, John George Edmund
 Rider, Martha Hannah
 Rigby, George William
 Riley, Arthur
 Rippon, Elsie
 Robinson, Edward
 Robinson, Ewart
 Robinson, Lilian Dorothea,
Leighton Scholar
 Robson, Thomas
 Rogers, Hannah
 Rogers, Violetta

Rollisson, Edgar
 Roser, Fritz
 Ross, Walter Alexander
 Ross, William Oatey
 Routledge, Norman
 Rowe, Annie Jane
 Rowe, Mortimer
 Rudkin, Thomas Sidney
 Rushton, William

 Saunders, Hugh Stanley
 Schofield, John
 Scholes, Katharine Louise,
Wheatley Scholar
 Scotney, Charles Edward
 Scott, Henry Cooper
 Scott, Hubert Edward
 Scruton, Harriett Annie, B.A.
 Sharpe, Claudius Galen Kaye
 Shaw, Charles Percy
 Shaw, Gertrude Powell
 Shaw, William (Huddersfield)
 Shaw, William (Wakefield)
 Sheard, Charles Holdrid
 Sheard, Dora
 Sheard, Walter
 Sheehan, Patrick Joseph
 Shepherd, William
 Shout, Theodore William
 Shuttleworth, Newton
 Simpson, Charles Howden
 Singleton, John
 Sinson, Israel Lewis, *Akroyd Scholar*
 Slater, Arthur Dickinson
 Slingsby, Arnold
 Smailes, Alan
 Smith, Benjamin Musgrave
 Smith, Bracewell
 Smith, Egerton
 Smith, Gerald Flood
 Smith, Gordon
 Smith, Harlan
 Smith, Harold
 Smith, Joseph Alfred
 Smith, Lena
 Smith, Mary E.
 Smith, Reginald Eccles
 Smith, Wilfrid Victor
 Smith, William
 Snowden, Henry Frederick

- Snowdon, Percy
 Sook, Siri
 Speiser, Felix, Ph.D., *Berlin*
 Spencer, Frances Mary Elvira
 Squire, John Carter
 Standing, Edwin Mortimer
 Stead, Harry Smith
 Stephenson, Ralph
 Steward, George Edward
 Stirling, William
 Stocks, Frank Rubie
 Stodola, Joseph Gustav
 Stoker, Joseph
 Stone, Mary Beatrice
 Storer, George Eric
 Stott, Alice Maud
 Stott, Amy Jane
 Stuart, Mary
 Stubley, John Reginald
 Suffield, Florence A.
 Summerscales, Gertrude
 Sutcliffe, James
 Sutcliffe, John Algernon Lacy
 Sykes, Albert Howarth
 Sykes, Alfred
 Sykes, Lucy Hemsworth
 Sykes, William Henry
 Talbot, Geoffrey Richard Henry
 Talbot, Joseph Harold
 Tasker, John
 Taylor, Ernest
 Taylor, Friend
 Taylor, Joseph Hamer
 Taylor, Robert, junr.
 Taylor, Ronald Cooke
 Tenbruggenkate, George Herbert
 Thomas, Sydney Hardisty
 Thomlinson, Arthur Reginald
 Thompson, Alfred
 Thomson, James
 Thorburn, Robert Murray
 Thorburn, Walter Hunter
 Thornton, Oscar Robert
 Thornton, Squire
 Thorp, George, *Leighton Scholar*
 Thorp, Hilda
 Thoseby, John Norman Lonsdale
 Tiffany, Frank
 Tilley, Frank Edgar
 Ting, Alexander Young
 Tinney, Elizabeth
 Tomlinson, John Arthur
 Tomlinson, Thomas Fowler
 Tothill, Joseph
 Toulemonde, André Louis Marie
 Joseph
 Townsend, Florence Emma
 Townsend, Fred
 Townsend, Robert
 Treacy, Kathleen
 Trevor, Arnold William
 Tucker, Alfred
 Tuley, M.
 Turner, Florence Mary Beatrice
 Turner, Fred
 Turner, Frederick William
 Turner, George Corral
 Turner, Harriet Marie
 Turner, Herbert
 Veitch, Joseph Gibson
 Vernon, Edgar
 Viccars, John Ellis
 Wagstaffe, George William
 Wainwright, John Arthur
 Wainwright, Wilfred Cleverley
 Walker, Arthur Leonard
 Walker, Ernest Smith
 Walker, Francis Henry
 Walker, Hugh Gordon
 Walker, Jessie
 Walker, Leonard
 Wall, Harry
 Wallace, Harry Bruce
 Walsh, Margaret
 Ward, Alec Cowper
 Ward, Margaret Naomi
 Ward, Rowland
 Wardle, Ernest James
 Warnes, Sarah Catherine
 Wartnaby, William Thomas Wade
 Waterhouse, Osborn
 Waterson, William Horace
 Waterworth, James William
 Watmuff, Reginald Jonas
 Watson, George Alston
 Webster, John
 Welbury, Cecilia Purse
 Wharton, John
 Whitaker, Gilbert
 White, Arthur Ernest

White, Ethel, B.A.
 White, Robert George
 Whitehead, Claude Maguire
 Whitehead, James Loy
 Whitehead, Mary
 Whitehead, Pollie
 Whitton, Helen Grace
 Whitworth, Abraham
 Wilkins, Leopold Lound
 Wilkinson, Edward
 Wilkinson, Eltoft Wray
 Wilkinson, Robert
 Wilman, Alfred
 Wilman, Jennie
 Wilson, Ella Beaumont
 Wilson, Florence Grey, *Baines Scholar*
 Wilson, Forsyth James
 Wilson, Henry Leslie
 Wilson, Selina Ethel
 Winder, Alice

Wiseley, Annie
 Wither, Janet G.
 Wither, Margaret Gordon
 Wood, Edith Nora
 Wood, John
 Woodhead, Arthur Edmund
 Woodhead, Henry Knowles
 Woodhead, Thomas
 Wordsworth, Thomas, junr.
 Worth, Henry John George Rogers
 Wragby, George
 Wright, Francis Whitworth, B.A.
 Wright, Horace
 Yeilding, Richard Birkett
 Yeoman, Harold
 Youdan, Florence Mary
 Zortman, Israel Hyman,
Akroyd Scholar

School of Medicine

Alderson, William Seaforth
 Almond, George Henry
 Anderson, Alexander
 Archer, Henry
 Arnott, William
 Ashmore, Arthur
 Baker, Arthur William
 Barrett, Walter Ernest
 Battle, Harold Edward
 Beeley, Arthur, M.Sc.
 Bell, John James, L.R.C.P.,
 L.R.C.S., Edin.
 Bibby, James Paley
 Blackwood, Bertie
 Boggs, Charles William Sproule
 Booth,¹ Sydney Herbert
 Bradshaw, Lionel Wilson
 Braim, Thomas Paul
 Braithwaite, Edward Wrigley
 Brearley, Joseph
 Burnell-Jones, Harold Stanley
 Butler, William Harold
 Child, Ernest
 Clay, Cecil Ernest

Close, John Basil
 Coates, William Robert Addison
 Crawford, James Stirling
 Crawshaw, James Henry
 Dakin, Henry Drysdale, B.Sc.
 Denison, George Edward
 Dibb, William Land
 Dixon, John
 Dixon, Robert Garside
 Dobson, Donald Frederick
 Dobson, Francis George
 Dobson, Maurice Rowland
 Dolan, Edmund Michael
 Dunbar, Dean
 Edmondson,² Watts
 Elliott, William Harold Arthur
 Ellis, Edward Douglas
 Fairclough, James Butler
 Farries, John Stothart
 Fearnley, Harold
 Flint, Ethelbert Rest
 Flint, Harold Lance
 Fothergill, Arthur

¹ Medical Scholar,

² Infirmary Scholar.

- | | |
|--|--|
| Frobisher, James Hebblethwaite Martin | North, Donald North, Herbert |
| Gamble, Albert Gaunt Gloyne, Stephen Roodhouse Gough, ^{1 2} Alfred Greenwood, George Frederick Grundy, George Christopher | Oakley, Philip Douglas O'Connell, Arthur Patrick O'Donoghue, James B. |
| Hackworth, Vivian Cuthbert Hamilton, ¹ William Douglas Hansell, Alan Waites Hardy, Digby Wrangham Hardy, George Wilfred Harling, Harry Simpson Harrison, Percy Heppenstall, Clement Hoyle Hepworth, Sydney Martin Hessel, William Thomas Hill, Philip Keith Hill, William Bertram Hirst, Benjamin Hattersley Holroyde, Gerald Hood, Eric Crichton Hummel, John James, B.Sc. Hustler, George Herbert | Parkinson, Alfred Howard, B.Sc. Pegler, ² William Vernon Percival, Thomas Godfrey Perlman, Archie Pickles, Clifford Crawshaw Pickles, Philip Dobson Pickles, William Norman Piercy, Bernard Charles Pinder, William Padgett Potts, Matthew Bertram |
| Ibbotson, Henry Roscoe | Radcliffe, Roland Brooke Rawlings, ^{1 2} Harry Richardson Reader, Norbert Leo Maxwell Reed, Ernest William Renton, Harold Ferdinand Rhodes, Arthur Richardson, Alfred Richardson, Cyril Brian Richardson, Gerald Sidney |
| Kendall, Frank Edward Kenny, Maurice Aloysius Keswick, John Barton Thompson | Scarborough, Oswald Lowndes Scargill, Harold Brooke Scargill, Henry Edwin Schilling, Joseph Ludwig Scott, William Graham Sedgwick, George Henry Sergeant, John Owen Shacksnovis, Reuben Sims, David, M.R.C.S., L.R.C.P. |
| Landman, Abraham Judah Landmann, Alfred Emil Lister, Thomas Edmund Longley, Joseph Alan, M.B., Ch.B. Longley, Walter Lord, William Ernest Lyth, John Christopher | Stanger, Harry Sutcliffe, Edward Swanson, George Isles Swinburne, Arthur Westray Sykes, Joseph Harvey Kemp |
| McKane, Rudolph John Watford McKane, William Oliphant Middlemiss, ^{1 2} James Ernest Miller, Archibald William Cameron Mitchell, Guy Annesley Carter Montgomery, Raymond | Taylor, Daniel Macpherson, M.B., C.M. Taylor, John Edgar Tinsley, Seth Turner, Arthur Henry |
| Nicol, George Colin Henderson | Vallow, Harold Veale, Rawdon Augustus |

¹ Medical Scholar.

² Infirmary Scholar.

Vickers, Benjamin Randall
Vickers, Helen Randall

Waddington, Eric Frushard
Wales, Harry
Wales, Herbert
Walker, Albert Latimer
Walker, George Lister

Walker, John Philip
Whalley, Frederick
White, William John Parsons
Whitehead, Thomas
Williamson, William Sugden
Wilman, Joseph Burnett
Wilson, John Black Ferguson

Number of Students

The following table shows the number of Students of different classes who attended the University of Leeds during the last two Sessions :—

| Registered Students : | | | | | 1903-4. | 1904-5. |
|--|-----|-----|-----|-----|-------------|-------------|
| In Department of Medicine | ... | ... | ... | ... | 157 | 138 |
| In Department of Arts, Law, Science and Technology | ... | ... | ... | ... | 685 | 688 |
| Occasional Students in do. | do. | do. | ... | ... | 19 | 7 |
| Evening Students in do. | do. | do. | ... | ... | 417 | 517 |
| | | | | | <u>1278</u> | <u>1350</u> |

UNIVERSITY SOCIETIES, 1905-6

The sanction of the Senate is required to the Rules and Regulations of any new Society which it is proposed to establish.

The University Union. The University Union comprises the Cricket, Football (Rugby and Association), and Tennis Clubs, and undertakes the management of the Gymnasium, the Fives Court, and the Debating Society. The Union has also the management of the University Athletic Ground, and undertakes the arrangement of the Athletic Sports, the *Conversazione*, and other entertainments.

The governing body of the Union consist of a President, two Vice-Presidents, a representatives of the Staff, the Hon. Treasurer, and a Committee of twenty-three students elected annually.

The subscription to the Union is 10s. 6d. annually. It is payable to the Registrar of the University at the beginning of the session, with the class fees, and is compulsory on each registered student attending for more than six hours per week, with certain exceptions.

Membership of the Union carries with it membership of the various athletic clubs under its control, membership of the Debating Society, and the right of using the Common Rooms and the Gymnasium.

Handbooks, containing all information concerning the Union, its Rules, Officers, Athletic Clubs, and also the various Societies are issued *gratis* to all members of the Union. They may be had on application to the Hon. Secretary, or the Hall Porter.

Further information may be obtained from the Hon. Secretary of the Union.

President—The Most Hon. the Marquis of Ripon, Chancellor. *Vice-Presidents*—A. G. Lupton, Esq., Pro-Chancellor; N. Bodington, M.A., Litt. D., Vice-Chancellor; De Burgh Birch, M.D., Dean of the Faculty of Medicine. *Chairman of Committee*—R. M. Thorburn. *Hon. Secretary*—W. A. Ross. *Hon. Treasurer*—Professor Connal. *Staff Representative*—Professor Vaughan. *Committee*—H. P. Arnes,

A. E. Battle, J. N. Cameron, B. W. Elliott, J. N. Ellis, J. S. Lidbetter, B. W. Marchant, C. A. Pollock, J. S. Richardson, W. O. Ross, T. F. Tomlinson, Miss V. Rogers, Miss N. Naylor, Miss S. Frank, and representatives of the School of Medicine.

Students' Representative Council.¹ Elected annually by the students of the Department of Medicine from amongst their own number.

It concerns itself with the affairs of the Medical Students, and appoints representatives to serve on the Committee of the University Union, a proportion of whose funds it has at its disposal.

The Secretary of the Council is *ex-officio* the Medical Secretary of the Union Committee.

The Council further appoints a sub-committee to manage the Students' Medical Society, and two of its number serve upon the Refectory Committee.

Women's Representative Committee. This Committee is annually elected by the Women Students. It has control of the Women's Common Rooms and appoints representatives on the University Union Committee and sub-committees.

President—Miss V. Rogers. *Secretary*—Miss N. N. Naylor. *Committee*—Miss C. Brown, Miss E. Claridge, Miss M. Edwards, Miss F. Frank, Miss F. Gale, Miss G. Murphy.

Debating Society. Meetings on alternate Mondays in the first and second terms.

President—Professor Clapham. *Vice-President*—F. Ashburner. *Secretary*—G. W. Butterworth. *Committee*—J. P. Musson, R. Ward, A. E. White.

Literary and Historical Society. This Society meets at 5 p.m. on alternate Mondays during the first and second terms for the reading of papers and discussions on literary and historical subjects. The annual subscription is 4s.

President—Professor Vaughan. *Vice-Presidents*—Miss H. Conyers and A. E. White. *Secretaries*—Miss M. Hastings and W. T. Hand. *Committee*—H. G. Chapman, B. Fairley, Miss J. Holgate, Miss J. Jowett, Miss F. G. Wilson.

Old Students' Association (Women). The aims of the Association are (1) to hold re-unions three times each session : (2) to provide opportunities of communication between former students by means of a list of addresses to be put in a handbook containing also items of interest from former students, to be sent to all members every two or three years : (3) to provide a loan fund for the use of students whom pecuniary assistance would enable to stay a third year at the University, and others whom the committee consider eligible. Annual subscription 1s. ; life members, on payment of 10s.

¹ The Officers for 1905-6 are not elected in time for insertion in the Calendar

President—Miss H. Robertson, B.A. *Treasurer and Secretary*—Miss E. L. Melville, M.A. *Secretary*—Miss M. Briggs, M.A. *Committee for 1904-5*—Miss E. Aveyard, B.Sc., Miss A. Crawshaw, B.Sc., Miss M. Lister, B.A., Miss F. Nussey, Miss A. Oddy, B.Sc., Miss M. Skinner, B.A. The Committee for 1905-6 will be elected at the November meeting.

The Education Society. This Society holds two meetings in each of the first and second terms for the discussion of educational subjects. The syllabus for 1905-6 includes addresses from Mrs. Marvin and Professor Vaughan.

President—Miss Robertson, B.A. *Vice-President*—W. P. Welpton, B.Sc. *Hon. Secretary*—H. Davies. *Committee*—C. H. Binns, Miss C. M. Brown, Miss F. Gale, G. Thorp.

The Leeds Day Training College Club. The objects of the Club are (1) to provide for a re-union in a social manner of the past students of the Training College, all of whom may become members of the Club; (2) to supply the members with a means of communicating with each other privately, by the annual issue of a list of members and their addresses; (3) to found a fund which may be used at the discretion of the President for the relief of any past or present student of the Training College who may be in financial distress. Subscription—life membership 10s. : annual, 1s.

President—Professor Welton. *Vice-Presidents*—The Vice-Chancellor, Professors Connal, Kendall, Rogers, Smithells, Stroud; Messrs. A. R. Derryhouse, M.Sc., C. M. Gillespie, M.A., A. J. Walker, B.Sc., W. P. Welpton, B.Sc. *Secretary and Treasurer*—S. A. Shorter, B.Sc. *Committee*—J. H. K. Appleyard, B.Sc., J. Cooke, W. H. Davis, B.A., E. J. Edwards, B.Sc., J. H. Everett, B.Sc., L. W. K. Fearnley, B.Sc., H. Hartley, M.A., J. T. Hargreaves, W. H. Lindsay, B.A., C. E. Moss, B.Sc., A. W. Priestley, M.A., B.Sc., S. Thorp, B.Sc.

The Scientific Society. The object of this Society is to develop and maintain interest in the progress of Science by affording opportunities of intercourse between students of the University. The meetings are held during the first and second terms. Members take tea together at 5 p.m., after which papers are read and discussions take place. Any present or past student of the University is eligible for membership. The subscription for Ordinary members is 4s. ; for Life members, £1 1s. During the third term excursions are made to neighbouring chemical works, dyehouses, &c.

President—A. O. Allen, B.A., B.Sc. *Vice-Presidents*—W. Lowson, B.Sc., H. G. Bennett, B.Sc. *Hon. Treasurer*—H. J. Hodsman. *Hon. Secretary*—H. P. Armes, B.Sc. *Committee*—C. H. Binns, C. A. King, F. Mellor, B.Sc., Miss M. Myers.

The Biological Society. Members of the University Staff, who are interested in any branch of Natural History, and students past and present, who have completed a course of Elementary Biology, are invited to join. The meetings are conversational, and no lectures or papers are given. Members are invited to bring interesting natural

objects for exhibition. Subscription, 1s. a year. Meetings are usually held at 5 p.m. on the first Friday in the month, except when this falls in a University vacation. The officers of the Society are a President and Secretary, the latter of whom also acts as Treasurer.

President—Professor Miall. *Secretary and Treasurer*—E. E. Unwin, F.Sc.

The Engineering Society. This Society has for its object the discussion of subjects bearing upon Engineering and Applied Sciences, the visiting of works and other places of engineering interest, and the promotion of a friendly intercourse amongst its members. It consists of Ordinary, Associate, and Honorary Members and Associates. Any past or present day or evening student of the University is eligible for ordinary membership. Any person not eligible for ordinary membership, but who shall have been actively engaged in engineering for a period of not less than five years, or who shall have passed through an engineering training at any University or University College, is eligible as an Associate Member. Any person may be elected an Honorary Member. Any person is eligible as an Associate who is recommended by the Committee as a fit and proper person. Members are elected by ballot at the ordinary meetings. The ordinary meetings are held fortnightly at the University, the chair being taken at 7.30 p.m. Each Ordinary and Associate member pays an annual subscription of 5s. (except present day and evening students, who pay 2s. 6d., and receive no notices of meetings), and each Associate not less than 10s. per annum.

President—Professor Goodman. *Hon. Secretary*—Kenneth Greener. *Hon. Treasurer*—Wilson Gardner. *Committee*—F. T. Tomlinson, F. H. Walker, J. N. Ellis, F. S. G. Hinings, W. B. Odgers, S. J. Rayner, F. H. Pickard, J. H. Slater, H. McLaren, J. Wharton.

The Textile Society. The objects for which the Society is established are :

(a) To provide meetings for the discussion of all textile subjects ; (b) to stimulate interest among students, manufacturers, and others in all questions relating to textile industries, whether of a scientific, mechanical, or an artistic character ; (c) to provide textile journals for the use of members. The subscription of Members is 5s., Day students 3s. 6d., Evening students 1s. a year. Honorary and Life members one payment of £3 3s. Honorary members must be gentlemen who have distinguished themselves in the advancement of textile industries. Former and present students of the University, and gentlemen connected with textile trades generally, may be elected Life members.

The Agricultural Society. This Society has for its main object the promotion of intercourse between senior and junior students of the Agricultural Department, and affords opportunities of meeting for the discussion of agricultural topics. Papers are read or debates take place fortnightly on Tuesday evenings during the Winter Session. Students of the University or any persons interested in the progress of agricultural science are eligible for membership.

The minimum annual subscription is 1s.

The Medical Society is managed by a Sub-Committee of the Students' Representative Council. Meetings are held on alternate Tuesdays during the first and second terms when papers dealing with subjects of medical interest are read and discussed. The session usually commences with an address, and there is an annual Prize Debate.

Royal Army Medical Corps (Volunteers), Leeds Company. Medical Students are invited to join this Corps, as recruits are required annually to keep up the establishment. The Volunteer year commences on 1st November, when the enrolment of members commences. The active part of the Drill season is from the beginning of May to the end of July. The Company goes into Camp, usually for the first week in August, with the Regular Forces at Aldershot, Netley Military Hospital, or York. For further information apply to the Instructor at Headquarters.

Commanding Officer—de Burgh Birch, M.D., Major R.A.M.C. (Vols.)

Christian Union (Men's Branch). Affiliated to the B.C.U.U. *Staff-President*—F. W. Moorman. *Vice-Presidents*—W. Lowson, Professor Phillips. *Student President*—H. G. Bennett. *Hon. Secretary*—E. B. Greening. *Hon. Treasurer*—A. Smailes. *Bible Circle Secretary*—G. Thorp, D.P.M. *Secretaries*—E. Wilkinson, E. Vernon. *Committee*—E. E. Bibby, C. H. Binns, A. H. Davies, A. Jordan.

Christian Union (Women's Branch). Affiliated to the B.C.U.U. *President*—Miss H. Conyers. *Hon. Treasurer*—Miss V. Rogers. *Hon. Secretary*—Miss F. Wilson. *Committee*—Miss J. Jowett, Miss A. W. Martin, Miss A. Outram, Miss E. Spencer.

The University Lads' and Young Men's Club. The object of the club is to provide evening recreation for working lads who have left school. The club-rooms in 14 All Saints' Street, York Road, are open every evening except Sundays, from 8 to 10. The rooms are under the supervision of a committee of the club, controlled by a committee of members of the University. In addition to various games, some intellectual occupation is usually afforded. The Secretary will be glad to furnish a copy of the annual report, and to supply additional information.

Hon. Secretary and Treasurer—Professor Cohen. *Committee*—The Vice-Chancellor, Professors Clapham, Connal, Goodman, Grant, Hartley and Smithells; F. H. Brown, E. Kitson Clark, Dr. Hellier, Dr. Moorman, T. H. Taylor, J. J. Wood.



APPENDIX

EXAMINATION PAPERS

FOR

SCHOLARSHIPS, &c., 1905

EXAMINATION PAPERS FOR SCHOLARSHIPS, MAY, 1905

I. ENTRANCE SCHOLARSHIPS

ENGLISH LANGUAGE AND COMPOSITION.

(One-and-a-half hours allowed.)

N.B.—Candidates competing only for Akroyd or Textile Scholarships take only question 1, for which forty-five minutes are allowed.

- 1.—Write a short Essay on one of the following subjects :—
 - (a) The motor-car.
 - (b) A moorland walk.
 - (c) The British Navy.
 - (d) "The age of chivalry is gone."
- 2.—Indicate briefly the influence of the French language upon the English in the different stages of its history.
- 3.—What is a strong-weak verb? Comment on the forms *shalt, forlorn, brought, caught*.
- 4.—Form sentences to illustrate the various uses of the words *one, what, there, before*.
- 5.—Comment on the correctness of the following sentences :—
 - (a) I cannot help but believe him.
 - (b) There have been unmistakable signs that this campaign would be a fiasco.
 - (c) This house is to let. This house is to be let.
 - (d) Political bitterness only yields the palm to religious.

ENGLISH HISTORY.

(Three hours allowed.)

Not more than eight questions should be attempted, of which the first should be one : a third of the marks is assigned to it.

- 1.—Write an essay on one of the following subjects :—
 - (a) English manners and customs in the time of Alfred the Great.
 - (b) The Renaissance.
 - (c) The chief causes of wars.
 - (d) Parliament in the XIXth Century.
- 2.—Give some account of any monuments or memorials of the Roman occupation of Britain.
- 3.—Sketch the relations between the Norman Kings and the Church.
- 4.—Why was Henry V. so successful in his wars with France and Henry VI. so unsuccessful?
- 5.—Show how the power of the Crown increased during the reign of Henry VIII.
- 6.—What do you know of the growth of Puritanism down to the outbreak of the great Civil War?
- 7.—Give a character sketch of Charles II. ; and describe his relations with France.
- 8.—Why is Walpole considered to be one of the greatest of English statesmen?
- 9.—Describe *either* the Conquest of Canada *or* the career of Clive in India.
- 10.—Sketch the condition of England in 1815, and show why changes were necessary in the social and political institutions of the country.
- 11.—Give a short account of :—The Synod of Whitby, the Act *de heretico comburendo*, Cromwell's Ironsides, the Battle of Blenheim, the Lord George Gordon Riots.

LATIN.

(Three hours allowed.)

I. Translate:—

The Divine voice which warned Socrates.

Idem etiam Socrates, cum apud Delium male pugnatum esset Lachete duce fugeretque cum ipso Lachete, ut ventum est in trivium, eadem qua ceteri fugere noluit; quibus quaerentibus cur non eadem via pergeret, deterri se a deo dixit: tum quidem ii qui alia via fugerant in nostrum equitatum inciderunt. permulta collecta sunt ab Antipatro, quae mirabiliter a Socrate divinata sunt; quae praetermittam; tibi enim nota sunt, mihi ad commemorandum non necessaria. illud tamen eius philosophi magnificum ac paene divinum, quod, cum impiis sententiis damnatus esset, acquissimo animo se dixit mori; neque enim domo egredienti neque illud suggestum (*platform*), in quo causam dixerat, ascendenti signum sibi ullum quod consuesset a deo quasi mali alicuius impendentis sibi datum.

II. Translate into Latin:—

The king collected a great army and entered the borders of Caledonia. At first the inhabitants thought it impossible to resist him. But the prince having summoned a council declared that they must either fight or die. "Do not fear," he said, "to take up arms in defence of your country and your homes; fortune favours the brave; your fathers and your grandfathers often repelled the foe; I do not doubt that you can do the same." Encouraged by these words they declared they would die rather than yield, and indeed in a short time so large a force was gathered together that the king did not dare to advance further.

- III. 1. Distinguish between *ferere*, *ferrere*, *ferare*, *ferre*; *eunti*, *eundi*, *eundo*; *poterunt*, *potuerunt*, *potuerint*.
Write down: pres. infin. of *fero*; fut. infin. pass. of *vinco*; fut. partic. of *morior*; pres. infin. pass. of *fero*; 1st plur. fut. indic. of *redeo*.

2. Express in Latin : *one is good, the other bad ; a certain man had two sons ; neither of them is at home, both have gone to the country ; I don't know who you are ; when did he die ?*
3. Write down (a) dat. sing. of *totus, vetus, quidam, manus*.
 (b) gen. plur. of *canis, vis, urbs*.
 (c) comparative of *graviter, diu, niger*.
 (d) superlative of *acriter, nobilis, ultra*.
4. Turn into Latin :—
 (a) He gave orders (*impero*) that the prisoners should be spared.
 (b) I was afraid you would not come.
 (c) You may go if you wish.
 (d) He died on May 10th.
 (e) You must not forget us.
5. Give principal parts of *texo, ordior, stringo, torqueo, comperio*.

FRENCH.

(Three hours allowed.)

I.—Translate into English :—

- (a) Ha ! si vous aviez vu comme j'en fis rencontre,
 Vous auriez pris pour lui l'amitié que je montre.
 Chaque jour à l'église il venoit, d'un air doux,
 Tout vis-à-vis de moi se mettre à deux genoux.
 Il attiroit les yeux de l'assemblée entière
 Par l'ardeur dont au Ciel il poussoit sa prière ;
 Il faisoit des soupirs, de grands élancements,
 Et baisoit humblement la terre à tous moments ;
 Et lorsque je sortois, il me devançoit vite,
 Pour m'aller à la porte offrir de l'eau bénite.
 Instruit par son garçon, qui dans tout l'imitoit,
 Et de son indigence, et de ce qu'il étoit,
 Je lui faisois des dons ; mais avec modestie
 Il me vouloit toujours en rendre une partie.
 "C'est trop, me disoit-il, c'est trop de la moitié ;
 Je ne mérite pas de vous faire pitié ;"
 Et quand je refusois de le vouloir reprendre,
 Aux pauvres, à mes yeux, il alloit le répandre.

MOLIERE.

- (b) Quel personnage, le vent pour les marins ! On en parle comme d'un homme, d'un souverain tout-puissant, tantôt terrible et tantôt bienveillant. C'est de lui qu'on s'entretient le plus, le long des jours, c'est à lui qu'on pense sans cesse, le long des jours et des nuits. Vous ne le connaissez point, gens de la terre ! Nous autres, nous le connaissons plus que notre père ou que notre mère, cet invisible, ce terrible, ce capricieux, ce sournois, ce traître, ce féroce. Nous l'aimons et nous le redoutons, nous savons ses malices et ses colères que les signes du ciel et de la mer nous apprennent lentement à prévoir. Il nous force à songer à lui à toute minute, à toute seconde, car la lutte entre nous et lui ne s'interrompt jamais. Tout notre être est en éveil pour cette bataille ; l'œil qui cherche à surprendre d'insaisissables apparences, la peau qui reçoit sa caresse ou son choc, l'esprit qui reconnaît son humeur, prévoit ses surprises, juge s'il est calme ou fantasque. Aucun ennemi, aucune femme ne nous donne autant que lui la sensation du combat, ne nous force à tant de prévoyance, car il est le maître de la mer, celui qu'on peut éviter, utiliser ou fuir, mais qu'on ne dompte jamais.

MAUPASSANT.

II.—Translate into French :—

- (a) The disputes with America had now become so serious that an appeal to the sword seemed inevitable ; and the Ministers were desirous to avail themselves of the services of Clive. Had he still been what he was when he raised the siege of Patna, and annihilated the Dutch army and navy at the mouth of the Ganges, it is not improbable that the resistance of the Colonists would have been put down, and that the inevitable separation would have been deferred for a few years. But it was too late. His strong mind was fast sinking under many kinds of suffering. On the twenty-second of November, 1774, he died by his own hand. He had just completed his forty-ninth year.

MACAULAY.

- (b) Last week some friends came to stay with us.
 They were off after four days of it and went on to Liverpool.
 Since that, things have been very slow.
 We are going to the theatre to-night, however, they say it's a splendid piece, so we shall no doubt enjoy ourselves all right.

III.—Write an essay in French of about 200 words on *one* of the following subjects :—

- (a) La nouvelle université de Leeds.
 (b) Les Japonais.
 (c) Le règne de la reine Victoria.

IV.—Grammar :—

- (a) Write down the 2nd person singular of the present indicative of *mourir*, *coudre*, *se retenir*, *devoir*, *mener*, and the 1st personal plural of the preterite indicative of *croire*, *s'asseoir*, *taire*, *voir*, *éteindre*.
 (b) What are the rules for the agreement of the past participle in French? Explain the agreement or non-agreement in the following cases :—
 Elles se sont *plu* à nous aider.
 Elles se sont *aperçues* de ses défauts.
 La chanson qu'elle a *entendu* chanter.
 (c) Give any two classes of conjunctions that govern the subjunctive mood and construct sentences to illustrate.

GERMAN.

(*Three hours allowed*).

I.—Translate into English :—

- (a) Nachdem die grosse Armee im Juni 1812 den Niemen überschritten hatte, lagerte sich eine tiefe Stille über Europa. In den ersten *Wochen* vernahm man hier und da eine Nachricht über ihr Vordringen in das innere Russland, dann aber blieb alles lautlos, auch die kaiserlichen Bulletins verstummten Wochen lang, *Monate* lang. Ende September kam eine Notiz von dem Brande Moskaus, damals unwidersprochen in der Fassung,

dass die *Franzosen* die eroberte Stadt zerstört *hätten*. Dann wieder zwei Monate volles Schweigen —als plötzlich die Kunde durch die *Länder flog*, dass am 14. Dezember Napoleon ohne Heer in Dresden erschienen und rasch nach Paris weiter geeilt sei. Man war erstaunt und wie durch einen Blitzstrahl in dunkler Nacht geblendet; aber nur wenige Tage *vergiengen*, und ein Gottesgericht ohnegleichen *wurde* in überwältigender Klarheit den erschütterten *Blicken* entfaltet. Am 19. erreichte König Murat von Neapel die russisch-preussische Grenze, mit ihm ein Tross von 20000 Menschen, über die jede Art von irdischem Elend entladen war. Abgerissen, hohläugig, in *Lumpen* und *Kostüme* aller Art gewickelt, wankten die *Massen* vorwärts, eine meilenlange Kolonne ohne alle Ordnung, die auf der schneebedeckten, mit *Leichen* und Verwundeten erfüllten Strasse *daherzog*.
Heinrich von Sybel.

Comment on the use of the subjunctive mood in *hätten*.

(b) Es reden und träumen die Menschen viel

Von besseren künftigen Tagen;
 Nach einem glücklichen, goldenen Ziel
 Sieht man sie rennen und jagen.
 Die Welt wird alt und wird wieder jung,
 Doch der Mensch hofft immer Verbesserung.

Die Hoffnung führt ihn ins Leben ein,
 Sie umflattert den fröhlichen Knaben,
 Den Jüngling locket ihr Zauberschein,
 Sie wird mit dem Greis nicht begraben;
 Denn beschliesst er im Grabe den müden Lauf,
 Noch am Grabe pflanzt er——die Hoffnung auf.

Es ist kein leerer, schmeichelnder Wahn,
 Erzeugt im Gehirne der Thoren;
 Im Herzen kündet es laut sich an:
 Zu was Besserm sind wir geboren.
 Und was die innere Stimme spricht,
 Das täuscht die hoffende Seele nicht. *Schiller.*

II.—Translate into German :—

A donkey that was laden with two bags wanted to wade (*waten*) through a brook ; but he slipped on the loose stones and fell into the water. When he stood up again, he felt that his load had become much lighter, for he was laden with salt, and a large part of it had melted. This occurrence (*Vorfall*, m.) the donkey bore in mind (*sich merken*). When he came back again with a heavy load, and was again in the water, he did not fall this time, but lay down purposely (*absichtlich*). But he could not get up again, for his burden had become much heavier. He was laden with sponges (*Schwamm*, m.), which filled at once with water, and became so heavy that he lost his life.

III.—Write about fifteen lines in *German* on *one* of the following subjects :—

- (a) Geben Sie den Inhalt eines deutschen Buches an, das Sie gelesen haben.
- (b) Das Leben und Treiben auf einem grossen Bahnhof.
- (c) Erzählen Sie in einem an einen Freund (oder eine Freundin) gerichteten Briefe, wie Sie die Osterferien verbracht haben.

IV.—Questions on Grammar :—

- (1) Write down the nominative singular (with the definite article) of the nouns italicised in the extract under I(a).
- (2) Write down the third person singular of the present indicative and the past participle of the verbs italicised in the extract under I(a).
- (3) Give the German for :—This clever German ; two Berlin newspapers ; many a Frenchman ; many French ladies ; this happened ten days ago ; he has not been allowed to see me ; for instance.
- (4) Make up short German sentences to show the case (or cases) required by the following prepositions :—*an, gegen, gegenüber, mit, trotz, unter, wegen.*

MATHEMATICS I.

For Infirmary, Baines, Emsley, Wheatley, and Craven Scholarships, and Preliminary Paper for Leeds City Council and Entrance Akroyd and Brown Scholarships.

(One-and-three-quarter hours allowed.)

Candidates for Entrance Akroyd Scholarships need not attempt questions 5 and 10.

- 1.—Shew that two quadrilaterals are equal in all respects if the sides of one are equal to the sides of the other, taken in order, and one angle of the one is equal to the corresponding angle of the other.
- 2.—Prove that the diagonals of a parallelogram bisect one another.

Shew how to construct a rhombus, having given the middle points of two of its adjacent sides and the difference between its diagonals.

- 3.—Prove that the shortest straight line that can be drawn from a given point without a circle to its circumference is that one which, if produced, would pass through the centre.

The corner A of a rectangular piece of paper A B C D is folded over so that the crease passes through B; shew that A in its new position is nearest to D when the crease bisects the angle A B D.

- 4.—Draw from an external point a line which shall touch a given circle. Two circles A B and A C touch one another externally at A; B C is a common tangent to the two circles; prove that the tangent at A bisects B C, and that A B C is a right-angled triangle.
- 5.—What is meant when four lines are said to be “reciprocally proportional”?

If two triangles, which have a pair of equal angles, be equal in area, prove that their sides about the equal angles are reciprocally proportional.

- 6.—If $x + y + z = 0$, prove that $x^3 + y^3 + z^3 = 3xyz$ and that $(y - z)^2 + (z - x)^2 + (x - y)^2 = 3(x^2 + y^2 + z^2)$.

- 7.—Find the factors of (i) $(x^2 + 4x)^2 - 2(x^2 + 4x) - 15$.
 (ii) $51a^2 - 40a + 4$.
- 8.—Solve the equations (i) $\int (a+b)x - ay = a^2$
 $\int (a^2 + b^2)x - aby = a^3$
 (ii) $\frac{12}{5x+1} + \frac{7}{5x+2} = \frac{48}{15x+1}$
- 9.—Find the square root of
 $x^6 + 4x^5 + 20x^2 - 16x + 16$.
- 10.—Find the sum to n terms of the arithmetic progression
 $a, a+b, a+2b, \dots$
 The sum of 4 numbers in arithmetic progression is 20,
 and the product of the first and last is equal to the
 square of the second. Find the numbers.

MATHEMATICS II.

For Leeds City Council and Entrance Akroyd and Brown Scholarships, and Leeds City Council Entrance Free Studentships.

(Three hours allowed.)

- 1.—Show how to express the co-efficients of an equation in terms of the roots.
 If the roots of the equation $x^3 - ax^2 + bx - c = 0$, are in arithmetical progression, prove that $9ab = 2a^3 + 27c$.
- 2.—Show how to sum the series $1 + 2x + 3x^2 + \dots + nx^{n-1}$
 Prove that $1 + 2\left(1 + \frac{1}{n}\right) + 3\left(1 + \frac{1}{n}\right)^2 + \dots + n\left(1 + \frac{1}{n}\right)^{n-1} = n^2$
- 3.—Determine A, B and C so that

$$\frac{5(1+x)}{(1-2x)(1-3x)(1+x^2)} \equiv \frac{A}{1-2x} + \frac{B}{1-3x} + \frac{C}{1+x^2}$$
 If the expression is expanded in ascending powers of x by means of the Binomial Theorem, prove that the coefficient of x^{4r} is $-12 \times 2^{4r} + 18 \times 3^{4r} - 1$.
- 4.—Show how to express all the other trigonometrical ratios in terms of the cosine.
 Solve the equation $3(\sec x - 1) = \sin x \tan x (3 - 2 \cos x)$,
 having first expressed all the other ratios in terms of $\cos x$.

- 5.—Prove that $\cos(A+B) = \cos A \cos B - \sin A \sin B$.
 Prove the identities:—
 (i.) $\cos 3A = 4 \cos^3 A - 3 \cos A$
 (ii.) $\frac{\cos^3 A - \cos^3 2A}{\cos A - \cos 2A} = 1 + \cos A (\cos 2A + \cos 3A)$.
- 6.—Define a logarithm; and prove that for any base
 $\log(x^n) = n \log x$.
 Solve the simultaneous equations $3^x \cdot 2^y = 100$, $2^x \cdot 3^y = 50$.
- 7.—Prove that in any triangle
 (i.) $c = a \cos B + b \cos A$.
 (ii.) $\cos \frac{A}{2} = \sqrt{\frac{s(s-a)}{bc}}$
- 8.—An observer sees on the opposite side of a stream a tree which subtends an angle of 35° . On walking back 23 feet he finds that it subtends an angle of 24° . What is the breadth of the stream?
- 9.—A, B, C, D is a parallelogram. The coordinates of the points A, B, C are (3, 1); (4, -1); (5, 3) respectively. Find the coordinates of D and the equations of the sides of the parallelogram.
- 10.—Find the coordinates of the centre and the length of the radius of the circle $x^2 + y^2 - 4x - 6y + 3 = 0$.
 Prove that the straight line $3x + y = 19$ touches it at the point (5, 4).

MECHANICS.

For Akroyd and Brown Entrance, Craven (see below), and Leeds City Council Scholarships.

(Three hours allowed.)

- 1.—A safety-valve consists of a circular hole $\frac{1}{4}$ in. in diameter, closed by a plunger attached to a light horizontal hinged bar at a distance of 1 in. from the hinge. A weight of 2 lbs. rests on the bar 12 in. from the hinge. At what pressure of steam will the valve be lifted?

- 2.—A train runs round a curve of 200 yards radius at 40 miles an hour. What radial acceleration must be imparted to it by the rails?
- 3.—A cricket ball is thrown at an angle of 30° to the horizontal and reaches the ground at a range of 300 ft. Find (i.) the time taken, (ii.) the initial velocity, (iii.) the velocity after one second from the start.
- 4.—A bullet fired with a velocity of 1,500 ft. per second penetrates a block of timber to a depth of 3 in. With what velocity would it have emerged from the block if its thickness had been only 1 in.?
- 5.—A fly wheel 6 ft. in diameter has a 12 ton rim, and it runs at 200 revolutions per minute. If there are eight spokes, what will be approximately the pull on each spoke?
- 6.—A flexible cord, with one end fastened to the ceiling, is passed under a movable pulley (to which a weight of 5 lbs. is attached) and then over a fixed pulley, and the free end carries a weight of 3 lbs. Calculate the tension in the cord and the acceleration of each of the weights.
- 7.—What is a Watt? A clock weight of 5 kilograms is wound up through a height of 80 cm. once a week. Express in watts or in ergs per second the power needed to drive the clock.
- 8.—In some experiments of Michelson and Morley a flat cylindrical block of sandstone required to be floated upon mercury with its axis vertical. Taking the diameter of the block as being 3 ft., the height 1 ft., and the specific gravity 2.5, calculate the weight of mercury required for flotation in a suitable vessel if there be allowed everywhere a clearance of $\frac{1}{20}$ in. for the mercury.
- 9.—What must be the least diameter of a soap bubble (thickness $\frac{1}{80}$ of a millimetre) inflated with hydrogen to just float in air, the temperature being 20°C . and the pressure 77 cm?
[Density of mercury 13.6 $^\circ\text{C}$. Density (at 0°C . and 76 cm.) of air = .001293, and of hydrogen = .00009 in c.g.s. units.]

Candidates for the Craven Scholarship are requested to answer Questions 1, 3, 7, and 8 of the above paper and in addition the following:—

- 10.—Find the centre of gravity of weights of 1, 2, 3, and 4 pounds placed at the corners of a square.
- 11.—Calculate the kinetic energy of the train in foot pounds in Question 2 if its mass is 200 tons.
- 12.—In an Atwood's machine the weights are 3 and 5 lbs., calculate the tension in the string connecting the weights.

CHEMISTRY.

(Three hours allowed.)

- 1.—A gaseous mixture contains carbon dioxide, hydrochloric acid, and nitrogen. Try to devise a method for preparing from it a small specimen of each of the gases in a pure state.
- 2.—What is meant by a chemical equivalent? If chemical equivalents were used as atomic weights what would be the formulæ of ammonia, water, nitrous oxide, copper sulphate, sodium bicarbonate?
- 3.—Give an account of the solution of gases in water taking carbon dioxide and air as examples.
- 4.—Describe and sketch a suitable apparatus for carrying out the following processes:—(a) preparation of carbon monoxide; (b) examination of the action of heated tin on hydrogen sulphide.
- 5.—Explain exactly how you would prepare a specimen of bleaching powder and how you would use it for bleaching purposes. Explain the chemical actions involved.
- 6.—What volume of air measured at 20°C and 770 mm. bar, and containing 21% by volume of oxygen could be just deprived of its oxygen by 20 grammes of hot copper?
[Cu 63.]

BOTANY.

(Three hours allowed.)

- 1.—Name five of the most important elements of plant food. State the source from which they are obtained, and how they pass into the plant.
- 2.—Sketch the appearance of a Hyacinth or Crocus plant at different periods of the year. Explain the flowering of these plants in spring before leaves are fully developed.
- 3.—What are the features of a seed which distinguish it from a spore? Contrast the germination of a seed and a spore.
- 4.—Where is chlorophyll found in a plant, what is its appearance, and under what conditions is it formed?
- 5.—Describe and contrast the specimens supplied.
- 6.—Describe the plant supplied, and point out any peculiarities in its external features.

GEOGRAPHY.

For Craven Scholarship.

Five questions to be attempted. (Two hours allowed).

- 1.—What changes have taken place in the distribution of the Ship-building Industry in Britain during the last century? To what causes may they be ascribed?
- 2.—Contrast the character of the East Coast of Britain with that of the West Coast and explain the differences.
- 3.—Mention any facts which may account for the importance of four of the following:—Aden, Calcutta, Port Arthur, Birmingham, San Francisco, Singapore, Peshawur, Madiera.
- 4.—What do you suppose will be the principal effects of the construction of a Ship Canal through the Isthmus of Panama?
- 5.—Give a short account of the physical features of Italy.
- 6.—How do you explain the rise in importance of Liverpool and the decline of Chester?
- 7.—Describe the river systems of N. America.

- 8.—What are the principal industries carried on in Russia?
 9.—Whence do we get our chief supplies of (i) Wool;
 (ii) Timber? Do you know any facts connected with
 the exporting countries which explain their production
 of these commodities?
 10.—How could you be carried most expeditiously from
 Huddersfield to Cairo, and by what route would you
 travel if economy rather than speed were desired?

II. CLOTHWORKERS' TEXTILE DAY SCHOLARSHIP

MATHEMATICS.

(One-and-three-quarter hours allowed.)

- 1.—An article of commerce passes successively through the
 hands of three dealers, each of whom, in selling,
 adds 10 per cent. of the price at which he bought it
 as his profit. What did the first dealer pay for the
 article, if the third dealer sells for £11 1s. 10d?
 2.—When silk is sold at 19·25 francs the metre, find the
 price per yard in shillings and pence; £1 being
 equivalent to 25·2 francs and 1 metre equivalent to
 39·371 inches.
 3.—Find to 4 decimal places the values of $36\cdot37492 \times$
 $\cdot 02375$ and $23\cdot798 \div 386\cdot345$.
 Extract the square root of 160048·0036.
 4.—Simplify and find the product of
 $5x - \{2y - (x + y - 1)\}$ and $2[3y - \{x + 2y - (x + 2)\}]$.
 Divide $x^6 - 32y^6$ by $x - 2y$.
 5.—Find the highest common factor of
 $2x^3 - 3x^2 - 3x + 2$ and $4x^3 + 4x^2 - x - 1$.
 6.—Solve the equations:
 (1) $\frac{3x+1}{5} = \frac{x}{3} + \frac{2x-4}{2}$
 (2) $\frac{x+y}{3} + 5 = 10; \frac{x-4}{2} + y = 9\frac{1}{2}$.
 7.—A labourer was engaged for 36 days, upon the con-
 dition that he should receive 2s. 6d. for every day
 he worked, but should pay 1s. 6d. for every day he
 was not working. At the end of the time he
 received 58s. How many days did he work?

TEXTILE INDUSTRIES (DESIGNING AND WEAVING).

*(Three hours allowed.)**Not more than ten questions to be attempted.*

- 1.—Enumerate the various raw materials employed in the production of woven fabrics, and explain fully the character and qualities of those used for clothing purposes.
- 2.—Why should wool sorting be necessary? Describe the circumstances (a) when a large number of sorts is required and (b) when the raw material is used without sorting.
- 3.—Explain the process of wool scouring, and state the faults which sometimes occur.
- 4.—Briefly compare the method of construction of woollen and worsted yarns.
- 5.—Define a woven fabric and give sketches to illustrate your answer.
- 6.—Make three designs as follows :—
 - (a) A stripe on 72 ends, composed of three weaves derived from the $\frac{\text{---}^3}{3}$ twill.
 - (b) A stripe on 72 ends, composed of 9-shaft weaves.
 - (c) A check on 32 ends, using weaves other than simple twills.
- 7.—Draw a tappet for a $\frac{1}{3} \frac{3}{1}$ twill, supplying the necessary dimensions.
- 8.—Explain the action of the single and double lift dobby used in handloom weaving, giving a sectional drawing of each machine.
- 9.—Compare the systems of backing cloths with warp and weft respectively. Fully explain the methods of stitching, and give examples in each class,

- 10.—Explain the principle of the setting of cloths on the diameter theory, illustrating your answer by examples.
- 11.—Describe the various types of colour mixtures for fibrous materials, giving the proportions suitable for a costume cloth in five shades, using colours A, B, and C.
- 12.—Give examples in regular, irregular, and compound orders of colouring.
- 13.—Analyse the pattern submitted, giving weave, counts of yarn, and ends and picks per inch.
- 14.—(a) Find the resultant counts of a fancy yarn made as follows :—
- 2 ends of 40's black cotton, taking up 38 inches per yard.
 - 1 end of 5's mohair, taking up 63 inches per yard.
 - 1 " 40's silk, " 45 " "
- What quantity of each yarn would there be in 60 lbs. of the twist?
- (b) Give the weight and cost of material for an over-coating cloth made thus :—
- Warp : 10 threads $\frac{2}{30}$ skeins grey and white twist at $\frac{2}{6}$ per lb
 - 2 threads $\frac{2}{30}$ skeins black and crimson twist at $\frac{2}{8}$ per lb.
 - Weft : 10 skeins black at $\frac{1}{6}$ per lb.
 - Set 16's reed 2's, 68 inches wide in loom, and woven with 28 picks per inch, 64 yards warp, piece from loom 60 yards long. Add 5 per cent. to weft for waste in weaving.
- (c) State the time required to weave 64 yards of cloth in a loom with the following take-up motion :—
- Ratchet wheel 60 teeth, change wheel 56 teeth, intermediate 120 teeth, pinion 15, friction beam wheel 70, circumference of feed roller 15 inches. Speed of line shaft, carrying pulley 18 inches in diameter, 100 revolutions per minute, the diameter of the loom pulley being 12 inches. Allow 10 per cent. for stoppages.

FREEHAND DRAWING AND DESIGN.



- (1) The design must be copied and enlarged to about one and-a-half times the size.
- (2) The outline of the design must be broadly sketched in, and a portion must be worked out in detail, the latter to be subsequently washed in with the brush, Indian ink or ordinary black ink to be used for this purpose.
- (3) Tracing paper may be used in drawing the repeats.

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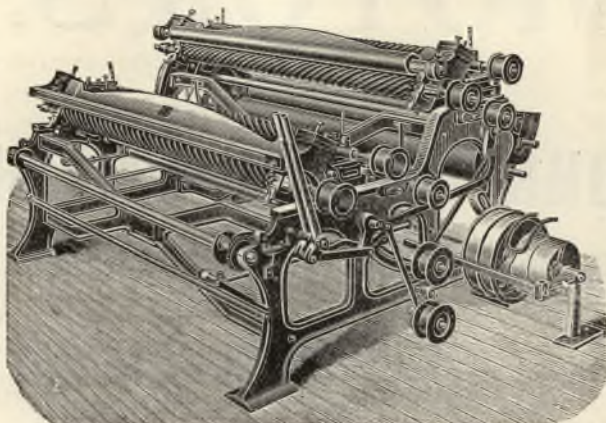
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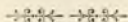


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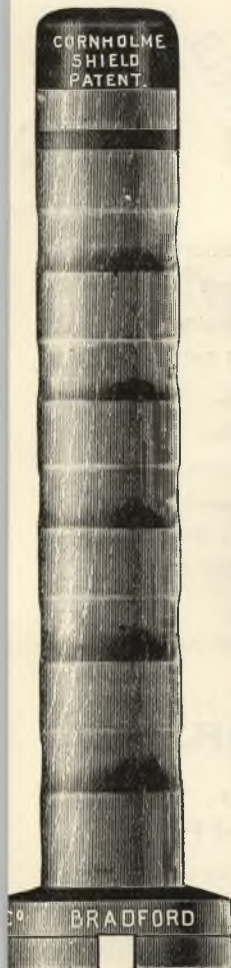
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