## CALENDAR

OF

# DALHOUSIE GOLLEGE

AND

# UNIVERSITY,

HALIFAX, NOVA SCOTIA.

1888-89.



HALIFAX:

PRINTED FOR THE UNIVERSITY BY THE NOVA SCOTIA PRINTING COMPANY. 1888.

## Balhousie College and University.

## HALIFAX, February 1st, 1888.

At a meeting of the Joint Committees of the Board of Governors, the Professors and the Alumni Association of Dalhousie College, it was decided to celebrate the opening of the new building by holding a Conversazione; and it was resolved to invite the lady friends of the College to co-operate in carrying out the intentions of the Committee. In accordance with this resolution, you are invited to attend a meeting of ladies at the College, on Monday the sixth day of February instant, at four o'clock in the afternoon.

Entrance at the north-east door.

Yours, very sincerely,

JOHN FORREST.

Chairman.

H. W. C. BOAK,

Secretary.

Celebration Committee.

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## NOTICES.

The more important changes in this Calendar will be found in §§ I, II, IV, VII, VIII, IX, X, XI, XIII, XIV, XVII, XXII, XXIII, XXVII, XXVII, XXXIII, XXXIII, XXXIV, XXXVII, XXXVII, XXXVIII, XXXIX, XL, XLI, XLII.

Announcements in regard to the course in Elocution will be made at the beginning of the Session.

Copies of this Calendar, with the Examination Papers set in the session of 1887-8, may be obtained, at twenty-five cents each, from H. W. Barnes, Esq., Nova Scotia Printing Company, Halifax, N. S.

## CONTENTS.

	PAGE
University Almanac	5
Historical Sketch	7
Benefactors	11
Time Table, Faculty of Arts.	14
Board of Governors	15
Senatus Academicus	15
Academic Staff	16
	1
FACULTY OF ARTS:	
Courses of Instruction	17
The Academic Year	29
Admission of Students	29
Degrees	30
Matriculation Examinations	31
Courses of Study for B. A. and B. L	33
Courses of Study for B. Sc	35
Attendance	36
Degree Examinations	36
Degrees with Honours	38
Short Courses for General Students	43
Medals and Prizes	44
Munro Exhibitions and Bursaries	:46
Residence	49
Church Attendance	49
Discipline	50
Degree of M. A	50
Admission ad eundem Gradum	50
Academic Costume	.50
Fees	.51
FACULTY OF LAW:	
Courses of Lectures	52
Academic Year	56
Admission of Students	56
Degree of Ll. B	56
Matriculation Examinations	.56
Course of Study for LL, B	57
Sessional Examinations	.58
Moot Courts	.56
Mock Parliament	59
Academic Costume	59
Library	,59
Fees	59

#### CONTENTS.

FACULTY OF MEDICINE:	PAGE
Courses of Instruction	60
Academic Year	62
Degrees	62
Matriculation Examinations	62
Degree Examinations	64
Primary M. D., C. M. Examinations	64
E liter	65 67
Academic Costume	67
Fees	01
Institutions:	
The University Library	68
The University Museum	71
The Gymnasium	71
University Lists:	
Degrees conferred, 1888	73
General Pass List	74
Honours, Medals, Prizes, &c, awarded 1887-8	75
Results of Examinations, 18878	76
Medals, Prizes, &c., awarded 187986	82
Graduates of the University	87
Undergraduates and General Students, 18878	94
ALUMNI ASSOCIATION	100
Appendix—Examination Papers, 18878.	
Matriculation and Junior Munro Exhibitions and Bursaries	i
Senior Munro Exhibitions and Bursaries	xiii
Entrance Examinations	xxii
Sessional Examinations (Faculty of Arts)	XXV
Examinations for Honours do	lxxx
Sessional Examinations (Faculty of Law)	xci
" (Faculty of Medicine)	ciii

## University Almanac, 1888-89,

#### 1888

- Aug. 28, Tu.—Last day for receiving notices of Supplementary and Matriculation Examinations (Law Faculty).
- Sept. 4, Tu.—Session (Law Faculty) begins. Matriculation and Supplementary Examinations (Law Faculty).
  - 4, "-Registration and payment of class fees (Law Faculty).
  - F, "-Meeting of Law Faculty, 4 P. M.
  - 6, Th.-Meeting of Senate, 11 A. M.
  - 7, F .- Meeting of Faculty of Arts, 11 A. M .- Meeting of Faculty of Law, 4 P.M.
  - 11, Tu.—3 P. M., Registration of Candidates for Matriculation and Bursary Examinations.
  - 12, W.—Session (Arts Faculty) begins.—Examinations for Senior and Junior

    Munro Exhibitions and Bursaries, and for 1st and 2nd Years

    Matriculation (Arts Faculty), begin:

9.45 A. M., Latin.

3 P. M., Greek.

13, Th.— 10 A. M., Mathematics.

3 P. M., ditto.

14, F.— 10 A. M., English.

3 P. M., ditto.

- Sa. 10 A. M., Chemistry and Natural Philosophy.
   3 P. M., Elementary Mechanics and Botany.
- 17, M.- 10 A. M., French and German.
- 17, "-Supplementary Examinations (Arts Faculty) begin, 10 A. M.
- 13, Tu.—Supplementary Examinations (Arts Faculty) continued, 10 A. M.
  - 21, F .- Meeting of the Faculty of Arts, 10 A. M.
- Matriculation, Registration, and Issue of Gymnasium Tickets, 2 P. M.
- 24, M.—Class Tickets (Arts Faculty) issued, 11 A. M.—Meeting of Faculty of Law, 4 P. M.
- 25, Tu.—Convocation, 3 P M.—Opening address by Hon. S. L. Shannon, D. C. L., Q. C.
- W.—Lectures begin. Last day for receiving applications for Medical Matriculation Examination.
- Oct. 8, M .- Meeting of Governors.
  - 9, Tu.-Registration of candidates for Medical Matriculation Examination.
  - W.—Final Matriculation Examinations (Arts Faculty) and Preliminary (Medical) Examination in General Education begin:
  - 3 P. M., English.

    11, Th.— 3 P. M., Classics and Modern Languages.
  - 12, F.- 3 P. M., Mathematics.
  - 13, Sa -10 A. M., Chemistry.
  - 16, Tu .- Meeting of Faculty of Arts, 1 P. M.
  - 18. Th.-Meeting of Faculty of Arts, 4 P. M.
  - 19, F. -Returns as to residence, &c., to be made on or before this day.
  - 29, M.—Session (Medical Faculty) begins.
- Nov. 1, Th.-Meeting of Faculty of Law, 4 P. M.
  - — Thanksgiving Day,—no lectures.
  - - Day after Thanksgiving Day, -no lectures.
- Dec. 6, Th.-Meeting of the Faculty of Law, 4 P. M.
  - 21, F.-No Lectures. Christmas Vacation begins.

#### 1889.

- Jan. 8, Th.-Meeting of Governors.
  - 7, M.-Lectures resumed.
  - 10, Th.-Meeting of Faculty of Law, 4 P. M.
- Feb. 1, F.-George Munro Day .- No lectures.
  - 4, M.-Meeting of the Senate, 4 P. M.
  - 7, Th.-Meeting of the Faculty of Law, 4 P. M.
    - F.—Last day of Lectures (Law Faculty).
- 18, M.—Sessional Examinations (Law Faculty) begin.
- Mans 1, F .- Last day for receiving M. A. Theses.
  - 6, W .- Ash Wednesday. No lectures.
  - 11, M .- Meeting of Senate, 4 P. M.
  - F.—Last day of Lectures (Arts Faculty).—Meeting of Faculty of Arts,
     4 P. M.
- April 1, M .- Meeting of Governors.
  - 3, W.—Sessional Examinations (Arts Faculty) begin:
    - 10 A. M., Latin.
      - 3 P. M., Practical Physics.
    - , Th.— 10 A. M., French.
      - 3 P. M., Botany, Hon. English.
  - F.— 10 A. M., Ethics, Addl. Latin (1st and 2nd years), Hon. Greek, Hon. Math., Hon. Exp. Phys., Hon. Phil.
    - 3 P. M., Addl. Latin 3rd and 4th years).
  - 8, M.— 10 A. M., Mathematics, Physics (3rd and 4th years).
    - 3 P. M., History (3rd year), Hon. Latin, Hon. Chemistry, Hon. History.
  - 9, Tu.— 10 A. M., Logic, Hon. Greek, Hon. Math. Phys., Hon. Exp. Phys.,
    Hon. Phil.
    - 3 P. M., Organic Chemistry, English (1st year), Hon. English.
  - 10, W.- 10 A. M., English (2nd, 3rd and 4th years).
    - 3 P. M., German.
  - 11, Th.— 10 A. M., Greek, Hon. Math., Hon. Phil., Hon. Hist., Hon. Chem.
  - 12, F.- 10 A. M., Inorganic Chemistry, History (4th year.)
    - 3 P. M., Metaphysics, Prac. Chemistry, Addl. Greek (1st and 2nd years), Hon. Latin.
  - 15, M.— 10 A. M., Mathematics, Dynamics, Political Economy, Hon. Exp.
    - 3 P. M., Addl. Greek (3rd and 4th years), Hon. Phil., Hon. Hist.
  - 16, Tu.- 10 A.M., Addl. Mathematics, Addl. Physics and Dynamics, Hon. Greek.
    - 3 P. M., Addl. English, Hon. English.
  - 16, "-Last day for returning books to the Library.
  - 17, W.- 10 A. M., Hon. Latin, Hon. Math., Hon. Phil., Hon. Chem.
  - 19. F.-Good Friday.
  - 20, Sa.-Meeting of the Faculty of Arts, 10 A. M.
  - 23, Tu.—Meeting of the Senate, 10 A. M.—Results of Sessional Examinations declared.
  - 25, Th.-3 P. M., CONVOCATION.

## HISTORICAL SKETCH.

DALHOUSIE COLLEGE was founded by the Earl of Dalhousie in 1821, "for the education of youth in the higher branches of science and literature."

The original endowment was derived from funds collected at the port of Castine in Maine, during its occupation in 1814 by Sir John C. Sherbrooke, then Lieutenant-Governor of Nova Scotia. These funds the British Government authorized the Earl of Dalhousie, Sir John's successor, to expend "in defraying the expenses of any improvement which it might seem expedient to undertake in the province"; and the Earl, believing that "a Seminary for the higher branches of education is much needed in Halifax—the seat of the Legislature—of the courts of justice—of the military and mercantile Society," decided upon "founding a College or Academy on the same plan and principle of that at Edinburgh," "open to all occupations and sects of religion, restricted to such branches only as are applicable to our present state, and having the power to expand with the growth and improvement of our society."

The original Board of Governors consisted of the Governor-General of British North America, the Lieutenant-Governor of Nova Scotia, the Bishop, the Chief Justice and President of Council, the Provincial Treasurer and the Speaker of the House of Assembly.

After unsuccessful efforts on the part of both the British Government and the Board of Governors to effect a union with King's College, the only other then existing in the Province, this College went into operation in 1838, under the Presidency of the Rev. Thomas McCulloch, D. D., and with a staff of three Professors.

By an Act passed in 1841, University powers were conferred on the College, and the appointment of the Governors was vested in the Lieutenant-Governor and Council.

In 1843, President McCulloch died, and in 1845 the College was closed, the Governors considering it "advisable to allow the funds of the institution to accumulate."

In 1848, an Act was passed authorizing the Lieutenant-Governor and Council to appoint a new board of Governors "to take such steps for rendering the institution useful and efficient as to His Excellency may seem fit." This Board, from 1849 to 1859, employed the funds of the University to support a High School.

In 1856, the Arts department of the Gorham College, Liverpool, N. S., was transferred to this College, "with a view to the furtherance of the establishment of a Provincial University," and an attempt was made to conduct the Institution as a University, in pursuance of the Act of 1841. This union, however, came to an end in 1857.

In 1863, the College was re-organized under the following Act:-

An Act for the Regulation and Support of Dalhousie Cotlege.

(Passed the 20th day of April, A. D., 1863.)

Whereas, it is expedient to extend the basis on which the said College is established, and to alter the constitution thereof, so as the benefits that may be fairly expected from its invested capital and its central position may, if possible, be realized, and the design of its original founders, as nearly as may be, carried out.

Be it enacted by the Governor, Council. and Assembly as follows:-

- 1. The Board of Governors now appointed, consisting of the Honorable William Young, the Honorable Joseph Howe, Charles Tupper, S. Leonard Shannon, John W. Ritchie, and James F. Avery, Esquires, shall be a body politic and corporate, by the name and style of the Governors of Dalhousie College, at Halifax, and shall have and exercise all usual powers and authorities as such, and have the title, control and disposition of the building on the Parade, at Halifax, and of the property and funds belonging to the said College, and held for the use thereof by the present Governors; and all vacancies at the Board shall be filled up on recommendation of the remaining members thereof by the Governor-in-Council; and any of the Governors shall be removable by the Governor-in-Council, at the instance of the Board of Governors.
- 2. Whenever any body of Christians, of any religious persuasion whatsoever, shall satisfy the Board that they are in a position to endow and support one or more chairs or professorships in the said College, for any branch of literature or science, approved of by the Board, such body in making such endowment, to the extent of twelve hundred dollars a year, shall have a right, from time to time, for every chair endowed, to nominate a Governor to take his seat at the Board, with the approval of the Board of Governors and of the Governor-in-Council, and shall also have a right, from time to time, to nominate a Professor for such chair, subject to the approval of the Board of Governors; and in the event of the death, removal, or resignation of any person nominated under this section, the body nominating shall have power to supply the vacancy thus created.
- 3. The same right of nominating a Professor from time to time shall belong to any individual or number of individuals, who shall endow to the same extent and support a chair or professorship, and to the nominee of any testator by whose will a chair or professorship may be so endowed.
- 4. The Governors shall have power to appoint and to determine the duties and salaries of the President, Professors, Lecturers, Tutors, and other officers of the College, and from time to time to make statutes and bye-laws for the regulation and management thereof, and shall assemble together as often as they shall think fit, and upon such notice as to them shall seem meet, and for the execution of the trust hereby reposed in them.
- 5. The said College shall be deemed and taken to be a University, with all the usual and necessary privileges of such institutions; and the students shall have liberty and faculty of taking the degrees of bachelor, master, and doctor, in the several arts and faculties at the appointed times; and shall have liberty within themselves of performing all scholastic exercises for the conferring of such degrees, and in such manner as shall de directed by the statutes and bye-laws.

- 6. No religious tests or subscriptions shall be required of the professors, scholars, graduates, students, or officers of the College.
- 7. The internal regulation of the said College shall be committed to the Senatus Academicus, formed by the respective chairs or professorships thereof, subject in all cases to the approval of the Governors.
- 8. The Legislature shall have power, from time to time, to modify and control the powers conferred by this Act.
- 9. The Acts heretofore passed in relation to Dalhousie College are hereby repealed, except the Act passed in the fourth year of his late Majesty King George the Fourth, entitled, "An Act authorizing the lending of a sum of money to the Governors of Dalhousie College, and for securing the repayment thereof."

This Act was afterwards amended by the following Acts:-

An Act to Amend the Act for the Regulation and Support of Dalhousie College.

(Passed the 6th day of May, A. D., 1875).

Be it enacted by the Governor, Council, and Assembly, as follows:-

- 1. The present Board of Governors, consisting of nine persons, shall be increased to a number not exceeding fifteen; and the Board shall be filled up by new nominations made on the same principle as set forth in the first section of the Act hereby amended; and any of the Governors shall be removable. as heretofore, by the Governor-in-Council.
- 2. The Governors shall have power to affiliate to Dalhousie College any other Colleges desirious of such affiliation, or any schools in arts, in theology, in law, or in medicine, and to make statutes for such affiliations, and for the regulation and management thereof, on the same principles as obtain in other Universities, and to vary and amend such statutes from time to time. Provided always, that such statutes of affiliation, before they go into effect, shall be submitted to and receive the sanction of the Governor-in-Council.
- 3. So much of chapter 24 of the Acts of 1863, entitled, "An Act for the Regulation and Support of Dalhousie College," or of any other Act, as is inconsistent with this Act, is repealed.

An Act to provide for the Organization of a Law Faculty in connection with Dalhousie College, and for other purposes.

(Passed the 14th day of April, A.D., 1881.)

Be it enacted by the Governor, Council, and Assembly, as follows:-

1. The Governors of Dalhousie College at Halifax, shall, in addition to the powers conferred on them by section 2 of chapter 27 of the Acts of 1875, entitled, "An Act to Amend the Act for the Regulation and Support of Dalhousie College," have power to organize a Faculty of Law in connection with such College; and to appoint professors or lecturers in law, and out of the revenues of the College to provide for the maintenance and support of such Faculty, and to make rules for the regulation and management of such Faculty, and for the granting of degrees in law on the same principles as obtain in other universities, and to vary and amend such rules from time to time.

- 2. Section 3 of chapter 24 of the Acts of 1863, entitled, "An Act for the regulation and support of Dalhousie College," is amended by adding the words "and governor" after the word "professor" in the said section, and any individual who has hitherto endowed a chair or chairs in the College shall have a right to nominate a governor for each chair endowed, in the same way as if section 3 aforesaid had been originally passed as now amended.
- 3. Section 1 of the said chapter 27 of the Acts of 1875, is amended by adding the words "provided, however, that in the event of any body of Christians, individual, or number of individuals, endowing and supporting one or more chairs or professorships in the said College, as provided by sections 2 and 3 of the Act hereby amended, and of such body of christians or individuals nominating a professor or governor by virtue thereof, the number of Governors may be increased beyond fifteen, but such increase shall be limited to the number of such chairs or professorships as may after the passing of this Act be founded by virture of the said said sections 2 and 3."

In pursuance of the Act of 1863, the Presbyterian Church of the Lower Provinces closed their College, and agreed to support two chairs in this University; The Synod of the Maritime Provinces in connection with the Church of Scotland founded one chair; and the College opened in that year, under the Principalship of Rev. James Ross, D.D., and with an Arts Faculty of six Professors,

In 1868, a Faculty of Mcdicine was organized, which in 1875 developed into the Halifax Medical College. In 1885 the Faculty was re-organized, and the Halifax Medical College affiliated.

In 1883 a Faculty of Law was added.

In 1879, George Munro, Esq., of New York, a native of this Province, placed in the hands of the Governors the funds necessary for the endowment of a Professorship of Physics. In 1881, he established a Professorship of History and Political Economy. In 1882, he founded a chair of English Language and Literature. In 1883, he added to the staff of the College a Professor of Constitutional and International Law, and Tutors in Classics and Mathematics. In 1884, he founded a Professorship of Metaphysics. Since 1880, he has provided the University with Exhibitions and Bursaries, to the amount of \$46,215.44, which, according to his own desire, have been so offered for competition as to stimulate to greater activity and efficiency the High Schools and Academies of Nova Scotia and the neighboring Provinces.

The Governors desire to place on permanent record their high sense of Mr. Munro's enlightened public spirit, and their gratitude to him for the munificent manner in which he has come to their help in the work of building up an unsectarian University in Nova Scotia.

To connect the donor's name for all time with the benefits thus conferred both on the University and on his native country, the chairs which he has founded shall be called the George Munro Chairs of Physics, of History and Political Economy, of English Language and Literature, of Constitutional and International Law, and of Metaphysics respectively.

In 1883, Alexander McLeod, Esq., of Halifax, bequeathed to the University the residue of his estate. The following is an extract from his will:—

"All the residue of my Estate I give and bequeath to the Governors of Dalhousie College or University in the City of Halifax in

Trust, that the same shall be invested and form a fund to be called the McLeod University Fund, and the interest and income of which shall be applied to the endowment of three or more professorial chairs in said College as they may deem proper; but this bequest is made upon these conditions, namely, that if at any time the said College or University should cease to exist, or be closed for two years, or be made a sectarian college, then and in any such case, the said Fund and all accumulations thereof shall go to the said Synod of the Maritime Provinces of the Presbyterian Church in Canada, to be used for the purposes of higher education in connection with said Synod, and it is further stipulated that no part of this Fund shall ever be used, either by said Governors of Dalhousie College or by the said Synod, as a collateral security under any circumstances whatever."

According to the provisions of the will, the McLeod Chairs of Classics, Chemistry and Modern Languages were founded.

In 1886, SIR WILLIAM YOUNG, one of the oldest and best friends of the College, subscribed \$20,000 to start a Building Fund. In 1887, Sir William Young bequeathed to the University half the residue of his estate, together with a Prize Fund of \$4000, and the amount remaining unpaid to his subscription to the New Building. The following are extracts from his will:—

"I bequeath to the Governors of Dalhousie College at Halifax, the sum of \$4000 to be kept continually invested by them, and that they shall apply the income derived therefrom in founding and maintaining a prize of a gold medal of the value of \$50, to be called Sir William Young's medal, and to be annually awarded for scholastic eminence, and to have the recipient's name engraved thereon, with the year of his attendance at College, and in founding and maintaining such other prizes for distribution among the students of said College as the Governors may from time to time approve."

"Having agreed and promised to the Governors of Dalhousie College to pay them the sum of \$20,000 to aid in the erection of their building now in progress, I direct my executors to pay the said sum from time to time as it may be required by the said Governors."

"All the rest and residue of my estate I direct my executors to divide into two even and equal parts or shares, and to pay over one such part or share to \* \* \* \*, and the other part or share to the Governors of Dalhousie College at Halifax, for the general purposes of said College."

"In the event of my having paid to Dalhousie College during my life-time any part of said sum of \$20,000 hereinbefore mentioned, as agreed to be paid to them to aid in the erection of the college buildings, I do direct my executors to pay to said Governors the balance only, if any, that may be due on said sum at the time of my decease."

Clause 15, of the Will of Dr. J. F. Avery, provides as follows:—
"I give and bequeath the sum of \$500 to Dalhousie College in the City of Halifax, to be at the disposal of the Senatus of the said College, and the interest thereof to be appropriated for an annual prize."

The following donations have been made to the Endowment Fund:

Hon. Sir Wm. Young, W. J. Stairs, Esq., Hon. Stayley Brown,
John Gibson, Esq., John P. Mott, Esq., Wm. P. West, Esq., Thos.

A. Ritchie, Esq., and Hon. Robt. Boak, \$1000 each; Adam Burns, Esq., Peter Jack, Esq., Hon. Jeremiah Northup, Prof. Lawson and Alex. McLeod, Esq., \$500 each.

The following subscriptions have been made to the Building Fund:

Rev. Louis H. Jordan, \$1000; John Doull, John S. McLean, R. Sedgewick, \$750 each; Thomas Bayne, John McNab, Adam Burns, Hon. R. Boak, Dr. Avery, \$500 each; President Forrest, \$375; James Forrest, \$300; Prof. John Johnson, Peter Jack, William Miller, Prof. McDonald, \$250 each; Prof. McGregor, A. & W. Mackinlay, \$225 each; Prof. Alexander, Wallace Graham, \$200 each; James Scott, R. B. Seeton, Rev. John McMillan, Wm. Robertson, J. C. MacIntosh, H. McD. Henry, John Y. Payzant, Pearson, Morrison & Forbes, \$150 each; J. G. Stewart, \$120; Rev. E. Scott, Peter Ross, H. W. C. Boak, Pictou Academy, \$100 each; Wm. B. Wallace, Arthur Drysdale, E. Newcombe, Alfred Costley, H. W. Barnes, Hugh McKenzie, \$75 each; W. C. Silver, Graham Fraser, \$50 each; E. McKay, \$30; J. M. Stewart, \$25; Rev. A. Falconer, \$20; J. H. Sinclair, Dr. J. Stewart, \$10 each. In all \$10640.

The following donations have been made from time to time to meet current expenses:

Hon. Sir Wm. Young, \$500; John Doull, Esq., \$400; J. S. Maclean, Esq., \$300; J. F. Avery, Esq., M. D., S. Fleming, Esq., C. M. G., Rev. Principal Grant, D. D., W. J. Stairs, Esq., Thos. Bayne, Esq., John Gibson, Esq., Rev. J. McMillan, B. D., and John McNab, Esq., \$200 each; James Scott, Esq., and A. K. Mackinlay, Esq., \$180 each; Hon. R. Boak, and the Medical Faculty, \$160 each; Rev. President Forrest, D.D., Hon. A G. Jones, and Geo. Thomson, Esq., \$150 each; A. Burns, Esq., \$125; J. J. Bremner, Esq., \$120; B. H. Collins, Esq., J. Donaldson, Esq., Prof. J. DeMill, Prof. J. Johnson, Prof. G. Lawson, Prof. J. Liechti, Alex. McLeod, Esq., Robt. Morrow, Esq., Hon. Jeremiah Northup, Joseph Northup; Esq., T. A. Ritchie, Esq., Rev. Principal Ross, D.D., Ed. Smith, Esq., R. H. Skimmings, Esq., John Stairs, Esq., Jas. Thomson, Esq., and Hon. Sir Charles Tupper, \$100 each; J. W. Carmichael, Esq., C. D. Hunter, Esq., Major-General Laurie, Messrs. Lawson, Harrington & Co., Prof. C. Macdonald, J. P. Mott, Esq., and Hon. Judge Ritchie, \$80 each; G. P. Mitchell, Esq., and Hon. S. L. Shannon, \$60 each; J. B. Duffus, Esq., R. W. Fraser, Esq., Peter Jack, Fsq., and W. H. Neal, Esq., \$50 each; with smaller sums amounting to \$1349.

The following donations have been made for the purpose of providing scientific apparatus:

Hon. Sir William Young, \$500; Prof. J. G. MacGregor, \$260; The Alumni Association, \$150; J. F. Avery, Esq., M.D., Thos. Bayne, Esq., Hon. R. Boak, Alex McLeod, Esq., John McNab, Esq., Hon. Jeremiah Northup, W. J. Stairs, Esq, and W. P. West, Esq., \$100 each; Thos. A. Brown, Esq., Messrs. Doull & Miller, Messrs. Esson & Co., John Gibson, Esq., Peter Jack, Esq.. Prof. G. Lawson, J. S. Mclean, Esq., Robt. Morrow, Esq., Hon. J. W. Ritchie, James Thomson, Esq., and a Friend, \$50 each; with smaller sums amounting to \$645

For other benefactions, see under headings: Library, Museum, and Gymnasium.

In addition to the members of the present staff, the following have occupied Professorial Chairs in the College between the dates and in the subjects set opposite their names:

REV. THOMAS McCulloch, D.D., 1838-43, President, and Professor of Moral Philosophy, Logic and Rhetoric.

REV. ALEXANDER ROMANS, 1838-42, Classics.

REV. JAMES McIntosh, 1838-44, Mathematics and Natural Philosophy.

REV. FREDERICK TOMKINS, M.A., LL.D. (Lond.), now Barrister, London, G. B., 1856-7, Mathematics and Natural Philosophy.

Rev. George Cornish, B.A., (Lond.), now Professor of Classics, McGill College, 1856-7, Classics.

THOMAS McCulloch, 1863-5, Natural Philosophy.

JOHN JAMES MACKENZIE, M.A, Ph.D., 1877-79, Physics.

Herbert A. Bayne, M.A., Ph. D., F.R.S.C., late Prof. of Chemistry, Roy. Mil. Coll, Kingston, Ont., 1877-79, Organic Chemistry and Chemical Analysis.

James DeMill, A.M., 1866-80, Rhetoric and History.

REV. DAVID HONEYMAN, D.C.L., F.S.A., F.R.S.C., Provincial Museum, Halifax, 1878-83, Geology and Peleontology.

REV. James Ross, D.D., 1863-85, Principal, and Professor of Ethics. J. G. Schurman, M.A., D.Sc., now Prof. of Ethics and Metaphysics, Cornell Univ., 1882-86, English Literature and Metaphysics.

Hon. J. S D. Thompson, now Minister of Justice, 1883–86, Lecturer on Procedure and Evidence.

ROBT. SEDGEWICK, B.A., Q.C., now Deputy Minister of Justice, 1883-88, Lecturer on Equity Jurisprudence.

## TIME TABLE — FACULTY OF ARTS.

Years.	Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
First Year.	9 10 " 11 12 2 3	Math. (Tutor.) Latin.  Mathematics. Latin (Tutor.)  1st German.	Inorg. Chem. Greek. Botany. Mathematics. English. 2nd French. 1st French.	Inorg. Chem. Latin.  Mathematics, Latin (Tutor.)  1st German.	Math. (Tutor.) Greek. Botany. Mathematics. English. 2nd French. 1st French.	Inorg. Chem. Latin.  Mathematics. Greek (Tutor.)  1st German.
Second Year.	9 10 11 12 2 3	Mathematics. Latin. English Lit. 2nd German. Log. and Psy.	3rd French. Mathematics. Greek. 2nd French. Log. and Psy.	Mathematics. Latin. English Lit. 2nd German. Log. and Psy.	3rd French. Mathematics. Greek.  2nd French. Log. and Psy.	Mathematics. Latin. English Lit. 2nd German.
Third Year.	9 10 "" " " " " " " " " " " " " " " " " "	Org. Chem. History. Chem. Lab. Latin. Adv. Math. Chem. Lab.  1st German. Adv. Eng. Lit. Adv. History. Metaphysics.	3rd French. Greek (1st yr.) Pol. Economy Dynamics. Botany. Adv. Classics. Physics. Chem. Lab. Greek (3rd yr.) Const. Hist. Chem. Lab. 2nd French.	Org. Chem.  History. Chem. Lab. Latin. Adv. Math. Chem. Lab.  Ist German. Adv. Eng. Lit. Adv. History. Metaphysics.	3rd French. Greek (1styr.) Pol. Economy Dynamics. Botany. Adv. Classics. Physics. Chem. Lab. Greck (3rd yr.) Const. Hist. Chem. Lab. 2nd French. 1st French.	Physics. Chem. Lab. Latin. Adv. Math. Chem. Lab. Adv. Log.&Psy 1st German. Adv. Eng. Lit. Adv. History.
Fourth Year.	9 44 44	Const. Law. Physics. Org Chem. Adv. Physics Ethics. Chem. Lab. Latin. Chem. Lab. 2nd German. Adv. Eng. Lit. Adv. History. Metaphysics.	2rd French. Pol. Economy. Dynamics. Botany. Adv. Classics. His;ory. Greek (2nd yr) Chem. Lab. Greek (4th yr) Adv. Math. Chem. Lab. Adv. Metaph.	Chem. Lab.	Pol. Economy, Dynamics. Botany. Adv. Classics. History. Greek (2nd yr) Chem. Lab. Greek (4th yr) Adv. Math. Chem. Lab. Adv. Metaph. 2nd French.	Chen. Lab. Latin. Adv. Math. Chem. Lab.

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James Seth, M. A. (Edin.), George Munro Professor of Metaphysics and Ethics.

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HOWARD MURRAY, B. A. (Lond.), George Munro Tutor in Classics.

ARTHUR STANLEY MACKENZIE, B. A. (Dal.), George Munro Tutor in Mathematics.

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TUTORS: MURRAY, MACKENZIE.

## § I.—COURSES OF INSTRUCTION.

#### I .. - CLASSICS.

(McLeod Professorship.)

#### First Year Latin Class.

Professor's Class—Mondays, Wednesdays, and Fridays, 10-11 A.M.—After Christmas the class is conducted by the Tutor.

# Tutorial Class-Mondays and Wednesdays, 12 M.-1 P.M.

## Subjects of study:

Cicero: Pro Lege Manilia. (Wilkins's, Macmillan, Lond.) \* Pro Milone (Purton's, University Press, Cambridge.) Virgil: Æneid, Book VI. (Page's, Macmillan, Lond.). Composition: Arnold's Latin Prose, by Bradley, (Rivingtons, London). Grammar: Syntax and Prosody (Allen and Greenough's, Ginn, Boston.) History: Roman History (Smith's, Harpers, N. Y.)

<sup>‡</sup> The Tutor will also be in the Library two or three times a week, from 3 to 5 p.m., when he may be consulted by students with reference to their studies.

<sup>\*</sup>Students seeking a First or Second Class at the Sessional Examinations are examined in this additional subject. Such students are also required to show special accuracy in grammar.

#### Second Year Latin Class.

# Mondays, Wednesdays and Fridays, 11 A.M.-12 M.

## Subjects of study:

Horace: Odes, Books I, \*II, \*III, (Page's, Macmillan, London); Livy: Book I, (Stephenson's, Macmillan, London). Composition: Easy Pieces for Latin Prose, (First Series, Champneys and Rundall, Rivingtons, London). History: Grecian History (Smith's smaller edit., Harners, N. Y.)

#### † Third and Fourth Years Latin Class.

Mondays, Wednesdays and Fridays, 12 M .- 1 P.M.

## Subjects of study in alternate years:

For 1888-9.—Horace: Selected Satires. Tacitus: Annals, Bk. I, (Smith's or Anthons's.)—Composition: Bennett's Second Latin Writer (pub. by Rivingtons, London.)

For 1889-90.—Tacitus: Agricola (Church & Brodribb's, Macmillan, London.) Plautus: Captivi (Harrington's, Harpers, N. Y.) Juvenal: Satires III, X, XIII, (Hardy's, Macmillan, London, 5s.)—Composition: Bennett's Second Latin Writer (pub. by Rivingtons, London.)

#### First Year Greek Class.

Tuesdays and Thursdays, 10-11 A.M.; Fridays, 12 M.-1 P.M.

t (Conducted by the Tutor.)

#### Subjects of study:

Lucian: Vera Historia, (Jerram's, Clarendon Press, Oxford.) \*Xenophon: Cyropædia, Book I, Gorham's, Whittaker, London.) Composition: Elementary Greek Prose Competition, (by Fletcher & Nicholson, pub. by W. Bailie, Kingston, Ont.,) introductory rules; oral and \*written exercises.—Grammar: Accidence, (Goodwin's, Ginn, Boston.)

#### Second Year Greek Class.

‡ Tuesdays and Thursdays, 11 A.M.-12 M.

## Subjects of study:

Homer: Odyssey, Book IX, (Major's, Macmillan, London.) Xenophon: Hellenica, Book II, (Hailstone's, Macmillan, London.) \*Demosthenes: Olynthiacs, (Oxford ed. with notes.)—Composition: As in First Year's Class; also Sidgwick's First Greek Writer, (Rivingtons, London,) introductory rules; oral and \*written exercises.

<sup>\*</sup> Students seeking a First or Second Class at the Sessional Examinations are examined in this additional subject. Such students are also required to shew special accuracy in grammar.

<sup>†</sup> An "unseen" passage will be set for translation to students seeking a First Class in these years.

<sup>‡</sup> The Tutor will also be in the Library two or three times a week, from 3 to 5 p.m., when he may be consulted by students with reference to their studies.

#### t Third and Fourth Years Greek Class.

Tuesdays and Thursdays, 12 M.-1 P. M.

Subjects of study in alternate years:

For 1888-9.—Demosthenes: Philippics, I, II, III, (Tarbell's, Ginn & Co., Boston.) Euripedes; Medea, (Verral's, Macmillan, Lond.)—Composition: Sidgwick's Introduction to Greek Prose Composition, introductory rules; oral and \*written exercises.—Philology: Peile's Primer of Comparative Philology.

For 1889-90.—Plato: Apologia Socratis: (Adam's, Clarendon Press, Oxford). Aeschylus: Prometheus Vinctus.—Composition: Sidgwick's Introduction to Greek Prose Composition, introductory rules; oral and written exercises.—Philology: Müller's Science of Language, vol. 1, chaps. 1-7.

#### Advanced Class.

#### Twice or three times a week.

In this class the Latin and Greek Subjects prescribed for Honours in the department of Classies are read, and Latin Prose Compostion is regularly practised.

#### II.-MODERN LANGUAGES.

(McLeod Professorship.)

Professor..................................JAMES LIECHTI, M. A.

#### First French Class.

Tuesdays and Thursdays, 3-4 P.M.

#### Subjects of study:

Guizot: Guillaume le Conquérant (Hachette & Co.) Molière: Le Bourgeois Gentilhomme, (Macmillan & Co.) Exercises in Grammar and Composition.

Text Books: Brachet's Public School Elementary French Grammar. Other Text Books required will be announced at the opening of the Session.

#### Second French Class.

Tuesdays and Thursdays, 2-3 P.M.

## Subjects of study :

Molière's : L'Avare. Racine : Athalie, (Macmillan & Co.). Translation from English writers. Exercises in Syntax.

Molière's Misanthrope (Macmillan & Co.) is prescribed for private reading to candidates for a First Class position at the Sessional Examinations.

Text Books: Brachet's Public School French Grammar. Other Text Books' required will be announced at the opening of the Session.

<sup>†</sup> An "unseen" passage will be set for translation to students seeking a First Class in these years.

<sup>\*</sup> Students seeking a First or Second Class at the Sessional Examinations are assumined in this additional subject. Such students are also required to shew special accuracy in Grammar.

#### Third French Class.

Tuesdays and Thursdays, 9-10 A.M.

Subjects of study:

Molière: Les femmes savantes, (Macmillan & Co.) Corneille: Horace, (Clarendon Press). Translations from English writers. Original Essays. Lectures on French Literature.

Molière's Tartufe (Macmillan & Co.) is prescribed for private reading to candidates for a First Class position at the Sessional Examinations.

Text Books: Brachet's Public School French Grammar.

#### First German Class.

Mondays, Wednesdays and Fridays, 3-4 P.M.

Subjects of study:

Adler's Reader, parts III, IV and V,; Schiller: Wilhelm Tell, (Macmillan & Co.) Act I. Exercises in Grammar and Composition.

Text Book: Otto's German Grammar. Other Text Books required will be announced at the opening of the Session.

#### Second German Class.

Mondays, Wednesdays and Fridays, 2-3 P.M.

Subjects of study:

For 1888-9. Goethe: Egmont. Schiller: Maria Stuart, (Macmillan & Co.) Translations from English writers. Lectures on German Literature.

For 1889-90. Goethe: Hermann und Dorothea, (George Bell & Sons.) Schiller: Maria Stuart, (Macmillan & Co.) Lectures on German Literature.

Schiller's Geschichte des dreissigjährigen Kriegs, Part I., Book I., is prescribed for private reading to candidates for a First Class position at the Sessional Examinations of 1889.

Text Book : As in First Class.

#### Third German Class.

Mondays, Wednesdays and Fridays, 9-10 A. M.

Subjects of study:

For 1888-9.—Lessing: Minna von Barnhelm, (Macmillan & Co.). Schiller: Jungfrau von Orleans. Prose composition. Lectures on German Literature.

For 1889-90.—Goethe: Egmont. Lessing: Nathan der Weise. Prose composition. Lectures on German Literature.

Schiller's Wallenstein's Tod, (George Bell & Sons) is prescribed for private reading to candidates for a First Class position at the Sessional Examinations of 1889.

### III.—ENGLISH LANGUAGE & LITERATURE.

(George Munro Professorship.)

#### First Year Class.

#### Tuesdays and Thursdays, 12-1 P. M.

Composition, embracing Exercises in the formation of sentences, General Principles of Composition, Characteristics of Style, etc.-Students are required to write exercises, for the most part on subjects connected with the course in Literature.

As an illustration of the principles laid down in the course on Composition, and as an introduction to the study of literature, the following works will be read critically :-

Dryden: Mac Flecknoe, St. Cecilia's Day, Alexander's Feast, \*Stanzas on Oliver Cromwell, \*Astræa Redux, \*Annus Mirabilis, \*Absalom and Achitophel. Addison: Select Essays. Pope: Rape of the Lock. Johnson: London, Vanity of Human Wishes, Life of Pope, \*Lives of Dryden, Addison, and Gray. Gray: Elegy. Goldsmith: Traveller, Deserted Village, \*Select Essays. Macaulay: Samuel Johnson.

Books recommended: Nichol's Composition Primer (Macmillan); Hudson's Selection from Addison and Goldsmith, (Ginn & Heath, Boston); Clarendon Press Edition of Dryden; Hale's Longer English Poems (Macmillan)—which contains all the poetry read in the class.

#### Second Year Class.

#### Mondays, Wednesdays and Fridays, 12-1 P. M.

Critical readings of select works of Shakespeare and Milton, with lectures thereon :-

Shakespeare: Richard II., Midsummer Night's Dream, \*Henry IV., Pts. I. and II., \*Merchant of Venice, Julius Casar, King Lear, \*Antony and Cleopatra. Milton: L'Allegro, Il Penseroso, Lycidas, Paradise Lost, Bks. IV., VII.—IX.

Students will be required to write exercises from time to time, for the most part on subjects connected with the course in Literature.

Books recommended: Rolfe's Edition of the separate plays of Shakespeare. Dowden's Shakespeare Primer, Clarendon Press Edition of Milton.

#### Third and Fourth Year Class.

### Twice a week.

Lectures on some of the leading poets and prose writers of the

nineteenth century, with reading of selected works.

This class will be held in alternate sessions, beginning with the session of 1889-90. Undergraduates will not be permitted to take thi class as a part of their ordinary course, unless their ability to profi by it has been made made clear to the Professor by their previous

<sup>\*</sup> Candidates for First Class will be examined in these additional works, which will not be read in class.

#### Advanced Class.

Detailed history of Elizabethan and Early Stuart Literature with special study of select works (8 xi. (11).

Books recommended: Saintsbury's History of Elizabethan Literature, Rolfe's Edition of Shakespeare, Clarendon Press and Arber Editions of Elizabethan works.

### IV.-HISTORY AND POLITICAL ECONOMY.

(George Munro Professorship.)

## Third Year History Class.

Mondays and Wednesdays, 12 A.M.-12 M., and Fridays, 10-11 A.M.

## Subjects of study:

Mediæval History and Modern History to 1555.

The class work will be conducted by means of lectures and examinations on prescribed reading.

Text Book: Gibbon's Decline and Fall of the Roman Empire (Student's Edition).

Books recommended: Hallam's Middle Ages; Bryce's Holy Roman Empire; Irving's Mahomet and his Successors; Guizot's History of Civilization; Michaud's History of the Crusades; Robertson's Charles V.; Stubb's Constitutional History of England.

#### Fourth Year History Class.

Tuesdays and Thursdays, 11 A.M.-12 M.

#### Subjects of study:

Modern History from 1555.

The class work will be conducted by means of lectures and examinations on prescribed reading. In the lectures books of reference will be named and select portions specified for reading.

 ${\it Text\ Books:}\ {\it Green's\ England}\ ;\ {\it Guizot's\ France\ (Masson's\ Abridgement)}\ ;\ {\it Menzel's\ Germany.}$ 

#### Advanced History Class.

Once a week.

### Subjects of study:

English History from 1603 to 1688.

The work of this class will be conducted by means of lectures and examinations on reading prescribed from Clarendon, Gardiner, Green, Hallam, Ranke, and other authorities.

This class is intended especially for Candidates for Honours in English Literature and History.

#### Political Economy Class.

Tuesdays and Thursdays, 10-11 A. M.

The work of this class will be conducted by means of lectures and examinations on prescribed reading.

Text Book: Mill's Principles of Political Economy.

#### Advanced Political Economy Class.

Twice a week.

The work of this class will consist of lectures, entering into the principles of Political Economy more fully than can be overtaken in the ordinary class, with examinations on the following books, viz: Smith's Wealth of Nations, Cairnes' Principles of Political Economy, Carey's Principles of Social Science, Roscher's Political Economy, Fawcett's Protection and Free Trade, Carey's Harmony of Interests, aud George's Progress and Poverty.

#### V.-METAPHYSICS AND ETHICS.

(George Munro Professorship.)

Professor.....JAMES SETH, M. A.

#### Metaphysics Class (Third and Fourth Years.)

Mondays and Wednesdays, 4-5 P. M.

After an introductory account of the nature and scope of Philosophy in its various departments, and a general sketch of the history of Metaphysics, attention will be concentrated on modern metaphysical theories. Here the history of Cartesianism will first be traced; and afterwards, in more detail, the development of modern Sensationalism in Locke, Berkeley and Hume, leading up to the Critical Philosophy of Kant. The significance of Berkeley in the latter movement will receive special attention, and his philosophy, as contained in the class Text Book, will be made the subject of detailed study, oral examination and discussion.

The work of the class will be conducted mainly by lectures, but will also embrace an essay and special readings in connection with the course.

Text Book: Fraser's Selections from Berkeley, (Clarendon Press Series.)

#### Ethics Class (Fourth Year).

Mondays, Wednesdays and Fridays, 11 A. M.-12 M.

After an introductory account of the province and method of Ethics, and its relation to other branches of Philosophy, the history of ethical thought will be traced, and the various theories critically examined. The course will thus fall into two divisions,—the one concerned with Ancient (chiefly Greek), the latter with Modern (chiefly British and German) ethical theories. Under the latter division will be explained

and criticised the different forms of Intuitionism—Æsthetic and Rational; of Hedonism—Egoistic, Altruistic and Evolutionistic; and of Transcendentalism—Kantian and Neo-Kantian.

The work of the class will be conducted mainly by lectures, but will also embrace oral examination and discussion. Short essays, as well as special readings in connection with the course, will be prescribed from time to time.

Text Book: Sidgwick's Outlines of the History of Ethics (Macmillan & Co).

#### Advanced Class (Fourth Year).

Tuesdays and Thursdays, 12-1 P. M., and Fridays, 4-5 P. M.

In this class, which is intended mainly, though not exclusively, for candidates for Honours in Philosophy, the books prescribed for Honours in Metaphysics and Ethics will be made the subject of critical study.

## VI .- LOGIC AND PSYCHOLOGY.

Professor ...... REV. WM. LYALL, LL.D.

#### Second Year Class.

Mondays, Tuesdays, Wednesdays and Thursdays, 3-4 P. M.

This course will consist of lectures on Mind and its phenomena,—the laws and faculties of Cognition, comprising a review of the doctrines of Locke, Reid, Stewart, Brown, Hamilton, and the modern Sensationalist School,—with the philosophy of the Emotions. Under Logic will be considered—the nature of Concepts, Judgments and Reasonings; the opposition and conversion of Propositions; the different orders of Syllogism; the Fallacies; the doctrine of Method; the sources of Error and the means of their correction.

Books recommended—Sir Wm. Hamilton's Lectures on Metaphysics and Logic; Prof. Lyall's "Intellect, the Emotions and the Moral Nature."

#### Advanced Class.

### Fridays, 2-3 P. M.

This class is intended especially for candidates for Honours in Mental and Moral Philosophy, the work extending over two sessions, and alternating between the two divisions of the general subject.

The lectures will enter into a more critical review of the psychological phase of Philosophy, the theory of the Ratiocinative process, with especial reference to the views of Mill and Hamilton; together with the laws and methods of Inductive Logic.

#### VII.-MATHEMATICS.

Professor. C. Macdonald, M. A.

Tutor. A. S. MacKenzie, B. A.

#### First Year Class.

Daily, 11 A. M.-12 M.

## Subjects of study:

ALGEBRA.—Involution, Evolution, Theory of Indices, Equations of the First and of the Second Degree, Elements of Determinants, Proportion, Inequalities, Indeterminate Equations, Variation, Progressions; Propositions in the Theory of Equations, with Horner's method of approximating the roots of an Equation of a Degree higher than the Second.

Geometry.—First and Second Books of Euclid revised, Third and Fourth Books, Definitions of Fifth, and Sixth Book, with Geometrical Exercises and Practical applications.

The class meets daily with the Professor. The Tutorial class meets once a week, for the purpose of revision of the Professor's Lectures, and illustration of them in working further examples. The Tutor will also be in the Library two or three times a week, from 3 to 5 o'clock, P. M., when he may be consulted by students with reference to their studies.

Books recommended—Colenso's or Todhunter's or Hamblin Smith's (Miller & Co.), Elements of Geometry; Colenso's or Todhunter's Algebra; C. Smith's Treatise on Algebra; Hall & Knight's Higher Algebra. (The two latter books are recommended to those who wish to pursue advanced work. Todhunter's small School Algebra is scarcely sufficient for the course).

#### Second Year Class.

Daily, 10-11 A. M.

### Subjects of study:

Geometry.—Sixth Book of Euclid revised. Drew's Conic Sections, Parabola and Ellipse. Geometrical Exercises continued; 21 Propositions of the Elventh Book of Euclid.

TRIGONOMETRY.—Analytical Plane Trigonometry as far as, but exclusive of, DeMoivre's Theorem. Practical applications, with the use of Logarithms, to the Solution of Triangles, Measurement of Heights and Distances, Navigation, &c. Spherical Trigonometry as far as the solution of Right-Angled Triangles.—For First or Second Class; Extension of Ordinary Course; DeMoivre's Theorem and Series connected with the measurement of Circular arcs.

ALGEBRA.—Permutations and Combinations, Binomial Theorem, Properties of Logarithms, Compound Interest, Annuities, Probabilities.—For First or Second Class; Extension of Ordinary Course. Investigations connected with the Binomial Theorem, Indeterminate Co-efficients, and the Theory of Logarithms, with applications.

The ordinary class meets, in the beginning of the Session, three days with the Professor, and two days with the Tutor; afterwards, two days with the Professor and three with the Tutor.

The main subjects of study in the Professor's classes 'are Modern Geometry and Advanced Algebra; in the Tutor's Euclid, the Conic Sections geometrically treated, and Analytical Plane Trigonometry.

The Professor holds a class one day a week (Friday) for those studying the additional subjects for First or Second Class.

The Tutor will be in the Library two or three times a week from 3 to 5 P. M., when he may be consulted by students with reference to their studies.

Books recommended—Colenso's Algebra, 1st part and, for the additional subjects, 2nd part: also the books recommended for the first year; Todhunter's Plane Trigonometry; Todhunter's Spherical Trigonometry; Chamber's Logarithmic, &c. Tables.

#### Advanced Class.

There are two Divisions in this Class:

The First Division meets three times a week.\* Subjects: Analytical Trigonometry, commencing with the applications of DeMoivre's Theorem; Analytical Geometry; Spherical Trigonometry as far as Napier's Analogies: Theory of Equations; Differential Calculus.

Books recommended—Todhunter's Plane Trigonometry; C. Smith's Conic Sections; Todhunter's Theory of Equations; Williamson's Differential Calculus; Williamson's Integral Calculus; Todhunter's Spherical Trigonometry. Any Standard Works on the subjects treated may, however, be used.

The Second Division meets three times a week.\* Subjects: Spherical Trigonometry as far as Napier's Analogies; Theory of Equations; Differential Calculus; Integral Calculus, with Differential Equations; Applications of these to Physics, Physical Astronomy, &c.

Books recommended—The same as for the First Division. Also, Tait & Steele's Dynamics of a Particle; Todhunter's Analytical Statics; Boole's Differential Equations.

#### VIII.-PHYSICS.

(George Munro Professorship.)

#### Third Year Physics Class.

Tuesdays, Thursdays and Fridays, 11 A. M .- 12 M.

Subjects of the lectures:

The elements of Dynamics; the properties of solid and fluid bodies; Heat; Electricity and Magnetism; Light and Radiant Heat; and Sound. These subjects will be treated in an elementary manner, Dynamics only in so far as a knowledge thereof may be necessary in the study of the other subjects of the course.

Books recommended—Lodge's Elementary Mechanics (W. & R. Chambers), Garnett's Elementary Treatise on-Heat (Deighton, Bell & Co.), Cumming's Electricity Treated Experimentally (Rivingtons), and Deschanel's Natural Philosophy, Ed. Everett. Part IV—Sound and Light (Blackie & Son).

<sup>\*</sup> An extra hour for some part of the session may be required.

#### Fourth Year Physics Class.

## Mondays and Wednesdays, 10-11 A. M.

The subjects studied in this class will be the same as those of the Third Year Class, but they will be treated in a less elementary manner. In the present session attention will be directed more especially to Heat and Electricity.

Books recommended—For ordinary students, Maxwell's Theory of Heat, (Longmans), and Cumming's Theory of Electricity (Macmillan & Co.).—Candidates for Honours in Experimental Physics and Chemistry are recommended to read also MacGregor's Kinematics and Dynamics (Macmillan & Co.), Tait's Properties of Matter (A. & C. Black), S. Taylor's Sound and Music (Macmillan & Co.), Lloyd's Wave Theory of Light (Longmans).

#### Dynamics Class.

#### Tuesdays and Thursdays, 10-11 A. M.

The lectures will be on the following subjects:

Kinematics: (a) motion of a point, (b) motion of a rigid system of points,  $(c)^*$  strains.

Dynamics: (a) of a Particle, including Kinetics and Statics, (b) of systems of Particles, (c) of a rigid body, including Kinetics and Statics, (d)\* of elastic solids and fluids.

The portions of the subject marked above with asterisks are intended for candidates for a first class position at the Sessional Examinations. The portions not thus marked constitute the ordinary work of the class.

Text Book-MacGregor's Kinematics and Dynamics (Macmillan & Co.)

### Advanced Mathematical Physics Class.

### Mondays and Wednesdays, 11 A. M.-12 M.

The subjects of the lectures will be as follows:

Kinematîcs; Dynamics of a Particle and of a Rigid Body; Hydrodynamics; Thermodynamics; Electrodynamics.—Students will be assumed to have a sufficient knowledge of the Differential and Integral Calculus and to be familiar with the Text Book of the Dynamics Class.

This class is intended especially for candidates for Honours in Mathematics and Physics, but other persons having sufficient knowledge of Mathematics and Physics will be admitted.

Books recommended—Tait and Steele's Dynamics of a Particle (Maemillan & Co.), Aldis' Rigid Dynamics (Deighton, Bell & Co.), Besant's Hydromechanics (Deighton, Bell & Co.), Tait's Sketch of Thermodynamics (Douglas, Edinburgh.)

#### Practical Physics Class.

The work of this class will consist of the exact determination of physical constants, such as density, specific heat, electromotive force, electrical resistance, &c., and the conducting of experimental investigations.

The class is intended especially for candidates for Honours in Experimental Physics and Chemistry; but other persons having sufficient knowledge of Physics will be admitted.

 $Book\ recommended$  —Glazebrook and Shaw's Practical Physics (Longmans, Green & Co).

#### IX.-CHEMISTRY.

(McLeod Professorship.)

Professor.......George Lawson, Ph. D., LL.D.

Inorganic Chemistry Class.

Tuesdays, Wednesdays and Fridays, 9-10 A. M.

Subjects of Lectures:

General Principles. Chemical Affinity. Laws of Combination, by weight, by volume. The Elements. Compounds. Equivalent and Atomic Numbers; Atomicity. Nomenclature; Notation; Formule; Equations. The Non-Metalic Elements considered in detail; their modes of occurrence in nature; preparation in the free state; their compounds; natural phenomena and artificial processes in which they take part; useful manufactures to which they are related. The Metals considered in regard to their physical and chemical characters and modes of occurrence in nature; Classification of the Metals. Alloys, Amalgams; Constitution of Salts: Bases, Acids, Radicals. Discussion of the more important Metallic Elements in detail; their Salts and other compounds; Metallurgical processes; Chemical Manufactures.

 $\mathit{Text}\ \mathit{Book}$  : Greene's Edition of Wurtz's Elements of Modern Chemistry (Lippincott, Philadelphia.)

#### Organic Chemistry Class.

Mondays and Wednesdays, 10-11 A. M.

Subjects of Lectures:

Principles of Classification. Elementary Analysis. Methane and its Homologues, and their Substitution Compounds. The Monatomic Alcohols, and related compounds. The Fatty Acids. Compound Ethers. Polyatomic Alcohols, Ethers and Acids. The Aromatic Series. Benzol and its derivatives. Alkaloids.

Students are exercised in the Laboratory in the preparation of organic compounds, and in experiments to determine their properties.

Text Book: Greene's Edition of Wurtz's Elements of Chemistry. Reference works in the College Library will be recommended during the course.

#### Chemical Laboratory.

PRACTICAL CHEMISTRY.—Systematic Separation and Detection of Bases and Acids. Preparation of Reagents. The work is done entirely by the students. Where additional time can be given, students will also be exercised in the preparation of, and manipulation with, the more important elementary and compound gases.

Laboratory Books: One of the following: Macadam's Practical Chemistry, Fresenius's Qualitative Analysis, Goodwin's Text Book.

QUANTITATIVE ANALYSIS.—Instruction is provided in Quantitative Analysis, for the benefit of candidates for Honours in Experimental Physics and Chemistry, and also for Students who, having taken Practical Chemistry in their Third Year, are desirous of taking it

again in their Fourth Year. Other persons, having a sufficient knowledge of Chemistry, will also be admitted. Instruction is offered not only in General Quantitative Analysis, but also in special work, such as the analysis of Ores, Coal, and other Mineral Substances, Fertilizers, Soils, Mineral Waters, Sanitary Examinations of Water, Air and Food, Detection and Estimation of Poisons.

Laboratory students are required to furnish themselves with test tubes and to replace apparatus which they may destroy; and those who wish to work in special departments, such as any of those mentioned above, or to engage in original research, may require to furnish themselves with the necessary apparatus.

Text Book: Fresenius's Quantitative Analysis, Vol. I. Special works in the College Library, will be recommended when necessary.

#### X.-BOTANY.

Professor......GEORGE LAWSON, PH. D., LL. D.

Tuesdays and Thursdays, 10-11 A. M.

The course in Botany embraces the subjects of Structural and Physiological Botany, special attention being given to Minute Structure and Development of Tissues, the phenomena of Growth, Reproduction, Life-History, and Plant Movements. Also Classification, as illustrated by the leading natural orders of North American plants. A Biological Laboratory, in connection with this class, will be fitted up in the new College Building.

Text Book: Goodale's Physiological Botany (vol. II. of Gray's Botanical Text Book.) Field Book for Summer Work: Gray's Manual.

- § II.—THE ACADEMIC YEAR.—The academic year consists of one session. The session of 1888-9 will begin on Wednesday, 12th September, 1888, and end on Wednesday, 24th April, 1889.
- § III.—ADMISSION OF STUDENTS.—1. Persons of either sex may become students of the College by (a) furnishing satisfactory references or certificates of good moral character (on first entering the College), (b) entering their names in the Register (annually), and (c) paying the annual Registration fee (§ xxi).
- (2.) Registered students may on payment of the proper fees (§ xxi), enter any of the ordinary classes of the College. The Tutorial classes are open to members of the ordinary classes in connection with which they are held; the Advanced classes, to students who have sufficient knowledge of the subjects taught in them.
- (3.) Students who are candidates for degrees are known as Undergraduates, others as General Students.

- § IV.—DEGREES.—(1.) Three baccalaureate degrees are conferred in the Faculty of Arts, those, viz., of Bachelor of Arts (B. A.), Bachelor of Letters (B. L.) and Bachelor of Science (B. Sc.)
- (2.) Persons who wish to obtain University Degrees must become Undergraduates. Persons of either sex may become Undergraduates by (a) passing either one of the Matriculation Examinations or a recognized equivalent (§§ iv, 4–6, and vi), and (b) matriculating, i. e., entering their names on the Matricula or Register of Undergraduates.
- (3.) Two Matriculation Examinations are held, of lower and higher grade respectively. The First Year Matriculation Examination admits to the First Year of the various courses. The Second Year Matriculation Examination admits to the Second Year of the various courses, and thus enables those who pass it to obtain their degrees at the end of three academic years.
- (4.) Persons may be admitted as Undergraduates of the First Year, without Examination, on presentation of certificates from the Principals of High Schools or Academies, approved for this purpose by the Faculty, stating that they have satisfactorily completed the work prescribed for the First Year Matriculation Examination and passed satisfactory examinations therein.
- (5.) Persons, who may have appeared as candidates for Junior Munro Exhibitions and Bursaries, may be admitted as Undergraduates of the First Year, without further examination, provided their examinations are approved by the Faculty.
- (6.) Undergraduates of other Universities may, on producing satisfactory certificates, be admitted ad eundem statum in this University, if on examination they are found qualified to enter the classes proper to their years. But if their previous courses of study have not corresponded to the courses on which they enter in this University, they may be required by the Faculty to take additional classes.
- (7.) Undergraduates must pursue, at the College, specified courses of study, which vary with the degrees for which they are candidates, but in the case of all degrees extend over four years. They must also pass the prescribed examinations according to the regulations of § x.

## § V.—FIRST YEAR MATRICULATION EXAMINATION.

-(1.) The following are the subjects of this Examination:

1 and 2. Two of the following:—Latin, Greek, French, German. (Candidates for B. A. must pass in Latin, and if they are to take Greek as one of the subjects of the First Year, must also pass in Greek.)

LATIN.—Grammar. Composition—Translation of easy sentences, as in Smith's Principia Latina, Part iv, Exs. 1-35. One Latin book. The following books are recommended:

For 1888: Cæsar, Gallic War, Book I.; or Virgil, Aeneid, Book I.

For 1889; Cæsar, Gallic War, Books II. and III.; or Virgil, Aeneid, Book I.

GREEK -Grammar. One Greek book. The following books are recommended:

For 1888: Xenophon, Anabasis, Book III., or Symposium (Wiman's, pub. by J. Allyn, Boston.)

For 1889: Xenophon, Anabasis, Book IV., or Symposium (See above).

FRENCH.—Voltaire: Charles XII., Books I. and II.; or Scribe, Bertrand et Raton (Comédie).—Questions in Grammar limited to the Accidence, and based upon the passages selected.—Easy English sentences for translation into French.

GERMAN.—Adler's German Reader (Appleton & Co.), Zweiter Abschnitt, 1-4 and 14-17 (inclusive); or Schiller's Der Neffe als Onkel, I Act. Grammar: Declensions of the Articles, Nouns, and Adjectives.

N. B.—Instead of the books recommended above in Latin, Greek, French and German, candidates may offer equivalents which are not included in the Course of Study. Such equivalents must have been previously approved by the President.

3. MATHEMATICS.—Arithmetic. Geometry: Euclid's Elements, Books I. and II. Algebra: Simple Rules, and Simple Equations of one unknown quantity, not involving surds.

4. English.—Language: Grammar, Analysis, Writing from Dictation, Punctuation, Synthesis, Paraphrasing. History and Geography: Outlines of English and Canadian History, and General Geography.

The above examination may be conducted partly viva voce.

(2.) Candidates taking French and German, and those who wish to offer equivalents, are required to give notice to the President, of their intention to appear at this Examination, at least one week before the day on which it is held, and in giving such notice they must state which of subjects 1 and 2 they take and what equivalents they offer instead of books specified above.

(3.) This examination will be held at the College on September 11th-17th, 1888. For the benefit of candidates unable to present themselves on these days, an opportunity will

be granted of appearing for examination on October 10th-12th. But no student will be admitted as an undergraduate at a later date without the special permission of the Faculty.

## § VI.—SECOND YEAR MATRICULATION EXAMINATION. —(1.) The following are the subjects of this examination:

1 and 2. Two of the following: Latin, Greek, French, German, Botany. (Candidates for B. A. must pass in Latin; if they are to take Greek as one of the subjects of the Second Year, they must also pass in Greek; if not, they may select Greek, or French, or German.—Candidates for B. L. must pass in two languages, of which one must be French or German.—Candidates for B. Sc. must pass in one modern language and in Botany).

LATIN.—The ordinary\* subjects of the First Year Class, as specified in § 1, together with one additional book.

GREEK.—The ordinary\* subjects of the First Year Class, as specified in § 1, together with one additional book.

FRENCH.—The subjects of the First French Class, as specified in § 1.

GERMAN.—The subjects of the First German Class, as specified in § 1.

BOTANY.—The subjects of the lectures of the Botany Class, as specified in  $\S$  1.

N. B.—Instead of the books prescribed above in Latin, Greek, French, and German, candidates may offer equivalents which are not included in the Course of Study. Such equivalents must have been previously approved by the President.

3. Mathematics.—The subjects of the First Year Class, as specified in § 1.

4. English.—In addition to the subjects of the First Year Matriculation Examination (in which special stress will be laid on Composition), candidates will be required to pass an examination on the literary subjects specified for the ordinary\* work of the First Year Class (§ 1)—or the equivalents thereof.

5. INORGANIC CHEMISTRY.—The subjects of the First Year Class (§ 1.)—Candidates may omit this subject; but in that event they must either pass the examination therein on entering the Third Year, or take it instead of one of the elective subjects in the Third Year.

The above examination may be conducted partly viva voce.

(2.) Candidates who have previously passed in any one or more of the above subjects, or in any portion thereof, either at the Matriculation Examination or at the Sessional Examinations of the First Year, shall be exempt from further examination therein.

<sup>\*</sup> The "ordinary" subjects are those not marked with an asterisk in § 1.

- (3.) Candidates must give at least one fortnight's notice to the President, of their intention to appear at this examination; and in giving such notice they must state in what Latin, Greek, French, German, and English books they intend to offer themselves for examination, whether or not they wish to be examined in Chemistry, and in what subjects they claim exemption from examination.
- (4.) This examination will be held at the College on September 11th—17th, 1888. For the convenience of candidates unable to appear on these days, an opportunity will be granted of appearing for examination on October 10th—15th. But no student will be allowed to enter as an undergraduate at a later date, without the special permission of the Faculty.
- § VII.—COURSES OF STUDY FOR DEGREES OF B. A. AND B. L.—The following is a list of the classes which undergraduates are required to attend in the four years of the B. A. and B. L. courses. The details of the subjects studied in these classes, will be found under Courses of Instruction (§§ I and XXII).

First Year.

- 1. For B. A.-Latin. For B. L.-German.
- 2. For B. A.—Greek, or French, or German. For B. L.—French.
  - 3. Mathematics.
  - 4. Inorganic Chemistry.
    - 5. English.

Undergraduates taking French or German, enter the classes for which the Professor considers them fitted.

#### Second Year.

- 1. For B. A .- Latin. For B. L .- German.
- 2. For B. A.—The language chosen as subject 2 in the 1st year. For B. L.—French.
  - 3. Mathematics.
  - 4. English Literature.
  - 5. Logic and Psychology.

#### Third Year.

- 1. For B. A.—Latin or Greek. The language selected must have been taken during the first two years. For B. L.—German or French.
  - 2. Physics.
  - 3. History.

## 4-5. Any two of the following\*:

a.	Greek.	g. P	olitical Economy.
Ъ.	Hebrew.	h. M	letaphysics.
c.	French.	i. D	ynamics.
d.	German.		rganic Chemistry.
	The aliab 1		Prostical (Thamistner

e. English.† k. Practical Chemistry.
f. Constitutional History l. Botany.
(Law Faculty.)

Undergraduates are required, on or before the 20th of September, to submit to the President for approval, the names of the two subjects, 4-5, which they may wish to select.

Undergraduates selecting French or German for the first time, enter the classes for which the Professor considers them fitted. Those selecting Greek for the first time, enter the First Year Class.

A certificate of attendance on a class of New Testament Greek in any recognized College, will exempt from subject 1 or from one of the two subjects 4-5, an undergraduate who has taken Greek in the first two years.

The University provides no instruction in Hebrew, but a certificate of attendance on a Hebrew Class in any recognized College will exempt an undergraduate from one of the two subjects, 4-5.

## Fourth Year.

1. For B. A.—Latin or Greek. The language chosen must have been taken during the first three years. For B. L.—The language chosen as subject 1 in the 3rd year, unless the 2nd class in that language have been entered in the 1st year, in which case one of the electives a-o may be taken instead.

## 2. Ethics.

## 3-5. Any three of the following\*:-

a.	Greek.	2.	Constitutional Law
<i>b</i> .	Hebrew.		(Law Faculty.)
c.	French.	j.	Physics.
d.	German.	k.	Practical Physics.
e.	English†.	7.	Dynamics.
f.	History.	m.	Organic Chemistry.
g	Political Economy.	n.	Practical Chemistry.
h.	Metaphysics.	0.	Botany.

Undergraduates are required, on or before the 20th of September, to submit to the President for approval, the names of the three subjects (3-5) which they may wish to select.

Undergraduates taking the First Year Greek class in the Third Year must take the Second Year class in the Fourth. Those taking the First French or First German class in the Third Year must take

<sup>\*</sup> So far as the provisons of the Time Table permit.

<sup>†</sup> See Syllabus of English Classes (§ 1.)

the Second class of the same subject in the Fourth. Neither the First Year Greek class nor the First German or French class can be taken in the Fourth Year without special permission.

Subjects in which but one class is provided (see § I) can be taken but once as part of the course.

A certificate of attendance on a New Testament Greek class in any recognized College, will exempt from subject 1, or from one of the three subjects 3-5, an undergraduate who has taken Greek during the first three years.

A certificate of attendance on a class in Hebrew in any recognized College will exempt from one of the three subjects 3-5. If the Hebrew class be one of 5 hours a week, attendance on it will exempt from two of the said subjects.

§ VIII.—COURSE OF STUDY FOR DEGREE OF B. Sc.— The following is a list of the classes which undergraduates must attend during the four years of the B. Sc. Course. The details of the subjects studied in these classes will be found under Courses of Instruction (§ I.)

## First Year.

- 1. French or German.
- 2. Botany.
- 3. Mathematics.
- 4. Inorganic Chemistry.
- 5. English.

Practical work in Botany will be prescribed for the summer following the First Year.

## Second Year.

- 1. The language chosen as subject 1 in the First Year.
- 2. Practical Chemistry.
- 3. Mathematics.
- 4. English Literature.
- 5. Logic and Psychology.

## Third Year.

- 1. The modern language not chosen as subject 1 in the first two years.
  - 2. Physics.
  - 3. Dynamics.
- 4. Either Advanced Mathematics or Organic and Practical Chemistry.
  - 5. One of the following:
    - a. French. e. Metaphysics.
    - b. German. f. Organic Chemistry.
  - c. History. g. Practical Chemistry.
  - d. Political Economy. h. Ethics.

## Fourth Year.

- 1. The language taken as subject 1 in the Third Year.
- 2. Physics.
- 3-4. Either Advanced Mathematics and Advanced Mathematical Physics or Practical Chemistry and Practical Physics.
  - 5. One of the following:
    - a. French.
- f. Practical Chemistry.
- b. German. g.
- g. Practical Physics.
- c. History.
- h. Metaphysics.
- d. Political Economy.
- i Ethics.
- e. Organic Chemistry.

Undergraduates selecting French or German in the First or Third Years enter the classes for which the Professor considers them qualified.

No class can be taken twice during the Course.

- § IX.—ATTENDANCE.—(1.) Undergraduates are required to attend with regularity the classes of their respective years. Professors shall mark the presence or absence of students immediately before commencing the work of the class, and shall note as absent those who enter thereafter, unless satisfactory reasons be assigned.—The amount of absence as recorded in the class registers, which shall disqualify for the keeping of a Session, shall be determined by the Faculty.
- (2.) Attendance on Tutorial Classes is, for the more advanced undergraduates, voluntary; but the Professors in connection with whose classes they are held, have the right of requiring the attendance of undergraduates whom they may consider to need the Tutor's help.
- (3.) Undergraduates of any year, who may have previously attended one or more of the classes of that year, and passed satisfactory examinations in the subjects of them, may be exempted by the Faculty from attending those classes a second time.
- § X.—SESSIONAL EXAMINATIONS.—(1) The examinations which candidates for Degrees are required to pass, after Matriculation, are called Sessional Examinations. They are held at the end of the Session\* in each of the four years of the Courses, in the subjects of the classes of that year, as specified in §§ VII and VIII. Candidates who wish merely to pass are examined in the ordinary work of the various classes only; candidates who wish to pass with distinction are in some classes

<sup>\*</sup> In the subject of Psychology the examination held at about the middle of the Session.

examined in additional work also.—The distinctions awarded are of two grades, First and Second Class.—All students are admitted to these examinations, and certificates are issued showing the standing they attain.

- (2.) Undergraduates who are exempted by § 1x (3), from attendance on one or more classes, shall be exempted also from passing the Sessional Examinations in the subjects of them.
- (3) Undergraduates of the Third and Fourth Years who are exempted from attendance on one or more classes on presentation of certificates from recognized Colleges, shall be exempted from examination in the subjects of those classes on presentation of certificates of having passed examinations therein, in the said Colleges.
- (4.) An undergraduate shall not be allowed as such to enter the classes of any year, unless he has passed all the required examinations of the previous year.
- (5.) If an undergraduate absent himself from any University Examination, except for such cause as may be considered sufficient by the Faculty, he shall lose his Session.
- (6.) If an undergraduate fail to pass in more than two subjects at any Sessional Examination he shall lose his Session.

  —In the case of an undergraduate taking a Session a second time, the Faculty may remit attendance on classes, the examinations of which he has already passed with credit.
- (7.) If an undergraduate fail to pass in more than two subjects at the Sessional Examinations of the First Year, he shall be allowed to appear as a candidate at the Second Year Matriculation Examination of any subsequent Session.
- (8.) If an undergraduate fail to pass in one or two subjects at any Sessional Examination, he shall be allowed a Supplementary Examination in such subject or subjects at the beginning of any subsequent Session, on the day fixed for that purpose in the University Almanac. For fee see § xxI.
- (9.) If an undergraduate absent himself from any Sessional Examination on the day appointed in the Almanac, for reasons considered sufficient by the Faculty, he shall be allowed to appear for examination on the day fixed in the Almanac for the corresponding Supplementary Examination. For fee see § XXI.
- (10.) If an undergraduate absent himself from a Supplementary Examination for reasons deemed sufficient by the Faculty, he shall be allowed to appear as a candidate at a

special Examination, on a day to be appointed for that purpose by the Faculty. For fee see § xxI.

- (11.) A second Supplementary Examination in the same Session, in any subject of the Sessional Examinations shall in no case be granted.
- (12.) Undergraduates wishing to appear as candidates at any Examination other than Sessional Examinations, shall be required to give notice of their intention, to the Secretary of the Faculty, at least one week before the date of such examination.
- (13.) Students are forbidden to take any book or manuscript into the Examination Hall, except by direction of the Examiner, or to give or receive assistance, or to hold any communication with one another at the Examinations. If a student violate this rule he shall either lose his session or suffer such penalty as the Faculty may see fit to impose.
- § XI.—DEGREES WITH HONOURS.—(1.) An undergraduate shall be allowed, during the Third and Fourth Years of his Course, to restrict his attention to a more limited range of subjects than that demanded of candidates for an ordinary degree, by entering upon one of the Honours Courses, provided he has either attained both a First Class standing at the previous Sessional Examination in the subject corresponding to that of the Honours Course selected, and a satisfactory standing in the other subjects of the course, or received the special permission of the Faculty.
- (2.) Honours Courses are provided in the following departments, viz, (1.) Classics, (2.) Latin and English, (3.) Greek and English, (4.) English and English History, (5.) Mental and Moral Philosophy (including Political Economy), (6.) Mathematics and Mathematical Physics, (7.) Experimental Physics and Chemistry. Undergraduates in Arts may become candidates in any one of the above departments; undergraduates in Letters in any one of departments 4, 5, 6, and 7; undergraduates in Science in either of the departments 6 and 7.
- (3.) A candidate for Honours in any of the above departments shall be required to attend the Advanced Classes provided in the subjects of such department (§ 1), to make progress satisfactory to the Professors who conduct such classes, and to pass the examinations in the subjects of such department; and he shall be allowed to omit, from the subjects demarded of candidates for the ordinary degree, certain subjects specified below.

- (4.) The examinations for Honours shall be held at the end of the Fourth Session. But a candidate for Honours may defer his examinations in the subjects of his Honours Course until a year after he has passed the Sessional Examinations in the ordinary subjects of the Fourth Year; in which case, however, such candidate shall not be entitled to his Degree until he has passed the Honours Examination.
- (5.) A candidate for Honours, who attains a First or Second Class standing at the examination for Honours, shall obtain the Degree of Bachelor with First or Second Rank Honours respectively in such department.
- (6.) A candidate who fails to obtain Honours shall receive the ordinary Degree, if his examinations in the subjects of the ordinary course and in those of the department of Honours in which he has studied, are of sufficient merit.
- (7.) Candidates for Honours in Classics may, in each of the Third and Fourth Years, omit any two of the subjects of those years, except Latin and Greek.

They shall be examined in the following subjects:

LATIN.—Plautus: Miles Gloriosus,
Terence: Adelphi.
Virgil: Georgics, Books I., IV.
Horace: Epistles, Books I., II.; Ars Poetica.
Juvenal: Satires, VII., VIII., XIV.
Cicero: De Oratore.
Livy: Books XXI., XXII.
Tacitus: Germania: Annals, Book II.

Composition .- Latin Prose.

Literature.—Crutwell's History of Latin Literature, selected chapters.

Greek.—Aeschylus: Eumenides.
Sophocles: Oedipus Rex.
Aristophanes: The Knights.
Homer: Odyssey, Books v., vi., vii., viii.
Thucydides: Book ii.
Plato: Phaedo.
Demosthenes: De Corona.
Aristotle: Poetics.

Composition. - Greek Prose (in 1890).

Philology.—Peile's Introduction to Greek and Latin Etymology; Comparative Philology by Papillon.

Literature.—Mahaffy's History of Greek Literature, the portions bearing on the authors and subjects read in the undergraduate course; Donaldson's Theatre of the Greeks, selected portions.

(8.) Candidates for Honours in Latin and English may, in each of the Third and Fourth Years of their course, omit any two of the subjects of those years, except Latin and English, the Third and Fourth Years English Class being regarded, however, in the case of candidates for Honours in this department, not as an ordinary subject but as a part of the They shall be examined in the following Honours Course. subjects, viz. :

#### LATIN.

The Latin subjects prescribed for the Honours Course in Classics.

## ENGLISH.

- The historical development of the language and literature to the year 1400, including a minute acquaintance with Sweet's Anglo-Saxon Reader (exclusive of poetical selections), Sweet's First and Second Middle English Primers, Chaucer's Prologue, Knight's Tale, and Nonne Prestes Tale (Clar. Press Ed.), and Lounsbury's History of the English Language.
- (2.) Detailed History of the Elizabethan and Early Stuart Literature, including a general acquaintance with the more important works of the period, and an intimate knowledge of the following:-

Spenser: Faerie Queen, Bk. II. Marlowe: Doctor Faustus, Edward II. Greene: Friar Bacon and Friar Bungay.

Sidney: Apologie for Poetrie.

Hooker: Ecclesiastical Polity, Book I.
Bacon: Advancement of Learning, Select Essays,
Shakespeare: Henry VI., Pts. II & III., Romeo and Juliet, Lear,
Henry VIII., Two Noble Kinsmen.

(3.) A general acquaintance with the genius and work of Robert Browning and a special acquaintance with the following poems :- My Last Duchess, A Woman's Last Word, Confessions, Cleon, Andrea del Sarto, The Bishop Orders his Tomb, An Epistle, A Death in the Desert, Saul, Rabbi Ben Ezra, Dis Aliter Visum, Pisgah Sights, Abt Vogler, Up at a Villa, Amphibian, Caliban on Setebos.

Books recommended: Saintsbury's History of Elizabethan Literature (Macmillan), Clarendon Press and Arber Editions of Elizabethan works. Selections from Browning, First and Second Series.

(9.) Candidates for Honours in Greek and English may, in each of the Third and Fourth Years of their course, omit any two of the subjects of those years, except Greek and English, the Third and Fourth Years English Class being regarded, however, in the case of candidates for Honours in this department, not as an ordinary subject, but as a part of the Honours Course. They shall be examined in the following subjects, viz. :

#### GREEK.

The Greek subjects prescribed for the Honours Course in Classics.

#### ENGLISH.

The English subjects prescribed for the Honours Course in Latin and English.

(10.) Candidates for Honours in English and English History may, in each of the Third and Fourth Years of their course, omit any two of the subjects of those years, except English and History, the Third and Fourth Years English Class being regarded, however, in the case of candidates for Honours in this department, not as an ordinary subject, but as a part of the Honours Course. They shall be examined in the following subjects, viz.:

#### ENGLISH.

The English subjects prescribed for the Honours Course in Latin and English.

#### ENGLISH HISTORY.

A minute investigation of English History from A. D. 1603-1689.

Books recommended; Greene's History of the English People, vol. 3: Lingard's History of England, vols. 7—10; Hallam's Constitutional History of England, Chap. vi.—xiv.; Ranke's History of England; S. R. Gardiner's Works on this Period; Clarendon's History of the Great Rebellion; Masson's Life of Milton; Carlyle's Life of Cromwell; Forster's Life of Elliott; Bayne's Chief Actors in the Puritan Revolution.

(11.) Candidates for Honours in Mental and Moral Philosophy may in the Third Year of their Course omit any one and, in the Fourth Year, any three of the subjects of those years, except Metaphysics, Ethics and Political Economy, all of which must be taken in the Third Year. They shall be examined in the following subjects:

### MENTAL PHILOSOPHY.

Plato's Theaetetus.

Locke's Essay on Human Understanding: Books II. and IV.

Fraser's Selections from Berkeley.

Hume's Treatise on Human Nature, vol. I. (with Green's Introduction).

Kant's Critique of Pure Reason (Stirling's Translation),

Reid's Essays, VI.

Alison's Essays on the Principles of Taste.

Cousin's Philosophy of the Beautiful.

Mill's Logic, Book III, chaps. 8 and 9.

Hamilton's Lectures on Metaphysics and Logic.

#### MORAL PHILOSOPHY.

Plato's Republic, (omitting Books vIII. and IX.)
Aristotle's Nicomachean Ethics, (omitting Books vI. and vII.)
Kant's Theory of Ethics, (Abbott.)
Green's Prolegomena to Ethics.
Spencer's Data of Ethics.
Sidgwick's Methods of Ethics.

A general acquaintance with the History of Philosophy will be expected.

#### POLITICAL ECONOMY.

Smith's Wealth of Nations.
Cairnes' Principles of Political Economy.
Carey's Principles of Social Science.
Roscher's Political Economy.
Fawcett's Protection and Free Trade.
Carey's Harmony of Interests.
George's Progress and Poverty.

(12.) Candidates for Honours in Mathematics and Mathematical Physics may omit in the Third Year any two, and in the Fourth Year any three, of the subjects of those years, except Physics and Dynamics. The Dynamics class must be taken in the Third Year. They shall be examined in the following subjects, viz.:

#### MATHEMATICS.

TRIGONOMETRY.—Angular Analysis; Solution of Spherical Triangles; Napier's Analogies; with application to Astronomical Problems,

ANALYTICAL GEOMETRY.—The Conic Sections, and the Equation of the Second Degree between two variables; as far as set forth in any standard treatise on the subject.

CALCULUS.—Differential and Integral, as set forth in any standard treatises on these subjects. Differential Equations (selected course), with practical applications to Physical Problems.

#### MATHEMATICAL PHYSICS.

Selected portions of Kinematics, Dynamics of a Particle, Rigid Dynamics, Hydrodynamics, Thermodynamics, and Electrodynamics, illustrating the application of the Higher Mathematics to the study of physical problems.

(13.) Candidates for Honours in Experimental Physics and Chemistry may, in the Third Year, omit any one, and in the Fourth Year, any two, of the subjects of those years, except Physics, Practical Physics, Dynamics, and Organic and Practical Chemistry. They shall be examined in the following subjects:

#### EXPERIMENTAL PHYSICS.

Candidates shall be required to show a general knowledge of Abstract Dynamics, the Properties of Solids and Fluids, Heat, Electricity and Magnetism, Light and Radiant Heat, and Sound, so far as these subjects can be treated by elementary mathematical methods.

They shall be required to show an intimate knowledge of the following original memoirs: Joule's papers on the determination of the Mechanical Equivalent of Heat, contained in his Scientific Papers (Taylor & Francis) vol. 1, pp. 123, 172, 298, 542, 632.—Faraday's Experimental Researches in Electricity (Quaritch), vol. 1, Series III., IV., VI., VII., VIII.

They shall be required also to shew ability to determine practically the more important physical constants, such as Density, Specific Heat, Electrical Resistance, &c.

#### CHEMISTRY.

ORGANIC CHEMISTRY.—Principles of Elementary Analysis, Practical Estimation of Carbon, Hydrogen, Oxygen and Nitrogen. Principles of Classification. Hydrocarbons, Chlorides, &c. Monatomic and Polyatomic Alcohols, Aldehydes, Volatile Fatty Acids. Compound Ethers, Ethers of Glycerine, Saponification, Organic Acids. Carbohydrates. Fermentation. Transformations of the Alcohols, and Laboratory Determinations. Aromatic Group. Compound Ammonias. Alkaloids.

Books recommended: Wurtz's Chemistry, Organic part. Roscoe & Schorlemmer's Chemistry.

For reference: Watt's Dictionary of Chemistry, and other reference works in the

Balance Room Library.

PRACTICAL CHEMISTRY.—Candidates will be required to show familiarity with modes of Manipulation, Preparation of Gases, Preparation of Laboratory Re-agents, Systematic Method of Testing for bases and for acids; also proficiency in one of the following:—(1) Quantitative Estimation of Metallic Ores, (2) do. of Inorganic Poisons, (3) Soil Analysis, (4) Sanitary Analysis. Special work will be prescribed according to the department selected by the candidate, and suitable books suggested.

Books recommended for general work: Macadam's Practical Chemistry. Fresenius's Qualitative Analysis, Thorpe, or Appleton. Woehler's Mineral Analysis.

- § XII.—SHORT COURSES OF STUDY FOR GENERAL STUDENTS.—(1.) For the benefit of students who may wish to spend but a short period of time at the University, the Time Table has been so arranged that the following combinations of classes may be made. The details of the subjects studied in these classes will be found under Courses of Instruction, (§ § I and XXII.)
- (2.) To students who attend the classes of the following courses with regularity and pass the Sessional Examinations (§ x.) in the subjects thereof, certificates will be issued stating the nature of the course pursued and the degree of success attained.
- (3.) Two Years Course of Liberal Studies.—First Year.

  —Two of the three—Latin, French, German; English; Mathematics or History and Political Economy; Inorganic Chemistry or Botany. Second Year.—Two of the three—Latin, French, German; English Literature; Political Economy or Logic; Physics or Inorganic Chemistry. (The alternative subjects so far as the Time Table may permit.)
- (4.) Two Years Course preparatory to study of Medicine or to Chemical Work.—First Year.—French or German, English, Mathematics, Botany, Inorganic Chemistry. Second Year.—French or German, English Literature, Physics, Organic Chemistry, Practical Chemistry.

- (5.) Three Years Course preparatory to the study of Engineering.—First Year.—French, German, English, Mathematics, Inorganic Chemistry. Second Year.—German, English Literature, Mathematics, Physics, Practical Chemistry. Third Year.—German, Advanced Mathematics, Physics, Dynamics, Practical Chemistry.
- (6.) Two Years Course preparatory to Journalistic work.—First Year.—French, English Literature (1st and 2nd year classes), History (3rd and 4th year classes), Logic and Psychology or Political Economy. Second Year.—French, Advanced English Literature, Ethics, Political Economy or Metaphysics, Constitutional History, Constitutional Law.
- (7.) Two Years Course preparatory to Commercial work.

  —First Year.—French, German, English, Mathematics, Chemistry. Second Year.—French, German, English Literature, Political Economy, Physics, Law of Contracts.

## § XIII.—MEDALS AND PRIZES.

(The Senate reserves to itself the right of withholding Medals and Prizes in cases in which sufficient merit is not shewn.)

THE GOVERNOR-GENERAL'S GOLD MEDAL, which is offered by His Excellency the Governor General of the Dominion of Canada, will be awarded to the Undergraduate standing highest among those taking Honours in the department of Classics, the winners of other medals being excluded. In the event of its not being awarded in this department, it may be awarded either in the department of Latin and English, or in that of Greek and English.

THE GOVERNOR-GENERAL'S SILVER MEDAL, which is offered by His Excellency the Governor-General of the Dominion of Canada, will be awarded to the Undergraduate standing highest among those taking Honours in Mental and Moral Philosophy, the winners of other medals being excluded. In the event of its not being awarded in this department of Honours, it may be awarded in some other department.

THE SIR WM. YOUNG MEDAL, founded by bequest of the late Hon. Sir Wm. Young, will be awarded to the Undergraduate standing highest among those taking Honours in the department of Mathematics and Mathematical Physics, the winners of other medals being excluded.

THE DEMILL GOLD MEDAL, which is provided by the Alumni Association, in memory of the late James De Mill, M.A., Professor of Rhetoric and History, will be awarded to the

Undergraduate standing highest among those taking Honours in the department of English and English History, the winners of other medals being excluded.

THE MACKENZIE GOLD MEDAL, which is provided by the Alumni Association in memory of the late John James MacKenzie, M. A., Ph. D., Professor of Physics, will be awarded to the Undergraduate standing highest among those taking Honours in the department of Experimental Physics and Chemistry, the winners of other medals being excluded.

North British Society Bursary.—A Bursary of the annual value of \$60, has been founded in connection with Dalhousie College by the North British Society of Halifax, to be competed for at the Sessional Examination of the Second Year's Course in Arts, and held by the successful competitor for two years, namely, during the Third and Fourth Years of the Undergraduate Course in Arts. Candidates must be Undergraduates who have completed two years of the Curriculum, and must be eligible at the proper age, to be members of the North British Society. The next competition will take place in April, 1890.

The Waverley Prize.—This Prize, the interest of an endowment of \$1000, will be awarded annually to the student of the Second Year Mathematical Class, who stands highest at the Sessional Examinations in the Mathematics of the year, the winner of the North British Society Bursary being excluded.

The Avery Prize.—This prize, the interest of \$500, bequeathed for this purpose by the late J. F. Avery, M. D., is offered for competition to the Undergraduates in Arts of the Fourth Year, who are not studying for Honours. It will be awarded to the Undergraduate who makes the highest average at the Sessional Examinations in the subjects of the classes attended in the Faculty of Arts.

THE EARLY ENGLISH TEXT SOCIETY'S PRIZE, which is offered annually by that Society, and consists of several volumes of the Society's publications, will be awarded to the Student standing highest in the subject of Early English Language and Literature at the Examinations for Honours in the department of English and English History.

THE NEW SHAKSPERE SOCIETY'S PRIZE, which is offered annually by that Society, and consists of several volumes of the Society's publications, will be awarded to the student who stands highest in the subject of the plays of Shakespeare at the Sessional Examinations of the Second Year in English Literature.

§ XIV.—MUNRO EXHIBITIONS AND BURSARIES.—
(1.) The following Exhibitions and Bursaries are offered by Geo. Munro, Esq., of New York, to be competed for at the beginning of the Session in each of the years 1888-9, 1889-90, viz.:—

Five Junior Exhibitions of \$150 a year, tenable for two years. Ten Junior Bursaries of \$100 a year, tenable for two years. Five Senior Exhibitions of \$200 a year, tenable for two years. Ten Senior Bursaries of \$150 a year, tenable for two years.

- (2.) The Junior Exhibitions and Bursaries are offered for competition to candidates for matriculation in Arts, provided they have previously neither matriculated\* at any University conferring Degrees in Arts, nor appeared as candidates for these Exhibitions and Bursaries more than once.
- (3.) The Senior Exhibitions and Bursaries are offered for competition to Undergraduates entering the Third Year of the Arts Course. Candidates must have completed the Second Year of the Arts Course, either at this or at some other University; but they must not have entered upon the Third Year. They must also have matriculated\* within three years or within two years of the date of the competition, according as they may have entered upon their course as Undergraduates of the First or of the Second Year, respectively.
- (4.) The Junior Exhibitions and Bursuries shall be held during two years, provided the holder (a) attend in consecutive years the classes proper to the first and second years of the Arts Course to the satisfaction of the Faculty, Greek being taken as one of the subjects of each of those years, (b) † pass in all the subjects of the Sessional Examinations of the First Year, and attain a Second Class standing in at least one of them, and (c) pass either the Sessional Examinations (§ x), or the Supplementary Examinations of the Second Year.
- (5.) If a candidate, to whom a Junior Exhibition or Bursary has been awarded, is able to pass the Second Year Matriculation Examination, he may enter the Second Year; in which case, however, he shall hold his Exhibition or Bursary during that year only.
- (6.) The Senior Exhibitions and Bursaries shall be held during the third and fourth years of the Arts Course, provided

<sup>\*</sup> Matriculation consists in entering the name upon the Register of a University as an undergraduate, not in the mere passing of a Matriculation Examination.

<sup>†</sup> For the purposes of condition (b), Geometry and Algebra shall be reckoned as separate subjects.

the holder (a) attend in consecutive years the classes proper to the third and fourth years of the Arts Course, to the satisfaction of the Faculty, (b) pass in all the subjects at the Sessional Examinations of the third year, and either obtain a Second Class standing in one of them or obtain the favorable report of a Professor on work done in one of the departments of Honours, and (c) pass either the Sessional Examinations ( $\S$  x), or the Supplementary Examinations of the Fourth Year.

- (7.) The annual amounts of the above Exhibitions and Bursaries will be paid in three instalments, the first on the first Monday after the Autumn Convocation, the second on the first Monday after the Christmas vacation, and the third on the day of the Spring Convocation, the payment of each instalment being dependent upon the fulfilment of the conditions of tenure at the date at which it becomes due.
- (8.) Candidates are required to make application for these Exhibitions and Bursaries by means of the printed schedule inserted at the end of this Calendar. These schedules are to be filled up by candidates and sent with the certificates mentioned therein, to the President, so as to reach him on or before September 1st, 1888.
- (9.) A certain standard of answering at the Examinations, fixed by the Faculty, will be required for obtaining any of the above Exhibitions and Bursaries. A higher standard will be required for Exhibitions than for Bursaries.
- (10.) The Faculty shall in all cases decide as to the fulfilment of the above rules and conditions.
- (11.) The Examinations for the Exhibitions and Bursaries will be held at the College on September 11th-14th, 1888.
- (12.) The subjects of examination for the Junior Exhibitions and Bursaries of 1888-9, shall be as follows:—
- 1. Latin.—† Cæsar, Gallic War, Book I, and Virgil, Æneid, Book I.—Grammar: Accidence, Prosody, Scansion of Hexameter Verse.—\*Text Book: Smith's Latin Grammar.—Composition: Easy sentences to be translated into Latin Prose. \*Text Books: Smith's Principia Latina, Part IV., Exs. 1-35, or Arnold's Latin Prose Composition, Exs. 1-9, 21-49.
- 2. Greek.+—Xenophon, Anabasis, Book III., and Symposium, (Wiman's, pub. by J. Allyn, Boston). Grammar: Accidence (omitting Accentuation), chief rules of Syntax. \* Text Book: Smith's

<sup>\*</sup> These Text Books are mentioned to indicate in a general way the extent of knowledge required.

<sup>†</sup> The following are the classical books for 1889-90:

Latin: Cœsar, Gallic War, Books II. & III., and Virgil, Aeneid, Book I. Greek: Xenophon, Anabasis, Book IV. and Symposium (Wiman's).

Greek Grammar.—Composition: Translation of simple sentences such as are found in the English-Greek Exercises in Smith's Initia Græca, Part I.

- 3. Mathematics.—Arithmetic: the ordinary rules of Arithmetic, Vulgar and Decimal Fractions, Proportion and Interest.—Algebra: as far as Simple Equations and Surds, with theory of Indices.—Geometry: First, Second and Third Books of Euclid or the subjects thereof.
- 4. English.—Language: Grammar, Analysis, Writing from Dictation, Punctuation, Synthesis, Paraphrasing.—History and Geography: Outlines of English and Canadian History, and General Geography.

The relative values of these subjects shall be as follows: Classics, 250; Mathematics, 200; English, 200.

(13.) 1. The subjects of Examination for the Senior Exhibitions and Bursaries of 1888-9, shall be any two of the following groups:

## A. -CLASSICS.

LATIN: Horace, Epodes; Pliny, Selected Letters (Prichard and Bernard's edition, Clarendon Press, London).—Composition: An easy piece of English to be turned into Latin Prose, (For models, see Champeneys and Rundall's Easy Pieces for Latin Prose, 2nd series, Rivingtons, London.)

GREEK.—Herodotus, Book II.—Composition: Translation of simple passages. (For models, see Sidgwick's First Greek Writer.)

## B. -MATHEMATICS.

ALGEBRA: As set forth in Colenso's, or Todhunter's or Wood's Algebra, exclusive of Continued Fractions and Diophantine Analysis.

TRIGONOMETRY: Analytical Plane; as far as, and including, DeMoivre's Theorem, with its application to the measurement of Circular Arcs, and the solution of the equation  $x_n = \pm 1$ .—Spherical; as far as, and including, Napier's Rules for the solution of Right-angled Triangles.

GEOMETRY: The First, Second, Third, Fourth and Sixth Books of Euclid, with the definitions of the Fifth; the first 21 propositions of the Eleventh Book. Conic Sections:—The Parabola and the Ellipse, as set forth in Drew's Conic Sections. (The equivalents of these will be accepted, if the candidate has used other Text Books; which, however, he must, at the examination, specify.)

The examinations will not be confined to the text of the books mentioned, or of any others, but will include Exercises and Problems on the principles laid down in common by all standard treatises on the above subjects,

## C. -ENGLISH AND HISTORY.

ENGLISH: Lounsbury's History of the English Language (Henry Holt & Co., N. Y.), to end of Part I; Spenser's Faerie Queen, Bk. I. (Clarendon Press), Shakespeare's King John, and The Tempest (Rolfe's Edition, Harpers, N. Y.); Hutton's Scott (English Men of Letters Series); Sir W. Scott's Marmion, and Rob Roy.

CLASSICAL HISTORY AND GEOGRAPHY.—History of Greece to the death of Alexander. Geography of Græcia, Asia and Africa.

\* Text Books: Smith's Student's Greece; Tozer's Primer of Classical Geography.

Candidates shall be required to present themselves for examination in two of the above groups—A, B, C. They may select any two of these groups; but they will not be allowed to present themselves for examination in all three.

The relative values of the three groups will be the same.

Candidates must give notice to the President, of the groups in which they intend to present themselves for Examination.

2. The subjects of Examination for the Senior Exhibitions and Bursaries of 1889-90, shall be any two of the following groups:

A.—CLASSICS.

The subjects specified in (13) I. of this section.

B.—MATHEMATICS.

The subjects specified in (13) I. of this section.

## C .- ENGLISH.

Lounsbury's History of the English Language (published by Henry Holt & Co., N. Y.), to end of Part 1; Spenser's Faerie Queen, Book 1, (Clarendon Press Edition); Shakespeare's King John, As You Like It, (Rolfe's Edition, Harper Bros.); Nichol's Byron (Eng. Men of Letters Series); Byron's Childe Harold (Clarendon Press).

§ XV.—RESIDENCE.—All students are required to report their places of residence to the President on or before the day appointed in the University Almanac.

Persons who wish to take students as boarders must furnish the President with satisfactory references. A Register is kept by the President, containing the names of those persons who have satisfied this condition; and, for the convenience of students, a list of the names and addresses of such persons will be posted on the notice-board in the College hall at the beginning of the Session.

§ XVI.—CHURCH ATTENDANCE.—All students under twenty-one years of age, not residing with parents or guardians, are required to report to the President on or before the day appointed in the University Almanac, the churches they intend to make their places of worship during the Session. Intimation will be made to the various clergymen of the city, of the names and addresses of the students who have chosen their respective churches as places of worship.

§ XVII.—DISCIPLINE.—Any case of improper conduct on the part of a student, if brought to the notice of the Faculty, is to be investigated by the Faculty and reported to the Senate.

The Senate has authority to impose fines for damage done to property; to inflict at their discretion the penalties of admonition, suspension for a term, and expulsion, for neglect of duty, or for disorderly or improper conduct, and to use all other means deemed necessary for maintaining discipline.

The Professors have full power to maintain order in their respective classes, and may if necessary expel from the room during the class hour, any student persisting in disorderly conduct.

- § XVIII.—DEGREE OF MASTER OF ARTS.—A Bachelor of Arts, of at least three years standing, maintaining meanwhile a good reputation, shall be entitled to the Degree of Master of Arts, on producing a satisfactory thesis on some literary, philosophical or scientific subject. The subject must have been previously approved by the Faculty. The thesis must be handed in on or before 1st March. For fee see § xxi.
- § XIX.—ADMISSION AD EUNDEM GRADUM.—Bachelors or Masters of Arts, who have received their degrees in course at Universities approved by the Senate, shall be admitted adeundem gradum in this University, on producing satisfactory proof of rank and character.—For fee see § xxi.
- § XX.—ACADEMIC COSTUME.—(1.) Bachelors and Masters of Arts and Bachelors of Science of this University, shall be entitled to wear gowns, of black stuff, and hoods. The distinctive part of the costume is the hood. The following are the kinds of hood appointed for the various degrees:—
- B. A.—Black stuff lined with white silk and bordered with white fur.
  - M. A.—Black stuff lined with crimson silk.
- B. Sc.—Black stuff, with a lining of white silk, bordered with crimson silk.
- B. L.—Black stuff, with a lining of white silk, bordered with light blue silk.
- (2.) Successful candidates for these degrees shall be required to appear at Convocation in the proper academic costume, to have the degrees conferred upon them. Degrees will be conferred in the absence of the candidate only by special permission of the Senate.

§ XXI.—FEES.—(1.) Fees are payable by students for Registration, for the use of the Gymnasium, for classes attended, and for certain examinations. They are payable in advance.

No student shall be allowed to enter a class until he has paid the proper fees.

The following is a statement of the fees payable by students generally, and of the special privileges granted to undergraduates:

Registration Fee, payable annually by all students*	\$2	00
ing more than one class, except registered students of the		
Halifax Medical College	1	50
Fee for each class attended, per Session + (except the Practical		
Chemistry and Physics Classes)	6	00
Fee for each of the Practical Chemistry and Physics Classes for		
every three months of practical work in Laboratory	6	00
Supplementary Examination Fee, payable on giving the notice		
required by § x. (12)		00
Special Examination Fee	2	00

Undergraduates shall in general pay one fee of six dollars to each Professor whose classes they may attend as parts of the ordinary course; but in the case of the Professors of Classics and Mathematics fees shall be paid in both the first and second years of the course, in the case of the Professor of Modern Languages fees shall be paid twice by undergraduates taking either one language during more than two years or two languages for two years, in the case of the Professors of Chemistry and Physics, fees of \$6.00 per session shall be paid for Practical Classes by undergraduates taking those classes, and in the case of the Professor of English Literature a fee of \$6.00 shall be paid by undergraduates taking the third and fourth years English Class.—No fees are required for the Tutorial classes in Classics and Mathematics.—A candidate for Honours shall pay a fee of \$6.00 to each Professor whose advanced classes he may attend.

## (2.) The graduation fees are as follows:

Fee for the B. A. or B. L. or B. Sc. Diploma, which	is payable
by candidates before the Sessional Examinati	ons of the
Fourth Year, and will be returned in case of f	
Fee for M. A. Diploma, which must accompany the	thesis, and
will be returned if the Thesis is not sustained	d 10 00
Fee for B. A. or M. A., (ad eundem gradum)	10 00

<sup>\*</sup>Undergraduates who matriculated previously to 1884, shall pay a fee of \$1.00 annually.

<sup>§</sup> The English Classes of the First and Second Years, and the History and Physics Classes of the Third and Fourth Years, though extending over two sessions shall for the purpose of this rule be considered single classes. The Latin and Greek Classes of any one year shall also be considered one class.

# Faculty of Caw.

THE PRESIDENT, (ex officio.)

Professors: Weldon,

RUSSELL,

Lecturer's: Townshend, J.,

SHANNON,

GRAHAM,

PAYZANT,

HARRINGTON.

Dean of the Faculty: Professor Weldon. Secretary of the Faculty: Professor Russell.

## § XXII.—COURSES OF LECTURES.

The following courses of lectures, to be given in the Session of 1888-9, will begin on the 4th September, 1888, and end on the 15th February, 1889.

## CONSTITUTIONAL AND INTERNATIONAL LAW.

(George Munro Professorship.)

#### Constitutional Law.

Two lectures per week.

Subjects of leetures:

The Written Code of the Constitution: Magna Charta, Petition of Right, Habeas Corpus Act, Bill of Rights, Act of Settlement. Law of Parliament. Select cases in Constitutional Law. British North America Act.

## Constitutional History.

Two lectures per week.

Subjects of lectures:

Anglo-Saxon Royalty. The Judicial System of the Anglo Saxons. The Witenagemote. Feudalism in England. Origin and Growth of the two Houses of Parliament. Origin and Development of Trial by

Jury. The Royal Prerogative. History of the Law of Treason. The Liberty of the Press. History of Party Government. Origin and Development of the Cabinet System. History of the Reform Bills.

Text Book: Taswell-Langmead's Constitutional History of England.

## Conflict of Laws.

One lecture per week.

Subjects of lectures:

Leading rules as to (1) personal capacity, (2) rights of property, (3) rights of obligation, (4) rights of succession, (5) family rights, (6) forms of legal acts. The use of courts by strangers. The effects of foreign judgments. Select cases upon the Conflict of Laws.

Text Book: Dicey's Domicil.

### International Law.

One lecture per week.

Subjects of lectures:

Sources, Subjects, Objects and Sanctions of International Law. Sovereigns, Consuls, Ambassadors. Rights and Duties of Neutrals. Reprisals, Contraband, Blockade, Rights of Search, Privateering, Capture and Recapture, Construction of Treaties, Extradition.

Text Book: Woolsev's International Law.

#### CRIMES.

Lecturer...... Hon. Mr. Shannon, Q. C., D. C. L.

One lecture per week.

Subject of lectures:

Sources of Criminal Law. Felonies and Misdemeanours. Offences against property, against persons, against the Queen and Her Government, against Public Justice, against Public Peace, against Public Trade, against Public Morals. Conspiracy. Accessories. Offences after previous convictions.

Text Book: Stephen's Digest of Criminal I aw.

## REAL PROPERTY.

One lecture per week.

Subjects of lectures:

Estates in Fee Simple; Estates for Life; Estates in Remainder, and Reversion; Joint-Tenancy and Tenancy in Common; Estates for Years; Landlord and Tenant; Easements; Devises; Descent of Real and Personal Property,

Text Books: Williams' Real Property, and Tudor's Leading Cases.

## CONTRACTS.

.....B. Russell, A. M. Professor .....

Two lectures per week.

Subjects of lectures;

Definition of terms; agreement, consideration, proposal, acceptance, promise, &c. Persons who may contract, principal and agent. Disabilities arising from infancy, coverture, lunacy, intoxication, &c. Express and implied contracts. Verbal and written contracts. Specialties. Statutory requirements as to validity or authentication of contracts; Statute of Frauds. Causes vitiating agreements; mistake, fraud, duress, &c. Discharge of contracts, recission, performance, payment, release, merger, &c. Leading cases.

Tevt Book: Finch Cases.

## SALES OF PERSONAL PROPERTY.

Lecturer......Professor Russell.

Two lectures per week.

1888 - 9.

Subjects of lectures:

Capacity to buy and sell. Executed and executory contracts of sale. Statute of Frauds. Lord Tenterdon's act. Rules as to passing of property. Reservation of jus dispouendi. Stoppage in transitu. Condition, warranty, express and implied. Remedies of seller and buyer.

Text Book: Benjamin on Sales.

## EQUITY JURISPRUDENCE.

Two lectures per week, extending over two years.

Subjects of lectures:

Trusts, Mortgages, Fraud, Mistake, Specific Performance of Contracts, Administration of Debts and Assets. Election, Account, Discovery, Injunction.

Text Book: Smith, H. A.

#### MARINE INSURANCE.

..... Mr. Graham, A. M., Q. C.

One lecture per week.

Subject of lectures:

Parties to and Agents for Marine Insurance; The Policy; Durability; Misrepresentation; Concealment; Warranties; General and Particular Average; Total Loss; Abandonment.

Text Book: Arnould,

## TORTS.

Lecturer......Mr. PAYZANT, A. M.

One lecture per week.

Subjects of lectures:

Definitions. Torts considered with reference to Crimes and Contract. Deceit. Slander and Libel. Malicious Prosecution. Conspiracy. Assault and Battery. False Imprisonment. Enticement and Seduction. Trespass to Property. Conversion. Violation of Water Rights and Rights of Support. Nuisance. Negligence.

Text Book: Bigelow.

## EVIDENCE.

Lecturer......Mr. Harrington, Q.C.

One lecture per week.

[1888-9.]

Subjects of lectures:

Nature of Proof, Production and Effect of Evidence, Relevancy, Instruments of Evidence.

Text Books: Greenleaf on Evidence; Judicature Act and Rules.

## PARTNERSHIP AND COMPANIES.

Lecturer......Mr. Harrington, Q. C.

One lecture per week.

[1888-90.]

Subjects of lectures:

Constitution. Liability of partners inter se and to third persons. Change of firm. Retirement of partners. Dissolution. Mining ventures, Joint-stock Companies. Canada Joint-stock Companies Act.

## NEGOTIABLE INSTRUMENTS.

Lecturer......PROFESSOR RUSSELL.

[1889-90.]

Two lectures per week.

Subjects of lectures:

Formal Requisites. Consideration. Indorsement and Transfer. Real and personal defenses. Over-due paper. Notice of Dishonour, Protest. Bill or note. Bonds, Debentures, &c.

Text Book; Ames' Select Caees.

- § XXIII.—THE ACADEMIC YEAR.—The academic year consists of one Session. The Session of 1888-9 will begin on the 4th of September, 1888, and end on the 15th of February, 1889.
- § XXIV.—ADMISSION OF STUDENTS.—(1.) Students may enter the University by (a) furnishing satisfactory references or certificates of good moral character, (b) entering their names in the Register, and (c) paying the prescribed fees.
- (2.) Registered students may, on payment of the proper fees, (see page 59), enter any of the classes of the University.
- (3.) Students who wish to obtain University Degrees must become undergraduates. They may become undergraduates by (a) passing either one of the Matriculating Examinations or a recognized equivalent, and (b) matriculating, i. e., entering their names on the Matricula or Register of Undergraduates.
- (4.) Students who are not undergraduates are known as General Students.
- § XXV.—DEGREE OF BACHELOR OF LAWS.—(1.) Candidates for the Degree of LL. B. are required to pass the Matriculation Examination, or a recognized equivalent, and to pass the Sessional Examinations in the subjects of the three years course of study.
- (2.) Undergraduates of other Law Schools may, on producing satisfactory certificates of standing, be admitted to similar standing in this Law School if, on examination, they are found qualified to enter the classes proper to their years. But if their previous courses of study have not corresponded to the course on which they enter in this University, they may be required to take extra classes.
- (3.) Graduates in Arts who have taken the classes of Constitutional History, Constitutional Law and Contracts, as parts of their Arts Course, shall be allowed to graduate in two years from the date of their entering upon the Law Course, provided they take in those years all the other classes specified.
- § XXVI.—MATRICULATION EXAMINATION.—(1.) Candidates for entrance into the First Year of the Course shall be examined in the following subjects, except in cases in which certain Examinations mentioned below shall have been already passed:

Classics.—Xenophon—Anabasis, Books one and two. Cicero— The 1st and 4th Orations against Catiline. Virgil—Æneid, Books one and two. Translation from English nto Latin. Latin Grammar. MATHEMATICS.—Arithmetic; Geometry—Books one, two and three of Euclid.

English.—A paper on English Grammar, Composition.

HISTORY AND GEOGRAPHY.—English History; Geography, North America and Europe.

ELEMENTS OF BOOK-KEEPING.

Students may substitute French for Greek.

- (2.) Persons desirous of appearing as candidates at this examination must give notice to the Dean of the Faculty on or before August 27th, 1888; and they shall be required to pay a fee of \$5.00 on the morning of the day of Examination.—The Examination will be held next Session on Monday, September 3rd, at 10 o'clock, A. M.
- (3:) Graduates and Undergraduates in Arts of any recognized College or University, and articled clerks or law students who have passed the preliminary law examinations in any of the Provinces of the Dominion of Canada, or in Newfoundland, shall be admitted to the standing of Undergraduates of the First Year in the Faculty of Law, without passing any examination.

## § XXVII.—COURSE OF STUDY FOR DEGREE OF LL.B.

## First Year.

- 1. Real Property.
- 3. Contracts.

2. Crimes.

- 4. Torts.
- 5. Constitutional History.

## Second Year.

1. Equity.

- 2. Sales of Personal Property.
- 2. Evidence.
- 4. Constitutional Law.
- 5. Conflict of Laws.

## Third Year.

- 1. International Law.
- 3. Partnership and Companies.

2. Insurance.

- 4. Equity.
- 6. Negotiable Instruments.

Undergraduates are required to attend with regularity the classes of their respective years. The extent of absence from prescribed classes which shall disqualify for the keeping of a Session shall be determined by the Faculty.

Note.—Third Year students in 1888-9 will also take the subject of Conflict of Laws transferred to the Second Year of the course.

The Faculty urgently recommend that students devote their whole time during Sessions to the work of the School, experience having proved that students who undertake office work in addition to the work of their classes, receive very little advantage from the lectures. The Course having been very considerably enlarged, the Faculty apprehend that students who are doing regular office work during Session, will find it quite impossible to pass with credit the required examinations.

- § XXVIII. SESSIONAL EXAMINATIONS. (1.) The Sessional Examinations will begin next Session on February 18th, 1889.
- (2.) Students are forbidden to bring any book or manuscript into the Examination Hall, except by direction of the Examiner, or to give or receive assistance, or to hold any communication with one another at the Examinations. If a student violate this rule, he shall be excluded from the Sessional Examinations of the Session, and such other penalty shall be imposed as the Faculty may determine.
- (3.) If an Undergraduate fail to pass in any subject or subjects of the Sessional Examinations, he shall be allowed a supplementary Examination in such subject or subjects at the beginning of any subsequent Session.
- (4.) Undergraduates who wish to present themselves at a Supplementary Examination, must give notice to the Dean of the Faculty on or before August 27th, 1888.
- (5.) The Supplementary Examination for the present year will begin September 3rd, at 10 o'clock, A. M. Fee \$5.00, payable on the morning of the Examination.
- § XXIX.—MOOT COURTS.—Moot courts will be held every fortnight, and will be presided over by some member of the Faculty, or a Barrister selected by the Faculty. Every candidate for a degree shall be required to take part in arguments at the Moot Court. The senior counsel on either side shall be required to file briefs with the Dean before noon of the day preceding that on which the case is argued. A record will be kept of the values assigned to the arguments made, and these values will be considered by the Faculty in recommending a candidate for his degree.

In addition to the Moot Courts under the supervision of the Faculty, a voluntary Moot Court has been organized by students of the First Year.

- § XXX. MOCK PARLIAMENT. The students have organized a Mock Parliament for the discussion of legal and constitutional questions. This Parliament is largely attended, and is found to be of great utility.
- § XXXI.—ACADEMIC COSTUME.—Bachelors of Laws are entitled to wear gowns and hoods. The gowns are similar to those worn by Barristers-at-Law. The hoods are of black silk stuff with a lining of white silk bordered with gold-coloured silk.
- § XXXII.—THE LIBRARY.—The Library has a good set of English and Canadian Reports, and will be found to contain almost all the books which an undergraduate will have occasion to consult.
- § XXXIII.—FEES.—The following are the fees payable by Students of the Faculty of Law. They are in all cases payable in advance.

Seats in the Lecture Room will not be assigned to Students until they have paid their Class Fees to the Dean.

Students are required to sign the University Register and pay their Class Fees on the first day of the term, at 10 A. M., in the office of the Law School.

Registration Fee, payable only by general Students\$	2	00
Fee for each class attended, per Session, payable by general students		
Fee for the classes of the First Year, payable by undergraduates	40	00
Fee for the classes of the Second Year, payable by undergraduates	10	00
Fee for the classes of the Third Year, payable by undergraduates :		
Fee for LL.B. diploma, which is payable before the final examin-		
ation, and will be returned in case of failure	10	00
Fee for the Matriculation Examination	5	00
	10	00
Fee for the Supplementary Examination	5	00

Students of any year are permitted to attend lectures in the subjects of an earlier year without extra charge.

# Haculty of Medicine.

THE PRESIDENT, (ex officio).

Professor: Lawson.

Examiners: Somers,

SINCLAIR,

LINDSAY,

CAMPBELL.

Secretary of the Faculty: Dr. LINDSAY.

§ XXXIV.—COURSES OF INSTRUCTION.—1. Instruction is provided by the University in the following subjects of the Medical Curriculum:

## I. CHEMISTRY.

Daily Lectures, 11 A. M.—12 M.

With experimental demonstrations.

Part I. Inorganic.—Objects and nature of the Science. General Principles: Chemical Affinity; Laws of Combination, by weight, by volume. The Elements. Equivalent and Atomic Numbers; Atomicity. Nomenclature; Notation; Formulae; Equations. The Non-Metallic Elements and their compounds considered in detail. The Atmosphere. Water. Methods of Water Analysis. Mineral Waters. Combustion; Respiration. Anhydrides. Acids. Manufactures of Chlorine compounds, Acids, Ammonia, &c.

The Metals: their physical and chemical characters; Classification, &c.; Salts; Bases; Acids; Radicals. The Metals and their compounds considered in detail. The Metals of the Alkalies, and the Alkali manufactures. Classification and Separation of Bases. The Alkaline Earth Metals and their compounds. Magnesium Salts; Aluminium and the Earth Metals. Constitution of Silicates. Iron, its salts, and other compounds. Reduction of Iron Ores. In discussing the Metals, special attention is given to the Salts and other compounds of Mercury, Antimony, Arsenic, Bismuth, Silver, Copper, Lead, Tin, and the methods of teating for metallic poisons, their detection in organic mixtures and tissues, and their quantitative analysis.

Part II. Organic—Theory of Organic Compounds, founded on Marsh Gas as a starting point. Functions of Organic Compounds. Principles of Classification. Saturated Hydrocarbons; Homologous Series. Monatomic Alcohols and their derivatives; Methyl Alcohol; Chloroform. Ethyl Alcohol; Ether; Nitrous Ether; Nitric Ether. Series of Saturated Hydrocarbons of Alcohols. Amines. Volatile Fatty Acids. Compound Ethers. Aldehyde, Chloral. Polyatomic

Compounds. Fats. Saponification. Polyatomic and Polybasic Acids. Sugars and Starches. Fermentation. Glucosides. The Aromatic Compounds. Benzol; Phenol; Aniline, &c. The Natural Alkaloids: of Opium; Nicotine; Quinine; Strychnine; Caffeine; Morphine, &c. Albumen. Urea. Uric Acid. Urinary Calculi and other deposits; methods of determing their chemical composition, and presence of Glucose, Albumen, &c., in urine. Analysis of Milk, Alcoholic Solutions, &c.

Text Book: Fownes' Manual of Chemistry (English or American Edition); or Greene's Edition of Wurtz's Elements.

## Practical Chemistry.

Systematic Course of Testing for Bases and Acids, with special exercises. Processes for detection of Poisons, examination of Urine for Glucose, Albumen, nature of Calculi and other deposits. Sanitary Analysis,—Atmospheric Air; Water; Mineral Waters.

Text Books: Macadam's Practical Chemistry. Bowman's Medical Chemistry. Special Tables are used in the Laboratory, and reference books may be consulted in the Balance Room.

## II. BOTANY.

Professor ...... George Lawson, Ph. D., LL. D.

## Lectures three days a week.

The Vegetable Cell: its structure and contents. Typical and Transformed Cells; Tissues, Parenchyma, Prosenchyma. Minute Structure and Development of the Root, Stem and Leaf. Structure and Development of the Flower, Fruit and Seed.

Vegetable Protoplasm: its structure, chemical character and movements; effects upon it of Light, Electricity, Irritation, Gravitation, Moisture, Gases.

Plant Growth: Relations of the plant to the soil and atmosphere. Diffusion, Osmosis, Absorption, Transpiration, Assimilation Production of organic matter in the plant: Transmutation or Metastasis. Respiration. Vegetable Growth. Movements, of Chlorophyll, of organs (Circumnutation), Nyctitropic.

Reproduction: Fertilization. The Seed, Germination,—dependent upon moisture, free oxygen, temperature. Effects upon plants of extremes of temperature.

Classification of Plants: The Natural System of Classification. The distinctive structural characters and geographical distribution of the more important natural orders will be given, with special attention to those orders containing poisonous plants, and plants used in medicine.

 $\mathit{Text}\ \mathit{Book}$  : Goodale's Physiological Botany (being Vol. II. of Gray's Botanical Text Book.)

Field Book for Summer Work: Gray's Manual of Botany of the Northern States.

2. Students wishing to attend the above courses may do so either as General Students without preliminary examination,

or as Undergraduates. In either case they must enter their names in the University Register at the beginning of the Session.

- 3. In other subjects the necessary classes may be attended either at the Halifax Medical College, which is affiliated to this University, or at any recognised School of Medicine.
- 4. Attendance on classes by those registered as General Students, or as Undergraduates of other Faculties, will not qualify for Degree Examinations in this Faculty.

For information as to courses of instruction provided at the Halifax Medical College address the Registrar, A. W. H. Lindsay, M. D., 241 Pleasant St., Halifax.

§ XXXV. THE ACADEMIC YEAR.—The Year consists of one session. The session of 1888-9 will begin on Monday, Oct. 29th, and continue six months.

In order to qualify for Degree Examinations, the Medical Academic Year must include attendance on at least two courses of 100 lectures each, or one such course and two of 50.

- § XXXVI. DEGREES.—Two Medical Degrees are conferred by this University, viz., Doctor of Medicine (M. D.) and Master of Surgery (C. M.); but neither degree is conferred on any person who does not at the same time obtain the other.
- § XXXVII. MATRICULATION EXAMINATIONS.—1. Candidates for medical degrees must give evidence of having obtained a satisfactory general education before entering upon the course of study qualifying for the degrees, by passing either one or other of the Matriculation Examinations of this Faculty or some other examination recognized by the Senate as sufficient.
- The following are the subjects of the Lower Matriculation Examination:
  - (1.) English Language, including Grammar and Composition.
- (2.) LATIN, including Grammar, Translation\* from specified authors, and Translation of easy passages not taken from such authors.
- (3.) ELEMENTS OF MATHEMATICS, comprising (a) Arithmetic, including Vulgar and Decimal Fractions, (b) Algebra, including Simple Equations, (c) Geometry, including the First Book of Euclid, with easy questions on the subject matter of the same.

<sup>\*</sup> Latin for 1888, Cæsar, Gallic War, Book I., or Virgil, Æneid, Bk. I.
Latin for 1889, Cæsar, Gallic War, Bks. II. and III., or Virgil, Æneid, Bk. I.
Greek for 1888, Xenophon, Anabasis, Bk. III., or Symposium, (Wiman's, published by J. Allyn, Boston.)
Greek for 1889, Xenophon, Anabasis, Bk. IV., or Symposium (as above.)
In French, Voltaire's Charles XII., Books I. and II., or Scribe's Betrand et Raton,
In German, Adler's Reader (Appleton & Co.), Zweiter Abschnitt, 1-4 and 14-17 (inclusive).

- (4.) ELEMENTARY MECHANICS OF SOLIDS AND FLUIDS, comprising the Elements of Statics, Dynamics, and Hydrostatics—as treated in Blaikie's Elements of Dynamics+ (Thin, Edinburgh).
  - (5.) One of the following subjects:
  - (a) Greek, including translation\* from the original and Grammar.
  - (b) French, including translation\* from the original and Grammar. (c) German, including translation\* from the original and Grammar.
- (d) Logic, as in Jevons' Elementary Lessons in Logic† (Macmillan & Co.)
  - Elementary Chemistry.
  - (f) Botany.
- The following are the subjects of the Higher Matriculation Examination:
- (1.) English, including (a) writing a passage of English from dictation.
- (b) English Composition, with the correction of sentences of bad English.
- (c) Questions in English Grammar with analysis of sentences and derivation and definition of some common English words.
- (d) Question in Geography and History, especially in the History of the British Islands and of English Literature.
- (2). LATIN, including Grammar and Translation of an easy passage from a Latin prose author\*, and retranslation into Latin of a single passage of English (translated from a Latin author) the more difficult Latin words being given.
- (3.) ARITHMETIC, the common rules including Vulgar and Decimal Fractions.
- (4.) Elements of Mathematics, comprising (a) Geometry, Euclid, Books I. II. and III.; (b) Algebra, including Simple Equations.
- ELEMENTS OF DYNAMICS (MECHANICS), comprising Elementary Kinematics, Statics, Kinetics and Hydrostatics, as treated in Blaikie's Elements of Dynamics† (Thin, Edinburgh).
  - ANY Two of the following subjects:
- (a) Greek, including Grammar, Translation from specified authors\*,
- and Translation of easy English sentences into Greek prose.

  (b) French, including Grammar, Translation from specified authors\*, and translation of easy English sentences into French.

  (c) German, including Grammar, Translation from specified
- authors\*, and translation of easy English sentences into German. (d) Natural Philosophy, as in Balfour Stewart's Elementary
- Physics+ (Macmillian & Co.) (e) Logic, as in Jevons' Elementary Lessons in Logic† (Macmillian & Co.
- These examinations will be held on the 10th—13th October, 1888, in the College Hall. They will be conducted by instructors of the Arts Faculty.—Persons who wish to appear as candidates are required to give notice to the Secretary of the Faculty at least fourteen days before the date of Examination

<sup>\*</sup> See footnote last page.

<sup>†</sup> These books are mentioned to show the extent of knowledge expected. Other books may of course be used by candidates.

(stating in such notice whether they are candidates for the Lower or Higher Examination, and specyfying the elective subjects in which they wish to be examined), to enter their names in the Register of Candidates, and to pay a fee of Ten Dollars.

- 5. The Lower Examination satisfies the requirements of the General Medical Council of Great Britain as to the preliminary examination which must be passed by persons wishing to register as medidal students; the Higher Examination satisfies the requirements of the University of Edinburgh in the same respect.—Certificates will be issued to candidates showing the subjects in which they passed and the extent to which their knowledge of these subjects was tested.—For classes in the Arts Faculty in which candidates may prepare for the above Examination, (see p. 43).
- 6. A certificate of the possession of a University Degree in Arts or of having passed the Matriculation Examination of the Provincial Medical Board of Nova Scotia shall be considered by this University sufficient evidence of satisfactory general education.
- 7. The Matriculation and Sessional Examination of any chartered University or College; and also the Preliminary Examination of any Medical Licensing Board in Her Majesty's dominions will be recognized pro tants.
- 8. Candidates who may have passed in all subjects but one, either at the University or the Nova Scotia Medical Board Matriculation Examinations, may enter as undergraduates, and will be allowed after six months to pass a Supplementary Examination in the subject in which they previously failed.
- § XXXVIII.— DEGREE EXAMINATIONS. Candidates for the Degrees of M.D. and C.M. shall be required to pass two examinations—the Primary and the Final M.D., C.M. examinations, and to have satisfied at the dates of the examinations certain conditions as to attendance on classes, etc.
- § XXXIX.—PRIMARY M. D. C. M. EXAMINATIONS.— 1. Candidates for this examination shall be required to produce certificates to the following effect:—
- (1.) Of having passed one of the Matriculation Examinations, or other examination recognized as sufficient, at least two academic years previously, and of having completed their sixteenth year at the date of passing said examination.
- (2.) Of having, after passing the Matriculation or other equivalent examination, attended in the Halifax Medical College or in some School of Medicine approved by the Senate, two courses

- of 100 lectures each, in each of the following subjects, viz:—Anatomy, Chemistry, Materia Medica and Physiology; and two courses of instruction of the same duration in Practical Anatomy, in the course of which they shall have dissected the whole body (i. e., the head and neck and upper and lower extremities) at least twice.
- (3) Of having, after passing the Matriculation Examination, attended either in this University, in the Halifax Medical College, or in some other University or College, approved by the Senate, one course of instruction of fifty lessons each in each of the following subjects, viz., Botany and Practical Chemistry, and one course of twenty-five lectures or demonstrations in Histology.
- (4.) Either of having after passing the Matriculation Examination, attended at the Halifax Medical College or at some College approved by the Senate, one course of instruction of fifty lessons in Practical Pharmacy, or of having had three months' practice in the dispensing of drugs with a recognized apothecary or dispensing medical practitioner.
- 2. Candidates shall be required to pass written and oral examinations in Chemistry (including Practical Chemistry), Botany, Anatomy (including Practical Anatomy and Histology) Physiology and Materia Medica (including Practical Pharmacy).
- 3. Candidates may appear for examination in Botany one academic year after passing the Matriculation Examination on presentation of the certificates specified above so far as they apply to this subject.
- 4. The Primary M.D., C.M. Examinations will be held in the third week in April. Candidates are required to transmit the certificates specified above to the Srcretary of the Faculty at least fourteen days before the date of the Examination, to enter their names in the Register of Undergraduates of the University before the date of the examination, and to pay before the date of the examination half the amount of the graduation fee. Should the candidate fail to pass, the fee will not be returned to him, but he will be admitted to any one subsequent Primary Examination without fee.
- § XL —FINAL M. D., C. M. EXAMINATIONS.—1. Caudidates for this examination shall be required to furnish certificates to the following effect, viz.:—
- (1.) That they have completed their twenty-first year or that they will have done so on or before the day of graduation. This certificate shall be signed by themselves.

- (2.) Of having passed the Primary M. D., C. M. Examination at this University, or of having passed the same examination at the Halifax Medical College prior to its affiliation with this University, or of having been admitted to the standing of an under-graduate who has passed this examination on certificates from recognized medical schools.
- (3.) Of either (a) having attended during four academic years at least two courses of lectures per year in subjects of the Primary and Final M. D., C. M. Examination either in this University or at the Halifax Medical College, or at some other recognised Medical School, or (b) having spent one calendar year in the study of Medicine in the office or offices of one or more registered medical practitioners, and having subsequently attended during three academic years courses of lectures as above.
- (4.) Of having attended at least two courses of lectures during at least one academic year at the Halifax Medical College, and of having paid the fees for one course of lectures in each of the subjects of the M. D., C. M. Examination at that College.
- (5.) Of having, after passing the Matriculation Examination, attended at the Halifax Medical College, or at some School of Medicine approved by the Senate, two courses of 100 lectures each in each of the following subjects, viz.:—Principles and Practice of Surgery, Obstetrics and Diseases of Women and Children, and Principles and Practice of Medicine; two courses of lectures of fifty lectures each in each of the following subjects, viz.:—Clinical Medicine and Clinical Surgery; and one course of fifty lectures in Medical Jurisprudence.
- (6.) Of having, after passing the Matriculation Examination, attended during one calendar year the practice of the Victoria General Hospital, or that of some other Hospital approved by the Senate.
- (7.) Of having attended for at least six months the practice of a lying-in hospital, approved by the Senate, or of having attended at least six cases of midwifery under a recognised practitioner.
- (8.) Of having obtained proficiency in the practice of Vaccination under a recognised practioner.
- 2. Candidates will be required to pass written and oral examinations in the following subjects: Principles and Practice of Medicine, Obstetrics and Diseases of Women and Children, Principles and Practice of Surgery, and Medical Jurisprudence. The oral examinations in Medicine and Surgery shall include clinical examinations conducted at the bedside, cases being submitted for diagnosis and treatment.

- 3. Candidates may appear for examination in Medical Jurisprudence alone, three academic years after passing the Matriculation Examination, on presentation of the certificates specified above so far as they apply to this subject.
- This Examination will be held in the third week in Candidates are required to transmit the certificates specified above to the Secretary of the Faculty at least fourteen days before the date of the Examination, to enter their names in the register of under-graduates before the date of the examination, and to pay before the date of the examination one-half of the amount of the graduation fee. Should the candidate fail to pass, the fee will not be returned to him, but he will be admitted to any one subsequent Final Examination without fee.
- § XLI. ACADEMIC COSTUME.—1. Doctors of Medicine of this University shall be entitled to wear black stuff gowns The hoods shall have a lining of scarlet silk bordered with white silk.
- Successful candidates for this degree shall be required to appear at Convocation in academic costume to have the degree conferred upon them. Degrees shall not be conferred in the absence of the candidate, except by special permission of the Senate.
- § XLII. FEES.—The following fees, payable by candidates for the degree of M. D., C. M., are in all cases payable in advance:-

Registration Fee	\$ 2 00
Matriculation Examination Fee	10 00
Chemistry Class Fee	12 00
Chemistry Laboratory Fee (three months' course)	
Botany Class Fee	6 00
Graduation Fee	20 00

## Enstitutions.

## THE UNIVERSITY LIBRARY.

The General † Library consists of about 2500 volumes, selected to meet the wants especially of students of the Faculty of Arts. It has no endowment funds, and its revenue is derived from the Registration Fees of Students of the Faculty of Arts, from fees for Supplementary and Special Examinations, and fines.

It contains the Mackenzie Collection of works on Mathematical and Physical Science, which was presented to the College by the relatives of the late Professor J. J. Mackenzie.

The following are the regulations with regard to the issue of books:—

- (1.) All students, graduates, and members of the Alumni Association shall be entitled to the use of the Library.
- (2.) Such persons shall, on making a deposit of two dollars, have the further privilege of borrowing books from the Library; the deposit may at any time be withdrawn, provided the books have been returned in proper condition.
- (3.) All books must be returned to the Library on or before the day appointed for that purpose in the University Almanac. Students who fail to comply with this rule shall forfeit half the amount of their deposit.
- (4.) No student shall have his Attendance and Examination certificates signed unless he has returned the books he may have obtained from the Library.
- (5.) Books damaged or lost shall be paid for by the borrower at such rates as the Librarian may direct.
  - (6.) The Library shall be open daily from 3 to 5 p.m.

During the past year, 358 volumes, exclusive of pamphlets, calendars, etc., have been added to the Library. The following have been presented:

<sup>†</sup> The Provincial Legislative Library and the Citizen's Free Library being open to the public on the fulfilment of certain conditions, may also be used by Students.

- By Mrs. Robert Morrow. A collection of works, mainly on Norse languages and antiquities, made by the late Robert Morrow, viz: Annaler for Nordisk Oldkyndighed, 21 vols.; Antiquarisk Tidsskrift, 8 vols.; Mémoires de la Societié Royale des Antiquaires du Nord, 15 vols.; Nemoires de la Societte Royale des Antiquaires du Nord, 15 vols.; Nordiske Sidsskrift for Oldkyndighed, 5 vols.; Scripta Historica Islandorum, 12 vols.; Tillae till Aarboger for Nordisk Oldkyndighed, 12 pamphlets; Groenland's Historike Mindesmaerker, vols II. and III.; Jonsson's Oldnordisk Ordbog; Thorpe's Northern Mythology, 3 vols.; Guide to Northern Archæology, (2 copies); Laing's Chronicles of the Kings of Northern Whetern's History of the Northern Pofes. way, 3 vols.; Wheaton's History of the Northmen; Rafu's Faereying Saga; Rink's Tales and Traditions of the Eskimo; Iceland, Greenland and the Faroe Islands; Smith' Discovery of America by the Northmen; Vestiges d'Asserbo et de Söborg; Congrès International des Américanistes, 8 vols.; Lelands' Discovery of America; Hyorten's Flugt; Holbergs Peder Paars; Bayldon's Old-Norse Grammar; Rask's Danish Grammar; Lund's Method of Learning Danish; Marsh's Old-Icelandic Grammar; Lund's Danish and English Idioms; English and Danish Dictionary; Engelsk-Dansk Ordbog; Dansk-Engelsk Ordbog; Cleasby & Vigfurson's Icelandic English Dictionary; Peterham's Anglo-Saxon Literature in England; Antiquités Russes, 2 vols.; Atlas d'Archéologie du Nord and Texte Explicative, 2 vols. ; Archaeology of the United States; Antiquités Americaines; Cabinet d'Antiquités Americaines à Copenhague, Rapport Ethnographique par Rafu; La Construction des Salles dites des Géants par le Roi de Danemark: Simpson's Archaeology, its Past and Future; Thom-sen's Northmen in Iceland; Worsaac's Discours levant la Soc. Roy. des Antiquaires du Nord.
- By R. Sedgewick, Esq., Deputy Minister of Justice.—The Encyclopaedia Brittannica, Vol. XXII.
- By Prof. MacGregor.—An Elementary Treatise of Kinematics and and Dynamics by J. G. MacGregor; Dalhousie Gazette, vols. I.-IV. (bound in one vol.); Scientific Papers, by J. J. Mackenzie; Census of Nova Scotia, 1861; The Works of President Edwards, the Younger, 2 vols.; General History of the Christian Church, by John Brown, 2 vols.; Dictionary of the Aneityumese Language.
- By Prof. Seth.—Peter's Translation of Anstotle's Ethics; Fleming's Vocabulary of Philosophy, 4th Ed.
- By President Forrest.—Schiller's Sämmtliche Werke.
- By Mr. Howard Murray, B. A.—Kiepert's Atlas Antiquus; Snowball's Elements of Trigonometry; Ramsay's Cicero Pro Cluentio; Biggs' Xenophon's Cyropaedia, Bks. IV. and V.; Sidgwicks Scenes from the Greek Dramatists, 4 vols.; Church & Brodribb's Tactius; Heslop's Olynltnae and Phillippic Orations of Demosthenes; Colenso's Trigonometry; Mission Morale de l'Art par A. Boulland.
- By Mr. W. H. Magee.—A Comparative Grammar of the Anglo-Saxon Language, by F. A. March.
- By Mr. D. A. Murray, B. A.—Angel's Geometry, 2 vols.
- By Macmillan & Co., (the Publishers).—Todhunter's Analytical Statics, 5th edit.; Scott's Marmion, ed. M. Macmillan; Paradise Lost, Bks. I. & II., ed. M. Macmillan; Geekie's Teaching of Geography; Calvert's School Readings in the Greek Testament; Stories from

Ovid's Metamorphoses, ed. Bond & Walpole; Cæsar's Helvetian War, ed. Welch & Duffield; Hall & Knight's Higher Algebra; Wood's Second School Poetry Book; Buckley's History of England for Beginners; Stewart & Gee's Lessons in Elementary Practical Physics, Vol. II.; Cohen's Practical Organic Chemistry; Wilhelm Tell, ed. Fasnacht; Remsen's Elements of Chemistry; Hartley's Quantitative Analysis; Cæsar's Gallic War, VII., ed. Bond & Walpole; Smith's Algebra; Wheeler's College History of India; Goldsmith's Traveller and Deserted Village, ed. Barrett; Much Ado About Nothing, ed. Deighton; Welch & Duffield's Latin Accidence; Anabasis, Bks. I-VIII., ed. Wells; Selections from Arrain, ed. Bond and Walpole; Polybius' Achaean League ed. Capes; Aeneid, Bk. VII., ed. Page; Geikie's Elementary Geography of the British Isles; Medea, ed. Verral.

By Rivingtons, (the Publishers).—Corneille's Cinna, ed. Hartington; Sand's Maîtres Mosaïstes, ed. Parry; l'Enfane de George Sand, ed. Joël; Young's Questions on Physics.

By Blackwood & Sons, (the Publishers).—Scottish Metaphysics Reconstructed.

Also, Proceedings of the Royal Society of Canada, 1886, by the Society.

Report of the Superintendent of Protestant Schools in Manitoba, by the Superintendent.

Report of the Smithsonian Institution, 1885, Pt. I., by the Institution.

Macoun's Catalogue of Canadian Plants, Pt. III., by the Geological, etc., Survey of Canada.

Report of the Fruit Growers' Association of Nova Scotia, by the Association.

Proceedings of the N. S. Institute of Natural Science, by the Institute.

Calendars, Registers, etc., by the following: University College,
Dundee; Glasgow University; Acadia College; Maryville College;
College of Ottawa; McGill College; Harvard University; Edinburgh
University; Aberdeen University; University of Toronto; Trinity
College, Toronto; Leheigh University; Durham University;
Lafayette College; Vassar College,

# THE UNIVERSITY MUSEUM.

The Museum \* consists chiefly of the Thomas McCulloch and the Patterson Collections.

The Thomas McCulloch Collection was presented to the University in 1884, by the Rev. William McCulloch, D. D., of Truro, with a fund of \$1400 for its maintenance and management. This Collection formed the museum of Prof. Thomas McCulloch, who occupied the Chair of Natural Philosophy from 1863 to 1865. It contains a large and valuable collection of birds, especially of the native birds of the Maritime Provinces; collections of shells, fossils, minerals and rock specimens, made in part by Rev. Thomas McCulloch, D. D., the first President of the College, and collections of dried specimens of native plants.

Patterson Collection.—Rev. G. Patterson, D. D., has kindly offered the College a very fine collection of Indian Antiquities, which will be removed to Halifax as soon as suitable accommodation can be provided.

Donations of Dried Plants from the Pacific Islands and Australia have also been made by Rev. Hugh Robertson and Rev. Joseph Annand, M. A., New Hebrides.

# THE GYMNASIUM.

The Gymnasium is provided with apparatus which was purchased by funds contributed for the most part by former students.

Instruction is furnished by a competent Gymnast.

The following are the general regulations for the use of the Gymnasium:

- (1.) All male students, graduates and members of the Alumni Association shall, on paying the sessional fee, be entited to the use of the Gymnasium.
- (2.) Students shall be entitled to instruction in gymnastics without the payment of any additional fee.

<sup>\*</sup> The Provincial Museum, which contains collections illustrating the Mineralogy, Geology, and Zoology of the Province, is open to the public daily, and may be used by Students.

(3.) Graduates and members of the Alumni Association shall be admitted to the classes, on payment of a fee of three dollars.

Gold and Silver Badges are offered by the President for competition at the close of the session.

The successful competitors for these Badges have been as follows:—

1882-3-	-Gold Badge	H. W. Rogers.
		W. B. Taylor.
1883-4-		W. B. Taylor.
	Silver Badge .	A. W. Lewis.
1884-5-		A. W. Lewis.
		A. M. Morrison.
1885-6-	-Gold Badge	A. M. Morrison.
	Silver Badge .	F. J. Stewart.
	Special Prize.	J. J. Buchanan.
1886-7-	-Gold Badge	J. J. Buchanan.
	Silver Badge .	V. G. Frazee.
1887-8-	-Gold Badge	J. M. Davison.
	Silver Badge .	V. G. Frazee.

# University Lists.

# DEGREES

Conferred April 26th, 1888.

#### MASTERS OF ARTS.

HIRAM HENRY KIRKWOOD FITZPATRICK, Scotsburn, Pictou Co., N. S. ROBERT McDonald Langille..... River John, Pictou Co., N. S.

#### BACHELORS OF ARTS.

DANIEL McDonald Clarke	. West River, Pictou Co., N. S.
WILLARD HILL FULTON	. Halifax, N. S.
DAVID KENZIE GRANT	. Riverton, Pictou Co., N. S.
GEORGE MILLAR JOHNSON	. Upper Stwiacke, N. S.
WILLIAM MACDONALD	. Pictou, N. S.
HENRY MARTYN MACKAY	. Plainfield, Pictou Co., N. S.
WILLIAIM JOHN MCKENZIE	. West Bay, C. B.
Samuel John McLennan	. Sydney, C. B.
AMBROSE WATTS McLEOD	. Dunstaffnage, P. E. I.
GEORGE MACLEOD	. Murray River, P. E. I.
JOHN ALEXANDER MATHESON	.Boulardarie, C. B.
ALEXANDER McGEACHY MORRISON	.Dartmouth, N. S.
THOMAS REGINALD ROBERTSON	. Annapolis, N. S.
DAVID SOLOAN	. Windsor, N. S.
John Sanders Sutherland	.St. James, Charlotte Co., N.B.

#### BACHELORS OF LAWS.

ARMSTRONG, ERNEST HOWARD	Kingston, N. S.
CAMPBELL, JOHN ROY, JR	Dorchester, N. B.
GREGORY, CHARLES ERNEST	Antigonish.
Jones, Harry Treadway	Halifax.
MACKAY, ADAMS ARCHIBALD, B.A.	Wallace.
MAGEE, EDGAR ALLISON	. , . Annapolis.
McCready, Charles Alexander	Moneton, N. B.
McInnis, Hector	Pictou.
McLennan, Daniel	Port Hood, C. B.
Morrison, Aulay	Cow Bay, C. B.

# GENERAL PASS LIST.

(Containing the names, alphabetically arranged, of Undergraduates who have passed in all the subjects proper to their years.)

# FACULTY OF ARTS.

# B. A. Degree.

FOURTH YEAR: Clarke, D. McD.; Fulton, W. H.; Grant, D. K.; Johnson, G. M.; Macdonald, Wm.; MacKay, H. M.; McKenzie, W. J.; McLennan, S. J.; McLeod, A. W.; McLeod, G.; Matheson, J. A.; Morrison, A. M.; Robertson, T. R.; Soloan, D.; Stewart, F. I.; Sutherland, J. S.

THIRD YEAR: Allison, E. P.; Brown, E. N.; Burkitt, E. J.; Davison, J. M.; Fraser, Al.; Frazee, V. G.; Fulton, Ed.; Harvey, McL.; Henry, J. K.; Laird, A. G.; Macdonald, R. J.; Paton, V., Putnam, Hom.; Smither, A. W.

SECOND YEAR: Campbell, D. F.; Cogswell, G. A.; Fisher, J. M.; Fulton, Ed.; Grierson, R.; Lewis, E. W.; McCallum, H. J.; McKinnon, J. A.; Mackintosh, D. C.; MacLeod, F. J.; Rstte, E. J.; Rowlings, G. R.; Schurman, G. W.; Trefry, J. H.

FIRST YEAR: Baxter, Agnes; Brehaut, J. W.; Cox, G. H.; Creighton, G.; Goodwin, Emily M.; Grierson, J. A.; Harrington, Emily; Hugh, D. D.; Jordan, E. J.; Logan, J. D.; McCurdy, J. I.; McGlashen, J. A.; McLean, J. B.; McMillan, C. E.; McMillan, F. A.; McNaughton, Elizabeth; Macrae, A. O.; Magee, W. H.; Moore, C. L.; Morash, A. V.; Oliver, A. C. L.; Robertson, S. N.; Robinson, C. B., Jr.; Tupper, J. W.; Turnbull, G. D.

# FACULTY OF LAW.

### For LL.B. Degree.

THIRD YEAR: Armstrong, E. H.; Campbell, J. R.; Gregory, C. E.; Jones, H. T.; MacKay, A. A.; Magee, E. A.; McCready, C. A.; McInnis, H.; McLennan, D.; Morrison, A.

SECOND YEAR: Cummings, Dennison, Forsyth, McNeil, A. H.; Patterson, Ross, Tobin.

FIRST YEAR: Armstrong, Bowser, Fairweather, Frame, Hamilton, Howie, Lockhart, McNeil, McPhee, Oxley, Reid, Roberts, Sinclair, Smith.

#### FACULTY OF MEDICINE.

# For Primary M.D., C.M.

#### (Names in order of merit.)

ANATOMY (including Practical Anatomy\*).— Campbell, G. M.; Walker, S. L.; Walsh, Thomas W.; Cameron, J. J.

Physiology.—Campbell, G. M.; Walker, S. L.; Walsh, Thos. W.
MATERIA MEDICA (including Therapeutics and Practical Pharmacy)
—Cameron, J. J.; Walsh, Thos. W.

CHEMISTRY .- Walsh, Thomas W.

BOTANY.—McCharles, R. W.; Fraser, J. F.; Elliott, C. S.; Miller, C. H.; Dunlop, E. W., and McLeod, R. C., (æq.); Gregory, George; Freeman, N. P., and McMahon, Frank (æq.); Walsh, Thos. W.

<sup>\*</sup> Except in the case of Mr. Walsh.

# HONOURS, MEDALS, PRIZES, EXHIBITIONS AND BURSARIES, 1887-88.

#### HONOURS.

MATHEMATICS AND PHYSICS.—First Rank—A. M. Morrison. Second Rank—H. M. MacKay.

MENTAL AND MORAL PHILOSOPHY.—Second Rank—A. W. MacLeod.

MENTAL AND MORAL PHILOSOPHY.—Second Rank—A. W. MacLeod, English Literature and History.—First Rank—Geo. MacLeod; J. S. Sutherland. Second Rank—David Soloan.

#### MEDALS.

THE GOVERNOR-GENERAL'S GOLD MEDAL.—Not awarded.
THE GOVERNOR-GENERAL'S SILVER MEDAL.—J. S. Sutherland.
THE SIR WM. YOUNG GOLD MEDAL.—A. M. Morrison.
THE DEMILL GOLD MEDAL.—Geo. MacLeod.

#### SPECIAL PRIZES.

THE NORTH-BRITISH SOCIETY BURSARY. - F. J. McLeod, THE AVERY PRIZE. -T. R. Robertson.
THE WAVERLEY PRIZE. -G. R. Rowlings,
THE FARLY ENGLISH TEXT SOCIETY'S PRIZE. -G. MacLeod,
THE NEW SHAKSPERE SOCIETY'S PRIZE. -F. J. MacLeod.
THE BOAK PRIZE. -H. T. Jones.

#### SENIOR MUNRO EXHIBITIONS.

(1) Laird, A. G. (3) Henry, J. K. (2) Frazee, V. G. (4) Putnam, H. (5) Fulton, E.

#### SENIOR MUNRO BURSARIES.

(1) Brown, E. N. (2) Fraser, J. K. G. (3) Macdonald, R. J. (4) Fraser, A. (5) Harvey, M. (6) Davison, J. M. (7) Allison, E. P. (8) Burkitt, R. J.

#### JUNIOR MUNRO EXHIBITIONS.

(1) Magee, W. H. (3) Moore, C. L. (2) Creighton, G. (4) Brehaut, J. W. (5) MacMillan, F. A.

#### JUNIOR MUNRO BURSARIES.

(1) Hugh, D. D. (6) Robinson, C. B. (2) Creighton, G. (7) McLean, J. B. (3) Tupper, J. W. (4) Oliver, A. C. L. (9) Turnbull, G. D. (5) Robertson, S. N. (10) McMillan, C. E.

# EXAMINATIONS, 1887-8.

#### FACULTY OF ARTS.

#### MATRICULATION EXAMINATION.

(The following list contains the names of those who either passed the Matriculation Examination, or were allowed to matriculate on report of the Examiners for Munro Bursaries. The names are in alphabetical order.)

### For B. A. Course.

FIRST YEAR.—Atwater, J. T.; Bakin, F. W. M.; Baxter, Agnes S.; Brehaut, J. W.; Cameron, S. H. H.; Cogswell, W. F.; Cox, Geo. H.; Creelman, W. A.; Creighton, G.; Douglas, E. A.; Fullerton, A.; Grierson, J. A.; Hamilton, Annie I.; Harrington, Emily B.; Hugh, D. D.; Johnson, E. D.; Jordan, E. J.; Lear, G. A.; Logan, J. D.; McCulloch, W.; McCurdy, J. F.; McDonald, A. F.; McGlashen, J. A.; McLean, J. B.; McMillan, C. E.; Macmillan, F. A.; Macrae, A. O.; Magee, W. H.; Moore, C. L.; Munro, H. H.; Montgomery, J.; Morash, A. V.; Oliver, A. C. L.; Parlee, G. P.; Robertson, S. N.; Robinson, C. B.; Thompson, F. W.; Thomson, J. W.; Trefry, A. H.; Tupper, J. W.; Turnbull, G. D.

SECOND YEAR. -Gratz, H. G.

For B. L. Course.

FIRST YEAR. - Muir, Ethel; Worth, Caliste A.

#### ENTRANCE EXAMINATIONS.

(Names in order of merit.)

#### CLASSICAL HISTORY AND GEOGRAPHY.

THIRD YEAR: Class I.—Brown, E. N.; Henry, J. K.; Paton, V.; (Putnam, H.; Laird, A. G). Class II.—Fulton, Ed.; Frazee, V. G.; Allison, E. P. Passed.—Harvey, M.; Davison, J. M.; Smith, E. B.; Macdonald, R. J.

SECOND YEAR: Class I.—None. Class II.—Cogswell, G. A.; Schurman, G. W.; (Lewis, L. W.; MacLeod, F. J.); Fulton, Eb.; Mackintosh, D. C. Passed.—MacLead, J. N.; Campbell, D. F.; Fisher, J. M.; Miller, G.; Grierson, R.; McCallum.

#### ENGLISH LITERATURE.

THIRD YEAR: Class I.—Burkett, R. J.; Frazee, V. G.; Putnam, H.; Laird, A. G.; Fulton, E; McDonald, R. J.; Harvey, M.; Henry, J. K. Class II.—Paton, V.; Davison, J. M.; Brown, E. N.; Allison, E. P.; Smith, E. B.; Fraser, J. K. G.

SECOND YEAR: Class I.—Mackintosh, D. C.; Maclean, J. N.; Cogswell, G. A. Class II.—MacLeod, F. J.; Fulton, Eben; Lewis, E. W. Passed—Schurman, G. W.; Millar, G.; Grierson, R.; Rowlings, G. R.; Murray, N. F.; Campbell, D. F.; McKinnon, J. A.; Fisher, J. A.; McCallum, H.

#### HISTORY.

Class I.—(McLeod, G.; Sutherland, J. S.); Soloan, D.; Robertson, T. R. Class II.—McDonald, W.; Johnson, G. M. Passed—Grant, D. K.; Clarke, D. McD.: Matheson, J. A.; McLennan, S. J.

#### SUPPLEMENTARY EXAMINATIONS.

FOURTH YEAR: History (Entrance Examination).—McKenzie, W. J.; Fulton, W. H.

THIRD YEAR: Dynamics.—Brown, W. Classical History and Geography.—Burkit, R. J.; Fraser, Alex.; Fraser, J. K. G.; Howatt, C. A. English Literature (Entrance Examination).—Fraser, Alex.; Howatt, C. A.

SECOND YEAR: English.—Burkitt, R. J. Latin.—McKenzie, W. J. Classical History and Geography.—Fullerton, C. P.; Rattee, E. J.; Fraser, John; Chapman; McKinnon; McLennan, A. K.; Rowlings, Trefry, J. H.; Gratz, H. G.; Murray, N. F. English Literature (Entrance Examination).—Fullerton, C. P.; Rattee, E. J.; Fraser, John; Chapman; McLennan, A. K.; Trefry, J. H.; Gratz, H. G.

FIRST YEAR: English.—Fullerton, C. P. Algebra.—Fullerton, C. P.; Rattee, E. J.; McLennan, A. K.; Fraser, John. Greek.—Fraser, John.

#### SPECIAL EXAMINATION.

Honours, subjects of the Third Year. - MacDonald, W.

#### SESSIONAL EXAMINATIONS.

#### CLASS LISTS.

(Containing the names, arranged in order of merit, of all Students who have passed in the subjects of the various classes.)

#### LATIN.

FOURTH YEAR: Class I—None. Class II—Grant, D. K.

THIRD YEAR: Class I—Laird, A. G. Class II—Paton, V. J, Passed—Frazee, V. G.; Davison, J. M.; Howatt, C. A.; Allison, E. P.

Second Year: Class I—MacLeod, F. J.; Schurman, G. W.; Lewis, E. W. Class II—McCallum, H. J. Passed—MacIntosh, D. C.; Fisher, J. M.; Grierson, R.; Maclean, J. N.; Rattee, E. J.; Cogswell, G. A.; Murray, N. F.; Rowlings, G. R.; Fullerton, C. P.; Fulton, E.; Campbell, D. F.; Chapman, A. E.; MacKinnon, J. A.; Trefry, J. H.

FIRST YEAR: Class I—Brehaŭt, J. W.; Robertson, S. N.; Magee, W. H.; MacMillan, F. A.; Hugh, D. D.; Maclean, J. B.; McMillan, C. E.; Cox, G. H.; Jordan, J. Class II—Tupper, J. W.; McDonald, A. F.; Moore, C. L.; Oliver, A. C. L.; Robinson, C. B. Passed—Macrae, Arch.; McNaughton, Eliz.; Creighton, G.; Goodwin, Emily; Baxter, Agnes; Turnbull, G. D.; Morash, A. V.; Logan, J. D.; McGlashen, J. A.; Harrington, Emily; Thompson, F. W.; McCurdy, J. F.; Thomson, J. W.; Mackay, M. S.; Grierson, J. A.; Trefry, A. H.

#### GREEK.

FOURTH YEAR.—Class I—None. Class II—Fulton, W. H. Passed—Grant, D. K.; McLennan, S. J.

THIRD YEAR: Class I—Laird, A. G. Class II—Henry, J. K.; Macdonald, R. J.; Putnam, H.

SECOND YEAR: Class I—MacLeod, F. J.; Schurman, G. W. Class II—McCallum, H. J. Passed—Lewis, E. W.; Mackintosh, D. C.; Fulton, E. C.; Fisher, J.; Cogswell, G. A.; (Grierson, R.; Rowlings, G. R.); (McKinnon, J. A.; Rattee, E. J.); Campbell, D. F.; (Chapman, A. E.; Gratz, H.: McLean, J. N.; McLennan, A. K.; Miller, G.)

FIRST YEAR: Class I—Brehaut, J. W.; MacMillan, F. A.; Magee, W. H. Class II—Baxter, Agnes; Macdonald, A. F.; Robinson, C. B.; (Jordan, J.; Robertson, S. N.); Oliver, A. C. L.; Moore, C. W.; (Hugh, D. D.; MacLean, J. B.); (Goodwin, Emily; Tupper, J. W.) Passed—Macrae, A. O.; McMillan, C. E.; McNaughton, Elizabeth; Creighton, G.; Turnbull, G. D.; McGlashen, J. A.; Morash, A. V.; Cox, G. H.; Thompson, F. W.; Munro, Chris.; Logan, J. D.; Caldwell, Lillie; Thomson, J. W.; Grierson, J. G.; McCurdy, J. F.

#### FRENCH,

THIRD CLASS: Class II.—F. J. Stewart, H. J. McCallum, J. Hart Trefry. Passed—A. M. Morrison.

Second Class: Class I—Miss E. H. Stewart, Miss M. Liechti. Class II—Miss E. Muir, Miss M. Stewart; J. S. Stewart, Wm. Macdonald, H. M. MacKay. Passed—W. H. Fulton, George MacLeod, David Soloan, C. A Howatt, J. R. Robertson, Miss Gert. Mackintosh, Wm. Brown.

FIRST CLASS: Class I—V. G. Frazee, Edward Fulton, J. M. Davison. Class II—John Montgomery, B. D. Higgs. Passed—A. H. Trefry, Miss Calista Worth.

#### GERMAN.

Second Class: Class I — Miss M. Liechti, Miss Maria Stewart, Miss Gert. Mackintosh. Class II—W. H. Fulton. Passed—D. K. Grant.

FIRST CLASS: Class I—H. Putnam, J. K. Henry. Class II—E. N. Brown, Rob. Macdonald. Passed — Miss E. Muir, Miss Anna M. Milroy, Alexander Fraser, G. A. Lear, Miss Calista A. Worth.

#### ENGLISH.

SECOND YEAR: Class I — MacLeod, F. J.; Mackintosh, D. C.; (Schurman, G. W.; Stewart, Miss M. L. J.) Class II—Mackenzie, Miss K. G. Passed—Lewis, E. W.; Fulton, Eben.; Higgs, B. D.; (Irefry, J. H.; Mackintosh, J. A.); (Cogswell, G. A.; Fisher, J. M.; Grierson, R.; MacLennan, A. K.; McGlashen, J. A.; MacLean, J. N.; Rowlings, G. R.); (Chapman, A. E.; Rattee, E. J.); Murray, N. F.; Campbell, D. F.); (Miller, George; McCallum, H. J.); Gratz, H. G.

First Year: Class I—Brehaut, J. W.; (Stewart, Miss E. H.; Magee, W. H.); Harrington, Miss E. B. Class II—McMillan, C. E.; (Muir, Miss E.: Tupper, J. W.) Passed—(MacLean, J. B.; Robinson, C. B.); (Hugh, D. D.; Jordan, J.; Moore, C. L.; Turnbull, G. D.); Macdonald, A. F.; (Cox, G. H.; Oliver, A. C. L.; Robertson, S. N.); (Goodwin, Miss E. M.; MacMullan, F. A.); Higgs, B. D.; (Borden, H. C.; Grierson, J. A.); (Logan, J. D.; Montgomery, J.; McNaughton, Miss E.; Thomson, J. W.); (Macrae, A. O.; McCurdy, J. F.; Morash, A. V.; Trefry, A. H.)

#### HISTORY

FOURTH YEAR; Class I—Sutherland, J. S.; McLeod, George; Soloan, D.; Robertson, T. M.; McDonald, Wm. Class II—Higgs, B. D. Passed—McLennan, C. P.; Grant, D. K.

THIRD YEAR: Class I—Fulton, Edward; Putnam, H. Class II—Paton, Vincent; Henry, J. N.; McDonald, Robert; Davison, J. M.;

Allison, E. P. Passed—Fraser, J. K. G.; Frazee, V. G.; Higgs, B. D.; Smither, Allan; Harvey, M. S.

#### POLITICAL ECONOMY.

Class I—(McLeod, George; Sutherland, J. S.); Higgs, B. D. Class II—Allison, E. P.; (McLelland, J. J.; Paton, Vincent).

#### METAPHYSICS.

Class I—Fulton, Edward; Brown, E. N.; Macdonald, W.; (Fraser, Alex.; Putnam, H. Class II—Macdonald, R. J.; (Stewart, Miss M. L. J.; Henry, J. K.); Soloan, D. Passed—Harvey, McLeod; Murray, F. W.; Fraser, J. K. G.

#### ETHICS.

Class I—Grant, D. K.; Brown, E. N. Class II—Fraser, Alex.; Robertson, T. R.; (Clarke, D. McD.; McLennan, S. J.); Stewart, Miss M. L. J.; Fulton, W. H.; Johnson, George M. Passed—McKerzie, W. J.; Matheson, J. A.

#### LOGIC AND PSYCHOLOGY.

Class I—Schurman, G. W.; (McLeod, F. J.; Fulton, Eben.); Mackintosh, D. C.; Grierson, R.; Rowlings, G. R.; Munro, C.; Millar, Geo.; Maclean, J. N. Class II—Fisher, Jas; (Lewis, E. W.; Rattee, E. J.; Trefry, J. H.); McKinnon, J. A.; McGlashen, J. A.; Smithers, A.; Campbell, D. F.; (McLennan, C. P.; Murray, N. F. Passed—(Chapman, A. E.; Gratz, H. H.); Cogswell, G. A.; Fullerton, C. P.; McCallum, H. J.; Thompson, A. S.

#### MATHEMATICS.

SECOND YEAR: Class I.—Rowlings. Class II.—Lewis. Passed—Grierson, Schurman, (Fisher, Campbell), McLeod, Trefry, Gratz, Rattee, Fulton, McCallum, Millar, MacKinnon, Cogswell, Mackintosh, Murray. Passed in Geometry—McLean, J. N. Passed in Trigonometry, &c.—Chapman, E.

First Year: Class I—Moore, Magee, McLean, J. B., Stewart, Miss E. M., Oliver, Tupper, Macdonald, Hugh, Brehant, Robertson, Robinson, Jordan, Baxter, Miss A. Class II—Grierson, J. A.; Mc-Millian, C. E.; Turnbull, Morash, Goodwin, Miss; McMillan, F. A., Macrae, Caldwell, Miss; Cox. Passed—Thomson, F. W.; McCurdy, Parker, MacKay, McNaughton, Miss; Worthylake, Harrington, Miss Cameron, Montgomery, Logan, Grierson, G. F., Finlayson, Worth, Miss. Passed in Geometry—Fraser, S.; Thomson, J. W.; Trefry, J. H.; Borden, H. C, Passed in Algebra—Mair Miss E.

#### PHYSICS.

THIRD YEAR: Class I—(Frazee, V. G.; Putnam, H.) Class II—Laird, A. G.; Henry, J. K.; Burkitt, R. Passed--Harvey, M.; Davison, J. M.; Allison, E. P.; Paton, V.; Murray, F. W.; Macdonald, K. J.

FOURTH YEAR: Class I—MacKay, H. M. Class II—Stewart, F. J. Passed—Morrison, A. M.; Brown, W.

DYNAMICS.

Class II-Burkitt, R.

#### INORGANIC CHEMISTRY.

Class I—E. H. Stewart, W. H. Magee, J. W. Brehaut, R. L. Murray, S. W. Robertson, D. D. Hugh, E. B. Harrington, Agnes S. Baxter, C. L. Moore. Class II—E. Muir, G. D. Turnbull, G. A. Burbidge, Albert V. Morash, Lizzie McNaughton, C. B. Robinson, A. C. L. Oliver, F. A. McMillan, Lillie B. Caldwell, George P. Parlee, Alice Thomson, F. McCurdy, F. W. Thompson, George H. Cox, John Jordan, A. O. Macrae, E. M. Goodwin. Passed—J. A. Grierson, J. W. Tupper, F. C. McLeod, A. F. McDonald, J. W. Creighton, J. W. Thomson, John B. McLean, J. D. Logan, E. Worthylake, A. C. Borden, John Montgomery, C. E. McMillan, G. T. Grierson, D. Martin, Simon H. W. Cameron, Calista Worth, A. Lear, R. A. Finlayson, A. H. Trefry.

#### BOTANY.

Class I—W. H. Fulton, E. H. Stewart, Alice Thomson. Passed—J. W. Creighton.

#### ORGANIC CHEMISTRY.

Class I-A. J. Denton, S. J. McLennan, Robert Burkitt.

#### PRACTICAL CHEMISTRY-ADVANCED.

Class I-S. J. McLennan.

#### PRACTICAL CHEMISTRY.

Class I—G. Creighton. Class II—V. G. Frazee. Passed—A. J. Denton, J. M. Davison.

#### FACULTY OF LAW.

#### SESSIONAL EXAMINATIONS.

### CLASS LIST.

(Containing the names arranged in the order of merit in the First and Second Class, and alphabetically in the Pass List, of students who have passed in the various subjects.)

#### INTERNATIONAL LAW.

Class I—MacKay, Jones. Class II—Robertson, Armstrong, Campbell, J. R., and McLennan (equal), McInnis. Passed—Magee, McCready, McDonald, Morrison.

#### CONFLICT OF LAWS.

Class I—Armstrong, MacKay. Class II—Jones, Whitford and Magee (equal), McInnis. Passed—Morrison.

#### CONSTITUTIONAL LAW.

Class I—Lovitt, Robertson, Ross, Campbell, A. J. Class II—Patterson, McNeill, Cummings, Campbell, Alex., Tobin, Passed—McDonald, W., Whitford, Forsyth, Dennison.

#### CONSTITUTIONAL HISTORY.

Class I—Reid, Howie, Lovitt, Lockhart. Class II—McBride, Oxley and Smith (equal), McNeil, Roberts. Passed—Bowser, Fairweather, Frame, Hamilton, Howitt, McPhee, Paton, Sinclair.

#### INSURANCE.

Class I—McInnis, Campbell, J. R., and Sones (equal). Class II—McCready, MacKay, McLennan. Passed—Morrison, Armstong, Magee.

#### EQUITY.

Class I—McNeil, Patterson, Lovitt, Tobin, Cummings. Class II—Ross, Gray, Dennison. Passed—Buchanan, Campbell, Alex., Forsyth, Stevens.

#### BILLS AND NOTES.

Class I—MacKay, McNeil, Ross, Buchanan, Cummings, Lovitt and McInnis (equal), Patterson, Jones, Tobin, Dennison. Class II—McLennan, Magee, Armstrong. Passed—Campbell, Alex., Forsyth, Morrison.

#### CONTRACTS.

Class I—McNeil, Howie, Smith, Hamilton, Campbell, Reid, McPhee, Lockhart, Armstrong. Class II—Fairweather, Frame, Roberts. Passed—Bowser, McBride, Oxley, Sinclair.

#### REAL PROPERTY.

Class I—Reid, Campbell, Hamilton, Frame, Bowser, Howie, Mc-Neil, Sinclair, Lockhart. Class II—Fairweather, Smith, Buchanan, Roberts. Passed—Notting, McPhee, Higgins, Oxley, Armstrong, White, Freeman.

#### PARTNERSHIP.

Class I—McNeil, Lovitt, MacKay, McInnis, Buchanan, McLennan and Patterson (equal), Cummings, Asmstrong and Ross (equal). Class II—Forsyth and Tobin (equal), Dennison. Passed—Campbell, Morrison.

#### TORTS.

Class I—Reid, Howie and Hamilton (equal), Campbell, A. J., Lockhart and McNeil (equal), Buchanan. Class II—Smith, Robertson, Sinclair, Fairweather, McPhee, Bowser, McBride and Frame (equal). Passed—Armstrong, Huggins, Oxley, White.

#### GENERAL LIST

OF

# MEDALS, PRIZES, EXHIBITIONS, &c. 1879-87\*.

#### THE GOVERNOR-GENERAL'S GOLD MEDAL.

1880, Crowell, E. 1881, Creelman, H. G. 1882, Trueman, J. S. 1883, Bell, J. A. 1884, McLeod, J. P. 1885, Aiton, W. 1886, Robinson, A. 1887, Shaw J. C.

#### THE GOVERNOR-GENERAL'S SILVER MEDAL.

1880, Fraser, W. M. 1881, not awarded. 1882, not awarded. 1883, Macdonald, J. A. 1884, Adams, H. S. 1885, Langille, R. M. 1886, Mackay, N. F. 1887, McLeod, M. J.

#### THE SIR WILLIAM YOUNG GOLD MEDAL.

1882, Campbell, G. M. 1883, Reid, A. G. 1884, Murray, D. A. 1885, McKenzie, A. S. 1886, Morton, S. A. 1887, McLeod, M. J.

#### THE DEMILL GOLD MEDAL.

1885, Gammell, I. 1887, Coffin, V. E.

#### THE MACKENZIE GOLD MEDAL.

1886, Mackay, E.

### THE NORTH BRITISH SOCIETY BURSARY.

1880, Campbell, G. M. 1882, McLeod, J. P. 1884, Mackay, N. F. 1886, Mackay, H. M.

#### THE AVERY PRIZE.

1880, Thomson, A. E. 1881, Sedgewick, J. A. 1882, Carson, G. S.
 1883, McLennan J. W. 1884, Turner, D. F. D. 1885, Tuffts,
 W. M. 1886, Allison, M. G. 1887, (Calkin, N. S., and
 Stewart, A. F.

#### THE WAVERLEY PRIZE.

1879, Murray, H. 1881, Bell, J. A. 1883, Gammell. I. 1884, Stewart, D. 1885, Morrison, A. M. 1886, Stewart, F. I. 1887, Laird, A. G.

#### THE ST. ANDREW'S CHURCH PRIZE.

1879, Murray, H. 1880, Mellish, H. 1881, Macdonald, J. A. 1882, Murray, D. A. 1883, (Aiton, W., and Robinson, G. E.) 1884, Nicholson, A. (Discontinued in 1884).

<sup>\*</sup> For medallists of previous years, see list of Graduates. For Prizes, &c., of previous years, see Calendar of 1881–82.

#### THE YOUNG ELOCUTION PRIZES.

1879, (1) McLaren, C. D., (2) Crewell, E., (3) Fraser, W. F. 1880, (1) Murray, D. A., (2) Mellish, H. 1881, (1) Forsyth, J. E., (2) Dill, E. M. (Discontinued, 1881.)

### THE ALUMNI PRIZES.

1879, (First Year.) (1) Campbell, G. M. (2) Carson, G. S. (Discontinued 1879.)

#### THE NEW SHAKSPERE SOCIETY'S PRIZE.

1884, Macknight, Catherine K. 1885, Sutherland J. S. 4886, McLeod, G. 1887, Henry J. K.

#### THE EARLY ENGLISH TEXT SOCIETY'S PRIZE.

1885, Gammell, I. 1886, Coffin, F. J. 1887, McNeill, Charlotte M.

#### THE JACK HERBARIUM PRIZE.

1884, Campbell, G. G.

#### THE BOAK PRIZE.

1886, McCully, F. A. 1887, McCready, C. A.

#### UNIVERSITY PRIZES.

#### FACULTY OF ARTS.

- CLASSICS: Fourth Year; 1879, McLean, I. M. 1880, Thomson, A. E. 1881, Sedgewick, J. A. 1882, Trueman, J. S. 1883, Bell, J. A. 1884, McLeod, J. P. 1885, Aiton, W. 1886, Robinson, A. Third Year; 1879, Thomson, A. E. 1880, Murray, H. 1881, Truemen, J. S. 1882, Bell, J. A. 1883, McLeod, J. P. 1884, Aiton, W. 1885, Robinson, A. 1886, Latin; Shaw, J. C. Greek; Forbes, Antoinette. Second Year; 1879, (1) Murray, H. (2) Trueman, J. S. 1880, Mellish, H. 1881, Bell, J. A. 1882, McLeod, J. P. 1883, Gammell, I. 1884, Robinson, A. 1885, Shaw, J. C. 1886, McLeod, G. First Year; 1879, Campbell, G. M. 1880, (1) Bell, J. A. (2) Macdonald, J. A. 1881, (1) McLeod, J. P. (2) Adams, H. S. 1882, (1) Gammell, I. (2) Aiton, W., and McLeod, J. M. 1883, Mackay, E. 1884, Latin, Shaw, J. C.; Greek, Fraser, D. 1885, (2) McLeod, G.; (2) Grant, D; K. 1886, Laird, A. G.
- Hebrew: 1892, Carson, G. S. 1883, McLennan, J. W. 1884, Campbell A., (New Glasgow). 1885, Tuffts, W. M. 1886, Calder, J.
- FRENCH: Fourth Year; 1879, Cameron, C. S. 1880, Mahon, A. W. 1881, Stewart, T. 1882, Mellish, H. 1883, Smith, H. M. Third Year; 1879, Mahon, A. W. 1880, Murray, H. 1881, Mellish, H. 1882, Smith, H. M. 1883, Adams, H. S.—Third Class; 1885, Mackenzie, A. S. 1886, Nicholson, A. Second Class; 1884, Turner, D. F. D. 1886, Allison, M. G. First Ccass; 1884, McKenzie, A. S. 1885, Coffin, F. J. 1886, McLeod, M. J.

- GERMAN: 1880, Creelman, H. G. 1881, Reid, A. G. Third Class; 1886, Cornelius, Louise A. Second Class; 1884, Saunders, Maria F. 1885, Newcombe, Margaret F. 1886, Macknight, Catherine K. First Class; 1884, Aiton, W. 1885, Cahan, C. H. 1886, Shaw, H. C.
- RHETORIG: 1879, Fowler, G. W. 1880, Bell, J. A. 1881, McLeod, J. P. 1883, McLeod, J. M.
- ENGLISH LANGUAGE AND LITERATURE: 1883, (Larkin, F. H., and Ritchie, Eliza). First Year; 1884, MacNeill, Charlotte M. 1885, McLeod, G. 1886, Henry, J. K. Second Year; 1885, Sutherland, J. S. 1886, McLeod, G.
- HISTORY: 1879, Dickie, A.; Constitutional History, Mahon, A. W.
   1880, Crowell, E. 1882, Crowe, W. 1883, McLennan, J. W.
   Fourth Year; 1884, McLeod, J. P. 1885, Gammell, I. 1886,
   Macrae, A. W. Third Year; 1884, Gammell, I. 1885, Smith.
   J. F. 1886, Shaw, H. C.
- Political Economy: 1833, Bell, J. A. 1884, Turner, D. F. D. 1885, Newcombe, Margaret F. 1886, Allison, M. G.
- ETHICS AND POLITICAL ECONOMY: 1879, Cameron, C. S. 1880, Dustan, J. F. 1881, Stewart, T. 1882, Carson, G. S.
- ETHICS: 1383, McLennan, J. W. 1884, McDonald, D. 1885, Langille, R. M.
- METAPHYSICS: 1879, (1) Mahon, A. W., (2) Crowell, E. 1880, Murray, H. 1881, (1) Fraser, W. M., B. Sc., (2) Campbell, G. M. 1882. Taylor, W. P. 1883, McLeod, J. P. 1884, Ritchie, Eliza. 1885, Cahan, C. H. 1886, Creighton, J. E.
- LOGIC AND PSYCHOLOGY: 1879, Murray, H. 1880, Mahon, A. W.
   1881, McLennan, J. W. 1882, McLeod, J. P. 1883, (Gammell, I., and Mackenzie, A. S.) 1884, Cahan, C. H. 1885, Sutherland, J. S. 1886, McLeod, G.
- MATHEMATICS: Second Year: 1879, (1) Murray, H., (2) Creelman, H. G. 1880, Campbell, G. M. 1881, Reid, A. G. 1882, Murray, D. A. 1883, Gammell, I. 1884, Stewart, D. 1885, (1) Morrison, A. M., (2) McLeod, M. J. 1886, Stewart, F. I. First Year: 1879, (1) Campbell, G. M., (2) Carson, G. S. 1880, (1) Murray, D. A., (2) Reid, A. G. 1881, (1) McLeod, J. P., (2) Elliott, H. 1882, Calkin, Lillie B. 1883, Mackay, E. 1884, Macneill, Charlotte M. 1885, (1) Stewart, F. I., (2) Brown, W. 1886, Frazee, V. G.
- PHYSICS: 1879, Dickie, A. 1880, Creelman, H. G. 1881, Carson, G. S. 1882, MacGregor, T. S.; Mathematical Physics: Reid, A. G. 1883, Murray, D. A. 1884, Mackenzie, A. S. 1885, Fourth Year, Mackay, E. Third Year, Morton, S. A. 1886, Macleod, M. J.
- Astronomy: 1881, Creelman, H. G. 1882, Campbell, G. M. 1883, Reid, A. G. 1884, Murray, D. A.
- CHEMISTRY: 1879, Murray, H. 1880, Campbell, G. M. 1881, (Organic)
  Reid, A. G.; (Inorganic) McLeod, J. P. 1883, (Organic) Campbell, G. G.; (Inorganic) (Gammell, I. and Newcombe, Margaret F.) 1884, (Organic) Smith, H. M.; (Inorganic), Second Year, Robinson, A.; First Year, Morrison, A. M. 1885, (Organic) Macrae, A. W.; (Inorganic) Stewart, F. I.; (Practical) Robinson, G. E. 1886, (Inorganic) (Frazee, V. G. and Laird, A. G.); (Organic) McLeod, M. J.
- Geology: (Junior) 1871, Cameron, A. G. (Senior) 1882, Cameron, A. G.

ZOOLOGY: 1881, Moren, J. A. 1885, Campbell, G. G.

BOTANY: 1882, Smith, H. M. 1883, Trueman, H. 1886, Symonds, F. A.

#### FACULTY OF LAW.

CONSTITUTIONAL HISTORY: 1884, Carter, W. D. 1885, Mellish, H. 1886, Buchanan, J. J.

CONSTITUTIONAL LAW: Morse, C. 1885, Chisholm, J. 1886, Henry, W. A.

INTERNATIONAL LAW: 1885, Ives, W. B. 1886, Chisholm, J. A. Conflict of Laws: 1884, Morse, C. 1885, Milliken, A. E. 1886, McDonald, E. M.

ROMAN LAW: 1885, Ives, W. B. 1886, Carter, W. D.

EVIDENCE: 1884, Sedgewick, J. A. 1885, Carter, W. D. 1886, Rogers, H. W.

EQUITY: 1884, Sedgewick, J. A. 1885, Thompson, S. R. 1886, McDonald, E. M.

REAL ESTATE: 1884, Wells, W. W. 1885, McCully, F.

REAL PROPERTY: 1885, (McCully, F.; Mellish, H.; Thomson, W. K.) 1886, Campbell, J. R.

ESTATES LESS THAN FREEHOLD: 1886, Campbell, J. R.

ESTATES LESS THAN FREEHOLD: 1886, Campbell, J. R.
COMMERCIAL LAW: 1884, Mooney, P. C. C. 1886, Thomson, W. K.
CONTRACTS: 1884, Wells, W. W. 1885, Mellish, H. 1886, McInnes, H.
SALES: 1885, Carter, W. D.
BILLS AND NOTES: 1885, Carter, W. D.
INSURANCE: 1885, Boak, H. W. C. 1886, Henry, W. A.
CRIMES AND TORTS: 1884, Carter, W. D.
TORTS: 1885, Hanright, F. W. 1886, McCready, C. A.
CRIMES: 1885, Mellish, H. 1886, Ford, E. L.

(Discontinued 1886.)

#### PROFESSORS' SCHOLARSHIPS.

1879—In Arts': (1) Bell, J. A., Halifax High School; (2) Moren, J. A., do.; (3) Macdonald, J. A., do, In Science : Reid, A. G., Halifax High School.

1880-In Arts: (1) Adams, H. S., Halifax High School; (1) Pitblado, J., private Study. In Science: Smith, H. M., private study.

(Discontinued 1880.)

#### THE MUNRO EXHIBITIONS.

[The names are in order of merit.]

Senior—1883: Mackenzie, A. S.; Gammell, I.; Tufts, W. M. 1884:
Robinson, A.; Cahan, C. H.; Mackay, E.; Mackay, N. F.;
Lewis, A. W. 1885: Creighton, J. E.; Shaw, J. C.; Shaw, H.
C.; MacNeill, Charlotte M.; Buchanan, J. J. 1886: McLeod,
Sutherland, J. S.; Stewart, F. I.; Mackay, H. M.; Morrison,

JUNIOR - 1881: Gammell, I.; Aiton, W.; Fitzpatrick, H. H. K.; Mc-Leod, J. M. 1882: Mackay, E.; Cahan, C. H.; Calder, J.; Mackay, N. F.; Robinson, A, 1883: Buchanan, J. J.; MacNeill, Charlotte M.; Forbes, Antoinette; Creighton, J. E. 1884: MacLeod, G.; Mackenzie, J. W.; Mackay, H. M.; McDonald, W.; Soloan, D. M. 1885: Laird, A. G.; Fulton, E.; Frazee, V. G.; Henry, J. K.; Putnam, H. 1886: McCallum, H.; Mackintosh, D. C.; Schurman, G. W.; Gardner, N. H.; McLeod, F. J.

#### THE MUNRO BURSARIES.

[The names are in order of merit,]

SENIOR —— 1882: McLeod, J. P.; Murray, D. A.; Adams, H. S.; Jones, F. 1883: Newcombe, Margaret F.; Fitzpatrick, H. H. K.; Thompson, A. W.; Robinson, G. E.; Martin, K. J.; Aiton, W.; Langille, R. M. 1884: Macrae, A. W.; Coffin, F. J., Calder, J.; Stewart, D.; Nicholson, A.; Morton, S. A. 1885: Coops, F. H.; Forbes, Antoinette; Fraser, D. 1886: Fulton, W. H.; Soloan, D. M.; Clark, D. McD.; Robertson, T. R.; Johnson, G. M.; McDonald, W.; Grant, D. K.; McLennan, S. J.

Junior -1880: McLeod, S. P.; Dill, E. M.; Elliott, H.; Morrison, D. I.; Jones, F. 1881: Robinson, G. E.; Kempton, W. F.; Coffin, F. J.; Thompson, A.W.; Calkin, Lillie B.; Crawford, J.; Martin, K. J.; McLean, J. M.; Mackenzie, A. S.; Newcombe, Margaret F.; Tuffts, W. M. 1882: Nicholson, A.; Morton, S. A.; Macdonald, E. M.; Stewart, D.; Lewis, A. W.; Coffin, V. E.; Macrae, A. W.; McKenzie, D. H.; Reid, R. L. 1883: (Coops, F. H.; Fraser. D.); Shaw, H. C.; Shaw, J. C.); Campbell, W. R.; Sutherland, J. S.; Johnson, G. M. 1884: Stewart, F. I.; Grant, D. K.; Harvey, M.; Robertson, J. R.; Clark, D. McD.; Brown, W.; Allison, E. P.; Matheson, J. A. 1885: McDonald, R. J.; McKay, D. O.; Burkitt, R.; Fraser, A.; Howatt, C. A.; Laird, A.; Kennedy, J. 1886: McLean, J. N.; Campbell, D. F.; Grierson, R.; Lewis, E. W.; Fisher, J. M.; Cogswell, G. A.; Rowlings, G. R.; Fulton, Eben; Murray, N. F.

#### CERTIFICATES OF MERIT.

[The names are arranged alphabetically.]

FIRST CLASS: Fourth Year; 1879, Cameron, C. S; McLean, I. M. 1881, Creelman, H. G. 1882, Mellish, H.; Trueman, J. S. 1883, Bell, J. A; McLennan, J. W. Third Year: 1880, Blanchard, C. W.; Creelman, H. G; Murray, H. 1881, Campbell, G. M.; Trueman, J. S. 1882, Bell, J. A; Reid, A. G. 1883, Adams, H. S.; McLeod, J. P.; Murray, D. A. Second Year: 1879, Murray, H. 1880, Campbell, G. M.; Mellish, H. 1881, Bell, J. A.; Reid, A. G. 1882, Adams, H. S.; McLeod, J. P.; Murray, D. A. 1893, Gammell, I; Martin, K. J.; Mackenzie, A. S.; Robinson, G. E. First Year: 1879, Campbell, G. M.; Carson, G. S. 1880, Bell, J. A.; Macdonald, J. A.; Moren, J. A.; Murray, D. A; Reid, A. G. 1881, Adams, H. S.; Elliott, H; McLeod, J. P. 1882, Aiton, W.; Calkin, Lillie B; Coffin, F. J.; Gammell, I; Kempton, W. F.; Martin, K. J.; Mackenzie, A. S.; McLeod, J. M.; Pitblado, I.; Robinson, G. E.; Tuffts, W. M. 1883, Cahan, C. H.; Mackay, E.; Mackay, N. F.; Robinson, A. Second Class; Fourth Year; 1879, Emmerson, R. R. J. 1880, Crowell, E. 1881, Sedgewick, J. A. 1882, Cameron, A. G.; Carson, G. S.; Davidson, F. J.; Patterson, G. G. 1883, Dickie, H.; McColl, A. Third Year: 1879, Crowell, E.; Thomson, A. E. 1881, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, Mellish, H. 1882, Macdonald, J. A.; McLeonan, J. W.; Taylor, McLeonan, J. W.; McLeona

SECOND CLASS; Fourth Year; 1879, Emmerson, R. R. J. 1880, Crowell, E. 1881, Sedgewick, J. A. 1882, Cameron, A. G.; Carson, G. S.; Davidson, F. J.; Patterson, G. G. 1883, Dickie, H.; McColl, A. Third Year: 1879, Crowell, E.; Thomson, A. E. 1881, Mellish, H. 1882, Macdonald, J. A.; McLennan, J. W.; Taylor, W. P. 1883, Smith, H. M. Second Year: 1878, Creelman, H. G.; Trueman, J. S. 1880, Cameron, A. G. 1881, Macdonald, J. A.; Macgregor, T. S.; McLennan, J. W.; Moren, J. A. 1882, Smith, H. M. 1883, Aiton, W.; Calkin, Lillie B.; Fitzpatrick, H. H. K.; McLeod, M.; Newcombe, Margaret F.; Tuffts, W. M. First Year: 1879, McLennan, J. W. 1880, McInnis, H.; McLeod, J.; Thompson, E. 1881, Dill, E. M.; Jones, F.; Morrison, D. I.; Pitblado, J. 1882, Crawford, J.; Fitzpatrick, H. K.; Newcombe, Margaret F.; Thomson, A. W. 1883, Allison, M. G.; Larkin, F. H.; Lewis, A. W.; Saunders, Maria F.; Stewart, D.

(Discontinued in 1883.)

# GRADUATES OF THE UNIVERSITY.

N. B. — Degrees printed with the names have been obtained at other Universities.

Graduates are requested to notify the President of changes of address.

‡8Adams, H. S., Jesuits' College, MontrealB. A., 1884
†¹Aiton, W., Sussex, N. BB. A., 1885
Allan, Rev. John M., EdinburghB. A., 1873; M. A., 1876
Allison, Matthew G., Windsor, N. S
Annand. Rev. Joseph, New HebridesB. A., 1869; M. A., 1872
Archibald, Rev. F. W., M. A., B. D., Ph. D., St. Thomas, Ont,
B. A., 1877
Archibald, Rev. W. P., Cavendish, P.E.I., B.A., 1873; M. A., 1878
Armstrong, E. H, Kingston, N. SLL. B., 1888
Bayne, Prof. H. A., Ph. D., F.R.S.C., (obit.)B. A., 1869
M. A., 1872
† <sup>2</sup> Bell, F. H., HalifaxB. A., 1876
† <sup>2</sup> Bell, J. A., Halifax B. A., 1883
Bennett, A. W., Hopewell, N. BLL. B., 1885
Bethune, J. L., Baddeck, C. B
Blanchard, C. W., WinnipegB. A., 1880
Boak, H. W. C., HalifaxLL. B., 1885
Bruce, Rev. W. T., M. D., Valley Station, Col. Co. B. A., 1872
Bryden, Rev. W. C., TatamagoucheB. A., 1873
<sup>6</sup> Buchanan, James J., Sydney, C. B
Burgess, Rev. J. C
Cahan, Charles H., HalifaxB. A., 1886
Cairns, Rev. J. A., M.A., Upper Musquodoboit B. A., 1878
Calder, John, West Bay, C. B
Calkin, William S., TruroB. A., 1887
Cameron, A. G., Newton, Guysboro'
4Cameron, C. S., Halifax
‡ Cameron, Rev. J. H., Bass River, N. B B. A., 1878
Cameron, William, Merigomish, N. S B. A., 1873
Cameron, Rev. J. J., Shakespere, Ont., B. A., 1869; M. A., 1871
Cameron, Alexander J., Truro, N. S
Campbell, George G., Truro
Campben, Goorge G., 11010

<sup>&</sup>lt;sup>1</sup> Graduated with First Rank Honours in Classics.

<sup>&</sup>lt;sup>2</sup> Graduated with Second Rank Honours in Classics.

<sup>4</sup> Graduated with Second Rank Honours in English and English History.

<sup>6</sup> Graduated with Second Rank Honours in Mental and Moral Philosophy.

<sup>8</sup> Graduated with Second Rank Honours in Mathematics and Mathematical Physics.

<sup>†</sup> Governor-General's Gold Medallist.

<sup>‡</sup> Governor-General's Silver Medallist.

a § <sup>8</sup> Campbell, George M., TruroB. A.,	1882
Campbell, D. A., Halifax	1874
Campbell, J. R., Jr, Dorchester, N. BLL. B.,	1888
Campbell, Wm. R., E. River, St. Mary's, Pictou Co. B. A.,	1887
Carmichael, J. M., New GlasgowB. A.,	1872
Carr, Rev. A. F., Alberton, P. E. IA. A., 1868; M. A.,	1871
	1882
Carter, Titus James, Point de Bute, N. BLL.B.,	1887
Carter, William D., Richibucto, N. BLL.B.,	1886
Chambers, F. B., TruroB. A.,	1879
Chambers, R. E., TruroB. A.,	1877
Chase, Rev. J. H., Onslow	1869
Chisholm, Don., Antigonish	1874
Chisholm, Joseph A., AntigonishLL.B.,	1886
Christie, Rev. T. M., (obit )B. A.,	
Clarke, Daniel McD., West River, Pictou Co., N. S. B. A.,	1888
Cluney, Andrew, HalifaxLL.B.,	1887
<sup>4</sup> Coffin, Fulton J., Mt. Stewart, P. E. I B. A.,	1886
Coffin, F. S., M.A., Mt. Stewart, P. E. I	1885
*8Coffin, Victor E., Mt. Stewart, P. E. IB. A.,	1887
<sup>2</sup> Coops, Frank H., Milton, Queens CoB. A.,	1887
Costley, Alfred, Halifax B. A.,	1881
Cox, Robinson, Stewiacke	1875
Creelman, Rev. D. F. (obit.)	1880
† Creelman, H. G., B. Sc., Vans Dunlop Scholar, Edinburgh U	niv.,
В. А.,	1881
Creighton, J. G. A., MontrealB. A.,	1868
Creighton, H. S., DartmouthB. A.,	1880
‡5Creighton, James E., West River, Pictou CoA. A.,	1887
Crowe, Walter, Sydney, C. B LL.B.,	
+4Crowell, Rev. Edwin, YarmouthB. A.,	1880
Cruikshank, Rev. W., B. D., MontrealB. A.,	1872
Davidson, J. F., Pinos Altos, Grant Co., New Mexico.B. A.,	1882
DeWolf, G. H., Tintern, England	1872
Dickie, Alfred, Upper StewiackeB. A., 1879; M. A.,	
Dickie, Henry, Upper StewiackeB. A.,	
Dill, Edmund M., Centre Rawdon, Hants CoB. A.,	
Doull, W. S., Halifax	1885

<sup>&</sup>lt;sup>2</sup> Graduated with Second Rank Honours in Classics.

<sup>3</sup> Graduated with First Rank Honours in Literature and English History.

<sup>4</sup> Graduated with Second Rank Honours in Literature and English History.

<sup>&</sup>lt;sup>5</sup> Graduated with First Rank Honours in Mental and Moral Philosophy.

<sup>8</sup> Graduated with Second Rank Honours in Mathemetics and Mathematical Physics.

<sup>†</sup> Governor-General's Gold Medallists.

<sup>†</sup> Governor-General's Silver Medallists.

<sup>\*</sup> DeMill Gold Medallist.

<sup>§</sup> Sir Wm. Young's Gold Medallists.

a Munro Tutor in Mathematics, 1883-5.

	Duff, Kenneth, Lunenburg	B. A.,	, 1873
	Emmerson, R. R. J., Middle Sackville, N. S	B. A.,	1879
-	<sup>6</sup> Fitzpatrick, H. H. K., Scotsburn, Pictou Co	B. A.	, 1885
	oth, Ankhweller, Philadiana Payer, and Berkeley	M. A.	, 1888
	Fitzpatrick, Rev. James, Saltsprings	B. A.	1875
	Forbes, Antoinette, Little Harbor, Pictou Co		
	Forrest, James, HalifaxB. A., 1868;	M. A.	, 1872
	Fraser, Hon. D. C., New Glasgow		
	Fraser, Rev. D. S., Mahone Bay		
	Fraser, Donald, Pictou		
#	Fraser, W. M., Halifax		
	Fraser, W. R., Pictou		
	Fulton, G. H., M.D., C.M		50
	Fulton, W. H., Halifax		
*	<sup>3</sup> Gammell, I., Pictou		
	George, Rev. J. L., M. A., Dartmouth		
	Grant, David K., Riverton, Pictou Co		
	Grant, W. R., (obit.)		
	Gregory, C. E., Antigonish		
	Gunn, Rev. Adam, Kennetcook		
	Hamilton, H. H., Pictou		
	Hanright, Fred. W., B. A., Windsor		
	Henry, William A., Halifax, N. S		
	<sup>2</sup> Herdman, Rev. J. C., B. D., Calgarry, N. W. T		
		M. A.	
	Herdman, W. C., PictouB. A., 1874;		*
	Herdman, A. W., Pictou		
	Hiltz, C. W., (obit.)		
	Hunter, John, California		
	Ives, W. B., New Glasgow, N. S		
	Jennison, Hedley V., Walton, N. S		
	Johnson, George M., Upper Stewiacke, N. S		
	Jones, Frank, Digby		
	Jones, H. T., Halifax, N. S		-
+	Jordan, Rev. L. H., B. D., MontrealB. A., 1875;		
	Kinsman, F. S., M. D., Centreville		
	Knowles, J. H., Milton		
	Laird, G. A., Manitoba		
	Landells, R., Halifax		
	Lane, Charles W., Pictou		
	<sup>6</sup> Langille, R. M., River John, Pictou CoB. A., 1885;		
	LeNoir, M. U., Halifax, N. S		

<sup>&</sup>lt;sup>2</sup> Graduated with Second Rank Honours in Classics.

<sup>&</sup>lt;sup>3</sup> Graduated with First Rank Honours in English and English History.

<sup>&</sup>lt;sup>6</sup> Graduated with Second Rank Honours in Mental and Moral Philosophy.

<sup>†</sup> Governor-General's Gold Medallist.

<sup>‡</sup> Governor-General's Silver Medallist.

<sup>\*</sup> DeMill Gold Medallist

	Lewis, Abner W., Central Onslow, N. S	.B. A.,	1886
	Lindsay, A. W. H., M. B., C. M., Halifax	.B. A.,	1870
	M. D.,	C. M.,	1875
	Llppincott, Aubrey, M. D., Pittsburg, Pa	.B. A.,	1867
	Locke, R. T., Lockeport		1885
	Logan, Rev. Richmond, CaliforniaB. A., 1877;		1880
	Logan, Melville, Halifax		1873
	Lyons, William Alex., Halifax		1887
	McColl, A., New Glasgow, N. S.		1883
	McCready, Charles A., Moncton, N. B		1888
	McCully, Frank A., B. A., Sussex, N. B		1887
	McCurdy, S. T., New Glasgow		1877
	McDonald, J. H., (obit.)		1870
	McDonald, Donald, Cape North, Cape Breton		
			1884
	Macdonald, C. D., Pictou		1873
	Macdonald, Ed. M., Pictou		1887
	Macdonald, W. M., Halifax		1881
7	<sup>8</sup> Macdonald, J. A., Halifax		
	Macdonald, William, Pictou, N. S		1888
	McDowell, Isaac, (obit.)		1876
	McGregor, Rev. Daniel, Amherst		1874
	MacGregor, Prof. J. G., D.Sc., HalifaxB. A., 1871;		1874
	<sup>8</sup> MacGregor, T. S., Boston, Mass		1882
	McInnes, Hector, Halifax		1888
	Mackay, Adams A., B.A., Halifax, N. S		1888
	<sup>8</sup> McKay, A. H., B.Sc., Pictou		1873
	McKay, Rev. Kenneth, Richmond, N. B	В. А.,	1868
9	<sup>9</sup> Mackay, Ebenezer, New Glasgow, N. S	.В. А.,	1886
	<sup>8</sup> Mackay, H. M., Plainville, Pictou Co., N. S		1888
+	<sup>9</sup> Mackay, Neil F., West River, Pictou Co., N. S		1886
	McKeen, Rev. J. A., Hamilton, Bermuda	.B. A.,	1873
§	<sup>8</sup> Mackenzie, A. S., Munro Tutor, Dalhousie College	.B. A.,	1885
	McKenzie, Hugh, TruroB. A., 1872;	M. A.,	1875
	McKenzie, Prof, J. J., Ph.D., (obit.)B. A., 1869;	M. A.,	1872
	McKenzie, Rev. James, Pugwash		1878
	McKenzie, Rev. J. W., East St. Peter's, P. E	.В. А.,	1882
	McKenzie, William J., West Bay, C. B	.B. A.,	1888
	Mackinnon, Don. Alex., Charlottetown, P. E. I	LL.B.,	1887
++	McKittrick, Burgess, Sydney, C. B		1877
	McLatchy, Henry F., Hillsboro', N. B	LL.B.,	1887
	<sup>2</sup> McLean, I. M., M.D., Wallace		
	McLean, Rev. J. A., Barrington		

<sup>&</sup>lt;sup>2</sup> Graduated with Second Rank Honours in Classics

<sup>&</sup>lt;sup>8</sup> Graduated with Second Rank Honours in Mathematics and Mathemat. Physics.

<sup>9</sup> Graduated with First Rank Honours in Experimental Physics and Chemistry.

<sup>‡</sup> Governor-General's Silver Medallist.

<sup>§</sup> Sir Wm. Young Gold Medallist,

<sup>¶</sup> Mackenzie Gold Medallist.

McLennan, Daniel, Port Hood, C. BLL.B., 1	888
McLennan, J. W., B.D., Sydney, C. B. B. A., 1883; M. A., 1	1887
McLennan, S. J., Sydney, C. B	
McLeod, Rev. A. W., Ph.D., Vale, Pictou CoB. A., 1	1875
M. A., 1	
<sup>6</sup> MacLeod, Ambrose W., Dunstaffnage, P. E. IB. A., 1	
*8MacLeod, George, Murray River, P. E. I	
MacLeod, Rev. J. W., (obit.)	
McLeod, Don., Strathalbyn, P. E. I	
McLeod, J. M., M. A., Valleyfield, P. E. IB. A., 1	
b+1McLeod, J. P., Valleyfield, P. E. I	
§ McLeod, Malcolm J., Belfast, P. E. I	
McMillan, Finlay, Sheet Harbonr, N. SM. D., C. M., 1	
# McMillan, Rev. G. W., Malpeque, P. E. I B. A., 1	
McNaughton, Rev. Samuel, Preston, G.B., B.A., 1897; M. A., 1	
<sup>8</sup> McNeil, Charlotte M., Charlottetown, P. E. I B. A., I	
Macrae, Alex. W., St. John, N. B B. A., 1	
McRae, William, (obit.)	
Magee, Edgar A, AnnapolisLL. B., 1	
<sup>8</sup> Martin, K. J., Charlottetown, P. E. I	
Mason, Rev. W. A., New London, P. E. I B. A., 1	
Mellish, H., PictouB. A., 1	
Matheson, J. A., Halifax, N. S B. A., 1	
Millar, Rev. E. D., LunenburgB. A., 1	
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Munro, Rev. John, Antigonish, N. S	
Munro, G W., 17-27 Vandewater St., New YorkB. A., 1	
Murray, J. S., North Sydney, C. B B. A., 1	
a § <sup>8</sup> Murray, D. A., Truro	
Newcombe, E. L., <i>LL. B.</i> , Halifax, B. A., 1878; M. A., 1	

<sup>&</sup>lt;sup>1</sup> Graduated with First Rank Honours in Classics.

<sup>&</sup>lt;sup>3</sup> Graduated with First Rank Honours in English and English History.

<sup>&</sup>lt;sup>6</sup> Graduated with Second Rank Honours in Mental and Moral Philosophy.

Graduated with First Rank Honours in Mathematics and Mathematical Physics.
 Graduated with Second Rank Honours in Mathematics and Mathematical

Physics.

<sup>†</sup> Governor-General's Gold Medallist.

<sup>‡</sup> Governor-General's Silver Medallist.

<sup>§</sup> Sir William Young's Gold Medallist.

a Munro Tutor in Mathematics, 1885-7.

b Munro Tutor in Classics, 1885-7.

*Newcombe, Margaret F., Ladies' College, HalifaxB. A., 1885
Nicholson, Alfred, M. A., Southport, P. E. IB. A., 1886
<sup>6</sup> Oxley, J. M., <i>LL. B.</i> , Ottawa
Patterson, G. G., New GlasgowB. A., 1882; M. A., 1887
Pitblado, Colin, Pres. Theol. College, HalifaxB. A., 1876
Pollok, A. W., (obit.)
Putnam, Wm. G., Maitland
§ 7Reid, A. G., Edinburgh University
<sup>5</sup> Ritchie, Eliza, HalifaxB. L., 1887
Robert Cassimir, Arichat, C. B
Robertson, Henry McN., Barrington, N. SLL. B., 1886
Robertson, T. R., Annapolis, N. S
+ 1Robinson, Alex., Sussex, N. B
<sup>8</sup> Robinson, G. E., Charlottetown, P. E. I
Robinson, Rev. J. M., Spring HillB. A., 1883
Rogers, Rev. Anderson, YarmouthB. A., 1887
Rogers, Henry W., AmherstLL. B., 1887
Ross, Alexander, Dalbousie, N. B B. A., 1867
Ross, Rev. William, Prince William, N. BB. A., 1873
Russell, Rev. A. G., Oyster Bay, L. I., N. YB. A., 1871
Russell, Joseph A., Newcastle, N. B LL. B., 1887
Scott Rev. Ephraim, New GlasgowB. A., 1872; M. A., 1875
Scott Rev. Prof. H. McD., B. D., Chicago
Scot, J. McD., (obit.)
Sedgewick, J. A., HalifaxB. A., 1881; LL. B., 1885
Sedgewick, Robert, Q. C., OttawaB. A., 1867
4Shaw, Henry C., Stanhope, P. E. I
† 1Shaw, James C., Stanhope, P. E. I
Shaw, Robert, (obit.)
Simpson, Rev. Isaac, LaHaveB. A., 1868
Smith, Rev. D. H., TruroB. A., 1867; M. A., 1871
Smith, Rev. Edwin, Stewiacke B. A., 1867
Smith, H. McN., Edinburgh UniversityB. Sc., 1884
<sup>4</sup> Smith, James F., Halifax, N. S
<sup>4</sup> Soloan, D. M., Windsor, N. S
Spencer, Rev. W. H., Georgetown, P. E. IB. A., 1881
Stewart, Alex. F., PictouB. A., 1887
Stewart, Annie A., PictouB. Sc., 1886
Stewart, Dugald, Upper Musquodoboit, N. SB. A., 1886
Stewart, F. I., Charlottetown, P. E. I

<sup>&</sup>lt;sup>1</sup> Graduated with First Rank Honours in Classics.

<sup>&</sup>lt;sup>4</sup> Graduated with Second Rank Honours in English and English History.

<sup>&</sup>lt;sup>5</sup> Graduated with First Rank Honours in Mental and Moral Philosophy.

<sup>6</sup> Graduated with Second Rank Honours in Mental and Moral Philosophy.

<sup>&</sup>lt;sup>7</sup> Graduated with First Rank Honours in Mathematics and Mathematical Physics.

<sup>8</sup> Graduated with Second Rank Honours in Mathematics and Mathematical Physics.

<sup>†</sup> Governor-General's Gold Medallist.

<sup>§</sup> Sir William Young's Gold Medallist.

	#	<sup>8</sup> Stewart, J. McG., Pictou	B.	A.,	1876
		Stewart, Thomas, B. D., Pictou			
		Stramberg, H. H., New Westminster, B. C	.,В.	A.,	1875
		Sutherland, Rev. J. M., Virden, Man	. В.	A.,	1869
		Sutherland, Robert, (obit.)	, C.	M.,	1872
	++	<sup>3</sup> Sutherland, J. S., St. James, Char. Co., N. B	В.	A.,	1888
		Taylor, W. B., Halifax	B.	A.,	1884
		<sup>4</sup> Thompson, A. W., M. A., Durham, Pictou Co	. В.	A.,	1885
		Thompson, Stanley R., Oxford, N. S	LL.	В.,	1886
		Thomson, A. E., Edinburgh University	В.	A.,	1880
		Thomson, Walter K., Halifax	LL.	В.,	1887
		Thorburn, W. M., Trichinopoly, Madras Pres., India	В.	A.,	1880
		Torey, E. J., Windsor	. В.	A.,	1882
		Troop, Arthur G., A. B., Dartmouth, N. S	LL.	В.,	1886
		Trueman, A I., St. John, N. B B. A., 1872	M.	A.,	1878
6	+	<sup>2</sup> Trueman, J. S., Johns Hopkins Univ., Baltimore	B.	A.,	1882
		Tuffts, W. M., M. A., Halifax	В.	A.,	1885
		Turner, D. F. D., London. G. B	В.	A.,	1864
	+	<sup>8</sup> Waddell, Prof. John, Ph. D., D. Sc., Kingston, Ont	B.	A.,	1877
		Wallace, Rev. John	В.	A.,	1870
		Wallace, W. B., Halifax	LL.	В.,	1885
		Walsh, Wm. W., Halifax	LL.	В.,	1886
		Wells, Wm. W., Point de Bute, N. B	LL.	В.,	1886
		Whitman, Alfred, Halifax	LL.	В.,	1885

<sup>&</sup>lt;sup>2</sup> Graduated with Second Rank Honours in Classics.

<sup>&</sup>lt;sup>3</sup> Graduated with First Rank Honours in English and English History.

<sup>&</sup>lt;sup>4</sup> Graduated with Second Rank Honours in English and English History.

b Munro Tutor in Classics, 1883-5.

<sup>†</sup> Governor-General's Gold Medallist.

<sup>‡</sup> Governor-General's Silver Medallist.

 $<sup>^{8}</sup>$  Graduated with Second Rank Honours in Mathematics and Mathematical Physics.

# UNDERGRADUATES, 1887-88.

# IN ARTS.

# FOURTH YEAR.

Brown, William	. Brownville, Pictou Co.
Clarke, Daniel McDonald	
Fulton, Willard Hill	.85 Cunard street, Halifax,
Grant, David Kenzie	Riverton, Pictou Co.
Johnson, George Millar	. Upper Stewiack, N. S.
Macdonald, William	
Mackay, Henry Martyn	. Plainville, Pictou Co.
McKenzie, William John	. West Bay, C. B.
McLennan, Samuel John	. Sydney, C. B.
MacLeod, Ambrose Watts	. Dunstaffnage, P. E. I.
MacLeod, George	. Murray River, P. E. I.
Matheson, John Alexander	. Boulardarie, C. B.
Morrison, Alexander McGeachy	. Dartmouth, N. S.
Robertson, Thomas Reginald	. Annapolis.
Soloan, David	Windsor, N. S.
Stewart, Frank Ingram	. Charlottetown, P. E. I.
Sutherland, John Sanders	.St. James, Charlotte Co., N. B.

#### THIRD YEAR.

A	Allison, Edmund Powell	.73 Inglis Street, Halifax.
I	Brown, Ernest Nicholson	.Lower Newcastle, N. B.
E	Burkitt, Robert James	. Athenry, Ireland.
I	Davison, James McGregor	.56 Charles Street, Halifax.
F	raser, Alexander	. West River, N. S.
F	raser, John Keir Geddie	. Alberton, P. E. I.
F	razee, Victor Gladstone	. Dartmouth, N. S.
F	Tulton, Edward	.Lower Stewiacke.
F	Harvey, MacLeod	. Newport, N. S.
	Harvey, MacLeod	And the same of th
H		.Shubenacadie, N. S.
I	denry, Joseph Kaye	. Shubenacadie, N. S. . Winnipeg, Man.
E	lenry, Joseph Kaye Iowatt, Cornelius A	.Shubenacadie, N. SWinnipeg, ManCharlottetown, P. E. I.
I I I	denry, Joseph Kaye Howatt, Cernelius A aird, Arthur Gorden	.Shubenacadie, N. SWinnipeg, ManCharlottetown, P. E. IHopewell, N. S.
E I M	denry, Joseph Kaye	.Shubenacadie, N. SWinnipeg, ManCharlottetown, P. E. IHopewell, N. S27 Tobin Street, Halifax.
E L M	denry, Joseph Kaye	.Shubenacadie, N. SWinnipeg, ManCharlottetown, P. E. IHopewell, N. S27 Tobin Street, HalifaxLower Onslow, N. S.

#### SECOND YEAR

SECOND YEAR.	
Campbell, Donald Frank East Riv	ver, St. Mary's.
Chapman, Adolphus EugeneSalisbury	y, N. B.
Cogswell, George Alfred Port Wil	lliams, Kings Co., N. S.
Fisher, James MitchellLower St	tewiacke.
Fraser, JohnBig Bras	d'Or, C. B.
Fullerton, Charles Percy Cumberla	and Co.
Fulton, Eben Middle S	Stewiacke, Col. Co., N. S.

Gratz, Humphrey Gilbert	. Waasis Sta'n, Sunbury Co., N. B.
Grierson, Robert	.51 Charles Street, Halifax.
Lewis, Ernest William	. Moncton, N. B.
McCallum, Hammond J	. Warrington, P. E. I.
McKinnon, John Archibald	.Cow Bay.
Mackintosh, Charles	.Springville, N. S.
Maclean, John Norman	James River, Antigonish Co.
McLennan, Alexander Kenneth	. Middle River, C. B.
MacLeod, Frederick Joseph	•
Millar, George	. Tatamagouche.
Murray, Norman Frederick	.Truro, N. S.
Ratee, Edward Joseph	.Chatham, N. B.
Rowlings, George Row	. Musquodoboit, N. S.
Schurman, George Wellington	. P. E. I.
Trefry, James Hartley	.Barrington Passage, N. S.

# FIRST YEAR.

Baxter, Agnes Sime	.2 Gas Lane, Halifax.
Brehaut, James William	. Murray Harbor, South, P. E. I.
Cameron, Simon Hugh Holmes	. Dartmouth, N. S.
Cox, George Hastings	.Shelburne, N. S.
Creighton, Graham	. West River, Pictou Co., N. S.
Goodwin, Emily Maude	
Grierson, John Arthur	. Kentville, N. S.
Harrington, Emily Bevan	.164 Tower Road, Halifax.
Hugh, Douglas	. Murray Harbor, P. E. I.
Jordan, Elijah John	
Lear, Gerald Aldington	. North-West Arm, Halifax.
Logan, John Daniel	
McCulloch, William	.119 Dresden Row, Halifax.
McCurdy, James Farquhar	. Robie Street, Halifax.
McGlashen, John A	
Maclean, John Simon	. Hopewell, N. S.
McMillan, Charles Edward	Whycocomagh, C. B.
McMillan, Frederick Alexander	. Alberry Plains, P. E. I.
McNaughton, Elizabeth	
Macrae, Archibald Oswald	.St. John, N. B.
Magee, William Henry	.Town Plot, Kings Co., N. S.
Montgomery, John	
Moore, Clarence L	
Morash, Albert Victor	.Lunenburg, N. S.
Oliver, Allyne Cushing	.Litchfield, Digby, N. S.
Robertson, Samuel Napier	North Bedeque, P. E. I.
Robinson, Charles Budd, Jr	. Pictou, N. S.
Thomson, James William	. Willow Park, Halifax.
Trefry, Albert Harvey	
Tupper, James Waddell	
Turnbull, George Dykeman	

#### IN LETTERS.

#### FIRST YEAR.

Muir, Ethel		. Annandale	Street,	Halifax.
Worth, Calista	Ann	. Mabou, C.	В.	

# IN LAW.

#### THIRD YEAR.

Armstrong, Ernest Howard Kingston, N. S.
Campbell, John Ray, jr Dorchester, N. B.
Jones, Harry Treadway
MacKay, Adams Archibald, B. AWallace.
Magee, Edgar AllisonAnnapolis.
McInnis, Hector Pictou.
Morrison, Aulay Cow Bay, C. B.

#### SECOND YEAR.

Buchanan, Jose	eph Jost	. A comment of the tr
Campbell, Alexa	ander	
Campbell, Alexa	ander John, B. A	.Truro.
Cummings, Seld	len William, B. A	
Dennison, Harr	y Livingstone	. Kentville.
Forsyth, George	e Orman, B. A	.Greenwich.
Lovett, Harry	Almon	
McNeill, Albert	t Howard	.Charlottetown.
Patterson, Geor	ge, M. A	. New Glasgow.
Ross, Henry Ta	ylor, B. A	. Halifax.
Tobin, Thomas	Finlayson	. Halifax.

#### FIRST YEAR.

Armstrong, Bennett Honsby	Halifax.
Bowser, William John	Kingston, Kent Co., N. B.
Cahalane, Thomas Joseph	Halifax.
Fairweather, Fred. Lawrence	Sussex, N. B.
Frame, Joseph Fulton	Maitland, N. S.
Freeman, Charles Edmund	Jordan River, N. S.
Hamilton, Charles Francis, B. A	North Sydney.
Howay, Frederick William	New Westminster, B. C.
Huggins, William Hugh	Halifax.
Lockhart, Benjamin Alfred, B. A.	Lockhartville, N. S.
McBride, Richard	New Westminster, B. C.
McNeil, Alexander, B. A	Mabou, C. B.
McPhee, Daniel Lachlan	Little Bras D'or.
Notting, Thomas	Truro, N. S.
Oxley, Charles Howard, B. A	Oxford, N. S.
Reid, Robert Lewis	Kentville, N. S.

#### IN MEDICINE.

# FIRST YEAR.

Campbell, George M., B. A	.150 Gottingen Street, Halifax.
Dunlop, Edward Winslaw	. Sable R., Shelburne Co., N. S.
Elliott, Charles S	. Stillwater, Guysboro' Co.
Fraser, J. Frank	. West River Station.
Freeman, Nelson Porter	. Mill Village, N. S.
Gregory, George Augustus	. Churchover, Shelburne Co., N. S.
McCharles, Roderick W	. Middle River, Victoria, C. B.
McDonald, Daniel	. Mabou, C. B.
McLeod, Roderick C	. Margaree, Inverness, C. B.
McMahon, Frank	
Miller, C. H., B. A	.Bridgetown, N. S.
Murray, H. V	.Truro.
Purcell, John M	Halifax.
Silver, John Payzant	. Halifax.
THE RESIDENCE AND ADDRESS OF THE PARTY OF TH	

# GENERAL STUDENTS, 1887-88.

# IN ARTS.

Alexander, Laura M	87 Victoria Road, Halifax.
Borden, Henry Clifford	Grand Pre, N. S.
Burbidge, G. A	88 Robie St., Haiifax.
Burn, Murdoch P. R	
Burns, Agnes V	18 Kent St., Halifax.
Burns, Nettie G	
Caldwell, Lillian Beecham	
Creighton, James Willam	
Duffus, Emily	
Finlayson, R. A	
Fraser, Simon Alexander	3
	152 Spring Garden Rd., Halifax.
Higgs, Benjamin Darby	
Hyde, Chas. H	
James, Saidie M	
	Bloomingdale, N. W. Arm, Hfx.
Laurie, Mrs. L. D	
Lewis, Ernest Hastings	
Liechti, Minna Louisa Mary	
Logan, J. Herbert	
Macdonald, Alvin Fraser	
MacGregor, Isabel Forman	
Mackay, Charles	
Mackay, Murdoch S	
Mackenzie, H. Gertrude	Dartmouth.
Mackintosh, Mary	
Maclean, Margaret J	
McLennar, Charles Prescott	
McLeod, Thomas Chalmers	
Martin, Donald McLean	
Milroy, Anna M	
Morrow, Marion L. M	
Munro, Christopher	
Murray, Antoinette Nordbeck	0,
Murray, F. W	
Murray, Robert L	North Sydney, C. B.
Newcombe, Margaret F., B. A	Ladies' College, Halifax.
Parlee, Geo. P	
Paton, Georgina	
Puttner, Chas. H	
Pyke, Geo. Francis	
Ritchie, Ella Almon	Belmont, Halifax.
Ritchie. Mary W	Belmont, Halifax.
Scott, Lillie	

Seth, Lizzie J	Tobin St., Halifax.
Seth, Maggie	
Slayter, Clara M	64 Argyle St., Halifax.
Stewart, Elizabeth Helen	Pictou.
Stewart, Maria Louisa Jessie	Pictou.
Teasdale, Hattie	263 Brunswick St.
Thompson, Alfred Stuart	Dutch Village, Halifax.
Thompson, F. W	Merigomish, N. S.
Thomson, Mary Alice	Willow Park, Halifax.
Troop, Mrs	88 Victoria Road, Halifax.
Twining, Florence J	98 Morris St., Halifax.
Worthylake, Edward Uttly	Brighton, Digby N. S.
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# IN LAW.

Grey, George Patrick	Halifax.
Howatt, Cornelius A	· world O an
Hyde, Charles Hiram	.Truro.
McDonald, William	Pictou, N. S.
Paton, Vincent John	me ('olleen.
Ritchie, James Donaldson	Halifax.
Robertson, Thomas Reginald	Annapolis.
Stevens, Daniel J	Truro.
Whitford, J. Arthur	Bridgewater.

# SUMMARY.

# FACULTY OF ARTS.

Undergraduates in Arts. Undergraduates in Letters. General Students	2
Students, Arts Faculty	144
FACULTY OF LAW.	
Undergraduates	
Students, Law Faculty	47
FACULTY OF MEDICINE.	
Undergraduates	14
Students, Faculties of Arts, Law and Medicine  Deduct, studying in more than one Faculty	205 1

# THE ALUMNI ASSOCIATION.

(Incorporated 1876.)

#### EXTRACT FROM THE LAWS.

- 1. The object of the Association shall be the promotion of the interests of the University.
- 2. The Association shall consist of Ordinary and Associate Members.
- 3. All Graduates of the University, all persons who during at least one academic year have been registered students either of Dalhousie College or of Colleges which have been merged or united with Dalhousie College, and all other persons who have at any time been educated by means of the funds of Dalhousie College, shall be eligible for ordinary membership. But no persons other than graduates shall become members until three years have elapsed from the date of their first entering the College, except by special permission of the Executive.
- 4. Persons not eligible for membership under Section 3 may be elected Associate members.

#### OFFICERS:

J. G. MACGREGOR, D. Sc
Hon. D. C. Fraser, B. A.,
J. McG. Stewart, B. A.,
W. B. WALLACE, LLB., \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
HOWARD MURRAY, B. A.,
CHARLES A. ROBSON,
H. W. C. BOAK, LL. B Secretary.
Jas. A. Sedgewick, Ll. B Treasurer.
HECTOR McInnes, Ll. B.,
WILLIAM D. CAMERON,
CHARLES H. CAHAN, B. A., \ Executive Committee.
ALFRED WHITMAN, LL. B.,
John Menger,
SECRETARY'S OFFICE -14 Bedford Row Halifay

# APPENDIX.

# EXAMINATION PAPERS, 1887-88.

# MATRICULATION

AND

# JUNIOR MUNRO EXHIBITIONS AND BURSARIES.

# LATIN.

Examiner ..... John Johnson, M. A,

CÆSAR: GALLIC WAR, BOOK I. OVID: METAMORPHOSES, BOOKS IV., V. SELECTED FABLES.

TIME: THREE HOURS.

N. B.—Candidates for Matriculation in Arts will take Part IV. and either Part I. or Part II. Candidates for Exhibitions and Bursaries will take Parts I., II., III.

I.

### A. Translate:

(Ariovistus respondit): Se prius in Galliam venisse, quam Populum Romanum. Nunquam ante hoc tempus exercitum Populi Romani Galliæ provinciæ fines egressum. Quid sibi vellet? Cur in suas possessiones veniret? Provinciam suam hanc esse Galliam, sicut illam nostram. Ut ipsi concedi non oporteret, si in nostros fines impetum faceret, sic item nos esse iniquos, qui in suo jure se interpellaremus. Quod fratres a Senatu Æduos appellatos diceret, non se tam barbarum, neque tam imperitum esse rerum, ut non sciret, neque bello Allobrogum proximo Æduos Romanis auxilium tulisse, neque ipsos in his contentionibus, quas Ædui secum et cum Sequanis habuissent, auxilio Populi Romani usos esse. Debere se suspicari, simulata Cæsarem amicitia, quod exercitum in Gallia habeat, sui opprimendi causa

habere. Qui nisi decedat atque exercitum deducat ex his regionibus, sese illum non pro amico, sed pro hoste habiturum: quod si eum interfecerit, multis sese nobilibus principibusque Populi Romani gratum esse facturum; id se ab ipsis per eorum nuntios compertum habere, quorum omnium gratiam atque amicitiam ejus morte redimere posset.

- 1. Explain to whom or what these pronouns refer: "sibi," "suas," "hane," "illam," "ipsos."
- 2. What is unusual in the use of "hanc," "nostram," "interpellaremus?"
- 3. (a) "Populum," "provinciae," "fines," "illam," "bello," "Romanis:" (b) "vellet," "interpellaremus," "sciret," "habuissent": account for case, mood and tense.
- 4. "Quid sibi vellet? Cur in suas possessiones veniret?"—"ut ipsi concedi non oporteret, si in nostras fines impetum faceret, sic item nos esse iniquos qui in suo jure se interpellaremus." Change this report into the actual words used.
- 5. Show by a map the situation and boundaries of (a) Aquitania, (b) the ager Helvetius, as described by Cæsar, giving ancient and modern names.

#### II.

### B. Translate:

Ecce velut navis præfixo concita rostro Sulcat aquas, juvenum sudantibus acta lacertis; Sic fera, dimotis impulsu pectoris undis, Tantum aberat scopulis, quantum Balearica torto Funda potest plumbo medii transmittere cœli; Quum subitò juvenis, pedibus tellure repulsâ, Arduus in nubes abiit. Ut in æquore summo Umbra viri visa est; visam fera sævit in umbram. Utque Jovis præpes, vacuo quum vidit in arvo Præbentem Phæbo liventia terga draconem, Occupat aversum; neu sæva retorqueat ora, Squamigeris avidos figit cervicibus ungues; Sic celeri missus præceps per inane volatu Terga feræ pressit, dextroque frementis in armo Inachides ferrum curvo tenus abdidit hamo. Vulnere læsa gravi modò se sublimis in auras Attollit, modò subdit aquis, modò more ferocis Versat apri, quem turba canum circumsona terret.

- 1. "Quantum Balearica torto Funda potest," etc. Analyze this clause.
  - 2. "Inachides." Tell his story.
- 3. "Lacertis," "scopulis," "præpes," "ora," "squamigeris," "hamo": account for cases and give the nom. and gen. sing. and pl. of each.
  - 4. (a) Ubi dicitur altam Coctilibus muris cinxisse Semiramis urbem.
    - (b) Et triplices operire Minyeïdas alis.
    - (c) Clauserat Hippotades aeterno carcere ventos. Write explanatory notes.
  - 5. A short sketch of Ovid.

#### III.

- 1. Mark the gender and decline:
  - (a) in the sing: pulvere, domus, Persea.
  - (b) in the pl.: opus, mora, locis.
- Note peculiarities in the declension of: aëra, pelago, requiem, epulis, jugeribus, vespere.
- 3. Name the part of the verb in which the following words are found, and give their chief parts:

  sentiat, ausae, estote, agnorunt, repulsā, desinit, fare.
  - 4. Distinguish the meanings of:
    manabant, manebant; oblitus, oblitus; aëre, aere; sēdē,
    sĕdē; ōrīs, ōrīs; calidus, callidus; cānīs, cănīs.
  - 5. Scan these lines, noting any peculiarities of scansion:
    - (a) Tantum aberat scopulis, quantum Balearica torto.
    - (b) Arduus in nubes abiit. Ut in aequore summo.
    - (c) Jactari quos cernis in Ionio immenso.
- 6. What verbs govern two accusatives? Give one example of each class.
- 7. Translate into Latin: Marcus Tullius, what are you doing?—Our country now lies beneath the power of a man we hate.—I ran forward about a mile but did not see even a horse.—Having followed Cæsar through so many troubles, I am not going to desert him now.—Having heard this the consuls marched with all their forces as quickly as possible to the borders of the enemy's territories.

#### IV.

- 1. Decline throughout, (a) if you take Part I.: "tempus," "exercitum," "nos," or, (b) if you take Part II.: "navis," "aequore," "alis."
  - 2. Compare: mitis, similis, celer, magnus, bene.
  - 3. Write the Latin for: 16, 26th, 438.
  - 4. Give the same case in the plural of: cănis, senatūs, viri, quo, mihi, nulli.
- 5. Write the sing. in the pres. and fut. indic., and in the pres. subj. of: video, colo, sum.
- 6. Give the corresponding forms in the passive of : amas, audies, rege, regere, dixit.
  - 7. Parse, giving chief parts:
- (a), if you take Part I.: "venisse," "oporteret," "opprimendi," "interfecerit," "compertum."
  - or (b), if you take Part II.: "praefixo," "visa est," "abdidit," "laesa," "attollit."
- 8. Translate into Latin: The consul sent a letter to the Senate.—Give me that book.—Whose house was burning?—Having taken the city, the enemy returned.—The soldiers were standing on the top of the wall.—He will be punished severely on account of his base deed.

#### GREEK.

Examiner.....John Johnson, M. A.

XENOPHON: Anabasis, Books II, III.

TIME : THREE HOURS.

N. B.—Candidates for Matriculation in Arts will take Part IV. and either Part I. or Part II. Candidates for Exhibitions and Bursaries will take Parts I., II., III.

I.

#### A. Translate:

Έπειδη δὲ συνηλθον, λέγει ὁ Κλέαρχος τάδε· Ἐγώ, ὁ Τισσαφέρνη, οἰδα μὲν ἡμῖν ὁρκους γεγενημένους καὶ δεξιὰς δεδομένας, μη ἀδικήσειν ἀλλήλους φυλαττόμενον δέ σέ τε ὁρῶ ὡς πολεμίους ἡμᾶς καὶ ἡμεῖς ὁρῶντες ταῦτα ἀντιφυλαττόμεθα. Ἐπεὶ δὲ σκοπῶν οὐδὲν δύναμαι οὕτε σὲ αἰσθέσθαι πειρώμενον ἡμᾶς κακῶς ποιεῖν, ἐγώ τε σαφῶς οἰδα ὅτι ἡμεῖς γε οὐδ' ἐπινοοῦμεν τοιοῦτον οὐδέν, ἔδοξέ μοι εἰς λόγους σοι ἐλθεῖν ὅπως, εἰ δυναίμεθα, ἔξέλοιμεν ἀλλήλων τὴν ἀπιστίαν. Καὶ γὰρ οἰδα ἤδη ἀνθρώπους τοὺς μὲν ἐκ διαβολῆς τοὺς δὲ καὶ ἐξ ὑποψίας, οῖ φοβηθέντες ἀλλήλους, φθάσαι βουλόμενοι πρὶν παθεῖν, ἐποίησαν ἀνήκεστα κακὰ τοὺς οὕτε μέλλοντας οὕτ' αὐ βουλομένους τοιοῦτον οὐδέν. Τὰς οὖν τοιαῦτας ἀγνωμοσύνας νομίζων συνουσίαις μάλιστα ἀν παθεσθαι ῆκω καὶ διδάσκειν σε βούλομαι ὡς σὺ ἡμῖν οὐκ ὀρθῶς ἀπιστεῖς.

- 1. Καὶ γὰρ οἶδα ἀνθρώπους ἤδη τοὺς μὲν κ. τ. λ. What is irregular in the construction of this sentence? Account for the cases of ἀνθρώπους—τοὺς μὲν—τοὺς οὕτε μέλλοντας.
- φυλαττόμενον δέ σέ τε ὁρῶ ὡς πολεμίους ἡμᾶς. Analyze and account for cases. What difference would φυλάττοντα for φυλαττόμενον make?
- 3. οἰδα....δεξιὰς δεδομένας,—οἰδα ὅτι ἡμεῖς γε οὐδ' ἐπινοοῦμεν τοιοῦτον οὐδέν,—διδάσκειν σε βουλόμαι, ὡς σὰ ἡμῖν οὐκ ὀρθῶς ἀπιστεῖς. By what construction would each of these dependent clauses be expressed in Latin? Write the first of these sentences in Latin. What is the rule for double negatives in Greek? When does this rule hold good in Latin?
- 4. By what phrases does Xenophon express—"at daybreak," "at sunrise," "about midnight," "towards evening," "in the forenoon," "at sunset."?
  - 5. Give the meaning and derivation of:

άκρωνυχία, μεσημβρία, λοχαγοί, γήλοφος, ἰσόπλευρον, κογχυλιάτης, αἰχμάλωτος.

II.

#### B. Translate:

Ήμεῖς οὖν εἰ μέλλοιμεν τούτους εἰργειν, ὤστε μὴ δύνασθαι βλάπτειν ἡμᾶς πορενομένους, σφενδονητῶν τε τὴν ταχίστην δεῖ καὶ ἰππέων. ᾿Ακούω δ᾽ εἶναι ἐν τω στρατεύματι ἡμῶν Ῥοδίους, ὧν τοὺς πολλούς φασιν ἐπίστασθαι σφενδονᾶν,

καὶ τὸ βέλος αὐτῶν καὶ διπλάσιον φέρεσθαι τῶν Περσικῶν σφενδονῶν. Ἐκεῖναι γάρ, διὰ τὸ χειροπληθέσι τοῖς λίθοις σφενδονῶν, ἐπι βραχὺ ἐξικνοῦνται· οἱ δέ γε Ἑθόδιοι καὶ ταῖς μολυβδίσιν ἐπίστανται χρῆσθαι. Ἡν οὖν αὐτῶν ἐπισκεψώμεθα τίνες πέπανται σφενδόνας, καὶ τούτφ μὲν δῶμεν αὐτῶν ἀργύριον, τῷ δὲ ἄλλας πλέκειν ἐθέλοντι ἄλλο ἀργύριον τελῶμεν, καὶ τῷ σφενδονῶν ἐν τῷ τεταγμένφ ἐθέλοντι ἄλλην τινὰ ἀτέλειαν εὐρίσκωμεν, ἰσως τινὲς φανοῦνται ἰκανοὶ ἡμᾶς ώφελεῖν.

- 1. Give briefly the rules for the use of genitives of nouns and pronouns in this passage, and write the nom. and gen., sing., of each in full.
- 2. Infinitives are used in some constructions in the extract where they would be inadmissible in Latin; what would be used instead?
- 3. Give the meaning of the following phrases found in the prescribed books:
  - (α.) ώς συνελόντι είπεῖν.
  - (b.) πορεύεσθαι πλαίσιον ποιησαμένους των ὅπλων.
  - (c.) τὸ νῦν εἶναι.
  - (d.) ουτως έχόντων.
  - (e.) ήσχύνθημεν καὶ θεούς καὶ ἀνθρώπους.
  - (f.) ἡγεῖτο εἰς δύο.
  - (g.) έπεὶ Κῦρος ἀπέθανε—ἐπεὶ Κῦρος τέθνηκεν.
- 4. What measures of length are mentioned in these books? Give their equivalents in English measure.
  - 5. How does Xenophon tell us he came to join the expedition?

#### III.

- 1. Write the nom. gen. and acc. sing. and dat. pl. (if in use) of: διώρυχος, ἦτινι, τελῶν, μαστίγων, κριθάς, δόρατα, βοῦς, ἕω.
- 2. What forms in the other degrees of comparison correspond accurately to:

πλείους, μεῖον, σαφῶς, ἀμείνονες, φίλος.

- (a.) Write in words: 4,567-49 ships—on the 27th day.
   (b.) Indicate by letters: 6, 15, 1846.
- 4. What pronouns have the nom. sing. neut. in-0?
- 5. Write augmented forms of verbs compounded with  $\pi a \rho \dot{a}$ ,  $\pi \epsilon \rho \dot{i}$   $\pi \rho \dot{o}$ . Give some examples of double augment.
  - Write (α) perf. infin. in act. and passive of: βουλεύω, στέλλω, γιγνώσκω.
    - (b) 2nd sing. 1st aor. imperative in all voices of : λνω, κρίνω, φνλάττω.
    - (c) the modal conjugation of : ἐκλέξας, ἐγὲνοντο, ὅντας.
    - 7. Parse, giving the chief parts, in use:
    - (a) in Extract A—δεδομένας, οἶδα, σκοπῶν, φθάσαι;
    - (b) in Extract Β-έπίστασθαι, έξικνοῦνται, πέπανται, τελῶμεν.

C. Translate into Greek:

The father loves his sons.—Phalinus, having heard this, laughed and said: "You speak pleasantly young man."—From the Tigris they marched twenty parasangs to another river, a plethron in width.—They remained there three days.—Their enemies, having acted thus, departed.—They threw the rest into the fire.

#### IV.

- I. Decline together (a) in the sing.: aντη η θάλαττα—τίς  $\check{a}$ νήρ—(b) in the plural: τὸ  $\check{ο}$ ρος—καλη  $\check{ε}$ λπίς.
- Write in full the nom. cases sing. and plural of: τούτων, αὐτοῖς, δτω, ἀλλων, μ.
  - 3. Compare: δήλος, σαφής, εὐδαίμων, μέγας, αἰσχρός.
  - 4. What is the Greek for: 14, 8th, 400.
- 5. Write the augmented forms of initial vowels and diphthongs in verbs. Where is the augment used?
- 6. What are the reduplicated forms of verbs beginning with  $\phi$ ,  $\theta$ ,  $\sigma\tau$ ,  $\dot{\rho}$ ,  $a\dot{i}$ ,  $\kappa\rho$ ,  $\dot{z}$ .
  - 7. Write the modal conjugation of : λύω, εἰμί, λέγομαι.
  - Form the aor. infin. act. in use of:
     λείπω, τιμάω, πλέκω, ἀγγέλλω, ἔχω, δίδωμι.
- 9. Decline through all the persons, giving both contracted and open vowels:

έλυσα, γεγράμμαι, τιμασίην.

- 10. Parse, giving chief parts in use, according as you have taken Part I or Part II:
  - Either, συνήλθον, ἐπινοοῦμεν, φοβηθέντες, παθεῖν, ἐποίησαν. (in Extract A).

Or, δεῖ, ἐπισκεψώμεθα, δωμεν, ἐθέλοντι, φανοῦνται. (in Extract B.)

#### FRENCH.

(Matriculation Examination, Faculty of Arts.)

#### TIME : THREE HOURS.

A. Translate:—Histoire de Charles XII.—Le premier livre qu'on Iui fit lire fut l'ouvrage de Samuel Puffendorf, afin qu'il pût connaître de bonne heure ses États et ceux de ses voisins. Il apprit d'abord l'allemand, qu'il parla toujours depuis aussi bien que sa langue maternelle. A l'âge de sept ans il savait manier un cheval. Les exercices violents où il se plaisait, et qui découraient ses inclinations martiales, lui formèrent de bonne heure une constitution vigoureuse, capable de soutenir les fatigues où le portait son tempérament. Quoique doux dans son enfance, il avait une opiniâtreté insurmontable : le seul moyen de le plier était de le piquer d'honneur; avec le mot de gloire on obtenait tout de lui. Il avait de l'aversion pour le latin; mais dès qu'on lui eut dit que le roi de Pologne et le roi de Danemarck

l'entendaient, il l'apprit bien vite et en retint assez pour le parler le reste de sa vie.

- 1. Parse and give the primitive tenses of the following verbs: futo apprit, parla, savait, eut, dit. Write down in full the subjunctive present of fut, parla, eut and dit.
- 2. De bonne heure. Put this clause in the comparative degree. Write the comparative and superlative of bien, beaucoup, mauvais, peu. Turn into French: It is too early. He, too, is in town. A very well written letter. What time is it? It is 12 o'clock. Half-past one. Five minutes to three.
- 3. Quoique doux dans son enfance. Parse son, and write its femin., sing., and plural. When may son be used before a femin. noun? Give an example. Translate: Its value; its courage; its pleasures. Her father and mother. His Majesty George III. Her Majesty Queen Victoria.
- 4. Doux. Write the feminine of the following adjs.: doux, joli, pareil, pauvre, sec, public, malin, frais, beau; and the masculine of: vieille, neuve, vengeresse, protectrice, chère, vive.
- 5. Et en retint assez. Parse en, and write this clause, substituting for en, the term for which it stands. In what case or cases do you translate the English "some" or "any" by de alone? Give short examples. Turn into French: I have friends; have you any? I have two good ones.
- B. Charles XII.—Il partit pour sa première campagne le 8 mai, de l'année 1700. Il quitta Stockholm, où il ne revint jamais. Avant de sortir de Suède il établit à Stockholm un conseil de défense, composé de plusieurs sénateurs. Cette commission devait prendre soin de tout ce qui regardait la flotte, les troupes, et les fortifications du pays. Le corps du sénat devait régler tout le reste provisionnellement dans l'intérieur du royaume. Ayant ainsi mis un ordre certain dans ses états, son esprit, libre de tout autre soin, ne s'occupa plus que de la guerre. Sa flotte était composée de quarante-trois vaisseaux: celui qu'il monta, nommé le Roi-Charles, le plus grand qu'on ait jamais vu, était de cent vingt pièces de canon, le comte Piper, son premier ministre, et le général Renschild, s'y embarquérent avec lui. Il joignit les escadres des alliés.
- 1. Il partit pour sa première campagne. Write this sentence in the negative—interrogative form, What other meaning is campagne susceptible of? How do you change première into an adverb? Turn into French: I spent (passer) a fortnight in the country. Nova Scotia is my native country. Bismarck is Germany's Prime Minister.
- 2. De tout ce qui regardait la flotte. Parse ce qui and distinguish between: tout ce qui and tout ce que, giving two examples. Write the femin., sing., and the mascul., plural of tout, and translate: I have seen (vus) them all. All England. Everybody. The whole town. Give me the whole of it.
- 3. Le plus grand qu'on ait. Parse ait: why is it in this form? Can you explain the difference between: comte, compte and conte. Translate: The least difficulty. Give me more. Muchbetter. Most men.
- 4. S'y embarquèrent. Parse s'y. Conjugate the Indicative present of the reflective verb s'embarquèrent.
- 5. Vingt pièces de canon. Could you use des instead of de in such clauses? Illustrate your explanation with short examples, Does vingt ever admit of the plural s; why? Translate: Eighty men. Eighty-five pounds. One hundred houses. Five hundred dollars. The 11th of October, 1887 (in letters).

#### ENGLISH.

### ENGLISH LANGUAGE.

Examiner..... W. J. ALEXANDER, Ph. D.

TIME : THREE HOURS.

(Candidates for matriculation in Arts merely are to answer the first three questions, and any three of the remainder.)

- 1. Write out and punctuate the passage dictated. (From Ruskin.)
- 2. Analyze the passage dictated as far as "say it all."
- 3. Parse in the passage anything, but; also the words in italics in the following: Society goes on accumulating wealth. He was about retracing his steps.
  - 4. Combine each of the following groups into one complex sentence:
    - (a) The king had promised to abolish certain abuses; these abuses were such as illegal imprisonment, tampering with the judges, etc.; but he began to govern without a parliament; and forthwith resorted to these abuses as a matter of course.
    - (b) The Long Parliament met; Pym's work now really began; he was already past middle life; he was born in 1584; four years later came the Armada; from the beginning of the Parliament Pym displayed the qualities of a great administrator; these are an immense faculty for labour, a genius for organization, an iron will, tact, courage and moderation.
- 5. What is an infinitive,—a participle? Explain historically the various forms assumed by the infinitive in modern English.
- 6. What are the main points of difference between the English language at the presont time, and at the time of Alfred the Great?
- 7. Define accurately and give derivation of ten of the following words:—atonement, reciprocity, transpire, crusade, idiom, quixotic, parchment, kickshaw, biscuit, conservative, mercurial, miscreant, cardinal (noun), ecumenical, catholic.
- 8. Express as accurately as possible in simple prose the substance of the following:

TO A WATERFOWL.

Whither, midst falling dew,
While glow the heavens with the last steps of day,
Far, through their rosy depths, dost thou pursue
Thy solitary way?

Vainly the fowler's eye
Might mark thy distant flight to do thee wrong,
As dimly seen against the crimson sky,
Thy figure floats along.

Seek'st thou the plashy brink
Of weedy lake, or marge of river wide,
Or where the rocking billows rise and sink
On the chafed ocean-side?

There is a Power whose care
Teaches thy way along the pathless coast—
The dessert and illimitable air—
Lone wandering, but not lost,

### ENGLISH AND CANADIAN HISTORY AND GEOGRAPHY.

Examiner.....President Forrest.

#### TIME : THREE HOURS.

(Candidates for Matriculation only, may omit any three questions in each section.)

#### ENGLISH HISTORY.

- Give a brief account of Roman occupation of Britain with dates.
   Trace effects.
  - 2. Give the leading events of reign of Henry II.
- 3. Give a brief account of the political and social condition of England, under the Tudors.
- 4. Tell briefly the story of the struggle between Charles I. and the Parliament.
  - 5. What events led to the Revolution of 1688?
  - 6. Give the leading events of the reign of George III.
  - 7. Write a short account of the first Afghan war.
  - 8. What was the Navigation Act? When was it repealed?

#### CANADIAN HISTORY.

- 1. When, where, and under whom, did the French make their first settlement in Acadie? When did the English come?
  - 2. Give a brief account of Jacques Cartier's first voyage to Canada.
- 3. A. D. 1744: "When news of the war reached America, Du Quesnel the Governor of Louisburg, sent Du Vivier with a strong force against Nova Scotia." Give a brief account of the expedition.
  - 4. What effect had the war of 1812 upon Nova Scotia?
  - 5. How did the war of 1812 end?
- 6. 1854: "A new government was formed in Canada, of which the leading members were Sir Allan McNab and John A. McDonald. Three important measures characterized the beginning of its reign." What were they?
  - 7. Give a short account of the St. Alban's raid.

#### GEOGRAPHY.

- 1. What is meant in geography by watershed, basin, steppe, bight, lagoon?
  - 2. Give the coast waters of Asia.
- 3. Bound Pennsylvania, Turkey in Europe, Brazil, Lunenburg County, Albert County, N. B.
- 4. On which side of the equator is Trinidad? Demerara? Cairo? Calcutta? Borneo?
- 5. Through what countries and large islands does the Tropic of Capricorn pass?

- 6. To what powers belong Azores? Corsica? Heligoland? Batavia? Manila? Hamburg? Formosa? Java? Cyprus?
- 7. Locate St. Louis, Cayenne. Lyons, Madrid, Palermo, Sïtka, Mount Blanc, Monte Rosa, Mt. St. Elias, Mt. Everest.
- 8. What are the chief exports of the United States? Australia? Nova Scotia? Jamaica? Portugal?

### MATHEMATICS.

### GEOMETRY AND ALGEBRA.

(Matriculation in Arts.)

TIME: THREE HOURS.

- 1. If from the ends of the side of a triangle, there be drawn two straight lines to a point within the triangle, these shall be less than the other two sides of the triangle, but shall contain a greater angle.
- 2. If a straight line falling on two others make either (1) the alternate angles equal; or (2) the exterior angle equal to the interior and opposite on the same side, these two straight lines shall be parallel.
- 3. If a straight line be divided into any two parts, the rectangle contained by the whole line and one of the parts, is equal to the rectangle contained by the two parts, together with the square of the aforesaid part.
- 4. Prove, either by a diagram or in any other way, that if a straight line be bisected and produced to any point, the square of the whole line thus produced, and the square of the part of it produced, are together double of the square of half the line bisected, and of the square of the line made up of the half and the part produced.
- 5. Given the measurements of the three sides of a triangle. Explain an easy way of determining its shape, whether acute, obtuse or right-angled.
- 6. Take the decimal '0760083: and write in words the value of each separate digit. Hence deduce the rule for converting a finite decimal into a vulgar fraction; using the given decimal as an example.
- 7. Write the expansions of  $(a+b)^3$  and  $(a+b+c+d+e)^2$ : and deduce the expansions of  $(a-b)^3$  and  $(a-b+c-d+e)^2$  from the result.
- 8. Express as one fraction  $\frac{1}{a(a-b)(a-c)} + \frac{1}{b(b-a)(b-c)} \frac{1}{abc}$ : and divide  $x^5 mx^4 + nx^3 nx^2 + mx 1$  by x 1. (By bracketing, if you can.)
- 9. Shew that  $(40)^{\frac{1}{3}} = \frac{1}{2}(320)^{\frac{1}{3}} + \sqrt[3]{135}^{\frac{3}{3}} = 3\sqrt[3]{5}$  and that  $\frac{c\sqrt{ab} ac}{bc c\sqrt{ab}} = \frac{1}{a}\frac{1}{b}^{\frac{1}{2}}$ ,

10. Solve either of the following questions: (1) Given

 $\frac{a}{bx} + \frac{b}{ax} = a^2 + b^2$ : to find x: (2) In a cricket match the score of A,

the best batsman on one side, was to that of B, the second best, as 3:2; but if A's score had been 7 less, and B's as much greater, B would have surpassed A in the proportion of 5:4. Find their scores.

### GEOMETRY.

### (Exhibitions and Bursaries.)

#### TIME: THREE HOURS.

- 1. If from the ends of the side of a triangle, there be drawn two straight lines to a point within the triangle, these shall be less than the other two sides of the triangle, but shall contain a greater angle.
- 2. Assuming the construction of the 47th proposition of the First Book of Euclid; analyze the proof of it, pointing out the main things proved, but omitting the details of the proof.
- 3. In any triangle the square of the side opposite an acute angle is less than the squares of the sides containing it by twice a certain rectangle. Say what rectangle: and prove the proposition for an obtuse-angled and also for a right-angled triangle.
- 4. A tangent to a circle is at right angles to the radius drawn from the centre to its point of contact.
- 5. If a straight line touch a circle, and from the point of contact any chord of the circle be drawn, the angles between the chord and the tangent are equal to the angles in the alternate segments of the circle, each to each.
- 6. ABC is a triangle, D and F the middle points of AC and AB. Join BD, and produce it to P, making DP=BD. Produce CF similarly to Q. Prove that P, A, Q are in the same straight line.
- 7. If from a point within an equilateral triangle lines be drawn to the angles, any two of these are greater than the third.
- 8. On a given straight line describe a rectangle equal to the difference of two given squares.
- 9. If a quadrilateral have one of its angles at the centre of a circle, and the other three in its circumference, the middle one of the three is equal to the other two.
- 10. AB is the diameter of a circle, and AC that of another circle which touches it internally in A. PR is a double ordinate of the outer circle to the diameter AB, cutting it in N, and Q the point where it cuts the inner circle. Prove PQ. QR=BC. NA.

### ALGEBRA.

#### (Exhibitions and Bursaries.)

#### TIME: THREE HOURS.

1. A watch that regularly gained  $2\frac{1}{2}$  minutes a day, shewed true time on Monday at noon: what is the true time on the following Friday when the watch points to 4h. 30' P. M.?

- 2. A number in the common scale, expressed by more than two digits, ends in the digits .... 51. Shew that its odd powers end in the same digits.
- 3. Prove by actual division, that if  $x^2 + ax + b^2$  is a factor of  $x^3 + c^3$ , then must  $a = \pm b = -c$ : and resolve into quadratic factors  $2x^4 + 5x^3y 17x^2y^2 + 13xy^3 3y^4$ .
- 4. Expand by division to four terms  $\frac{a^{-\frac{1}{2}}}{b^{-\frac{1}{2}}-a^{-\frac{1}{2}}}$ : and write the result (1) with positive indices, (2) with negative indices.
- 5. Shew, by factoring if you can,  $(m^2 + n^2)^2 (m^2 n^2 2mn)^2 = (m^2 n^2 + 2mn)^2 (m^2 + n^2)^2$ ; and find the Highest Common Factor of  $9x(2x^4 6x^3 x^2 + 15x 10)$  and  $6x^2(4x^4 + 6x^3 4x^2 15x 15)$ .
  - 6. Reduce to its simplest form  $\frac{\left\{ \left( \sqrt[3]{a^4 \, b^2 \, c} \right)^5 \left( \sqrt{a^3 \, b^2 \, c} \right)^4 \right\}^{\frac{8}{11}}}{a^2 \, bc \, \sqrt[3]{a^5}}$
- 7. A, B, C, D are four algebraic expressions: a is the Highest Common Factor of A, B, C; b, of A, B, D; c, of A, C, D; d, of B, C, D: also a, b, c, d are prime to each other: find the L. C. M. of A, B, C, D.
  - 8. Solve the equation,  $\frac{x}{2} \frac{\frac{1}{3}(2x-3) \frac{1}{4}(3x-1)}{\frac{1}{3}(x-1)} = \frac{3}{2} \cdot \frac{x^2 + 2}{3x 2}$

Also A, B, C, &c., being algebraic expressions involving x, describe how you would deal with the following equation:

$$\frac{A}{20} \pm \frac{B}{9} \pm \frac{C}{12} \pm \frac{D}{15} \dots = \frac{E}{7x - 4}$$

- 9. Given  $x(x+y+z)=a^2$ :  $y(x+y+z)=b^2$ :  $z(x+y+z)=c^2$ : find x, y, z.
- 10. A full cask that held a gallons was treated thus: b gallons were drawn off, and the cask was filled up with water. b gallons were again drawn off and the cask again filled up with water. This process is repeated, in all, n times. On the supposition of the equal diffusion of the liquid in the water, prove that now the amount of

the original liquid in the cask is  $\frac{(a-b)^n}{a^{n-1}}$ .

### SENIOR MUNRO EXHIBITIONS AND BURSARIES.

### A.-CLASSICS.

### LATIN.

Examiner..... John Johnson, M. A.

HORACE: ODES, BOOK IV. CICERO: SELECTED LETTERS.

TIME: THREE HOURS.

#### A. Translate:

Phoebus volentem proelia me loqui Victas et urbes increpuit lyra, Ne parva Tyrrhenum per aequor Vela darem. Tua, Caesar, aetas Fruges et agris rettulit uberes Et signa nostro restituit Jovi Derepta Parthorum superbis Postibus, et vacuum duellis Janum Quirini clausit, et ordinem Rectum evaganti frena licentiae Injecit, emovitque culpas, Et veteres revocavit artes Per quas Latinum nomen et Italae Crevere vires famaque et imperi Porrecta majestas ad ortus Solis ab Hesperio cubili. Custode rerum Caesare non furor Civilis aut vis exiget otium, Non ira quae procudit enses Et miseras inimicat urbes. Non qui profundum Danubium bibunt Edicta rumpent Julia, non Getae, Non Seres infidive Persae, Non Tanaïn prope flumen orti. Nosque et profestis lucibus et sacris Inter jocosi munera Liberi Cum prole matronisque nostris, Rite deos prius apprecati, Virtute functos more patrum duces Lydis remixto carmine tibiis Trojamque et Anchisen et almae Progeniem Veneris canemus.

- 1. (a) "Et signa nostro restituit Jovi, Derepta Parthorum superbis Postibus."
  - (b) "Vacuum duellis Janum Quirinum clausit."

Write historical notes on the events mentioned, with dates.

- 2. Quote other passages from the Odes in which the Parthi are referred to under other names.
  - 3. "Getae," "Seres," "Tanain prope flumen orti." Write geographical notes.

- 4. Quote from this Book examples of : (a) unusual words ; (b) unusual constructions.
- 5. Account for the use of the following epithets: Berecyntiae tibiae, laurea Apollinari, palma Elea, Dircaeum cycnum, Calabrae Pierides, tauriformis Aufidus.
  - 6. (a) Note peculiarities in the declension of:
    lyncas, pinus, vices, jecur, fidibus, epulis.
    - (b) Parse, giving chief parts: callet, comissabere, procidit, metendo.
  - 7. Scan these lines and name the system to which each belongs:
    - (a) Liber vota bonos ducit ad exitus. -
    - (b) Miratur, o tutela praesens. —
    - (c) Major Neronum mox grave proelium.

### II.

### B. Translate:

Itaque Caesar iis litteris, quibus mihi gratulatur et omnia pollicetur, quo modo exsultat Catonis in me ingratissimi iniuria! At hic idem Bibulo dierum xx. Ignosce mihi: non possum haec ferre nec feram. Cupio ad omnes tuas epistolas, sed nihil necesse est; iam enim te videbo. Illud tamen de Chrysippo—nam de altero illo minus sum admiratus, operario homine; sed tamen ne illo quidem quicquam improbius—Chrysippum vero, quem ego propter litterularum nescio quid lubenter vidi, in honore habui, discedere a puero insciente me! mitto alia, quae audio, multa, mitto furta: fugam non fero, qua mihi nihil visum est sceleratius. Itaque usurpavi vetus illud Drusi, ut ferunt, praetoris in eo, qui eadem liber non iuraret, me istos liberos non addixisse, praesertim cum adesset nemo, a quo recte vindicarentur. Id tu, ut videbitur, ita accipies: ego tibi adsentiar. Uni tuae disertissumae epistolae non rescripsi, in qua est de periculis rei publicae: quid rescriberem? valde eram perturbatus; sed, ut nihil magno opere metuam, Parthi faciunt, qui repente Bibulum semivivum reliquerunt.

- 1. Write short notes on such passages in the extract as you think require explanation.
- 2. "Illud tamen de Chrysippo."—Explain the construction of the whole sentence.
  - 3. Translate and explain the following:
  - (a) Pompeius in Cumanum Parilibus venit.
  - (b) Tibi versos, quos rogas, γλαῦκ' εἰς 'Αθήνας, mittam.
  - (c) De Oppio factum est, ut volui: et maxime quod DCCC aperuisti.
  - (d) O illud verum ἔρδοι τις!
- 4. Give examples of "Epistolary" tenses. How are "to-day"—"to-morrow" expressed in Cicero's letters?
- 5. Cicero writes to his wife and daughter from Thessalonica on the 5th of October: give in full the address on the letter, the date, and the place.
  - 6. A short description of Cicero's life during 63-57 B. C.

#### III.

C. Translate: At the same time the centurion L. Fabius and the men who had scaled the wall with him were surrounded, stain and cast headlong from the wall. M. Petreius, a centurion of the same legion, tried to cut his way through the gates. Overpowered by numbers and despairing of his own life, for he had already received many wounds, he cried to the men of his company, who had followed him, "Since I cannot save you and myself at the same time, I am determined to take thought for your safety, seeing that in my eagerness to win renown, I have led you into danger. When the chance presents itself, look to yourselves." Saying this he dashed into the midst of the enemy, struck down two of them and pushed the others a little way from the gate. His men tried to relieve him, but he cried, "It is in vain that you try to save my life, for my blood and strength are falling: therefore get away while you have the chance and return to the legion." So fighting on after a while he fell and saved his men.

#### GREEK.

Examiner.....John Johnson, M. A.

HOMER: Odyssey, Book X. HERODOTUS: Book I, §§ 95-216.

TIME : THREE HOURS.

### A. Translate:

\*Αλλ' ότε δή σχεδον ήα κιών νεός άμφιελίσσης. Καὶ τότε τίς με θεῶν ὀλοφύρατο μοῦνον ἐόντα, "Ος ρά μοι υψίκερων ελαφον μέγαν είς όδον αυτήν Ήκεν · δ μεν ποταμόνδε κατήϊεν έκ νομοῦ ύλης Πιόμενος δη γάρ μιν έχεν μένος ηελίοιο. Τὸν δ' ἐγὰ ἐκβαίνοντα κατ' ἄκνηστιν μέσα νῶτα Πλήξα· τὸ δ' ἀντικρὰ δόρυ χάλκεον έξεπέρησεν, Κάδ δ' ἔπεσ' ἐν κονίησι μακών, ἀπὸ δ' ἔπτατο θυμός. Τῷ δ' ἐγὰ ἐμβαίνων δόρυ χάλκεον ἐξ ἀτειλῆς 164 Είρυσάμην· τὸ μὲν αὖθι κατακλίνας ἐπὶ γαὶη Είασ' αὐτὰρ ἐγὰ σπασάμην ρῶπάς τε λύγους τε, Πείσμα δ', ὅσον τ' ὁργυιαν, ἐϋστρεφὲς ἀμφοτέρωθεν Πλεξάμενος συνέδησα πόδας δεινοῖο πελώρου, Βην δὲ καταλοφάδεια φέρων ἐπὶ νηα μέλαιναν. \*Εγχει έρειδόμενος, έπεὶ οὕ πως ἤεν ἐπ' ὤμου 170 Χειρί φέρειν έτέρη· μάλα γὰρ μέγα θηρίον ἤεν. Κάδ δ' έβαλον προπάροιθε νεός, ανέγειρα δ' έταίρους 173 Μειλιχίοις ἐπέεσσί παρασταδὸν ἄνδρα εκαστον.

- 1. (a.) ἀμφοτέρωθεν admits of two explanations. (b.) ὅσον τ' δργνιαν: Explain construction and give the derivation of ὅργνιαν.
- 2. Parse these words, giving rules for cases and writing nom. case, sing. and plur. in full:

νεὸς, ὑψίκερων, νῶτα, μακών, τῷ, ῥῶπας, καταλοφάδεια, παρασταδὸν, ἀνδρα.

### 3. Write the Attic prose forms of:

(a) μὶν, ἤματα, παυέμεναι, ἐθέλησι, ὅτεων. (b) τὸν ἐκίχανον δαινύμενονπαρὰ ἦ τ'ὰ λόχῳ καὶ οἰσι τέκεσσιν.

4. Parse the following, giving their Attic forms and the chief parts of verbal forms:

πασσάμεθ', προέμεν, ίδμεν, δαίτηθεν, έέρχατο.

- 5. Scan vss. 164, 170, 173, and give explanations of irregularities.
- ένθα κ' ἄϋπνος ἀνὴρ δοιοὺς ἐξήρατο μισθοὺς,
   τὸν μὲν βουκολέων, τὸν δ' ἄργυφα μῆλα νομεύων.

Translate, supply the ellipsis in full, explain the meaning, and what  $\dot{\epsilon}\nu\theta a$  refers to.

### II.

### B. Translate:

- (a.) Τούτων δη ὧν τῶν Ἰώνων οἱ Μιλήσιοι μὲν ἤσαν ἐν σκέπη τοῦ φόβου, ὅρκιον ποιησάμενοι. τοῖσι δὲ αὐτῶν νησιώτησι ἤν δεινὸν οὐσέν· οὐτε γὰρ Φοίνικες ἤσάν κω Περσέων κατήκοοι, οὕτε αὐτοὶ οἱ Πέρσαι ναυβάται. ᾿Απεσχίσθησαν δὲ ἀπὸ τῶν ἄλλων Ἰώνων οὐτοι κατ' ἄλλο μὲν οὐδὲν, ἀσθενέος δὲ ἐόντος τοῦ παντὸς τότε 'Ελληνικοῦ γένεος, πολλῷ δὲ ἤν ἀσθενέστατον τῶν ἐθνέων τὸ Ἰωνικὸν, καὶ λόγον ἐλαχίστον ὅτι γὰρ μὴ ᾿Αθῆναι, ἤν οὐδὲν ἄλλο πόλισμα λόγιμον. οἱ μέν νυν ἄλλοι Ἰωνες καὶ οἱ ᾿Αθηναῖοι ἔφυγον τὸ οὐνομα, οὐ βουλόμενοι Ἰωνες κεκλῆσθαι·
- (b.) Ἡν δὲ, τοῦ ἀνδρὸς ἀποθανόντος, γυνὴ τῶν Μασσαγετέων βασίλεια. Τόμυρίς οἱ ἡν οὕνομα. ταύτην πέμπων ὁ Κῦρος ἐμνᾶτο τῷ λόγῳ, θέλων γυναϊκα ἡν ἔχειν. ἡ δὲ Τόμυρις συνιεῖσα οὐκ αὐτήν μιν μνώμενον, ἀλλὰ τὴν Μασσαγετέων βασιληίην, ἀπείπατο τὴν πρόσοδον. Κῦρος δὲ μετὰ τοῦτο, ῷς οἱ δόλῳ οὐ προεχώρεε, ἐλάσας ἐπὶ τὸν ᾿Αράξεα, ἐποιέετο ἐκ τοῦ ἐμφανέος ἐπὶ τοὺς Μασσαγέτας στρατηίην, γεφύρας τε ζευγνύων ἐπὶ τοῦ ποταμοῦ, διάβασιν τῷ στρατῷ, καὶ πύργους ἐπὶ πλοίων τῶν διαπορθμευόντων τὸν ποταμὸν οἰκοδομεόμενος.
- 1. ἀπεσχίσθησαν δὲ ἀπὸ τῶν ἄλλων Ἰώνων οὐτοι κ, τ. λ. Note irregular construction of this sentence.
- 2. (a.) ὅτι γὰρ μὴ ᾿Αθῆναι. (b.) θέλων γυναῖκα ἥν ἔχειν. (c.) ἀπεί-πατο τὴν πρόσοδον. (d.) ὡς οἱ δόλω οὐ προεχώρεε. (e.) διάβασιν. Write notes on syntax, or use of words.
  - 3. των άλλων Ίωνων οὖτοι. Who are meant?
- 4. State the peculiarities of the dialect used by Herodotus. How may the resemblances in the dialects of Homer and Herodotus be explained?
- 5. Write the Attic forms of the following (if different) and parse them, giving nom. and gen. sing. of nouns and chief parts of verbs:

άρρωδέων, κρεών, χρέο, πρηθήναι, ὑπείς, ἐνιαχή, ἰδησι, ἕαδε, ἐπέσσετο, ἀπώνητο.

#### III.

- 1. Accentuate all the cases of any monosyllabic noun of the third declension.
- Distinguish the meanings of; (a) οὐ ποιεῖ, μὴ ποιεῖ, μὴ ποιήσης.
   εἰ τοῦτο ἐπρασσε, καλῶς εἶχεν. εἰ τοῦτο ἔπρασσε, καλῶς ἀν εἶχεν. εἰ τοῦτο πράσσοι, καλῶς εἶχεν. εἰ τοῦτο πράσσοι, καλῶς ἀν ἔχοι.
  - 3. Give the rules for use of moods in dependent questions.
- 4. Translate into Greek: The larger part of mankind do not believe that this is true.—He said that he would order them to prepare food for three days.—I should like to hear you sing.—The boys in play chose the son of the herdsman to be their king.—No one is so wise as not sometimes to err. O! that the wise managed the affairs of the state.—Don't you think that if he were here all would be well?

### B.-MATHEMATICS.

Examiner ...... C. Macdonald, M. A.

### GEOMETRY AND TRIGONOMETRY.

#### TIME: THREE HOURS.

- 1. If two parallel diameters be drawn in two circles, the lines joining their extremities intersect in their centres of similitude.
- 2. Prove, by transversals, that if through any point within a triangle lines be drawn parallel to the sides, the solids contained by the alternate segments of these lines are equal.
- 3. If two triangles have an angle of the one equal to an angle of the other, and have their areas proportional to the squares of the sides opposite these equal angles, they must be equiangular.
- 4. Through a given point draw a line that shall be harmonically divided by the sides, produced if necessary, of a given triangle.
- 5. If two tangents be drawn to a parabola, and from their point of concourse a line be drawn parallel to the axis of the parabola, the chord of contact of the tangents shall be bisected by it.
- 6. The tangent to an ellipse makes equal angles with the lines drawn from the foci to the point of contact.
  - 7.  $A^{\circ}+B^{\circ}+C^{\circ}=180^{\circ}$ . Prove any two of the following:
    - (1)  $\sin 2 A + \sin 2 B + \sin 2 C = 4 \sin A \sin B \sin C$ :
    - (2)  $\frac{\sin A + \sin B \sin C}{\sin A + \sin B + \sin C} = \tan \frac{A}{2} \tan \frac{B}{2} :$
    - (3)  $\frac{1 \cos A + \cos B + \cos C}{1 + \cos A + \cos B \cos C} = \tan \frac{A}{2} \cot \frac{C}{2}.$

8. Prove that if h be the circular measure of a small angle—not amounting, say, to more than 1' of arc—then  $sin\ (a+h)-sin\ a$  is proportional to h, nearly. What is the use of this theorem?

9. Write the exponential expressions for  $\cos x$ ,  $\sin x$ , and  $\cos y$ ,  $\sin y$ : and use them to prove  $\sin x \cos y - \cos x \sin y = \sin (x - y)$ .

10. If  $r_1$ ,  $r_2$ ,  $r_3$  denote the radii of the escribed circles of a triangle, and r, R those of the inscribed and circumscribed circles: prove—

 $r_1 + r_2 + r_3 - r = 4 R.$ 

### MISCELLANEOUS.

TIME: THREE HOURS.

1. Find the three values of (1)3.

2. Prove that if x-y=a,  $x^2-y^2=b^2$ ,  $x^3-y^3=c^3$ : then must  $a^4+3b^4-4ac^3=0$ .

3. If  $\cdot a$ ,  $\beta$ ,  $\gamma$  are the roots of the equation,  $x^3+px^2+qx+r=0$ : Shew that  $\frac{1}{a^2}+\frac{1}{\beta^2}+\frac{1}{\gamma^2}=\frac{q^2-2pr}{r^2}$ .

4. In the expansion of  $(a+x)^n$ : there are two middle terms having the same co-efficient when n is odd. Prove this, and write the co-efficient: and find by the binomial theorem  $5\sqrt{31}$  correct to 3 places of decimals.

5. Shew that the number of combinations of 2n things, n together, where n of them are the same, is  $2^n$ .

6. There are five balls in a bag that can be severally only either black or white. A person puts his hand into the bag and draws two, which turn out to be white. These he restores and draws two again, which again are white. Find the probability that there are any black balls, even one, in the bag.

7. From the series  $\log (1+x) = x - \frac{1}{2}x^2 + \frac{1}{3}x^3 - &c.$ , deduce a series from which the logarithms of common numbers can be determined, to the same base.

8. Find, by employing the familiar series for  $e^x$ ,  $\sin x$ , &c., what is the true value of the fractions,  $\frac{x^2+2\cos x-2}{x^4}$ ,  $\frac{\epsilon_x+\sin x-1}{\log (1+x)}$ , when, in each case, x=0.

9. Resolve into partial fractions  $\frac{4}{x^4-1}$ .

10. Shew that if n be a prime number,  $(n-1)(n-2) \dots (n-r+1)$  is divisible by 1, 2, 3, ..., r: and enunciate the theorem in the proof of which this proposition is the first step.

### C.-ENGLISH AND HISTORY.

### ENGLISH LITERATURE.

Byron's Childe Harold; Milton's Areopagitica; Shakespeare's Julius Cæsar; Spenser's Faerie Queen, Bk. I; Lounsbury's History of the English Language, Pt. I.

Examiner..... W. J. Alexander, Ph. D.

TIME : THREE HOURS.

(Of the first four questions only three are to be answered.)

- 1. At what date and under what circumstances were the several cantos of Childe Harold written? Point out differences in style between the earlier and later cantos.
  - 2. Give an abstract of Canto III.
  - 3. Quote a passage of about 36 consecutive lines.
  - 4. Explain fully the references in the following :-
    - (a) Blush, Caledonia! Such thy son could be!
       England I joy no child he was of thine;
       Thy free born men should spare what once was free,
       Yet they could violate each saddening shrine,
       And bear these altars o'er the long-reluctant brine.
    - (b) The spouseless Adriatic mourns her Lord; And annual marriage now no more renewed, The Bucentaur lies rotting unrestored.
    - (c) When Athen's armies fell at Syracuse
      And fettered thousands bore the yoke of war,
      Redemption rose up in the Attic Muse.
    - Thou who didst subdue
      Thy country's foes ere thou wouldst pause to feel
      The wrath of thine own wrongs, or reap the due
      Of hoarded vengence till thine eagles flew
      O'er prostrate Asia;—thou who with a frown
      Annihilated senates—Roman too,
      With all thy vices, for thou didst lay down
      With an atoning smile a more than earthly crown!
    - (e)

      He arose

      To raise a language and his land reclaim

      From the dull yoke of her barbaric foes,

      Watering the tree which bears his lady's name,

      With his melodious tears, he gave himself to fame.
    - (f) The one was fire and fickleness, a child Most mutable in wishes, but in mind A wit as various,—gay, grave, sage, or wild,— Historian, bard, philosopher combined; He multiplied himself among mankind, The Proteus of their talents: But his own Breathed most in ridicule.
    - (g) The other, deep and slow, exhausting thought, And living wisdom with each studious year, In meditation dwelt with learning wrought, And shaped his weapon with an edge severe, Sapping a solemn creed with solemn sneer: The lord of irony.

- (h) Relic of noble days, and noblest arts!
  Despoiled yet perfect, with thy circle spreads
  A holiness appealing to all hearts—
  To art a model: and to him who treads
  Rome for the sake of ages, Glory sheds
  Her light through thy sole aperture: to those
  Who worship, here are altars for their beads;
  And they who feel for genius may repose
  Their eyes on honored forms, whose busts around them close.
- 5. Under what heads does Milton arrange his subject in the *Areopagitica?* How does he defend the reading of all sorts of books, good and bad?
  - 6. Describe the character of Cassius and of Iago.
- 7. Compare the two plays, Julius Casar and Othello, pointing out what you consider to be the special excellences of each.
- 8. Paraphrase accurately and briefly, but so as to bring out the the force of the less usual expressions:
  - (a) Enjoy the heavy dew of slumber;
    Thou hast no figure nor no fantasies,
    Which busy care draws in the brains of men.

    J. C. II, 1.
  - (b) ——The world, 'tis furnished well with men,
    And men are flesh and blood, and apprehensive;
    Yet, in the number, I do know but one
    That unassailable holds on his rank,
    Unshaked of motion.

J. C. III, 1.

- (c) That every like is not the same, O Cæsar,
  The heart of Brutus yearns to think upon.
  J. C. II, 2.
- (d) One that excels the quirks of blazoning pens, And in the essential vesture of creation Does tire the enginer

Othello II, 1.

- (e) Which thing to do,
  If this poor trash of Venice, whom I trash
  For his quick hunting, stand the putting on,
  I'll have our Michael Cassio on the hip.
  Othello II, 1.
- (f)
  Something, sure, of state,
  Either from Venice or some unhatched practice
  Made demonstrable here in Cyprus to him
  Hath puddled his clear spirit.
  Othello III, 4.
- 9. Describe the principal personages who appear in each of the successive cantos of The Faerie Queen, Book I, and mention the allegorical significance of each.
- 10. What influence was exerted by foreign tongues upon English before the Conquest? Narrate the various facts which are adduced to indicate the growing importance of English as compared with French in the 13th and 14th Centuries. What were the causes of the victory of the Midland over the other dialects?

### CLASSICAL HISTORY AND GEOGRAPHY.

Examiner.....John Johnson, M. A.

### TIME: THREE HOURS.

- 1. A full account of the events that led to the punishment of the Alemaeonidae and the use made of this subsequently.
  - 2. A sketch of Themistocles.
  - 3. The peace of Nicias and what led to it.
  - 4. A description of the Parthenon.
  - 5. The liberation of Thebes B. C. 379.
  - 6. The causes and results of the Second Sacred War.
- 7. Describe the situation of the following and note briefly any important events that have been connected with them:

  Aegospotami, Mycale, Phthiotis, Crissa, Nisaea, Calaureia.
  - 8. A description of Attica with a map.

# ENTRANCE EXAMINATIONS.

### CLASSICAL HISTORY AND GEOGRAPHY.

Examiner ...... John Johnson, M. A.

#### SECOND YEAR.

TIME : THREE HOURS.

(N. B.—Give dates in all cases.)

- 1. Show how the powers originally possessed by the kings were gradually divided among various magistrates.
- 2. Describe the different occasions on which a P. Decius Mus displayed his patriotism.
  - 3. An account of Saturninus.
- 4. The various rights of a Roman citizen and their gradual extension to persons not of Roman descent.
- 5. The events that took place in Rome during the week after March 15th, B. C. 44.
  - 6. Cicero's death and an estimate of his character.
  - 7. Give a description of the Roman Forum.
- 8. A map of Northern 1taly, showing its chief towns, lakes and rivers with both ancient and modern names.

### THIRD YEAR.

The paper in this subject was the same as that set at the Senior Bursary Examination See p. xxi.

### ENGLISH LITERATURE.

### SECOND YEAR.

MACAULAY'S ESSAYS ON LORD NUGENT'S MEMORIALS OF HAMPDEN, BOSWELL'S LIFE OF JOHNSON, AND WARREN HASTINGS; LAY OF HORATIUS.

TIME: Two Hours.

(Only five questions are to be answered, of which No. 6 must be one.)

- 1. Describe after Macaulay James I., Laud, Strafford.
- 2. "We are not sure that there is in the whole history of the human intellect so strange a phænomenon as this book," says Macaulay of Boswell's Life of Johnson. Reproduce his development of this statement.
- 3. Give after Macaulay a description of Johnson's intellectual and moral peculiarities.

- 4. Give a brief life of Warren Hastings.
- 5. What do you admire in Macaulay's poetry? Contrast the enjoyment it affords with that given by the Rape of the Lock.
- 6. On internal grounds determine which of the following extracts are by Macaulay, giving reasons for acceptance or rejection:
- (a) Yet a few years and the shades and structures may follow their illustrious masters. The wonderful city which, ancient and gigantic as it is, still continues to grow as fast as a young town of logwood by a water privilege in Michigan, may soon displace those turrets and gardens which are associated with so much that is interesting and noble, with the courtly magnificence of Rich, with the loves of Ormond, with the counsels of Cromwell, with the death of Addison. The time is coming when, perhaps, a few old men, the last survivors of our generation, will in vain seek, amidst new streets, and squares, and railway stations for the site of that dwelling which was in their youth the favorite resort of wits and beauties, of painters and poets, of scholars, philosophers, and statesmen.
- (b) Society, we believe, is constantly advancing in knowledge. The tail is where the head was some generations ago. But the head and tail still keep their distance. A nurse of this century is as wise as a justice of the quorum and custalorum in Shallow's time. The wooden spoon of this year would puzzle a senior wrangler in the reign of George the Second. A boy from the National School reads and spells better than half the knights of the shire in the October Club. But there is still as wide a difference as ever between justices and nurses, senior wranglers and wooden spoons, members of parliament and children at charity schools.
- (c) But let us return to Falkland,—to our martyr of sweetness and light, of lucidity of mind and largeness of temper. Let us bid him farewell, not with compassion for him and not with excuses, but in confidence and pride. Slowly, very slowly, his ideal of lucidity of mind and largeness of temper conquers; but it conquers. In the end it will prevail; only we must have patience. The day will come when the nation shall be renewed by it. But, O lime-trees of Tew, and quiet Oxfordshire field-banks where the first violets are even now raising their heads!—how often, ere that day arrive for Englishmen, shall your renewal be seen!
- (d) And when those who have rivalled her greatness shall have shared her fate; when civilisation and knowledge shall have fixed their abode in distant continents; when the sceptre shall have passed away from England; when, perhaps, travellers from distant regions shall in vain labour to decipher on some mouldering pedestal the name of our proudest chief; shall hear savage hymns chanted to some misshapen idol over the ruined dome of our proudest temple; and shall see a single naked fisherman wash his nets in the river of ten thousand masts;—her influence and her glory will still survive,—fresh in eternal wealth, exempt from mutability and decay, immortal as the intellectual principles from which they derived their origin, and over which they exercised their control.
- (e) It is of no moment to her own worth or dignity that she should be acquainted with this science or that; but it is of the highest that she should be trained in habits of accurate thought, that she should understand the meaning, the inevitableness, and the loveliness of natural laws; and follow at least some one path of scientific attainment, as far as to the threshold of that bitter Valley of Humiliation, into which only the wisest and bravest men can descend, owning themselves forever children, gathering pebbles on a boundless shore.

### THIRD YEAR.

The paper in this subject consisted of the first four questions of that set in the same subject at the Senior Bursary Examination. See p. xix.

#### HISTORY,

Examiner.....President Forrest.

### FOURTH YEAR.

- 1. "After the peace of Coblentz in 860, Charles the Bald restored all Allodial property belonging to his subjects who had taken part against him but not his own beneficiary grants, which they were considered as having forfeited." Explain.
- 2. (live brief account of the origin of the Guelf and Ghibelin factions?
- 3. Nicola di Rienzi conceived in 1347 the project of restoring Rome not only to good order, but even to her ancient greatness. Write short account of the man and his work.
- 4. Write a short account of the naval power and commerce of Pisa.
- 5. What was it that rendered the manumission of slaves in the agricultural districts almost impossible under feudalism.
- 6. To secure a proper administration of justice, "was, during several centuries one great object of political wisdom. The regulations for this purpose may be reduced to three general heads: to explain these and to point out the manner in which they operated is an important article in the history of society among the nations of Europe." What are the three general heads referred to?
- 7. What first led to the use of infantry in the armies of Germany, France and Spain?
- 8. A famous Sultan of the Turks began his reign a few months after Charles V, was placed on the Imperial throne. Give a brief account of him.

# SESSIONAL EXAMINATIONS.

### FACULTY OF ARTS.

### GREEK.

Examiner......John Johnson, M. A.

### FIRST YEAR.

LUCIAN: VERA HISTORIA.

TIME: THREE HOURS.

I.

- A. Translate: Bk. I, ll. 609—624, beginning Ἐνιαντὸν μὲν οὐν, ending εἰκοσι καὶ ἐκατόν.
- καθεωριμεν ἀπάντων ὧν ἐγὼ είδον θεαμάτων παραδοξότατον. Account for the cases.
  - 2. The accusative is used in the extract to express various relations.
  - 3. πέμπτη Ισταμένου. Explain the meaning of Ισταμένου.
  - 4. Give the meaning and derivation of the following: εὐωνυμος, ἀκρόδρυα, μεσημβρία, λάφυρα, ῥεῦμα, Ζωδιακός.
- 5. (a.) Parse, giving chief parts in use: δαηγόμεν, ἡκούετο, ταραχ-θέντες, ἀνειρπύσαμεν, είδον, προσπλέοντας. (b.) Write the modal conjugation of οίδα.
- B. Translate: Bk. II, ll. 427—441, beginning καὶ ἰχθῆς δὲ εἶχε, ending συνηπιστάμην.
- 1. Explain the construction of the last clause. How else might it have been written?
  - 2. Translate and explain:
- (a.) ἐλέγετο δὲ χαλεπαίνειν αὐτῷ ὁ Ῥαδάμανθυς, καὶ ἡπειληκέναι πολλάκις ἐκβαλεῖν αὐτὸν ἐκ τῆς νήσου, ἤν φλυαρῆ καὶ μὴ θέλη ἀφεὶς τὴν εἰρωνείαν εὐωχεῖσθαι.
- (b.) ὅτι μὲν γὰρ οὐδὲ τυφλὸς ἡν, ὁ καὶ αὐτὸ περὶ αὐτοῦ λέγουσιν, αὐτίκα ἡπιστάμην ἐωρα γὰρ, ωστε οὐδὲ πυνθάνεσθαι ἐδεόμην πολλάκις δὴ καὶ ἀλλοτε τοῦτο ἐποίουν, εῖ ποτε αὐτὸν σχολὴν ἀγοντα ἐωρων.
- (c.) τέταρτοι δ' ήμεῖς προσηνέχθημεν· καὶ ὁ μὲν ἤρετο, τί παθόντες ἔτι ζῶντες ἱεροῦ χωρίου ἐπιβαίημεν. ἡμεῖς δὲ πάντα ἐξῆς διηγησάμεθα.
- 3. When and where was Lucian born? What different professions did he follow? What does he say were his motives for writing the

Vera Historia? Mention any works that may have been more or less suggested by it.

4. Parse, giving chief parts, ἤνικται, κεχηνός, καταχθείημεν, ἀνεγρόμενος, κατεσκληκυῖα.

### II.

- Decline in the sing. : γόνν, γυνή, ἰχθύς, Ἡρακλῆς, and in the plu.: οὐς, ναῦς, ἀστήρ.
- Give the forms in the other degrees corresponding to: παλαιφ, αἰσχρός, ἰσοι, ἡδύ, πτωχοῦ, μέγαν.
- 3. Give the modal conjugation of  $\delta\iota a\delta\rho\tilde{a}\nu a\iota$ ,  $\gamma k\gamma\rho a\pi\tau a\iota$ ,  $k\lambda k\gamma\xi \epsilon\iota\epsilon$ , and give in the singular—the first aorist opt. and imperat. Act. of  $\kappa o\mu i\zeta\omega$ , the second aorist subj. and opt. of  $\delta\iota a\delta\rho\tilde{a}\nu a\iota$ , and the perf. imperat. Pass. of  $\dot{a}\nu a\sigma\tau\rho k\psi a\varsigma$ .
- 4. The second a orists of some verbs in  $\mu\iota$  are peculiar in certain respects.
- 5. What is meant by Crasis, Elision, Attic Reduplication? Give examples.
  - 6. Mention some classes of verbs which govern the genitive.
- 7. What cases do expressions of time require in Greek?

  Translate: He came in the night, stayed three days and went away on the fourth.
  - 8. How are conditions referring to the future expressed in Greek?

# (Additional for First and Second Class.)

XENOPHON: CYROPÆDIA, BOOK I.

#### I.

### TIME: THREE HOURS.

### A. Translate:

έξέρχονται δὲ ἐπὶ τὴν θήραν ἄριστον ἔχοντες πλεῖον μέν, ὡς τὸ εἰκός, τῶν παίδων, τἄλλα δὲ ὅμοιον. καὶ θηρῶντες μὲν οὐκ ἀν ἀριστήσειαν, ἢν δέ τι δεήση ἢ θηρίον ἕνεκα ἐπικαταμεῖναι ἢ ἄλλως ἐθελήσωσι διατρῖψαι περὶ τὴν θήραν, τὸ ἄριστον τοῦτο δειπνήσαντες τὴν ὑστεραίαν αὐ θηρῶσι μέχρι δείπνου, καὶ μίαν ἄμφω τούτω τὰ ἡμέρα λογίζονται, ὅτι μιᾶς ἡμέρας σῖτον δαπανῶσι. τοῦτο δὲ ποιοῦσι τοῦ ἐθίζεσθαι ἔνεκα, ἵν' ἐάν τι καὶ ἐν πολέμφ δεήση, δύνωνται τοῦτο ποιεῖν. καὶ ὄψον δὲ τοῦτο ἔχουσιν οἱ τηλικοῦτοι ὅ, τι ἀν θηράσωσιν' εἰ δὲ μή, τὸ κάρδαμον. εἰ δὲ τις αὐτοὺς οἰεται ἢ ἐσθίειν ἀηδῶς, ὅταν κάρδαμον μόνον ἔχωσιν ἐπὶ τῷ σίτφ, ἢ πίνειν ἀηδῶς, ὅταν ὕδωρ πίνωσιν, ἀναμνησθήτω πῶς μὲν ἡδὸ μᾶζα καὶ ἄρτος πεινῶντι φαγεῖν, πῶς δὲ ἡδύ ὕδωρ πιεῖν διψῶντι.

- 1. (a.)  $\dot{\omega}_{\zeta}$   $\tau \dot{\sigma}$   $\dot{\epsilon} i \kappa \dot{\sigma}_{\zeta}$ ; Parse  $\dot{\epsilon} i \kappa \dot{\sigma}_{\zeta}$ . (b.)  $\pi \tilde{\omega}_{\zeta}$   $\delta \dot{\epsilon}$   $\dot{\eta} \delta \dot{v}$   $\dot{v} \delta \omega \rho$   $\pi \iota \epsilon \tilde{\iota} v$   $\delta \iota \psi \tilde{\omega} v \tau \iota$ : Analyze the sentence.
  - 2. ὄψον: What was this?

- 3. τοὕτο δὲ ποιοὕσι τοῦ ἐθίζεσθαι ἔνεκεν, ἵνα ἐάν τι καὶ ἐν πολέμφ δεήση, δύνωνται τοὕτο ποιεῖν: Change this sentence into the "past" form.
- 4. ὅπως οὐν μὴ ἀπολεῖ μαστιγούμενος, ἐπειδὰν οἰκοι ἢς, ὰν παρὰ τούτου μαθὰν ἡκης ἀντὶ τοῦ βασιλικοῦ τὸ τυραννικόν, ἐν ἢ ἐστι τὸ πλεῖον οἰεσθαι χρῆναι πάντων ἔχειν: Translate; show the connection of clauses; analyze the last clause; and parse ἀπολεῖ.
- ἔπειτα δὲ ἐν τῷ δείπνῳ ἐπὶ τὸ μετρίως σοι δοκοῦν ἔχειν ὁποίαν βούλει ὁδὸν πορεύσει: Translate and explain the construction.

### B. Translate:

τί δὲ λέουσι καὶ ἄρκτοις καὶ παρδάλεσιν οὐκ εἰς τὸ ἰσον καθιστάμενοι ἐμάχεσθε, ἀλλὰ μετὰ πλεονεξίας τινὸς ἀεὶ ἐπειρᾶσθε ἀγωνίζεσθαι πρὸς αὐτά; ἢ οὐ πάντα γιγνώσκεις ταῦτα ὅτι κακουργίαι τέ εἰσι καὶ ἀπάται καὶ δολώσεις καὶ πλεονεξίαι; Ναὶ μὰ Δί', ἔφη, θηρίων γε· ἀνθρώπων δὲ εἰ καὶ δόξαιμι βούλεσθαι ἐξαπατῆσαί τινα, πολλὰς πληγὰς οἰδα λαμβάνων. Οὐδὲ γὰρ τοξεύειν, οἰμαι, οὐδ' ἀκοντίζειν ἀνθρωπον ἐπετρέπομεν ὑμῖν, ἀλλ' ἐπὶ σκοπὸν βάλλειν ἐδιδάσκομεν, ἵνα γε νῦν μὲν μὴ κακουργοίητε τοὺς φίλους, εἰ δέ ποτε πόλεμος γένοιτο, δύναισθε καὶ ἀνθρώπων στοχάζεσθαι. καὶ ἐξαπατᾶν καὶ πλεονεκτεῖν οὐκ ἐν ἀνθρώποις ἐπαιδεύομεν ὑμᾶς, ἀλλ' ἐν θηρίοις, ἵνα μηδ' ἐν τούτοις τοὺς φίλους βλάπτοιτε, εἰ δέ ποτε πόλεμος γένοιτο, μηδὲ τούτων ἀγύμναστοι εἰητε.

- 1. Parse ἐπειρᾶσθε, αὐτά, θηρίων, λαμβάνων.
- 3. (a.) καὶ Κύρφ ήδετο οὐ δυναμένφ σιγᾶν ὑπὸ τῆς ἡδονῆς, ἀλλ' ὤσπερ σκύλακι γενναίφ, ἀνακλάζοντι ὁπότε πλησιάζοι θηρίφ.

Translate and account for case of Κύρφ, σκύλακι, and mood of πλησιάζοι.

- (b.) άλλὰ τοῦ μὲν αὐτὸν λέγειν ἄ μὴ σαφῶς ἐιδείη φείδεσθαι δεῖ.Translate and account for εἰδείη.
- (c.) γενόμενοι οὖν τινες οὕτως εὐφυεῖς καὶ πρὸς τὸ εὖ ἐξαπατᾶν καὶ πρὸς τὸ εὖ πλεονεκτεῖν, ἰσως δὲ καὶ πρὸς τὸ φιλοκερδεῖν οὐκ ἀφυεῖς ὄντες, οὐκ ἀπέσχοντο οὐδ' ἀπὸ τῶν φίλων τὸ μὴ οὐ πλεονεκτεῖν αὐτῶν πειρᾶσθαι.

Translate and explain the construction in the last clause.

- (d.) τὸ γὰρ ἀρχὴν μὴ κάμνειν τὸ στράτευμα, τούτου σοι δεῖ μέλειν.
- (e.) τοῦ δὲ μηδ' ἐντεῦθεν διαφεύγειν σκοποὺς τοῦ γιγνομένου καθίστης. Translate and explain constructions.
- 4. εἰ δὲ καὶ ταύτας ἀποφύγοι, τοὺς πόρους αὐτῶν ἐκμανθάνων καὶ πρὸς οἰα χωρία φεύγοντες αἰροῦνται οὶ λαγῷ, ἐν τούτοις δίκτνα δυσόρατα ἐνεπετάννυς ἀν, καὶ τῷ σφόδρα φεύγειν αὐτὸς ἑαυτὸν ἐμπεσῶν συνέδει.

Translate and discuss the reading.

- 5. Parse, ἀποδρᾶ, χρῷο, ἡδει, ἡρουν, ἀσι, μάθης, μετενέγκοις.
- 6. Give a sketch of Xenophon's life. What are his chief works, and with what do they deal?

### II.

- Decline with accents in the singular: δδός, θρίξ.
   in the plural: νεανίας, τοῦτο.
- 2. What parts of verbs (a) accent the penult, (b) circumflex the last syllable?
- 3. Distinguish μόνη, μονή; φῶς, φώς; ὧμος, ὡμός; ἄλλα, ἀλλά; φίλησαι, φιλήσαι, φιλήσαι; ἤ, ἢ, ἢ, ἢ, ἢ, ἢ.
  - 4. The chief uses of διά and παρά.
  - 5. What constructions follow  $\omega \sigma \tau \varepsilon$ , and  $\pi \rho i \nu$ ?
  - 6. Translate into Greek: Si haec feceris, injuste facies. Si haec facias, injuste facias. Si haec faceres, injuste faceres. Si haec fecisses, injuste fecisses.
- C. Translate: It was not difficult to see that Helen was madly in love with the young man.—He told me that if I bore these things in mind I should come again in time to my native land.—Lucian shrank from telling many things which he had seen for fear people should think he was lying.

### SECOND YEAR.

HOMER: ODYSSEY, BOOK IX. XENOPHON: HELLENICA, BOOK II.

TIME: THREE HOURS.

- A. Translate: Od. ix., vss. 122-139.
- 1. (a.) ἐπεὶ μάλα πιᾶρ ὑπ' οὐδας. What difference will the reading ὕπ' make?
- (b.) ἀλλ' ἐπικέλσαντας μεῖναι χρόνον. Account for mood and case.
- 2. Point out the differences of Epic from Attic forms in nouns of the 3rd decl.
- 3. What are Attic prose equivalents of : πάρα, κεν, ἰκνεύμεναι, σφιν, (Extract A)—εἰρετο, `Ατρείδεω, δείδιμεν' αἰδεῖο, πεφιδοίμην.
  - Parse, giving chief parts: κάμοιεν, περόωσι, ἀμῷεν, (Α)—ἐθηεύμεσθα, τετυγμένα, ήσατο.
- 5. To what are the following epithets applied in this book, and what are their derivations?
  - νηλεές, πολυκηδέα, άζαλέης, ένοσίχθων, άλμυρόν, κυανοχαίτης, ἄκρητον.
  - 6. Scan vss. 130, 133, 136.
- 7. What verses describe the dispute about Homer's birth-place? What date does Herodotus assign to him? Give an outline of Wolf's theory about the composition of the Homeric poems and his arguments in support of it.

- B. Translate: Hellen. II, 3, §35—37, ending at μηδὲν ἐνθάδε γένοιτο.
- ἀλλ' ἐκεῖνοι ἔφασαν κ. τ. λ. Explain the construction of this sentence.
- 2. (a) μὴ ὅτι: (b.) οἰον τε εἶναι σῶσαι. How are these combinations accounted for?
  - 3. Classify the participles in the extract.
- 4. Translate the following sentences and explain the use of the relatives:
  - (α.) κράτιστον έστι έφ' οις προυκαλούντο ειρήνην ποιείσθαι.
- (b.) ἀλλ' ἐποιοῦντο εἰρήνην ἐφ' ῷ (τοὺς ᾿Αθηναίους) Λακεδαιμονίοις ἔπεσθαι.
- (c.) ήμεῖς δὲ γνόντες μὲν τοῖς οἴοις ἡμῖν τε καὶ ὑμῖν χαλεπὴν πολιτείαν εἰναι δημοκρατίαν, τήνδε τὴν πολιτείαν καθίσταμεν.
- 5. Write the dependent clauses of the following sentences in the direct form:
- (a.) ηδειν γὰρ ὅτι οὕτω γε τὸ ἀντίπαλον ἰσχυρὸν ἔσοιτο, εἰ τῷ μὲν πλήθει ἡγεμόνες ἰκανοὶ προσγενήσοιντο, τοῖς δ' ἡγεῖσθαι βουλομένοις σύμμαχοι πολλοὶ φανήσοιντο.
  - (b.) είπεν ὁ Σάτυρος ὅτι (Θηραμένης) οἰμώξοιτο, εἰ μὴ σιωπήσειεν.
- 6. Write in Olympiads the date of the sea-fight mentioned in B, and show how the year B. C. may be got from it.
- Show by different examples the various methods of expressing a purpose.

# (Additional for First and Second Class.)

### DEMOSTHENES: OLYNTHIACS.

#### TIME: THREE HOURS.

#### A. Translate:

'Αντὶ πολλῶν ἄν, ὁ ἀνδρες 'Αθηναῖοι, χρημάτων ὑμᾶς ἐλέσθαι νομίζω, εἰ φανερὸν γένοιτο τὸ μέλλον συνοίσειν τῆ πόλει περὶ ἀν νυνὶ σκοπεῖτε. ὅτε τοίνυν τοῦθ' οὕτως ἔχει, προσήκει προθύμως ἐθέλειν ἀκούειν τῶν βουλομένων συμβουλεύειν οὐ γὰρ μόνον εἴ τι χρήσιμον ἐσκεμμένος ἤκει τις, τοῦτ' ἀν ἀκούσαντες λάβοιτε, ἀλλὰ καὶ τῆς ὑμετέρας τύχης ὑπολαμβάνω πολλὰ τῶν δεόντων ἐκ τοῦ παραχρῆμα ἐνίοις ἀν ἐπελθεῖν εἰπεῖν, ώστ' ἑξ ἀπάντων ῥαδίαν τὴν τοῦ συμφέροντος ὑμῖν αἵρεσιν γενέσθαι.

'Ο μὲν οὖν παρὼν καιρός, ὁ ἀνδρες 'Αθηναῖοι, μόνον οὐχὶ λέγει φωνὴν ἀφιεὶς ὅτι τῶν πραγμάτων ὑμῖν ἐκείνων αὐτοῖς ἀντιληπτέον ἐστίν, εἰπερ ὑπὲρ σωτηρίας αὐτῶν φροντίζετε' ἡμεῖς δ' οὐκ οἰδ' ὅντινά μοι δοκοῦμεν ἔχειν τρόπον πρὸς αὐτά. ἔστι δὴ τά γ' ἐμοὶ δοκοῦντα ψηφίσασθαι μὲν ἤδη τὴν βοήθειαν, καὶ παρασκευάσασθαι τὴν ταχίστην ὅπως ἐνθένδε βοηθήσετε καὶ μὴ πάθητε ταὐτὸν ὅπερ καὶ πρότερον, πρεσβείαν δὲ πέμπειν ἤτις ταῦτ' ἐρεῖ καὶ παρέσται τοῖς πράγμασιν, ὡς ἔστι μάλιστα τοῦτο δέος, μὴ πανοῦργος ὡν καὶ δεινὸς

ἄνθρωπος πράγμασι χρῆσθαι, τὰ μὲν εἰκων, ἡνίκα ἄν τύχη, τὰ δ' ἀπειλῶν (ἀξιόπιστος δ' ὰν εἰκότως φαίνοιτο), τὰ δ' ἡμᾶς διαβάλλων καὶ τὴν ἀπουσίαν τὴν ἡμετέραν, τρέψηται καὶ παρασπάσηταί τι τῶν δλων πραγμάτων.

- άλλὰ καὶ τῆς ὑμετέρας τύχης ὑπολαμβάνω . . . . ἀν ἐπελθεῖν εἰπεῖν. Analyze this sentence and account for the case of τύχης.
  - 2. (α.) ὅπως ἐνθένδε βοηθήσετε, καὶ μὴ πάθητε ταὕτον:
    - (b.) ως έστι μάλιστα τοῦτο δέος:
    - (c.) ἡμεῖς δ' οὐκ οἰδ' ὄντινά μοι δοκούμεν ἔχειν τρόπον πρὸς αὐτά : Explain the syntax.
- 3. (α.) ὅτε τοίνυν τοῦθ' οὕτως ἔχει: (b.) οὐ μόνον—μόνον οὐ: (c.) ὅτις ταὕτ' ἐρεῖ: (d.) δεινὸς ἄνθρωπος πράγμασι χρῆσθαι: Write these phrases in Latin.

### B. Translate:

καίτοι ταῦτα, εἰ καὶ μικρά τις ἡγεῖται, μεγάλα, & ἀνδρες ᾿Αθηναῖοι, δείγματα τῆς ἐκείνου γνώμης καὶ κακοδαιμονίας ἐστὶ τοῖς εὐ φρονοῦσιν. ἀλλ', οἰμαι, νῦν μὲν ἐπισκοτεῖ τοὑτοις τὸ κατορθοῦν· αὶ γὰρ εὐπραξίαι δειναὶ συγκρύψαι τὰ τοιαῦτα ὀνείδη. εἰ δὲ τι πταίσει, τότ' ἀκριβῶς αὐτοῦ ταῦτ' ἑξετασθήσεται. δοκεῖ δ' ἔμοιγε, ὁ ἀνδρες ᾿Αθηναῖοι, δείξειν οὐκ εἰς μακράν, ὰν οῖ τε θεοὶ θέλωσι καὶ ὑμεῖς βούλησθε. ὥσπερ γὰρ ἐν τοῖς σώμασιν, τέως μὲν ὰν ἐρρωμένος ἡ τις, οὐδὲν ἐπαισθάνεται, ἐπὰν δὲ ἀρρώστημά τι συμβῆ, πάντα κινεῖται, κὰν ῥῆγμα κὰν στρέμμα κὰνάλλο τι τῶν ὑπαρχόντων σαθρὸν ἡ, οὕτω καὶ τῶν πόλεων καὶ τῶν τυράννων, ἔως μὲν ὰν ἔξω πολεμῶσιν, ἀφανῆ τὰ κακὰ τοῖς πολλοῖς ἐστίν, ἐπειδὰν δὲ ὁμορος πόλεμος συμπλακῆ, πάντα ἐποίσσεν ἔκδηλα.

- 1. τὸ κατορθοῦν—δείξειν—συμπλακῆ: Parse, giving chief parts.
- 2. Give the meaning and derivation of: τιθασεύουσι—ἐκνενευρισμένοι
  —θεωρικά—παρρησία—ἀνεχαίτισε.
- 3. έκατομβαιὼν, μεταγειτνιὼν, βοηδρομιών: Give the corresponding time of the year in our calendar.
- 'Αμφίπολις, 'Ολυνθος, Ποτίδαια: Describe their geographical position.

Accentuate all the cases of:  $\pi o i \varsigma$ ,  $\dot{a} \nu \eta \rho$ . What parts of verbs are paroxytone?

C. Translate into accentuated Greek: In private they were so modest that if any of you knows the house of Aristides, he sees that it is not a whit more imposing than his neighbour's.—And you must not be ignorant of this either, that a decree is worthless if it be not accompanied by willingness to do one's duty.—What the feelings of the majority of the Macedonians are towards Philip, we might conclude without difficulty from the following facts.

### THIRD AND FOURTH YEARS.

PLATO: APOLOGIA SOCRATIS. AESCHYLUS: PROMETHEUS VINCTUS.

TIME : THREE HOURS.

- A. Translate: Ap. Soc., Ch. 27 to ὅπόθεν ἐκτίσω.
- α. πέπεισμαι ἐγὰ ἐκὰν εἶναι μηδένα ἀδικεῖν ἀνθρώπων. Show the connection of the words.
- 2. ἀντὶ τούτου ἔλωμαι ἀν εὖ οἰδ΄ ὅτι κακῶν ὅντων, τούτου τιμησάμενος; Two different constructions are combined in this sentence. Account for the cases.
  - 3. Classify the subjunctives used in the extract.
  - 4. Write explanatory notes on the following:
    - α. εἴ τις οἰος τ' εἰη παιδεύειν ἀνθρώπους, ὥσπερ Γοργίας τε ὁ Λεοντῖνος,
    - b. 'Αναξαγόρου οἶει κατηγορεῖν, ὡ φίλε Μέλητε.
    - καὶ δὴ καὶ οἱ νέοι ταῦτα παρ' ἐμοῦ μανθάνουσιν, ἃ ἔξεστι ἐνίοτε
       ...δραχμῆς ἐκ τῆς ὁρχήστρας πριαμένοις Σωκράτους καταγελᾶν.
  - 5. Explain the use of different moods with  $\pi \rho i \nu$ .
- 6. Turn the following sentence into oratio obliqua after έφη and ξλεξε: ὡς δὲ καλῶς ἔξει τὰ ὑμέτερα, ἢν φίλοι γένησθε, ἐμοὶ μελήσει.
- 7. Write in Greek: In his absence he was condemned.—They hindered me from coming. I perceive that nobody knows.—What did you mean by going away?—He devised the following plan of escape.
  - B. Translate: Prom. Vinct. vss. 447-466.
- In vs. 461 Hermann writes μνήμης for μνήμην θ'. Why is the change made? Translate the passage accordingly.
- 2. ζεύγλαισι δουλεύοντα σώμασιν  $\theta$ ,  $\delta\pi\omega\varsigma$  κ.  $\tau$ .  $\lambda$ . Translate and explain the passage with a different punctuation and reading.
  - 3. Write grammatical or explanatory notes on the following:
    - α. οί προσκυνοῦντες τὴν 'Αδράστειαν σόφοι.
    - b. έμοι δε ελασσον Ζηνός ή μηδεν μέλει.
    - c. τέρας τ' ἄπιστον, αὶ προσήγοροι δρύες.
- 4. What geographical difficulties are found in the description of Io's wanderings?
- 5. Parse, giving chief parts of verbs and nom. and gen. of nouns δνειράτων, ἦσαν, κατώρυχες, (in B); also, θακῶν, ἐπτοημένοι, πλαθείην.
- Point out and account for the differences in the component parts of an Athenian play.
  - 7. A brief sketch of Aeschylus.
- 8. Account for the name of the metre of the extract. Scan the last three lines, marking the licences only.

- C. 1. Through what stages do sciences pass? Illustrate by that of Language.
- 2. What is meant by a "Family" of Languages? What are the tests of relationship? Do all European languages belong to the same family? Name the Romance languages. The belief that one of them is the parent of the rest can be easily disproved.

# (Additional for First and Second Class)

TIME : ONE HOUR.

Translate into accentuated Greek: When King Richardus was warring against Solimanes to see if he could recover the sacred monument which the Musulamii had captured, Solimanes was displeased to find that even a small body of his enemies could rout a much larger force of his own soldiers. So he took counsel and devised a plan which he hoped would strike terror into his foes. For one day when Richardus with a handful of men was gallantly driving before him many Musulamii, Solimanes sent a messenger with a beautiful horse and bade him present the horse to the king, and say: "O King, Solimanes, although he is your foe, yet is grieved that so brave a man as you are should go on foot in the midst of so many foes." The king accepted the gift, but suspecting some trick, he set a soldier on the horse. The moment the horse felt somebody on his back, he sped straight to Solimanes, who found to his disgust that the king had been too crafty to be caught in this trap.

# (Additional for First Class.)

TIME: ONE HOUR.

Translate this "unseen" passage:

Οὕτω δή, ὡ Σώκρατες, καὶ διὰ ταῦτα οἴ τε ἄλλοι καὶ οἰ ᾿Αθηναῖοι, ὅταν μὲν περὶ ἀρετῆς τεκτονικῆς ἡ λόγος ἡ ἄλλης τινὸς δημιουργικῆς, ὁλίγοις οἴονται μετεῖναι συμβουλῆς, καὶ ἐάν τις ἐκτὸς ὡν τῶν ὀλίγων συμβουλεύη, οὐκ ἀνέχονται, ὡς σὰ φής· εἰκότως, ὡς ἐγώ φηιι· ὅταν δὲ εἰς συμβουλὴν πολιτικῆς ἀρετῆς ἴωσιν, ἡν δεῖ διὰ δικαιοσύνης πᾶσαν ἱέναι καὶ σωφροσύνης, εἰκότως ἄπαντος ἀνδρὸς ἀνέχονται, ὡς παντὶ προσῆκον ταῦτης γε μετέχειν τῆς ἀρετῆς, ἡ μὴ εἶναι πόλεις. αὕτη, ὡ Σώκρατες, τούτου αἰτία.

"Ίνα δὲ μὴ οἰη ἀπατᾶσθαι, ὡς τῷ ὁντι ἡγοῦνται πάντες ἀνθρωποι πάντα ἀνδρα μετέχειν δικαιοσύνης τε καὶ τῆς ἀλλης πολιτικῆς ἀρετῆς, τόδε αὐ λαβὲ τεκμήριον. 'Εν γὰρ ταῖς ἀλλαις ἀρεταῖς, ὡσπερ σὰ λέγεις, ἐάν τις φῆ ἀγαθὸς αὐλητὴς εἶναι ἡ ἄλλην ἡντινοῦν τέχνην, ἡν μή ἐστιν, ἡ καταγελῶσιν ἡ χαλεπαίνουσι, καὶ οἱ οἰκεῖοι προσιόντες νουθετοῦσιν ὡς μαινόμενον ἐν δὲ δικαιοσύνη καὶ ἐν τῆ ἀλλη πολιτικῆ ἀρετῆ, ἐάν τινα καὶ εἰδῶσιν, ὅτι ἀδικός ἐστιν, ἐὰν οὐτος αὐτὸς καθ αὐτοῦ τάληθῆ λέγη ἐναντίον πολλῶν, δ ἐκεῖ σωφροσύνην ἡγοῦντο εἶναι, τάληθῆ λέγειν, ἐνταῦθα μανίαν, καί φασι πάντας δεῖν φάναι εἶναι δικαίους, ἐάν τε ὧσιν ἐάν τε μἡ, ἡ μαίνεσθαι τὸν μὴ προσποιούμενον δικαιοσύνην, ὡς ἀναγκαῖον οὐδένα ὅντιν' οὐχὶ ἀμωσγέπως μετέχειν αὐτῆς, ἡ μὴ εἶναι ἐν ἀνθρώποις.

#### LATIN.

Examiner.....John Johnson, M. A.

### FIRST YEAR.

I.

CICERO: PRO MILONE. VIRGIL: AENEID, BOOK VI.

TIME: THREE HOURS.

#### A. Translate:

Etenim si id non negat ex quo nihil petit nisi ut ignoscatur, dubitaret id fateri ex quo etiam praemia laudis essent petenda? nisi vero gratius putat esse vobis, sui se capitis quam vestri defensorem fuisse; quum praesertim in ea confessione, si grati esse velletis, honores adsequeretur amplissimos. Si factum vobis non probaretur, (quamquam qui poterat salus sua cuiquam non probari?) sed tamen si minus fortissimi viri virtus civibus grata cecidisset, magno animo constantique cederet ex ingrata civitate: nam quid esset ingratius quam laetari ceteros, lugere eum solum propter quem ceteri laetarentur? Quamquam hoc animo semper omnes fuimus in patriae proditoribus opprimendis, ut, quoniam nostra futura esset gloria, periculum quoque et invidiam nostram putaremus: nam quae mihi ipsi tribuenda laus esset, quum tantum in consulatu meo pro vobis ac liberis vestris ausus essem, si id quod conabar sine maximis dimicationibus meis me esse ausurum arbitrarer?

- 1. "Si id non negat, ex quo petit nisi ut ignoscatur, dubitaret id fateri, ex quo . . . essent petenda?" Explain id . . id. Why are different moods used in the relative clauses? Parse ignoscatur.
  - 2. Classify the uses of the subjunctive in A.
  - 3. Write explanatory notes on the following extracts:
    - a. Quod te aiunt . . . tamquam Palladium sustulisse.
- b. Declarant hujus ambusti tribuni plebis illae intermortuae conciones. . . .
- c. Itaque illud Cassianum, Cui Bono Fuerit, in his personis valeat. (Translate also.)
- d. Cujus jam pridem testimonio Clodius eadem hora Interamnae fuerat et Romae.
- 4. Give some account of the court that tried Milo, the argument for the defence, the verdict and its results. Write in Latin in full, and in English, the date of the speech.

### B. Translate:

Di, talia Graiis
instaurate, pio si poenas ore reposco.
sed te qui virum casus, age fare vicissim,
attulerint. pelagine venis erroribus actus,
an monitu divom? an quae te Fortuna fatigat,
ut tristes sine sole domos, loca turbida, adires?'
hac vice sermonum roseis Aurora quadrigis
iam medium aetherio cursu traiecerat axem;
et fors omne datum traherent per talia tempus;
sed comes admonuit, breviterque adfata Sibylla est:
538
'nox ruit Aenea; nos flendo ducimus horas.

hic locus est, partes ubi se via findit in ambas: dextera quae Ditis magni sub moenia tendit, hac iter Elysium nobis: at laeva malorum exercet poenas, et ad impia Tartara mittit.' Deiphobus contra: 'ne saevi, magna sacerdos; discedam, explebo numerum, reddarque tenebris.'

- 1. Parse: adires, vice, quadrigis, cursu, flendo, hac, Elysium.
- 2. Write lines 537-8 as a conditional sentence in prose.
- 3. Write a note on ambas, on ne saevi, and on any part of the extract the meaning of which may not have been made sufficiently clear by your translation.
  - 4. Explain:
    - (a) Euboicis Cumarum oris.
    - (b) Amphrysia vates.
    - (c) Marpesia cautes.
    - (d) Maestamque Eriphylen.
    - (e) Sedet, aeternumque sedebit, Infelix Theseus.
- 5. Give the derivation of the names: Cocytus, Acheron, Styx, Phlegethon.
  - 6. Scan the five lines beginning at 531.
  - 7. Mantua me genuit, Calabri rapuere, tenet nunc Parthenope; cecini pascua, rura, duces.

Translate and explain.

#### II.

- 1. Decline: vice, aere, requies; and mention any peculiarity in the declension of: jecur, caelum, canities, faces, jugera, fauces.
- 2. Give the chief parts of: ordior, orior, stridit, gaudet, verrunt, sepulti, ferit, satus.
- 3. What is meant by the Predicative Dative? What compound verbs are construed with a Dative?
  - 4. The different ways of expressing a Prohibition in Latin.
- 5. "Having heard this he set out at once," may be rendered into Latin in several ways.
  - 6. Distinguish between the uses of seu-seu, utrum-an, aut-aut.
- C. Translate into Latin: This man sold his country for gold, he made and remade laws for a price. Occasionally they made a month a day or two longer. Let us love our country, obey the senate, and consult the interest of the good. We will set out for home on the 27th of April. Expressing gratitude is one thing, feeling it another, showing it another still. If he were to say he did not believe I was telling the truth he would be speaking more clearly than kindly. April 10th, 1888.

# (Additional for First or Second Class.)

CICERO: PRO LEGE MANILIA.

TIME : THREE HOURS.

### A. Translate:

Atque ut inde oratio mea proficiscatur, unde haec omnis causa ducitur, bellum grave et periculosum vestris vectigalibus ac sociis a duobus potentissimis regibus infertur, Mithridate et Tigrane, quorum alter relictus, alter lacessitus occasionem sibi ad occupandam Asiam oblatam esse arbitrantur. Equitibus Romanis, honestissimis viris, adferuntur ex Asia cotidie litterae, quorum magnae res aguntur in vestris vectigalibus exercendis occupatae; qui ad me pro necessitudine, quae mihi est cum illo ordine, causam rei publicae periculaque rerum suarum detulerunt: Bithyniae, quae nunc vestra provincia est, vicos exustos esse complures; regnum Ariobarzanis, quod finitimum est vestris vectigalibus, totum esse in hostium potestate; L. Lucullum magnis rebus gestis ab eo bello discedere; huic qui successerit non satis esse paratum ad tantum bellum administrandum; unum ab omnibus sociis et civibus ad id bellum imperatorem deposci atque expeti, eundem hunc unum ab hostibus metui, praeterea neminem.

1. "Vectigalibus" seems to have different meanings in this passage: parse accordingly.

2. "Ad occupandam Asiam:" write a geographical and historical note on Asiam.

3. "Equitibus Romanis . . . quorum magnae res aguntur in vestris vectigalibue exercendis occupatae." Explain this statement.

4. "Bithyniae," "regnum Ariobarzanis:" show by a rough map the geographical position of these with respect to neighbouring countries.

B. 1. Etenim primum illud parvi refert, nos publicanis amissis vectigalia postea victoria recuperare: Translate this and point out the difficulty contained in it. Parse parvi and refert.

2. Quem socium defendiștis? Cui praesidio classibus vestris fuistis? Translate and account for the cases in the last sentence.

3. Atque hace qua celeritate gesta sint, quamquam videtis, tamen a me in dicendo praetereunda non sunt. Translate and point out an unusual construction.

4. Quem enim imperatorem possumus ullo in numero putare cujus in exercitu centuriatus veneant atque venierint: Translate this. Account for mood of *veneant*. Conjugate it and give its derivation.

5. Et iis temporibus non pudebat magistratus populi Romani in hunc locum escendere, cum eum nobis majores nostri exuviis nauticis et classium spoliis ornatum reliquissent. Translate and write notes on iis temporibus, hunc locum and exuviis nauticis. Decline exuviis.

6. Quid vero tam inauditum esse quam equitem Romanum triumphare? How else might the latter clause have been expressed? Enumerate the conditions usually necessary for a *triumphus*.

C. 1. What classes of nouns form the acc. in -im and abl. in -i?

2. What nouns of the 4th decl. are feminine?

3. Illustrate by examples the different constructions used with each of the following: dignus, consulo, impero, dubito.

- 4. What dissyllabic perfects have a short penult?
- 5. What words have final e long?
- 6. Arrange the following sentences as hexameters:
  - (a) Tum vero in omnes curas animo diducitur.
  - (b) Et saevus Oriens equis anhelis adflavit.
  - (c) Qui unus cunctando rem nobis restituit.

#### SECOND YEAR.

HORACE: ODES, BOOK I. LIVY: BOOK I.

TIME: THREE HOURS.

#### A. Translate:

Sic te diva potens Cypri, sic fratres Helenae, lucida sidera, ventorumque regat pater obstrictis aliis praeter läpyga, navis, quae tibi creditum debes Virgilium, finibus Atticis reddas incolumem, precor, et serves animae dimidium meae. illi robur et aes triplex circa pectus erat, qui fragilem truci commisit pelago ratem primus nec timuit praecipitem Africum decertantem Aquilonibus nec tristes Hyadas nec rabiem Noti, quo non arbiter Hadriae major, tollere seu ponere volt freta. quem Mortis timuit gradum, qui siccis oculis monstra natantia, qui vidit mare turgidum et infames scopulos Acroceraunia? nequiquam deus abscidit prudens Oceano dissociabili terras, si tamen impiae non tangenda rates transiliuut vada. audax omnia perpeti gens humana ruit per vetitum nefas. audax Iäpeti genus ignem fraude mala gentibus intulit.

- 1. (a.) Explain the connection of the clauses in the first sentence, and the meaning of Sic. (b.) Who are described in the first three lines?
- 2. Note unusual (a) meanings of words and (b) constructions in the extract, and classify the latter.
- 3. "Finibus Atticis": Is this phrase to be taken literally? Write a note on the occasion referred to. Virgil is mentioned elsewhere in the First Book.
  - 4. Write notes explaining the epithets in these phrases:
    - (a.) Nec saevam Pelopis domum.
    - (b.) Aut Epheson, bimarisve Corinthi.
    - (c.) Hastas et calami spicula Cnosii.
    - (d.) Intonsum, pueri, dicite Cynthium.

- 5. Give the derivation of: Hyades, viperinus, Thaliarche, letum, lorica, Diespiter; (b) Decline (marking gender): Iapyga, pelago, aes, Acroceraunia; (c) Parse and conjugate: deterget, reseces, recinet, morantem, sēvēris, quaties.
  - 6. Scan and name the lines quoted in question 4.
  - 7. A short sketch of Horace.
  - B. Translate:

Ita Numitori Albana re permissa Romulum Remumque cupido cepit in iis locis, ubi expositi ubique educati erant, urbis condendae. Et supererat multitudo Albanorum Latinorumque; ad id pastores quoque accesserant, qui omnes facile spem facerent parvam Albam, parvum Lavinium prae ea urbe, quae conderetur, fore. Intervenit deinde his cogitationibus avitum malum, regni cupido, atque inde foedum certamen coortum a satis miti principio. Quoniam gemini essent, nec aetatis verecundia discrimen facere posset, ut dii, quorum tutelae ea loca essent, auguriis legerent, qui nomen novae urbi daret, qui conditam imperio regeret, Palatium Romulus, Remus Aventinum ad inaugurandum templa capiunt.

- 1. Illustrate different uses of the subjunctive mood from this extract.
- 2. (a.) "ad id": What is the antecedent? (b.) "quorum tute-lae ea loca essent": account for the oblique cases.
  - a. pergit ad proximam speluncam, si forte eo vestigia ferrent.
     Explain the connection between these two clauses.
    - Haec templi est origo, quod primum omnium Romae sacratum est. Relate the circumstances.
    - c. partes eas tribus appellavit, ut ego arbitror a———. Complete the sentence. What is referred to?
    - d. Ancum nobilem una imagine Numae esse. Explain this.
    - e. Id ubi dixit, hastam emisit. Express this in the form of "indefinite frequency in the past" as used (a) by Livy, (b) by Cicero.
- 4. Turn the following into oratio obliqua: Tuum est, inquit, Servi, si vir es, regnum, non eorum qui alienis manibus pessimum facinus fecere. Erige te deosque duces sequere. Nunc te illa caelestis excitet flamma, nunc expergiscere vere . . . Qui sis, non unde natus sis, reputa: si tua re subita consilia torpent, at tu mea sequere.
- 5. What period was covered by Livy's History? How much of it is extant? What references does he make in this book to previous writers? What may have been the origin of the so-called historical details in the First Book?
- C. Translate into Latin: When Tarquin wished to double the centuries of Knights, Attus Navius, a famous augur at that time, opposed the plan, declaring that no change of that kind could be made without the consent of the gods. Tarquin, who appears to have thought little of the knowledge of the augurs, commanded him to inform him whether what he had in his mind at that time could be done. Attus, after taking the auguries, answered that it could. Then Tarquin giving him a whetstone and a razor, ordered him to cut the former with the latter, which the augur did to the amazement of all. Then the king gave up his intention and determined henceforth to do nothing without first consulting the gods by augury.

# (Additional for First and Second Class.)

HORACE: ODES, BOOKS II, III.

TIME: THREE HOURS.

### A. Translate:

Nullus argento color est avaris Abdito terris, inimice lamnae Crispe Sallusti, nisi temperato Splendeat usu. Vivet extento Proculeius aevo Notus in fratres animi paterni; Illum aget penna metuente solvi Fama superstes. Latius regnes avidum domando Spiritum, quam si Libyam remotis Gadibus jungas et uterque Poenus Serviat uni. Crescit indulgens sibi dirus hydrops, Nec sitim pellit nisi causa morbi Fugerit venis et aquosus albo Corpore languor. Redditum Cyri solio Phraaten Dissidens plebi numero beatorum Eximit Virtus, populumque falsis Dedocet uti Vocibus, regnum et diadema tutum Deferens uni propriamque laurum Quisquis ingentes oculo inretorto Spectat acervos.

- 1. The meaning of the first stanza is obscurely expressed. Explain it.
  - 2. "Notus in fratres animi paterni": Explain the construction.
  - 3. quam si Libyam remotis Gadibus jungas et uterque Poenus Serviat uni,

Write an explanatory and geographical note.

- 4. "Redditum Cyri solio Phraaten." Explain the meaning.
- 5. Note any unusual form or syntax in this ode.

#### B. Translate:

Quantum distet ab Inacho Codrus pro patria non timidus mori Narras, et genus Aeaci Et pugnata sacro bella sub Ilio: Quo Chium pretio cadum Mercemur, quis aquam temperet ignibus, Quo praebente domum et quota Pelignis caream frigoribus, taces. Da lunae propere novae, Da noctis mediae, da, puer, auguris Murenae: tribus aut novem Miscentur cyathis pocula commodis. Qui Musas amat impares Ternos ter cyathos attonitus petet Vates; tres prohibet supra Rixarum metuens tangere Gratia Nudis juncta sororibns.

Insanire juvat: cur Berecyntiae
Cessant flamina tibiae?
Cur pendet tacita fistula cum lyra?
Parcentes ego dexteras
Odi: sparge rosas; audiat invidus
Dementem strepitum Lycus
Et vicina seni non habilis Lyco.

 "Quantum distet ab Inacho Codrus pro patria non timidus mori Narras et genus Aeaci."

What connection is there between these lines and the theme of the ode? Write notes on "Inacho," "Codrus," "genus Aeaci."

- 2. Write "quis aquam temperet ignibus" in the direct form.
- 3. "tribus aut novem Miscentur cyathis pocula commodis."

  Different explanations of these lines are given. Parse miscentur.
- 4. Explain any unusual constructions in this ode.
- C. 1. Give the usual forms of the following Graecisms:
  - a. Perrupit Acheronta Herculeus labor.
  - b. Injecta monstris Terra dolet suis.
  - c. Tuque, testudo, resonare septem callida nervis.
  - d. Cum famulis operum solutis.
  - e. (Testa) digna moveri bono die.
  - 2. What contemporary events are mentioned in these books?
  - 3. Quote some short moral sayings from the odes.
- 4. Arrange the following phrases as Lyric verses, and name the system to which each belongs:
  - a. Defende decus Dauniae Camoenae.
  - b. Honestum utili praetulit judex.
  - c. Et miseras urbes inimicat.

### THIRD AND FOURTH YEARS.

TACITUS: AGRICOLA. PLAUTUS: CAPTIVI, JUVENAL: SATIRES, III., X., XIII.

TIME: THREE HOURS.

#### A. Translate:

Tu vero felix, Agricola, non vitae tantum claritate sed etiam opportunitate mortis. ut perhibent qui interfuerunt novissimis sermonibus tuis, constans et libens fatum excepisti, tamquam pro virili portione innocentiam principi donares. sed mihi filiaeque eius praeter acerbitatem parentis erepti auget maestitiam, quod adsidere valetudini, fovere deficientem, satiari voltu complexuque non contigit. excepissemus certe mandata vocesque, quas penitus animo figeremus. noster hic dolor, nostrum volnus; nobis tam longae absentiae condicione ante quadriennium amissus est. omnia sine dubio, optime parentum, adsidente amantissima uxore superfuere honori tuo: paucioribus tamen lacrimis comploratus es, et novissima in luce desideravere aliquid oculi tui.

- 1. Quam (sc. Britanniam) unius proelii fortuna veteri patientiae restituit, tenentibus arma plerisque quos conscientia defectionis et propius ex legato timor agitabat, ne quamquam egregius cetera arroganter in deditos, et, ut suae quoque injuriae ultor, durius consuleret. Translate this passage. What difference will the readings ni for 'ne' and cujusque for 'quoque' make?
  - 2. Note peculiarities of syntax in the following:
  - a. Peritus obsequi eruditusque utilia honestis miscere.
- Eoque initio erecta provincia, et quibus bellum volentibus erat, probare exemplum.
- c. Quos quod tandem invenistis, non restiterunt, sed deprehensi sunt.
  - 3. How may the date of the Agricola be fixed?

#### B. Translate:

TYND.—Vidi ego multa sæpe picta, quæ Acherunti fierent Cruciamenta: verum enimvero nulla adæque est Acheruns, Atque ubi ego fui in lapicidinis. Illic ibi demum est

> Ubi labore lassitudo omni'st exigunda ex corpore. Nam, ubi illo adveni; quasi patriciis pueris aut monedulæ, Aut anates, aut coturnices dantur, quicum lusitent; 1003 Itidem hæc mihi advenienti upupa, qui me delectem, data est...

> Sed herus eccum ante ostium, et herus alter eccum ex Alide Rediit!

HEG. — Salve, exoptate gnate mi !

TYND.—

Hem! quid! "gnate mi!"

Attat, scio cur te patrem assimules esse, et me filium;

Quia mihi, item ut parentes, lucis das tuendæ copiam.

PHIL.—Salve, Tyndare.

TYND. — Et tu quojus causa hanc ærumnam exigo.

PHIL.—At nunc liber in divitias faxo venies.

- 1. Note any unusual forms or constructions in this passage.
- 2. Translate the following sentences and state in what connection they are used:
  - a. Vel extra portam Trigeminam ad saccum ilicet.
  - b. Profundum vendis tu quidem, haud fundum mihi.
  - c. Nunc ego inter sacrum saxumque sto.
  - d. Nuculeum amisi, retinui pignori putamina.
- 3. Give the meaning and derivation of :—deruncinatus, cĕdŏ, autumes, libella, scrofipasci, assulatim, sursum, furcifer.
  - 4. Scan vss. 1003, 1004, 1005, which are written in trochaic metre.

### C. Translate:

Quis tumidum guttur miratur in Alpibus? ant quis In Meroe crasso majorem infante mamillam? Cærula quis stupuit Germani lumina, flavam Cæsariem et madido torquentem cornua cirro? Nempe quod hæe illis natura est omnibus una. Ad subitas Thracum volucres nubemque sonoram Pygmæus parvis currit bellator in armis:
Mox impar hosti raptusque per aera curvis
Unguibus a sæva fertur grue. Si videas hoc
Gentibus in nostris, risu quatiare: sed illic,
Quanquam eadem assidue spectentur prelia, ridet
Nemo, ubi tota cohors pede non est altior uno.

- 1. Write notes on "Meroe" and "Pygmaeus bellator." In what connection is the passage used?
  - 2. Translate and explain the following:
    - a. Dum superest Lachesi quod torqueat.
    - b. Transi Gymnasia atque audi facinus majoris abollae.
    - c. Quisquis adhuc uno partam colit asse Minervam.
    - d. Ridenda poemata malo,
      Quam te conspicuae, divina Philippica, famae,
      Volveris a prima quae proxima.
  - 3. What is known of Juvenal?

D. Translate into Latin: Leonidas was one of the first that fell, and around his body the battle raged fiercer than ever. The Persians made the greatest efforts to gain possession of it; but four times they were driven back by the Greeks with great slaughter. At length, thinned in numbers and exhausted by fatigue and wounds, this noble band retired within the pass and seated themselves on a hillock behind the wall. Meanwhile the detachment which had been sent across the mountains began to enter the pass from the south. The Thebans seized the opportunity of begging quarter, proclaiming that they had been forced to fight against their will. Their lives were spared, and the detachment marched on through the pass. The surviving heroes were now surrounded on every side, overwhelmed with a shower of missiles and killed to a man.—SMITH'S History of Greece.

# (Additional for First Class.)

TIME: Two Hours.

Translate these "unseen" passages:

a. Vetus illi (sc. Neroni) cupido erat curriculo quadrigarum insistere, nec minus fœdum studium cithara ludicrum in modum canere, curru certare et equis regium et antiquis ducibus factitatum memorabat, idque vatum laudibus celebre et deorum honori datum. Enimvero cantus Apollini sacros, talique ornatu astare non modo Græcis in urbibus, sed Romana apud templa, numen præcipuum et præscium. Nec jam sisti poterat, cum Senecæ ac Burro visum, ne utraque pervinceret, alterum concedere. Clausumque valle Vaticana spatium in quo equos regeret, haud promisco spectaculo. Mox ultro vocari populus Romanus, laudibusque extollere, ut est vulgus cupiens voluptatum et, si eodem princeps trahat, lætum. Ceterum evulgatus pudor non satietatem, ut rebantur, sed incitamentum attulit: ratusque dedecus molliri, si plures fœdâsset, nobilium familiarum posteros, egestate venales, in scenam deduxit; quos fato perfunctos ne nominatim tradam, majoribus eorum tribuendum puto. Nam et ejus flagitium est, qui pecuniam ob delicta potius dedit quam ne delinquerent. Notos quoque equites Romanos operas arenæ promittere subegit donis ingentibus, nisi quod merces ab eo qui jubere potest vim necessitatis affert.

Quidquid agunt homines, votum, timor, ira, voluptas, Gaudia, discursus, nostri est farrago libelli. Et quando uberior vitiorum copia? quando Major avaritiæ patuit sinus? alea quando Hos animos? Neque enim loculis comitantibus itur Ad casum tabulæ, posita sed luditur arca. Prælia quanta illic dispensatore videbis Armigero? Simplexne furor sestertia centum Perdere et horrenti tunicam non reddere servo? Quis totidem erexit villas, quis fercula septem Secreto cœnavit avus? Nunc sportula primo Limine parva sedet, turbæ rapienda togatæ. Ille tamen faciem prius inspicit et trepidat, ne Suppositus venias ac falso nomine poscas. Agnitus accipies; jubet a præcone vocari Ipsos Trojugenas; nam vexant limen et ipsi Nobiscum. "Da prætori, da deinde tribuno. Sed libertinus prior est." "Prior," inquit, "ego adsum: Cur timeam, dubitemve locum defendere, quamvis Natus ad Euphraten, molles quod in aure fenestræ Arguerint, licet ipse negem? sed quinque tabernæ Quadringenta parant. Quid confert purpura major Optandum, si Laurenti custodit in agro Conductas Corvinus oves? ego possideo plus Pallante et Licinis."

#### FRENCH.

Examiner..... Professor J. Liechti, M. A.

### FIRST FRENCH CLASS.

TIME: THREE HOURS.

### I.

A. Translate:—Guizot: Guillaume le Conquérant.—Son extrême jeunesse l'avait empêché jusqu'alors de prendre une part active au gouvernement; mais le spectacle de la guerre et des désordres civils n'avait pas été perdu pour lui: il s'indignait de voir son autorité ainsi combattue et méprisée par d'insolents vassaux, et il méditait dans son âme de s'en venger un jour avec éclat. Sa passion pour le commandement s'irrita par les souffrances qu'elle eut à subir: il était énergique, il devint dur; il voulait être obéi, il fut despotique; sa réserve naturelle se changea en dissimulation, "et considérant combien les Normands avaient, dans les transports de leur fureur, dévasté tout le pays, il puise dans son coeur encore enfant toute la vigueur d'un homme, pour leur apprendre à cesser tout acte d'indiscipline."

Impatient de mettre à profit les leçons qu'il avait reçues de tant d'alternatives de succès et de revers, le jeune duc voulut à quinze ans revêtir les armes de chevalier, et se soumit aux formalités d'usage, qui donnaient "le droit de servir et de commander dans tous les grades."
L'investiture de la chevalerie n'avait pas lieu en Normandie de la même façon que dans les autres parties de la France; les Normands avaient adopté pour cette cérémonie des formes plus militaires et moins religieuses.

- 1. De s'en venger un jour. Parse the words in italics. Write, in full, the object represented by en, and show by short exs. that en may be used as preposition and as partit. art. Translate: We revenge ourselves on him. Revenge thyself (affirm. and neg.). They (f.) have revenged themselves (affirm., neg. and interrog.). Do I revenge myself?
- 2. Il voulait être obei. Write this sent. in the active voice. Translate the following sentences, and fully explain why they differ in their construction from the English: "We are taught Ancient and Modern languages. This thing is not thought of. His new book is well spoken of. Mention the few exceptions of this class of verbs.
- 3. Le jeune duc se soumit aux formalités. Parse se soumit, and give its principal parts. Give a prenomial form to the indirect object. Write the fem. of le jeune duc, and put the whole sent. in the interrog. form, commenting on any peculiarity in its construction.
- Translate: Molière; Le Bourgeois Gentilhomme. Le Maître de Musique.—Il n'y a rien assurément qui chatouille davantage que les applaudissements que vous dites; mais cet encens ne fait pas vivre. Des louanges toutes pures ne mettent point un homme à son aise; il y faut mêler du solide; et la meilleure façon de louer, c'est de louer avec les mains. C'est un homme, à la vérité, dont les lumières sont petites, qui parle à tort et à travers de toutes choses, et n'applaudit qu'à contresens; mais son argent redresse les jugements de son esprit; il a du discernement dans sa bourse; ses louanges sont monnayées; et ce bourgeois ignorant nous vaut mieux, comme vous voyez, que le grand seigneur éclairé qui nous a introduits ici. Le Maître à Danser.—Il y a quelque chose de vrai dans ce que vous dites; mais je trouve que vous appuyez un peu trop sur l'argent et l'intérêt est quelque chose de si bas, qu'il ne faut jamais qu'un honnête homme montre pour lui de l'attachement. Le M. de M. -Vous recevez fort bien pourtant l'argent que notre homme vous donne. Le M. à D.-Assurément; mais je n'en fais pas tout mon bonheur; et je voudrais qu'avec son bien il eût encore quelque bon goût des choses. Le M. de M.-Je le voudrais aussi; et c'est à quoi nous travaillons tous deux autant que nous pou-
- 1. Qui chatouille davantage que . . . What word in Modern French would you substitute for davantage, and what use would you make of the latter word; write an ex. In what manner do you effect comparison in French. Illustrate fully. An exceptional form is used in sents. such as: There are more than three million inhabitants in London. Explain.
- 2. Il y faut mêler du solide. A verb, depending on an impers. verb, is usually in the subjunct. Make the application in the clause italicized. Write the same clause, substituting a personal verb for il faut. Write down the Imperf. Subjunct. of mêler.
- 3. Des louanges toutes pures. Parse toutes, and account for its inflection. Establish the difference between: Toute ville; toute la ville; toutes les villes. Translate: Give me the whole of it. I have seen them (m.) all. All I have is yours. All that [which] is good.

#### II.

- 1. Which is the logical order of words in a French sentence? Illustrate with an ex. Mention at least two cases, in which the usual order is departed from.
- 2. Distinguish between: un grand homme and un homme grand; un pauvre poète and un poète pauvre. Write an illustration of the agreemt, of adjs, with two or more nouns of different gender.

- 3. D'insolents vassaux. Mention the adjs. that are used without the prepos. de before a plural noun; and write the fem. of: blanc, grec, trompeur, pécheur, malin, gentil, protecteur, hébreu, las, faux, doux. Turn into French: The better a man is, the more he is esteemed.
- 4. Illustrate by short exs. the difference between: qui est-ce que? and qu'est-ce qui? What may be rendered by que and by quoi; write an ex. with each. Translate: I know what you are thinking of. I do not hear what he is speaking of. What a sad news. What precautions!
- 5. In how many ways in French can you render whose, denoting possession. Give instances. Explain the difference in the position of the noun after whose in the sents.: The author, whose work we are reading (lisons), and The author, whose work is in the library.
- 6. Write short exs. in illustration of the various ways in which the English passive is expressed in French.
- 7. Je ne saurais vous le dire. Une lettre à écrire. Pas encore. Elle n'a que vingt ans. Ne le faites pas de peur qu'on ne vous voie. Translate, and note peculiarities in the construction of these clauses.
- 8. Equivalent forms in French of "it is" are: il fait; il y a. Exemplify their use.
- 9. Idiomatic use of aller, venir and devoir. Your friend has just arrived from abroad. Are you going to write to him? I ought to have written to him a week ago. He is to come to-night. You ought to do it yourself.
- 10. Parse, and give principal parts of: perdu, devint, obei, reques (A); chatouille, mettent, voyez, eût. (B).

Translate into French:—(a). Have you answered his questions? Yes, I have answered them. Do you remember the affair? I remember it. How old is he? He is 21 years old. What subjects do you wish us to study? I wish (cond.) he were here. You speak English, do you not? Always do your best. However rich he may be, whatever may be his ambition, he will not succeed. French and English are spoken almost everywhere. The 31st of March, 1888 (letters).

(b). William received at the same time, in his father's palace, a more careful and literate education than that of most princes of his age: at the age of seven he already could read and explain Cæsar's Commentaries; he was deeply interested in his studies, and during his whole life and in the midst of affairs very foreign to literature, he preserved so much taste for the culture of the mind, that he was wont to say, "an ignorant king was but a crowned ass."

#### SECOND FRENCH CLASS.

TIME: THREE HOURS.

I.

A. Traduisez .- Racine : "Athalie."

Athalie.—Sa vue a ranimé mes esprits abattus;

Mais lorsque, revenant de mon trouble funeste,
J'admirais sa douceur, son air noble et modeste,
J'ai senti tout à coup un homicide acier
Que le traître en mon sein a plongé tout entier.
De tant d'objets divers le bizarre assemblage
Peut-être du hasard vous paraît un ouvrage:
Moi-même quelque temps, honteuse de ma peur,
Je l'ai pris pour l'effet d'une sombre vapeur.

Mais de ce souvenir mon âme possédée
A deux fois en dormant revu la même idée;
Deux fois mes tristes yeux se sont vu retracer
Ce même enfant toujours tout prêt à me percer
Lasse enfin des horreurs dont j'étais poursuivie,
J'allais prier Baal de veiller sur ma vie,
Et chercher du repos au pied des ses autels:
Que ne peut la frayeur sur l'esprit des mortels!
Dans le temple des Juifs un instinct m'a poussée,
Et d'appaiser leur Dieu j'ai conçu la pensée;
J'ai cru que des présents calmeraient son courroux,
Que ce Dieu, quel qu'il soit, en deviendrait plus doux.

- 1. Se sont vu retracer. Expliquez la règle sur l'accord du part. passé suivi d'un infinitif, et traduisez: Cette dame a du talent; Je l'ai vue peindre. Ces fleurs, je les ai laissé cueillir. You have heard them (f.) sing, and have seen them applauded. They (f.) have been allowed (laisser) to go out. I have allowed them to be burned. Nommez la seule exception à cette règle, et citez un exemple.
- 2. Nommez les part. passés qui restent invariables précédant le substantif, variables lorsqu'ils le suivent. Ils se sont vus et se sont parlés. Expliquez la faute qui se trouve dans cette phrase.
- 3. Quel qu'il soit. Les mots whatever et however se traduisent tantôt par quel que, tantôt par quelque... que? Citez des exemples à l'appui. Ecrivez en français: Whoever you may be and whatever you may do, is of little importance to me.
- Traduisez: Molière: L'Avare. Elise. Ah! Valère, ne bougez d'ici, je vous prie, et songez seulement à vous bien mettre dans l'esprit de mon père. Valère. Vous voyez comme je m'y prends, et les adroites complaisances qu'il m'a fallu mettre en usage pour m'introduire à son service; sous quel masque de sympathie et de rapports de sentiments je me déguise pour lui plaire, et quel personnage je joue tous les jours avec lui, afin d'acquérir sa tendresse. J'y fais des progrès admirables; et j'èprouve que, pour gagner les hommes, il n'est point de meilleure voie que de se parer, à leurs yeux, de leurs inclinations, que de donner dans leurs maximes, encenser leurs défauts, et applaudire ce qu'ils font . . . Valère.—Vous avez raison : voilà qui décide tout; cela s'entend. Il y a des gens qui pourraient vous dire qu'en de telles occasions, l'inclination d'une fille est une chose, sans doute, où l'on doit avoir de l'égard; et que cette grande inégalité d'âge, d'humeur et de sentiments, rend un mariage sujet à des accidents très-Harpagon.—Sans dot! Valère. -Ah! il n'y a pas de fâcheux. réplique à cela; on le sait bien. Qui diantre peut aller là contre? Ce n'est pas qu'il n'y ait quantité de pères qui aimeraient mieux ménager la satisfaction de leurs filles, que l'argent qu'ils pourraient donner; qui ne les voudraient point sacrifier à l'intérêt, et chercheraient plus que toute autre chose, à mettre dans un mariage cette douce conformité qui, sans cesse, y maintient l'honneur, la tranquilité et la joie; et que . .
- 1. Ne bougez d'ici. Commentez sur la construction de cette phrase. Expliquez l'ellipse de la negation pas dans les phrases suivtes.: Why don't you do it? Take care you are not deceived. The child neither talks nor walks. It is over two months since he met with this accident.
- 2. Comme je m'y prends. Il n'est point de meilleure voie. Donner dans leurs maximes. Ce n'est pas qu'il n'y ait quantité de pères. Aimeraient mieux. Qui peut aller là contre? Exprimez d'une autre manière le sens de chacune de ces phrases idiomatiques.

3. Toute autre chose. Expliquez l'accord du mot tout, adjectif et adverbe, dans les phrases suivs.: All Germany was quite alarmed as well as quite surprised at the news. A few days ago all the trees were covered with sleet (gresil). The people were all eyes and ears. I am not quite sure of it. However (tout) handsome those young ladies are, they have but few admirers.

#### II.

- 1. Montrez par quelques exs. que, dans certains cas, il y a inversion du sujet. Quand le complément indirect doit-il précéder le complément direct? Prenez pour ex.: We prefer riches, which are, alas! the source of our misfortunes, to a happy mediocity.
- 2. Pourquoi, les phrases suivantes, sont-elles incorrectes?:—Tôt ou tard on regrette le temps perdu, et de n'avoir pas mis à profit tous les instants de sa jeunesse. La charité chrétienne nous commande d'aimer et de prêter assistance à notre prochain. C'est à vous, o mon bienfaiteur! à qui je dois tout mon bonheur. Il est affable et bienveillant pour tous.
- 3. Traduisez: Le mieux est l'ennemi du bien. Il n'en est rien. Il fauts'en prendre à eux. C'en est fait de lui. Je n'y serai pour personne. Il y va de leur vie. There are certain rumours about town. They changed their mind. It is their turn to speak. Have you heard from him? My head aches.
- 4. Faites l'analyse et nommez les temps primitifs des verbes :— paraît, peut, deviendrait (A); bougez, prends, font, sait, ait.
  - 5. Racontez, en prose française, le songe d'Athalie.

Traduisez en Français:—Edward received the Duke of Normandy as if he had been his own son; he gave him arms, horses, dogs and birds of the chase. William, thus favoured by the Saxon king, entertained the hope of succeeding him some day on the throne of England. Edward had no children, and William might flatter himself of being chosen by him as his heir. But he did not give any cue to the current of his thoughts, and did not speak to Edward about it, believing things would turn out as he wished.

# (Additional for a First Class.)

Traduisez :- Molière : Le Misanthrope.

Alceste. — Quelques titres honteux qu'en tous lieux on lui donne,
Son misérable honneur ne voit pour lui personne:
Nommez-le fourbe, infâme, et scélérat maudit,
Toute le monde en convient, et nul n'y contredit,
Cependant sa grimace est partout bien venue;
On l'accueille, on lui rit, partout il s'insinue;
Et s'il est, par la brigue, un rang à disputer,
Sur le plus honnête homme, on le voit l'emporter.
Têtebleu! ce me sont de mortelles blessures,
De voir qu'avec le vice on garde des mesures;
Et parfois il me prend des mouvements soudains
De fuir dans un désert l'approche des humains.

Célimène.—Et ne faut-il pas bien que Monsieur contredise?

A la commune voix veut-on qu'il se réduise,
Et qu'il ne fasse pas éclater en tous lieux
L'esprit contrariant qu'il a reçu des cieux?
Le sentiment d'autrui n'est jamais pour lui plaire:
Il prend toujours en main l'opinion contraire,
Et penserait paraître un homme du commun,
Si l'on voyait qu'il fût de l'avis de quelqu'un.
L'honneur de contredire a pour lui tant de charmes,
Qu'il prend contre lui-même assez souvent les armes.

- 1. Vers. 4.—Mettez (en entier) les compléments représentés par les prons. en et y. Vers. 8.—Substituez, au gallicisme l'emporter sur, une expression non-idiomatique. Vers. 8.—Ecrivez ce vers. employant un verbe personnel au lieu de faut-il.
- 2. Expliquez l'inversion du sujet au vers 14., et mettez la phrase en construction régulière.
  - 3. Ecrivez un sommaire (en français) du I. Acte du Misanthrope.

### THIRD FRENCH CLASS.

TIME: THREE HOURS.

T \*

A. Traduisez: - Molière: Les femmes savantes.

Chrysale (à Belise). - Nos pères sur ce point, étaient gens bien sensés, Qui disaient qu'une femme en sait toujours assez, Quand la capacité de son esprit se hausse A connaître un pourpoint d'avec un haut-de-chausse. Les leurs ne lisaient point, mais elles vivaient bien: Leurs ménages étaient tout leur docte entretien; Et leurs livres, un dé, un fil et des aiguilles, Dont elles travaillaient au trousseau de leurs filles. Les femmes d'à présent sont bien loin de ces moeurs: Elles veulent écrire et devenir auteurs. Nulle science n'est pour elles trop profonde, Et céans beaucoup plus qu'en aucun lieu du monde; Les secrets les plus hauts s'y laissent concevoir, Et l'on sait tout chez moi, hors ce qu'il faut savoir. On y sait comme vont lune, étoile polaire, Venus, Saturne et Mars, dont je n'ai point affaire; Et dans ce vain savoir qu'on va chercher si loin, On ne sait comme va mon pot, dont j'ai besoin. Mes gens à la science aspirent pour vous plaire, Et tous ne font rien moins que ce qu'ils ont à faire.

- 1. Elles veulent écrire. L'infinitif s'emploie comme sujet et comme attribut. Citez deux exs. à l'appui. The prisoner admits he has committed the crime. He suffered himself to be imposed upon by his friend. They have been seen acting like madmen. The art of writing. A house to be let. Que faire? Rendez raison de la différence de construction dans ces phrases.
- 2. Manquer de, manquer à ; prier de, prier à ; tarder de, tarder à. Ces verbes, selon qu'ils sont employés avec de ou avec à, changent de

<sup>\*</sup> All sentences, both French and English, given in illustration of rules, must be translated into English and French respectively,

signification. Ecrivez des exs. Expliquez la nuance entre: Il vint me parler, il vint pour me parler; il venait de me parler; il vint à me parler; il en vint à me parler.

- 3. Faites les portraits (en français) de Chrysale et de Bélise.
- B. Traduisez: Corneille: Horace.

Horace. - Si vous n'êtes Romain, soyez digne de l'être ; Et si vous m'égalez, faites-le mieux paraître. La Solide vertu dont je fais vanité N'admet point de faiblesse avec sa fermeté; Et c'est mal de l'honneur entrer dans la carrière Que dès le premier pas regarder en arrière. Notre malheur est grand; il est au plus haut point. Je l'envisage entier, mais je n'en frémis point: Contre qui que ce soit que mon pays m'emploie, J'accepte aveuglément cette gloire avec joie; Celle de recevoir de tels commandements Doit étouffer en nous tous autres sentiments. Qui, près de le servir, considère autre chose, A faire ce qu'il doit lâchement se dispose ; Ce droit saint et sacré rompt tout autre lien. Rome a choisi mon bras, je n'examine rien: Avec une allégresse aussi pleine et sincère Que j'épousai la soeur, je combattrai le frère; Et, pour trancher enfin ces discours superflus, Albe vous a nommé, je ne vous connais plus.

- 1. Si vous n'êtes Romain. Pour quelles raisons la particule ne se trouve-t-elle dans les phrases: God forbid! I fear it will rain. She has not spoken to a living soul. The thing is more difficult than you think. Quand peut-on employer les mots pas, point et plus sans ne. Citez des exs. à l'appui.
- 2. Que dès le premier pas. Expliquez l'emploi idiomatique de que dans les phrases: Quel mot magique que celui de patrie. C'est déraisonner que de parler ainsi. Qu'il fasse le moindre excès, il est malade. Come near that I may speak to you. Why don't you draw near? Scarcely had he arrived, when a great tumult arose.
- 3. Il travaille pour s'enrichir. Il le dit pour que vous le sachiez. Traduisez ces phrases, et dites pourquoi l'infinitif ne peut s'employer dans la seconde. Substituez le subjonctif à l'infinit. s'enrichir au premier ex.

# II.

- 1. Do your duty, lest you be punished. Rendez lest (a) par de peur que, (b) par de peur de, et expliquez la différence dans la construct. de ces phrases. Montrez par quelques exs. l'emploi du subjonct. dans les propositions subordonnées.
- 2. Expliquez la nuance entre les phrases: Je crains qu'il ne révississe et Je crains qu'il ne révississe pas. Tout grand écrivain qu'est N. et Quelque grand écrivain que soit N. Croyez-vous qu'il pleut? et Croyez-vous qu'il pleuve?
- 3. Le subjonctif ne peut être employé dans une proposition principale, que quand elle est optative, dubitative ou conditionnelle. Donnez des exs. à l'appui. Nommez les verbes qui demandent le subjonct. avec ne.
- 4. Qu'est-ce que le vers Alexandrin? Pourquoi les vers suivants sont-ils défectueux : J'y suis encore malgré tes infidélités. Je vois que

l'injustice vous irrite en secret. Et trois fois le jour a chassé la nuit obscure. Corrigez-les.

5. Formez quatre vers Alexandrins du passage suivant: Je ne suis point un docteur révéré, mon frère; et le savoir n'est pas tout retiré chez-moi. Mais, pour toute ma science, je sais, en un mot, faire la différence du faux avec le vrai.

Traduire en Anglais: (a). In Sparta one accustomed the children very early to walk in the dark, in order that they should contract the habit of fearing nothing; not to give way to bad temper; to walk barefoot; to sleep on a hard couch, and often on the ground; to wear the same garment in winter and in summer, in order to harden themselves against cold and heat.

(b). Macbeth.—Is this a dagger which I see before me, the handle toward my hand? Come let me clutch thee: I have thee not, and yet I see thee still. Art thou not, fatal vision, sensible to feeling as to sight? or art thou but a dagger of the mind; a false creation, proceeding from the heat-oppressed brain? I see thee yet, in form as palpable as this which now I draw.

# (Additional for a First Class.)

Traduisez :- Molière : Le Tartufe.

Cléante. — Ces gens qui, par une âme à l'intérêt soumise, Font de dévotion métier et marchandise, Et veulent acheter crédit et dignités A prix de faux clins d'yeux et d'élans affectés; Ces gens, dis-je, qu'on voit, d'une ardeur non commune, Par le chemin du ciel courir à leur fortune ; Qui, brûlants et priants, demandent chaque jour, Et prêchent la retraite au milieu de la cour; Qui savent ajuster leur zèle avec leurs vices, Sont prompts, vindicatifs, sans foi, pleins d'artifices, Et, pour perdre quelqu'un, couvrent insolemment De l'intérêt du ciel leur fier ressentiment; D'autant plus dangereux dans leur âpre colère, Qu'ils prennent contre nous des armes qu'on révère, Et que leur passion, dont on leur sais bon gré, Veut nous assassiner avec un fer sacré: De ce faux caractère on en voit trop paraître. Mais les dévots de coeur sont aisés à connaître. Notre siècle, mon frère, en expose à nos yeux Qui peuvent nous servir d'exemples glorieux.

- 1. Ces gens, dis-je, qu'on voit, Expliquez la position de je. Quand l'inversion du complément peut-elle avoir lieu? donnez quelques exs. à l'appui.
- 2. Donnez les dérivés français et leurs genres de : alnus, ulna, liber, libra, somnus, summa, palmus, palma. Rendez compte de la différence (en genre et en signification) entre: le critique et la critique; le poste et la poste; le souris et la souris; le tour et la tour.
  - 3. Faites un épitome (en prose française) du I. Acte du Tartufe.

### GERMAN.

Examiner ..... Professor J. Liechti, M. A.

# FIRST GERMAN CLASS.

TIME : THREE HOURS.

# I\*

A. Translate:—Jean Paul: Die Neujahrsnacht eines Unglücklichen.
—Mitten in dem Kampf floss plötzlich die Musik für das Neujahr vom Thurme hernieder wie ferner Kirchengesang. Er wurde sanfter bewegt-er schauete um den Horizont herum und über die weite Erde, und er dachte an seine Jugendfreunde, die nun, glücklicher und besser als er, Lehrer der Erde, Väter glücklicher Kinder und gesegnete Menschen waren, und er sagte: "O, ich könnte auch wie ihr diese erste Nacht mit trockenen Augen verschlummern, wenn ich gewollt hätte.— Ach, ich könnte glücklich sein, ihr theuern Eltern, wenn ich euere Neujahrswünsche und Lehren erfüllt hätte!" Im fieberhaften Erinnern an seine Jünglingszeit kam es ihm vor, als richte sich die Larve mit seinen Zügen im Todtenhause auf—endlich wurde sie durch den Aberglauben, der in der Neujahrsnacht Geister und Zukunft erblickt, zu einem lebendigen Jüngling.

1. Hernieder; (erfüllt) hätte; (es ihm) vor. Parse the words in italics, and give reasons for their position. In the sent.: Ach, ich könnte... hätte, invert the order of the clauses, adopting contraction, where possible, and noticing changes that may occur in the construction.

2. Explain the modus operandi of contracting sents. like the folfollowing: endlich wurde sie . . . Jüngling (A.). Give the derivation of Jüngling, and mention its femin. Decline in the 4 cases sing. and plur.: Mit trockenen Augen.

3. Which is the logical order of words in a German sentence? In illustration compose a principal clause, with a verb in a compd. tense, adverbials of time and place, the neg. nicht, and a noun object. Show, by means of the same clause, the various ways in which the regul. construction may be departed from. Indicate the difference between: Der Kranke wurde von dem Arzte nicht, geheilt. Der Kranke wurde nicht von dem Arzte geheilt. Nicht der Kranke wurde von dem Arzte geheilt.

B. Schiller!:- "Wilhelm Tell."

Stauffacher.—Der wackern Männer kenn' ich viele dort Und angesehen grosse Herrenleute, Die mir geheim sind und gar wohl vertraut. (Er steht auf.)

Frau, welchen Sturm gefährlicher Gedanken Weckst du mir in der stillen Brust! Mein Innerstes Kehrst du ans Licht des Tages mir entgegen, Und, was ich mir zu denken still verbot, Du sprichst's mit leichter Zunge kecklich aus. — Hast du auch wohl bedacht, was du mir räthst? Die wilde Zwietracht und den Klang der Waffen Rufst du in dieses friedgewohnte Thal.—

<sup>\*</sup> Answer only two questions of A, B and C respectively; and six of Part II.

Wir wagten es, ein schwaches Volk der Hirten, In Kampf zu gehen mit dem Herrn der Welt? Der gute Schein nur ist's, worauf sie warten, Um loszulassen auf dies arme Land Die wilden Horden ihrer Kriegesmacht, Darin zu schalten mit des Siegers Rechten, Und unterm Schein gerechter Züchtigung Die alten Freiheitsbriefe zu vertilgen.

- 1. Kenn' ich viele dort. Parse henn' and mention all the words of the same class. How do you translate know in the follows. sents.: I know Schiller's works. He does not know when he is to leave. Do you know German? These people don't know how to write. Know good from evil.
- 2. Explain the terms: Herrenleute; friedgewohnte; Zwietracht; Freiheitsbriefe. What peculiar use is made of Leute? Give instances. Distinguish between: Landleute and Landsleute, and write the singul. of each, Write down the plural of: Tod; Liebe; Rath, Lob, Ehre, Vorsicht.
- 3. Worauf; darin (B.). How are such words formed? Mention other analogous forms, Illustrate their use by short exs. Haben sie sie nicht gesehen? Why is such a construction inadmissible? Translate and correct the ex.
- C. Schiller:—"Wallenstein's Absetzung."—Stumm, wie die Zugänge zu ihm, war auch sein Umgang. Finster, verschlossen, anergründlich, sparte er seine Worte mehr als seine Geschenke, und das Wenige, was er sprach, wurde mit einem widrigen Tone ausgestossen. Er lachte niemals, und den Verführungen der Sinne widerstand die Kälte seines Bluts. Immer geschäftig und von grossen Entwürfen bewegt, entsagte er allen leeren Zerstreuungen, wodurch Andere das kostbare Leben vergeuden. Einen durch ganz Europa ausgebreiteten Briefwechsel besorgte er selbst; die meisten Aufsätze schrieb er mit eigener Hand nieder, um der Verschwiegenheit Anderer so wenig als möglich anzuvertrauen. Ein furchtbarer, zurückschreckender Ernst lag auf seiner Stirn, und nur das Uebermaass seiner Belohnungen konnte die zitternde Schaar seiner Diener festhalten.—Der blendende Schimmer seines Privatlebens verrieth den stolzen Schwung seiner Entwürfe, und verschwenderisch wie ein Monarch schien er die Güter seiner Hoffnung schon unter seine gewissen Besitzungen zu zählen.
- 1. Stumm wie die Zugänge zu ihm. Parse wie and ihm. Decline the prons. er, sie (plur.), es. Translate the followg. sent. and account for the alternate use of als and wie before the nouns: Sokrates lehrte als Mann wie ein Engel, und starb als Greis wie ein Verbrecher. In what case does the adj. remain uninflected: give an ex.
- 2. Ein furchtbarer, zurückschreckender Ernst. What changes would occur in this sent., were you to use furchtbar instead of furchtbarer? Translate: We have bought a newly painted house but not a new, painted house. Ein gut englisch sprechender Student. Ein guter englisch sprechender Student. Viel besuchte Länder. Viele besuchte Länder.
- 3. Die meisten Aufsätze. Parse die meisten. Write the comparative and superlative of: gut, wenig, bald, gern. What form does the superlative assume, if the adj. is predicative after sein? write an ex.

# II.

1. Parse and classify the following verbs; floss, dachte, erfüllt (A); sind, spricht's loszulassen (B); widerstand, anzuvertrauen, konnte (C).

2. Bestehen, entstehen, erstehen, verstehen. Distinguish between these verbs. What meaning do the italicised prefixes impart to the verb, and how do they influence the p. part.; a certain termination exhibits the same peculiarity. Give instances.

3. What distinction is to be made between: widersprechen and wieder sprechen. Write the 1st pers. s. each, of the present and the perfect indicat. of these verbs. Uebersetzen admits of two interpretations accordingly as it is sep. or insep. Illustrate and write the respective p.parts.

4. In what particulars does the *English Passive* differ from the *German Passive?* Give illustrations. What form, and why, do sents. like the following assume?: The matter has not been thought of (an.). Certain persons are very much talked of (über).

5. Er wird seine Pflicht nicht haben thun wollen. Account for the two infinitives. Shylock would not take any money from Antonio; he would not take anything but his pound of flesh. Translate, and tate why nicht cannot be used in these clauses.

6. Illustrate the use of: der beste; am besten; auf's beste; am allerbesten; höchst; freundlichst.

7. What class of words do you form with the suffixes: haft, isch, ung, chen. Give exs. When is an object hölzern, holzicht, or holzig; when is a person achtbar, when achtsam.

8. Distinguish, giving exs., between: dann and denn; wann and wenn. When does the protasis in a conditional sent. adopt the inverted order? Translate as an ex.: If he had the means, he would go to Italy.

Translate into German:—(a). He who gives little and comforts, does more than he who gives much and reproaches. Schiller was born in 1759 (letters); he was only 18 years old when he wrote his first drama. Shakspeare's works have been translated by Schlegel. What are you thinking of? I am thinking of going to Europe. There are people who cannot write. All I have is yours. A few days ago.

(b). Tales from Shakspeare:—The king being tired with his journey, went early to bed. He had been unusually pleased with his reception (Empfang m.), and had made presents before he retired to his principal officers: and among the rest, had sent a rich diamond to lady Macbeth, greeting her by the name of his most kind hostess.

### SECOND GERMAN CLASS.

TIME: THREE HOURS.

I.\*

A. Schiller :-- Maria Stuart.

Maria (nach einigem Stillschweigen)

Ich höre staunend die Gewalt des Mundes, Der mir von je so unheilbringend war— Wie werd' ich mich, ein ungelehrtes Weib, Mit so kunstfert'gem Redner messen können!— Wohl! Wären diese Lords, wie Ihr sie schildert, Verstummen müsst' ich, hoffnungslos verloren Wär' meine Sache, sprächen sie mich schuldig.

<sup>\*</sup> Those, taking the Additional, may omit passage (a) for translation into German

Doch diese Namen, die Ihr preisend nennt, Die mich durch ihr Gewicht zermalmen sollen, Mylord, ganz andre Rollen seh' ich sie In den Geschichten dieses Landes spielen. Ich sehe diesen hohen Adel Englands, Des Reiches majestätischen Senat, Gleich Sklaven des Serails den Sultanslaunen Heinrichs des Achten, meines Grossohms, schmeicheln-Ich sehe dieses edle Oberhaus, Gleich feil mit den erkäuflichen Gemeinen, Gesetze prägen und verrufen, Ehen Auflösen, binden, wie der Mächtige Gebietet, Englands Fürstentöchter heute Enterben, mit dem Bastardnamen schänden Und morgen sie zu Königinnen krönen.

- 1. Write the first two lines (A) in a contracted form. When is the contraction of substantive clauses possible? when impossible? Explain, and take for exs.: It is a man's duty that he acknowledge (bekennen) his faults. I am glad that you are coming. He is sorry that he has to offend (kränken) some of his friends. 1 have been told that he had left the country.
- Wohl! The following words are used as expletives: ja, doch, wohl, noch, gar, schon. Write a few short sents. in illustration, and give the original meaning of these words.
- 3. Seh' ich sie . . . spielen. What English verbal form does the infinitive, dependent on sehen and similar verbs, represent? Mention other verbs of the same class. Why is the infinit not used in sents. like: Then came the Queen riding in her gilt carriage of state.
  - B. Goethe: "Hermann und Dorothea."—Die Bürger.

Aber der Vater fuhr in der Art fort, wie er begonnen: Was im Menschen nicht ist, kommt auch nicht aus ihm, und

Wird mich des herzlichsten Wunsches Erfüllung jemahls erfreuen, Dass der Sohn dem Vater nicht gleich sei, sondern ein bessrer. Denn was wäre das Haus, was wäre die Stadt, wenn nicht immer Jeder gedächte mit Lust zu erhalten und zu erneuen, Und zu verbessern auch, wie die Zeit uns lehrt und das Ausland! Soll doch nicht als ein Pilz der Mensch dem Boden entwachsen, Und verfaulen geschwind an dem Platze, der ihn erzeugt hat, Keine Spur nachlassend von seiner lebendigen Wirkung! Sieht man am Hause doch gleich so deutlich, wess Sinnes der Herr sei,

Wie man, das Städtchen betretend, die Obrigkeiten beurtheilt. Denn wo die Thürme verfallen und Mauern, wo in den Gräben Unrath sich häufet, und Unrath auf allen Gassen herumliegt, Wo der Stein aus der Fuge sich rückt und nicht wieder gesetzt wird, Wo der Balken verfault und das Haus vergeblieh die neue Unterstützung erwartet: der Ort ist übel regieret.

Denn wo nicht immer von oben die Ordnung und Reinlichkeit

wirket, Da gewöhnet sich leicht der Bürger zu schmutzigem Saumsal, Wie der Bettler sich auch an lumpige Kleider gewöhnet.

Sondern ein bessrer. Explain the ellipsis in this clause. Distinguish carefully, with ample illustrations, between the three conjuncts. answering to the English but, and give their original meaning. Mention a few terms analogous to sondern.

- 2. Denn was ware das Haus. Contrast then and denn; when and wenn; as and als; where and wer. Show by an ex. that the dependent relative clause may precede the principal clause in a certain case only.
- 3. Keine Spur nachlassend. What character must the German Present Part. assume to be used both predicatively and attributively? Write an ex. The English participle active must be paraphrased in German; take for exs.: God, having created the world in six days, rested on the seventh. Wishing to learn the truth, he wrote to the minister. He saved his country by sacrificing his life. Judging from his appearance he must be ill.

#### II.

- 1. Classify, and give the principal parts of: gedächte, entwachsen, nachlasesnd, herumliegt (B); zerriss, anerkannt, zugestanden, überlässen (Additional).
- 2. Idiomatic expressions:—Immer guter Dinge sein. Den Brodkorb höher hängen. Sie kann es nicht über das Herz bringen. Sich eines Bessern besinnen. Er hört das Gras wachsen. Er hat zu leben. In den Tag hinein leben. Sie gehen sich zu Leibe.
- 3. He said he had never been in Europe, but he would go there this summer. This lady is said to be very clever. I do not think of following his advice. Translate these sents., and give reasons for difference in construction.
- 4. An adverbial use is made of some genitive forms; take for exs.: We usually study in the evening and take a walk in the afternoon. The adject. werth may govern two cases? Explain and translate: It is worth your while to examine these works. This article is worth one dollar.
- 5. Write a summary (in German) of the parts read of "Hermann und Dorothea."

Translate:—(a) Macbeth, who stood listening to them, tried to say, "Amen," when the fellow said, "God bless us, but, though he had most need of a blessing, the word stuck in his throat, and he could not pronounce it. Again he thought he heard a voice which cried, "Sleep no more: Macbeth doth murder sleep, the innocent sleep, that nourishes life."

(b) "Hermann and Dorothea" is a poem full of life, character and beauty; simple in its materials, astonishingly simple in its handling (Behandlung); written in obvious imitation of Homer, and yet preserving throughout the most modern colour and sentiment. Of all idylls it is the most idyllic; of all poems, describing life and country people, it is the most truthful.

# (Additional for a First Class.)

Translate :-- Schiller : "Geschichte des dreissigjährigen Kriegs."

Deutschland zerriss auf diesem Reichstage zu Augsburg in zwei Religionen und in zwei politische Parteien; jetzt erst zerriss es, weil die Trennung jetzt erst gesetzlich war. Bis hierher waren die Protestanten als Rebellen angesehen worden; jetzt beschloss man, sie als Brüder zu behandeln, nicht als ob man sie dafür anerkannt h tte, sondern weil man dazu genöthigt war. Die Augsburgische Confession durfte sich von jetzt an neben den katholischen Glauben stellen, doch nur als eine geduldete Nachbarin, mit einstweilen schwesterlichen Rechten. Jedem weltlichen Reichsstande ward das Recht zugestanden,

die Religion, zu der er sich bekannte, auf seinem Grund und Boden zur herrschenden und einzigen zu machen, und die entgegengesetzte der freien Ausübung zu berauben; jedem Unterthan vergönnt, das Land zu verlassen, wo seine Religion unterdrückt war. Jetzt zum ersten Mal erfreute sich also die Lehre Luthers einer positiven Sanction, und wenn sie auch in Bayern oder in Oesterreich im Staube lag, so konnte sie sich damit trösten, dass sie in Sachsen und in Thüringen thronte.

1. Sie als Brüder zu behandeln. How would the substitution of vie for als affect the meaning of this clause? Illustrate the use of these particles of comparison. Translate: He is more to be pitied than any one else. It is as cold as in midwinter. Give your reasons for using either vie or als in these sents.

2. Compose a compound sent. containing a principal clause with a dependent substantive clause (subject or object), and an adjective or an adverbial clause, or both. There is another way in which compd. sents. may be formed. Write a short ex.

# THIRD GERMAN CLASS.

TIME: THREE HOURS.

T.

A. Uebersetzen:—Lessing's "Nathan der Weise." Nathan.—Stolz! und nichts als Stolz! Der Topf

Von Eisen will mit einer silbern Zange Gern aus der Gluth gehoben sein, um selbst Ein Topf von Silber sich zu dünken.—Pah! Und was es schadet, fragst du? was es schadet? Was hilft es? dürft' ich nur hinwieder fragen.— Denn dein "Sich Gott um so viel näher fühlen" Ist Unsinn oder Gotteslästerung .-Allein es schadet; ja, es schadet allerdings. -Kommt! hört mir zu.-Nicht wahr? dem Wesen, das Dich rettete,—es sei ein Engel oder Ein Mensch,—dem möchtet ihr, und du besonders, Gern wieder viele grosse Dienste thun?-Nicht wahr?—Nun, einem Engel, was für Dienste, Für grosse Dienste könnt ihr dem wohl thun? Ihr könnt ihm danken; zu ihm seufzen, beten; Könnt in Entzückung über ihn zerschmelzen; Könnt an dem Tage seiner Feier fasten, Almosen spenden.—Alles nichts.—Denn mich Deucht immer, dass ihr selbst und euer Nächster Hierbei weit mehr gewinnt, als er .-

1. Gotteslüsterung Wie ist das "s" zu erk "ären bei solchen femininis wie: Frauen-s-person, Freundschaft-s-bund etc; was nennt man Afterformen? Zeigt in einigen Beispielen den Reichthum der deutschen Sprache hinsichtlich der Wortbildung.

2. Fragst du? Wie ist die Inversion in einfachen und zusammengestezten Sätzen anzuwenden. Hebt verschiedene Satztheile in den folg. Sätzen hervor: Fidelity is beautiful nevertheless. That will never happen. Narrow the road that leads to life. Guilt is the greatest of evils. He had thrown down sword and shield. This affair, successful beyond all expectation. I have done what I could (do).

3. Wir sind wohlbehalten in Berlin angekommen und haben wir uns bereits ein wenig umgesehen. Warum ist die Inversion nach dem kopulativen und fehlerhaft, und wann kann dieselbe gestattet werden? Führt ein Beispiel an. B. Goethe's "Egmont." Margarete von Parma.

Regentin.—Ihr stellt das Jagen ab, ich werd heut nicht reiten. Sagt Machiavellen, er soll zu mir kommen. (Alle gehen ab).-Der Gedanke an diese schrecklichen Begebenheiten lässt mir keine Ruhe! Nichts kann mich ergetzen, nichts mich zerstreuen; immer sind diese Bilder, diese Sorgen vor mir. Nun wird der König sagen, dies seien die Folgen meiner Nachsicht; und doch sagt mir mein Gewissen jeden Augenblick, das Räthlichste, das Beste gethan zu haben. Sollte ich früher mit dem Sturme des Grimmes diese Flammen anfachen und umhertreiben? Ich hoffte sie zu umstellen, sie in sich selbst zu verschütten. Ja, was ich mir selbst sage, was ich wohl weiss, entschuldigt mich vor mir selbst; aber wie wird es mein Bruder aufnehmen? Denn ist es zu leugnen? Der Uebermuth der fremden Lehrer hat sich täglich erhöht; sie haben unser Heiligthum gelästert, die stumpfen Sinne des Pöbels zerrüttet und den Schwindelgeist unter sie gebannt. Unreine Geister haben sich unter die Aufrührer gemischt, und schreckliche Thaten sind geschehen, die zu denken schauderhaft ist und die ich nun einzeln nach Hofe zu berichten habe, schnell und einzeln, damit der König nicht denke, man wolle noch mehr verheimlichen.

- 1. Seien; komme; wolle. Warum stehen diese Zeitwörter im Konjunktiv des Präsens? In den folgenden Sätzen steht bald der Konjunctiv des Imperfectums, bald der Indikativ?: He anxiously asked whether you were not hurt. Pray God that He may enlighten you. I like a way that resembles mine. I cannot tell yet what I will do. There was none but (der nicht) believed everything he said.
- 2. Zu verschütten. Der Infinitiv steht bald mit bald ohne zu. Erklärt den Gebrauch desselben durch einige Beispiele. Wann ist der Infinitiv mit zu als verkürzter Adverbialsatz anzusehen?
- 3. Der Gedanke an. Was für Präpositionen regieren die Zeitwörter: sich freuen, warten, spotten, sich erbarmen, sich fürchten, glauben. Schreibt die aus diesen Zeitwörtern zu bildenden Substantive nieder.

### II.

- 1. Auf welche Weise werden die folgenden Perioden klassificirt; ist ihre Form bei-oder unterordnend; sind es einfache oder zusammengesetzte Perioden?:—
- (a). Keiner ist bestellt sich selbst zu richten; denn selten schätzt er recht, was er gethan, und was er thut, weiss er fast nie zu richten.

  —Goethe.
- (b) Nachdem die Empörung zum wilden Ausbruch gekommen war, und eine kluge Geschmeidigkeit allein dem nahen Bürgerkriege wehren konnte; fiehl die Statthalterschaft einem Manne zu, dem zu diesem Posten gerade diese einzige Tugend fehlte.—Schiller.
- (c). Das Böse, das der Mann, der mündige, dem Manne zufügt, das, ich will es glauben, vergibt sich und versöhnt sich schwer; (denn) der Mann will seinen Hass, und keine Zeit verändert den Entschluss, den er wohlbesonnen fasst; doch eures Haders Ursprung steigt hinauf in unverständiger Kindheit frühe Zeit.—Schiller.
  - 2. Themata zu einem kurzen deutschen Aufsatz :-
    - (1). Die Erfindung des Telephons.
    - (2). Vaterlandsliebe.
    - (3). Die Anwendung des Reichthums.

Ueberetzen ins Deutsche:—Two names shine forth before all others in the history of the heroes and martyrs of the Netherlands: Lamoral, Count of Egmont, and William, Prince of Orange. Both were Teutons, but the one was a genuine Fleming, and the other by birth a German. Both were popular favourites, but the one was cherished by the people with the affection of an indulgent father, and to the other they looked up with filial veneration. Upon both nature had lavished her choicest gifts, but upon the one she bestowed those brilliant attributes which dazzle the eye, and upon the other the moral qualities which excite the admiration of mature minds.

# (Additional for a First Class.)

Ubersetzen :- Schiller's "Wallenstein's Tod."

Wallenstein: —Und was ist dein Beginnen? Hast du dir's Auch redlich selbst bekannt? Du willst die Macht, Die ruhig, sicher thronende erschüttern, Die in verjährt geheiligtem Besitz, In der Gewohnheit festgegründet ruht, Die an der Völker frommen Kinderglauben Mit tausend zähen Wurzeln sich befestigt. Das wird kein Kampf der Kraft sein mit der Kraft; Den fürcht' ich nicht. Mit jedem Gegner wag' ich's, Den kann ich sehen, und ins Auge fassen, Der, selbst voll Muth, auch mir den Muth entflammt. Ein unsichtbarer Feind ist's, den ich fürchte, Der in der Menschenbrust mir widersteht, Durch feige Furcht allein mir fürchterlich-Nicht, was lebendig, kraftvoll sich verkündigt, Ist das gefährlich Furchtbare. Das ganz Gemeine ist's, das ewig Gestrige, Was immer war, und immer wiederkehrt, Und morgen gilt, weil's heute hat gegolten! Denn aus Gemeinem ist der Mensch gemacht, Und die Gewohnheit nennt er seine Amme. Weh dem, der an den würdig alten Hausrath Ihm rührt, das theure Erbstück seiner Ahnen'.

1. Wodurch haben sich Lessing und Schiller namentlich ausgezeichnet, und welches sind ihre hauptsächlichsten Werke?

#### ENGLISH LANGUAGE AND LITERATURE.

#### FIRST YEAR.

TIME: THREE HOURS.

(The whole paper will be regarded as a test of the candidate's ability to handle the language, and marks assigned accordingly.)

1. Express the substance of the following accurately in simple prose:

The march begins in military state And nations on his eye suspended wait; Stern famine guards the solitary coast, And winter barricades the realms of frost, He comes: nor want nor cold his course delay;—Hide, blushing Glory, hide Pultowa's day:
The vanquished hero leaves his broken bands,
And shows his misery in distant lands;
Condemned a needy supplicant to wait,
While ladies interpose and slaves debate.

# 2. Explain what is italicized in the following:

- (a). In his sinister hand, instead of ball. He placed a mighty mug of potent ale.
- (b). When Jubal struck the corded shell.
- (c). As from the power of sacred lays

  The spheres began to move.
- (d). On shining altars of Japan they raise the silver lamp.
- (e). And wits take lodging in the sound of Bow.
- (f). Not half so fixed the Trojan could remain, While Anna begg'd and Dido rag'd in vain.
- (g). What gave great Villiers to the assassin's knife, And fixed disease on Harley's closing life.
- (h). Or where Campania's plain forsaken lies.

# 3. Name the poem from which each of the following is taken, and indicate the context in each case:

- (a). What time could spare, from steel receives its date, And monuments, like men, submit to fate.
- (b). O then how blind to all that truth requires, Who think it freedom when a part aspires.
- (c). Far from the madding crowd's ignoble strife.
- (d). Deign on the passing world to turn thine eyes, And pause awhile from learning to be wise.
- (e). Thoughtless as monarch oaks that shade the plain And, spread in solemn state, supinely reign.
- (f). For praise too dearly lov'd, or warmly sought, Enfeebles all internal strength of thought.

# 4. Define accurately each of the following italicised words, as employed in the passage quoted:

And lambent dulness played about his face. With singing, laughing, ogling, and all that. She smiled to see the doughty hero slain. The diapason closing full in man. The laureat tribe in venal verse relate. Yet should thy soul indulge the gen'rous heat. Now give the hautboys breath. To point a moral and adorn a tale. Its former strength was but plethoric ill. Near yonder copse, where once a garden smiled. How do thy potions, with insidious joy diffuse their pleasure.

- 5. Write a concise life of Johnson.
- 6. Reproduce Johnson's description of Dryden's character.
- 7. Determine on grounds of style the author of each of the following passages, assigning your reasons in each case:
- (a). Known truths, however, may take a different appearance, and be conveyed to the mind by a new train of intermediate images. This

Milton has undertaken, and performed with a pregnancy and vigour of mind peculiar to himself. Whoever considers the few radical positions which the Scriptures afforded him, will wonder by what energetic operation he expanded them to such extent, and ramified them to so much variety, restrained as he was by religious reverence from licentiousness of fiction.

- (b). Perhaps the gods and demons of Æschylus may best bear a comparison with the angels and devils of Milton. The style of the Athenian had, as we have remarked, something of the Oriental character; and the same peculiarity may be traced in his mythology. It has nothing of the amenity and elegance which we generally find in the superstitions of Greece. All is rugged, barbaric and colossal. The legends of Æschylus seem to harmonize less with the fragrant groves and graceful porticoes in which his countrymen paid their vows to the God of Light and Goddess of Desire, than with those huge and grotesque labyrinths of eternal granite in which Egypt enshrined her mystic Osiris, or in which Hindostan still bows down to her seven-headed idols.
- (c). And here I must observe, that when Milton alludes either to things or persons, he never quits his simile till it rises to some very great idea, which is often foreign to the occasion that gave birth to it. The resemblance does not perhaps last above a line or two, but the poet runs on with the hint, till he has raised out of it some glorious image or sentiment proper to enflame the mind of the reader, and to give that sublime kind of entertainment which is suitable to the nature of an heroic poem.
- (d). The immoral writers of the seventeenth century are indeed much less excusable than those of Greece and Rome. But the worst English writings of the seventeenth century are decent compared with much that has been bequeathed to us by Greece and Rome. Plato, we have little doubt, was a much better man than Sir George Etherage. But Plato has written things at which Sir George Etherage would have shuddered.
- (e.) It seemed impossible to him to be idle, and his disorder made it difficult or dangerous to be long seriously studious or laboriously diligent. The love of ease is always gaining upon age, and he had one temptation to petty amusements peculiar to himself; whatever he did he was sure to hear applauded; and such was his predominance over all that approached that all their applauses were probably sincere. He that is much flattered soon learns to flatter himself: we are commonly taught our duty by fear or shame, and how can they act upon the man who hears nothing but his own praises?

# (Additional for First Class.)

GOLDSMITH'S SELECT ESSAYS; JOHNSON'S LIVES OF POPE, ADDISON, AND GRAY; DRYDEN'S STANZAS ON OLIVER CROMWELL, ASTRAEA REDUX, ANNUS MIRABILIS, ABSALOM AND ACHITOPEL.

# TIME: Two Hours.

- 8. Reproduce what is said of the Tatler and Spectator in the Life of Addison.
- Give an outline of Pope's life, mentioning his principal works, and very briefly describing each of them.

# 10. Explain:

- (a) Like eager Romans, ere all rites were past, Did let too soon the sacred eagle fly.
- (b) Our former chiefs like sticklers of the war.
- (c) The sacred purple and the scarlet gown, Like sanguine dye to elephants was shown.
- (d) And guard with caution that polluted nest Whence Legion twice before was dispossed.
- (e) Yet judged, like vapours that from limbecs rise, It would in richer showers descend again.
- (f) With such respect in entered Rome they gazed Who on high chairs the god-like fathers saw.
- (g) Some falcon stoops at what her eye designed And, with her eagerness the quarry missed, Straight flies at check, and clips it down the wind.
- (h) Though made immortal by a poet's song, And poet's songs the Theban walls could raise.
- (i) Now frequent trines the happier lights among.
- 11. Give a critical account of Absalom and Achitophel.

# SECOND YEAR.

COMUS, PARADISE LOST, BOOKS I.-IV.; MERCHANT OF VENICE, HENRY IV., PARTS I. AND II.; HENRY V.

TIME: THREE HOURS.

# 1. Explain fully-

- (a). And all this tract that fronts the falling sun, A noble peer of mickle trust and power Hath in his charge.
- (b). And thou shalt be our star of Arcady, Or Tyrian cynosure.
- (c). O foolishness of men! that lend their ears
  To those budge doctors of the stoic fur,
  And fetch their precepts from the cynic tub.
- (d). What matter where, if I be still the same, And what I should be, all but less than he Whom thunder hath made greater.
- (e). —What resounds In fable or romance of Uther's son Begirt with British and Armoric knights.
- (f). A gulf profound as that Serbonian bog Betwixt Damiata and Mount Casius old.
- (g). They pass the planet seven, and pass the fixt, And that crystalline sphere whose balance weighs The trepidation talk'd, and that first mov'd.
- (h). More lovely than Pandora, whom the gods Endow'd with all their gift, and O too like In sad event, when to the unwiser son Of Japhet brought by Hermes, to be aveng'd On him who had stole Jove's authentic fire.

- 2. Make a table containing the main events of Milton's life and his chief works in chronological order, inserting exact dates where you can.
  - 3. Compare Shakespeare and Milton as men.
- 4. What were the sources of the Merchant of Venice, and how does Shakespeare treat them?
  - 5. Describe the trial scene in the Merchant of Venice.
- 6. Discuss the character of Henry V. as exhibited in the three plays.
  - 7. Annotate two phrases in each of the following four groups:
    - Upon the Rialto. Give him a livery more guarded than his fellows. The patch is kind enough. These assume but valour's excrement —Merch. of Venice.
    - Indent with fears. He frets like gummed velvet. To play with mammets. Bated like eagles.—Hen. IV., Pt. I.
    - I was never manned with an agate till now. I am a proper fellow of my hands. She never could away with me. —Hen. IV., Pt. II.
    - Dout them with superfluous courage. He hath stolen a pax.

      The farced title running 'fore the king. A mighty whifter.

      —Hen. V.

# (Additional for First Class.)

ROMEO AND JULIET, AS YOU LIKE IT, MACBETH, WINTER'S TALE.

TIME: THREE HOURS.

- 8. Describe the character of Macbeth.
- 9. Name any points in which Macbeth surpasses all the other seven plays assigned.
- 10. It has been said that in some points and parts Romeo and Juliet is an immature work, in other respects and other portions it is little, if at all, inferior to Shakespeare's most successful efforts; cite definite points and passages to illustrate this remark.
  - 11. Discuss the date and text of Romeo and Juliet.
  - 12. Give a critical account of the plot of The Winter's Tale.
  - 13. Describe any character in As You Like It.
- 14. Point out the peculiarities of the following passages which serve to show that one was written early, the other late in Shakespeare's career.
  - A cause more promising
    Than a wild dedication of yourselves
    To unpath'd waters, undreamed shores, most certain
    To miseries enough; no hope to help you,
    But as you shake off one to take another;
    Nothing so certain as your anchors, who
    Do their best office, if they can but stay you
    Where you'll be loath to be. Besides you know
    Prosperity's the very bond of love,
    Whose fresh complexion and whose heart together
    Affliction alters.

To call hers, exquisite, in question more.
These happy marks that kiss fair ladies' brows,
Being black, put us in mind they hide the fair;
He that is stricken blind cannot forget
The precious treasure of his eyesight lost.
Show me a mistress that is passing fair,
What doth her beauty serve but as a note
When I may read who passed that passing fair?

### HISTORY.

Examiner ...... President Forrest.

# THIRD YEAR.

#### · TIME : THREE HOURS.

- 1. Give a brief account of the early history of the Goths. What historian gave the first account of their early movements?
- 2. "An obscure town of Moesia called Forum Tribonii was the scene of the battle," (A.D. 251). Explain.
- 3- In Chapter X. Gibbon describes the "Political System of Constantine and his sons." What does he say of Taxation?
  - 4. Give brief description of the four divisions of the Tartar race.
  - 5. Write a short account of the defeat and death of Valens.
  - 6. Give leading events of the reign of Heraclius.
- 7. Trace briefly the progress of Mohammedanism during the first century of its history, giving in order the countries conquered.
  - 8. Narrate the chief events of the reign of Philip IV. of France.
  - 9. Give a short account of the rise of the Ottoman Empire.
- 10. What was the Golden Bull of Charles IV.? How did it affect the German Constitution?
- 11. Give an account of the life and work of Savonarola. Trace the influence which he exercised on the new learning in England.
- 12. Over what countries did Charles V. reign? How did he come to possess them? What became of them on his abdication?
  - 13. Rome was pillaged in 1527. Give a short account.
- 14. Give a brief account of the Diet of Worms (1521). Diet of Spires (1529), and Diet of Augsburg (1530).

#### FOURTH YEAR.

### TIME : THREE HOURS.

- I. Trace briefly the causes which led to the Thirty Years' War.
- 2. At the commencement of the Thirty Years' War "Two men stood forward to personify the elements of stife." Who were they?
- 3. "In the spring of 1609 the Duke of Cleves died." Give an account of the dispute about the succession.
- 4. A diet was held at Frankfort in 1619. Give an account of its work.

- 5. The Treaty of Lubec 1629. Who were parties to it? What were its terms?
- 6. "When Charles XII. came to the throne of Sweden he found a triple alliance had been formed against him." Give an account.
- 7. Give a brief account of the Seven Years' War and show its effects upon Austria. Prussia. France. England.
  - 8. Give an account of the reign of Emperor Joseph II.
- 9. Write short account of French Revolution, with dates of most important events.
- 10. Schleswig and Holstein ceded te Austria and Prussia (1864.) Give history of dispute which led to this.
- 11. War between Austria and Prussia 1866. What caused it and what were its results.
  - 12. Crimean War. Its effects upon Europe.
  - 13. The Egyptian Question from 1874. Write notes.
- 14. 1871. Proclamation of the German Empire. How was it brought about?

# POLITICAL ECONOMY.

Examiner..... President Forrest.

#### TIME : THREE HOURS.

- 1. Classify as productive or unproductive the following labourers: Soldiers, Confectioners, Musicians, Artists, Lawyers, Teachers, Merchants, Bankers.
- 2. A owns Dominion debeutures; B, Provivcial debentures; C, City debentures; D, mortgages on land: F, bank deposits receipts. In summing up the wealth of the country would you count these? Give reasons.
- 3. When and how does a national loan add to the capital of a country?
- 4. Is it possible for a man to increase his own wealth without benefiting others? To what extent?
- 5. If the government passed a law forbidding men to accumulate more wealth than was required for comfortable subsistence, what effect would it have upon the working classes?
- 6. What is unearned increment? What proportion do you think it bears to the value caused by productive labour? Is it possible accurately to distinguish between the two?
- 7. In 1850 A purchased a farm for \$5000; B, a city lot for \$1000; C, an oil painting for \$100; D, a collection of postage stamps for \$50. At the present time they have increased in value tenfold. Could the government justly appropriate the increased value of the one and not of the others? Give your reason.
- 8. If every class of labourers received double wages would their condition be necessarily improved?
  - 9. Discuss the doctrine of the Balance of Trade.
- 10. Mill says: "One of the commonest fallacies is, that paper currency cannot be issued in excess so long as every note issued

represents property or has a foundation of actual property to rest on." Give his arguments,

- 11. How is the evil of low wages to be remedied? Give some of the proposed plans.
  - 12. Write a short article for or against Protection.
- 13. Can a protective tariff be effective if it does not raise the price of the article protected?
  - 14. How far does Mill justify a protective tariff?

# ETHICS.

#### APRIL 11TH.-10 A. M. TO 1 P.M.

- 1. Compare the ancient and modern conceptions of the problem of Ethics, and of its relation to Politics.
- 2. In what senses has it been held that Morality is (a) 'original', (b) 'derivative'? Indicate your own view.
- 3. Sketch the history of Modern Hedonism up to Mill, emphasizing its chief stages.
- 4. State Mill's theory of Obligation, indicate its development by later writers, and estimate its adequacy.
- 5. State and critically compare the accounts of Desire offered by Butler, Mill, and Green, respectively.
- 6. State and estimate Darwin's ethical theory, and indicate Spencer's main divergences from it.
- 7. Give the three forms of Kant's Categorical Imperative, and show their relation to one another.
- 8. Explain Aristotle's doctrine that Virtue is (a) a Habit, (b) a Mean.
  - 9. Trace the treatment of Pleasure in Greek Ethics.

# (Additional for First Class.)

# 3 то 6 г. м.

- 10. Give Plato's account of the human 'constitution,' and compare it with Butler's.
- 11. Trace the various elements in Aristotle's conception of Happiness, and exhibit their relation to one another.
- 12. Compare the views of Plato and Aristotle as to the Contemplative life.
- 13. In what sense does Butler hold that man is 'a law unto himself'? Compare his position with that of Kant or Green.
- 14. Examine Mill's account of the distinction of Quality in Pleasure. Is it original? If not, trace its source.
- 15. Give a summary statement and critical estimate of (a) Kant's or (b) Green's ethical theory.

#### METAPHYSICS.

Examiner.....Professor Seth.

### APRIL 14TH.-10 A. M. TO 1 P. M.

- Explain and illustrate the use of the following terms: Ontology, Epistemology, Monadology, Dogmatism, Scepticism, Criticism.
- 2. Trace the Dualism of Cartesian speculation, and the various attempts to account for reality without abandoning it.
- 3. Give Locke's view of Material Substance, and of the distinction between the Primary and Secondary Qualities. How does Berkeley criticise the latter distinction, and with what justice?
- 4. In what sense does Berkeley (a) deny, (b) maintain the existence of Matter?
- 5. State and estimate Berkeley's view of the Permanance of the External World. Compare the views of Hume and Kant on this question.
- 6. Give Berkeley's account of Space, and compare his view with those of Hume and Kant.
- 7. Compare critically the accounts of Causality offered by Locke, Berkeley, Hume and Kant, respectively.
- 8. In what sense may Hume be said to have "stated the problem of Metaphysics," and how does Kant generalize Hume's question? Indicate the general tenor of the Kantian answer.
- 9. "A consistent Sensationalism must be speechless." Explain this statement, and illustrate its truth from the history of modern philosophy.

# (Additional for First Class.)

#### 3 TO 5 P. M.

- 1. Distinguish Descartes' three proofs of the Divine existence, and estimate their value.
- 2. Describe Locke's aim and method in the Essay, and indicate the relation of the various parts to its central purpose.
- 3. Give Locke's view of (a) the nature, (b) the origin, (c) the certainty, (d) the reality, (e) the degrees, and (f) the extent of human knowledge.
- 4. State Locke's distinction between the "Nominal" and the "Real" Essence. Why, on his view, can then be "no science of bodies?" Compare Berkeley's view on this subject.
- 5. Summarize the evidence for the existence of two divergent lines of thought (a) in Locke, (b) in Berkeley.
  - 6. Give a critical estimate of Berkeley's Idealism.

# LOGIC AND PSYCHOLOGY.

# PSYCHOLOGY.

Examiner.....Professor Lyall.

# THURSDAY, 26TH JANUARY, 1888.

#### THREE O'CLOCK .- TWO HOURS.

- 1. Give Sir William Hamilton's classification of the Mental Phenomena, with criticisms.
- 2. What do you understand by the Laws of Mind? Show how the two generic laws are present in, and characterize the other laws.
- 3. Give illustrations of the Active or Practical Processes, defining them at the same time.
- 4. What are the Laws of Association, and to what single law may they be reduced? Give examples.
- 5. What views may be taken of Imagination? What is the distinctive character of Poetic Imagination?

# FRIDAY, 27TH JANUARY, 1888.

#### THREE O'CLOCK .- TWO HOURS.

- 1. How have the Emotions been classified? What more philosophic principle of classification may be adopted?
- 2. Under what class may the Aesthetic Emotion come? What is the highest Emotion under the same class?
- 3. Give the different theories of Beauty, vindicating and illustrating Alison's theory by Burke's sensible qualities of the Beautiful and Sublime, respectively.
- 4. Give some account of the Social Emotion. State the modern theory on the subject of the Social Emotions.
  - 5. Give the contrasted Emotions, with the ground of contrast.

# LOGIC.

Examiner......Professor Seth.

### APRIL 13TH.-10 A. M. TO 1 P. M.

- 1. How is Logic related to Psychology in respect of (a) its province, (b) its point of view?
- 2. State the various views which have been held as to the nature of the Concept. Which seems to you the most adequate, and on what grounds?
  - 3. (a) If the proposition I is false, what follows as to A, E and O?
    - (b) Convert the following propositions:
      - (1) All are not happy that seem so.
      - (2) Murder will out.
      - (3) 'Tis only noble to be good.

4. State the following argument in syllogistic form; give its Mood and Figure; and, if not in First Figure, reduce:

Epicureans are not true philosophers, for they do not hold that virtue is the chief good, and all true philosophers hold that it is.

- 5. Construct a concrete Syllogism capable of being expressed in each of the Four Figures, and state it in each.
  - 6. State and prove the special rules of the First Figure.
- 7. Define and illustrate the following: Infima Species; Epicheirema; Illicit Process; Ignoratio Elenchi.
- 8. Construct a Regressive Sorites, and resolve it into its component Syllogisms.
- 9. Test the following inferences. If correct, state syllogistically, giving Mood and Figure; if fallacious, name the Fallacy:
  - (a). The study of Logic is of no value, for all can reason without its aid.
  - (b). Light cannot consist of material particles, for it does not possess momentum.
  - (c). He must be a learned man, for all learned men are hard students.
  - (d). Why should I exert myself? For it is fated either that I shall succeed or that I shall not, and in either case exertion on my part is needless.
  - (e). Aristotle must have been a very industrious man; for he could not otherwise have produced so many works.
  - (f). No form of democracy is subject to violent revolutions, for it never excludes the mass of the people from political power.
  - (g). Dissent always weakens religion in the people, for it sets itself in opposition to the National Church.
- 10. Explain the Quantification of the Predicate, and the grounds on which it is advocated. With what theory of judgment is it connected, and what are its main effects on logical doctrine?

#### MATHEMATICS.

Examiner ..... C. Macdonald, M. A.

# GEOMETRY .- FIRST YEAR.

#### APRIL 19 .- 10 A. M. TO 1 P. M.

- 1. Shew that the fifth and sixth propositions of Euclid Book II and the ninth and tenth of the same book are only cases of one proposition: and give an enunciation that shall in each case comprehend both.
- 2. Enunciate and prove any one of these four propositions, and prove it by the division of the straight line.
- 3. If a straight line be drawn from the vertex of an isosceles triangle to meet the base, the difference between the squares of this line and one of the equal sides is equal to the rectangle of the segments of the base. Prove for one figure.
- 4. The angle at the centre of a circle is double of the angle at the circumference, standing on the same arc. Prove when the centre is outside the angle at the circumference,

- 5. In equal circles chords that are equal cut off equal arcs, the greater equal to the greater, and the less equal to the less.
- 6. If two adjacent angles of a regular polygon be bisected by lines which meet in Q, the lines drawn from Q to all the other angles bisect them.
- 7. If two triangles have an angle in the one equal to an angle in the other, and the sides about these equal angles proportional, then must the triangles be similar.
- 8. If two opposite sides of a quadrilateral inscribed in a circle be produced to meet, and also its opposite angles joined, four pairs of similar triangles are thus formed.
- 9. The circle that passes through the ends of the side of a triangle and its orthocentre is equal to the circle circumscribed about the triangle.
- 10. If a quadrilateral be inscribed in a circle, the sum of the angles in the segments cut off by its sides is six right angles.
- 11. The hypothenuse of a right angled triangle is fixed: but the sides vary: shew that the locus of the centre of the inscribed circle is the fourth part of the circumference of another circle: and that the square of the radius of the latter is equal to half the square of the hypothenuse.
- 12. "If a point so move that the difference of the square of its distances from two fixed points is constant, its locus is a straight line perpendicular to the line joining the points." Hence prove that if from a fixed point in the circumference of a circle two chords PQ and PR be drawn, and if they vary in length in such a way that  $PQ^2 + PR^2$  is constant, the locus of the middle point of QR is a straight line.

### GEOMETRY AND MENSURATION.-SECOND YEAR.

#### APRIL 16.-10 A. M. TO 1 P. M.

- 1. Draw two equiangular parallelograms and shew, without proof, how to represent by means of two straight lines the ratio of their areas.
- 2. The parallelograms about the diagonal of any parallelogram are similar to the whole parallelogram and to one another.
- 3. If V, a pencil of four lines, cut any one transversal harmonically, it cuts every transversal harmonically.
- 4. A line drawn through a centre of similitude of two circles cutting them, divides the circles into similar segments.
- 5. What is the "nine-points circle of a triangle"? Shew that it is also the "nine-points circle" of the three triangles whose bases are the sides, and common vertex the orthocentre of the first triangle.
- 6. BCDF is a quadrilateral inscribed in a circle, BC being equal to CD. Shew that  $FC^2 FB \cdot FD = BC^2$ .
  - 7. In a parabola the subtangent is bisected at the vertex.
- 8. The chord of contact of two tangents drawn to a parabola is bisected by the line drawn from their point of concourse parallel to the axis.

- 9. Shew that the sum of the focal distances of any point of an ellipse is equal to the major axis.
- 10. If S be the focus of an ellipse, and P any point in the curve at which a tangent is drawn, cutting the directrix in Z, then ZS is perpendicular to SP.
- 11. Given the two sides of a triangle and the included angle 5ft., 6 ft., and 30°: find the third side by one numerical process; and also the median drawn from the angle opposite to it.  $(\sqrt{3} = 1.732)$ .
- 12. A hemisphere and a right cone are of the same material and the same weight. The area of the base of the cone is  $\frac{1}{2}$  the area of the base of the hemisphere. Prove that the height of the cone is 4 times the radius of the hemisphere.

# ALGEBRA.-FIRST YEAR.

#### APRIL 16.-10 A. M. TO 1 P. M.

- 1. Shew that, if  $a^2 + b^2 = 1$ ,  $a + b\sqrt{-1}$  and  $a b\sqrt{-1}$  are the reciprocals of each other: and write out the powers of  $+\sqrt{-1}$  and  $-\sqrt{-1}$  as far as the 8th, with any relative remarks that occur to you.
- 2 When a fraction, as  $\frac{a}{\sqrt{b} \pm \sqrt{c}}$ , is to be numerically computed, shew the advantage of "rationalizing the Denominator," as the first step in the process. Illustrate by an example of your own.
- 3. A could do a whole job in 12 days, B in 16, C in 18 days. After working at it all together for two days, B and C struck for more wages: and after a time A struck also, when gths of the job remained undone. How long had A been working alone?
- 4. There are two ordinary ways of solving such a pair of equations as this: x+y=a, and  $xy=b^2$ . Describe them and say which you prefer, and why.
- 5. Solve either of the pairs of simultaneous equations:  $x^4 + y^4 = 706$ , and x + y = 8: (2)  $x^2y^2 + 400 = 41 xy$ , and  $y^2 = 5 xy 4 x^2$ .
- 6. Given  $x^2 + px + q = 0$ . Find the several conditions that the roots are (1) equal, (2) real but unequal, (3) imaginary: and if a and  $\beta$  are the roots, find an expression for  $\frac{1}{a^2} + \frac{1}{\beta^2}$ .
  - 7. Shew that  $\begin{vmatrix} ma_1ma_2 & ma_3 \\ b_1 & b_2 & b_3 \\ nc_1 & nc_2 & nc_3 \end{vmatrix} = mn \begin{vmatrix} a_1 & b_1 & c_1 \\ a_2 & b_2 & c_2 \\ a_3 & b_3 & c_3 \end{vmatrix};$

and that if two adjacent columns or rows of a Determinant are the same, the Determinant = 0.

- 8. Shew that in an Arithmetical Progression the sums of terms equidistant from the extremes is constant: and state and prove the corresponding theorem for a Geometrical Progression.
- 9. Shew that the series,  $a + ar + ar^2 + \&c.$ , ad inf., is to the series,  $a ar + ar^2 \&c.$ , ad inf., (r < 1) as 1 + r: 1 r. Also, if any one term of an infinite decreasing Geometrical series = m times the sum of all that follow it,  $r = \frac{1}{m+1}$ .

- 10. Prove  $a^5 + b^5 > a^4b + ab^4$ , unless a = b.
- 11. If a:b:c:d, prove  $a^2c+ac^2:b^2d+bd^2:(a+c)^3:(b+d)^3$ .
- 12. Given  $x^4 + ax^3 + bx^2 + cx + d = 0$ , the roots being  $a, \beta, \gamma, \delta$ : prove  $\frac{1}{a} + \frac{1}{\beta} + \frac{1}{\gamma} + \frac{1}{\delta} = -\frac{c}{d}$ : and write the equation whose roots are  $-a, -\beta, -\gamma, -\delta$ .
- 13. Given the equation  $2x^3-3x-6=0$ . Shew that one root lies between 1 and 2: and the first Decimal figure of it being '7, find by the method of Horner, the root to three places of decimals.

# TRIGONOMETRY AND ALGEBRA. SECOND YEAR.

#### APRIL 16.-3 TO 6 P. M.

- 1. Explain "circular measure," as distinguished from Gradual measure; and if an arc of 60° were the unit of angular measure, find the number of degrees, &c., in an arc whose measure is  $\frac{7}{12}$ .
- 2. Tan  $\theta = \tan (n\pi + \theta)$  where n is any whole number; but if  $\sin \theta = \sin (n\pi + \theta)$  or  $\cos \theta = \cos (n\pi + \theta)$ , then must n be an even number.
- 3. A column stands at the top of an even slope whose gradient is 1 in 20. At a station A the angle subtended by this column is  $a^{\circ}$  and l feet further down the slope at B, which is in the same straight line with A and the middle of the base of the column the angle subtended by it is  $\beta^{\circ}$ . Give all the steps, with accompanying explanations, for determining the height of the column.
- 4. From the formulae for sin(A + B) and cos(A + B) find expressions for tan(A + B), cot(A + B), tan(2A), sin(3A); and from one of these deduce  $tan(90^\circ)$ .
- 5. Shew that  $\sin (n+1) A = \sin (n-1) A + 2 \sin A \cos n A$ : find the similar formula for  $\cos (n+1) A$ : and describe carefully any useful application you know of one of these.
- 6. Starting from the fundamental formula for  $\cos A$  in terms of the sides of the triangle ABC, find  $\cos \frac{A}{2}$ : and shew that if the triangle is isosceles, b=c, the formula reduces to  $\sqrt{4b^2-a^2}$ .
- 7. Prove that the radius of the escribed circle touching the side a is  $\frac{S}{s-a}$ : and shew that the distance between the point where it touches this side and the point where the inscribed circle touches it = the difference of the other two sides.
- 8. From the relations of a spherical triangle to its polar triangle, deduce  $\cos a = \frac{\cos A + \cos B \cos C}{\sin B \sin C}$ : and illustrate Napier's rule of Circular Parts by two cases chosen by yourself, one for each subdivision of the rule.

9. Shew that the binomial expansion of  $(a+x)^n$  is finite when n is a positive integer: and find the greatest coefficient when n is odd; that it is infinite in all other cases. Does it ever become unintelligible? Illustrate your answer.

10. A person who owns an annuity A which has n years to run desires to exchange it for a perpetual annual income  $A_i$  that shall commence after q years. Shew that the actuary's formula is

$$A_{l} = \frac{A}{R^{n-q}} (R^{n} - 1).$$

11. In what scale of notation is the number 829 = 999 in the common scale.

12. Shew that every prime number must be adjacent to a multiple of 6, *i. e.*, must be of the form  $6 \ n \pm 1$ .

# ADDITIONAL MATHEMATICS.—SECOND YEAR.

#### APRIL 18.-3 TO 6 P. M.

1. Give the construction of the problem, To draw a perpendicular to a given plane from a given point without it: also, draw a plane parallel to a given plane through a given point without it.

2. Starting from the proper assumptions, prove

$$\sin x = x - \frac{x^3}{3} + \frac{x^5}{5} - &c.$$
 Hence

3. If c be the length of the chord of a small arc of a circle, and  $c_l$  that of its half, prove that the length of the arc  $=\frac{8c_l-c}{3}$  nearly.

4. Sum n terms of the following two series:

(1) 
$$1.1^2 + 2.3^2 + 3.5^2 + &c.$$
 : (2)  $\frac{1}{1.3.5} + \frac{1}{3.5.7} + \frac{1}{5.7.9} + &c.$ 

Also sum the latter to infinity.

5. Shew that  $tan(\theta + h) - tan\theta \propto sec^{2\theta}$ ; where  $\theta$  does not approach very nearly to  $\frac{\pi}{2}$ , and h is the measure of a very small angle, not greater than one minute of arc.

6. If 
$$\cot(x-1) - \cos^{-1} \frac{x+1}{\sqrt{x^2+2x+2}} = \frac{\pi}{6}$$
: find  $x$ .

7. There are four common dice in a bag and one uncommon one whose faces are all marked ace; but in other respects they are all the same. A die is taken out at random, not examined, and, thrown three times, turns up ace each time. Shew that it is 54:1 that this is the oddly marked die.

8. The roots of the equation  $x^n \pm 1 = 0$ , are in Geometrical Progression. In shewing this, take either sign you please, not both: and take n both even and odd.

### PHYSICS.

Examiner . . . . . . J. G. MACGREGOR, D. Sc.

# THIRD YEAR CLASS.

APRIL 16TH.-10 A. M.-1 P. M.

N. B. -Questions marked with an asterisk have the higher values.

A .- Three of the following:

- (1). The speed of a body which starts from rest, increases uniformly at the rate a. Shew that after having moved through a distance s, it will have gained a speed equal to  $\sqrt{2 a s}$ .
  - (2). Enunciate and prove the law of the composition of forces.
- \*(3). It has been said that if, as the Third Law of Motion asserts, in the case of a horse drawing a canal-boat, the horse were pulled back by the boat with a force equal to that by which the boat is pulled forward by the horse, there could be no motion. Criticise this statement and explain fully what determines the motion of the horse and of the boat respectively.
- \*(4). State the Law of the Conservation of Energy. To illustrate it, shew that if a stone be tossed vertically upwards with an initial velocity of 256 feet per second, its energy (including both kinetic an I potential) will have the same value after 4 and after 8 seconds respectively. (Take g as being 32 feet per sec.)
- \*(5). Describe the Common Balance.—If it is properly made, and if when the pans are loaded the beam is horizontal, shew that the weights of the loads in the pans must be equal.

# B.—Seven of the following:

- \*(7). What is meant by the pressure at a point of a fluid? Shew that in the case of a heavy liquid, the pressure at any point is greater than the pressure at the upper surface by the weight of a cylinder of the liquid whose cross section has an area unity and whose length is the distance of the point from the upper surface. How would you verify this result experimentally?
- (8). Describe the structure of the Mercury Barometer, and shew (a) that it enables us to measure the pressure of the atmosphere, and (b) that it may be used to measure the height of a mountain.
- \*(9). Point out what is inaccurate in the following statement, made by Huxley in his Introductory Science Primer: "As soon as this upper water" (in a vessel of water whose temperature was being gradually lowered) "cooled ever so little below 32° F., a film like glass would form on its surface by the conversion of the coldest fluid water into solid water or ice." What should Huxley have said?
- (10). How would you shew by experiment (a) that bars of metal increase in length as their temperatures rise; (b) that the thermal expansion of masses of metal is the same in all directions, and (c) that between 0° and 4° C. water contracts as its temperature rises?
- \*(11). (a) Heat is a form of energy. (b) Heat is the kinetic energy of the molcules of a body. (c) Heat is a mode of motion. (d) Heat is an imponderable substance.—In the case of each of these propositions answer the following questions: (a) Is it manifestly false? ( $\beta$ ) Has it been proven, and if so, how? ( $\gamma$ ) Is it an hypothesis? If so, has it been shewn to be false, and in that case, how?

- \*(12) A small object is so placed that the axis of a double convex lens passes through it, and its distance from the lens is greater than the focal length of the lens. Trace the course of the rays by which the image will be formed, and shew that the image will be real and inverted.
- \*(13) How may the prism be used to analyze the light of an incandescent body? Describe fully the spectrum of light from the sun, and account for the dark lines in it.
- (14). Describe experiments proving that the pitch of a musical note rises as the rapidity of the oscillations of the sounding body increases. Hence shew that if sound is propagated by waves in the atmosphere, the waves of a high note must be short, those of a low note long.
- \*(15). Shew that two equal and similar waves moving in opposite directions and with equal velocities along a line of particles must give rise to a standing wave; and explain (a) the formation of nodal lines in a vibrating plate, and (b) the fact that a series of notes can be obtained from any given flue pipe.
- (16). Given a piece of sealing wax, a piece of fur, a pith ball suspended by a silk string, and an electrified body; how will you determine whether this body has a positive or a negative charge? If a gold leaf electroscope were substituted for the suspended pith ball, how would you make the determination?
- \*(17). What conditions must be satisfied that a current may flow in a circuit of conductors? And how are the conditions satisfied (a) when a frictional machine is worked, sparks passing from its conductor to a conductor in contact with the earth, (b) in the galvanic circuit, and (c) in the case of thermoelectric currents?

# FOURTH YEAR CLASS.

#### APLIL 16TH.-10 A. M.-1 P. M.

- N. B.—Answer any ten questions. Those with an asterisk have the higher values.
- (1). Define declination and right ascension. What observations would you make to determine them? With what instruments? The observations made, how would you make the determinations?
- \*(2). Given that the sun attracts a planet with a force inversely proportional to the square of the distance between them, shew that the path of the planet about the sun must be a conic section.
- \*(3). Shew that a tension parallel to any one line in a body and an equal pressure parallel to any line at right angles to it are together equivalent to a shearing stress of the same value on planes cutting these lines at angles of 45°.
- (4). Define elasticity of figure, elasticity of volume, Young's modulus, and modulus of flexural rigidity. Express Young's modulus in terms of the elasticities of figure and volume.
- \*(5). Shew that at any point of a heavy fluid the rate at which pressure increases with distance in a direction normal to surfaces of equal pressure is equal to  $\rho g$ , where  $\rho$  is the density of the fluid at the point and g the acceleration of a falling body, pressure being measured in absolute units.

- \*(6). Shew that, if P be the excess of the pressure inside over that outside at any part of a soap-bubble, T the surface tension of a solution of soap bounded by air, and R and R' the radii of curvature of sections of the bubble, at the part referred to, made by perpendicular planes, P = 2 T (R + R') / RR'.
- (7). Water being in contact with glass and air (as for example, when a glass rod is partially immersed in water), upon what will the angle of contact depend? How would you determine its magnitude experimentally?
- (8). Describe generally the isothermal diagram of Carbonic Acid; and explain what is meant by its critical temperature.
- \*(9). How are the adiabatic lines of a substance related to its isothermals as to their general course? Given this relation, shew that an adiabatic compression must lower the temperature of a substance whose coefficient of expansion is negative.
- \*(10) Prove that the rate of increase of entropy with pressure, temperature being constant, is equal to the rate of decrease of volume with temperature, pressure being constant.
- \*(11). Discuss any method of determining the ratio of the specific heats.
- (12). How may it be concluded from the fact that there is no electrical force inside a conductor, that the law of electrical attraction is that of the inverse square of the distance.
- (13). Shew that the charges at the ends of a tube of force, extending from one electrified body to another, must be equal and of opposite sign. Hence prove that if a charged body be surrounded by a conductor its charge must be equal to that induced in the conductor. Describe the experiment by which Faraday obtained this result.
- \*(14). Apply the method of electrical images to prove that the den sity of the electrification at any point of a special conductor, kept at zero potential, due to a charge at a point outside it, is inversely proportional to the cube of the distance between the points.
- \*(15). Find the capacity of a condenser consisting of parallel plates very close together; and determine the attraction between the plates when charged to given potentials.
- (16). How would you determine the electromotive force and the resistance of a given galvanic cell?

# (Additional for First Class.)

APRIL 20TH.-10-11.30 A. M.

- N. B.—Any four of the following. Those with an asterisk have the higher values.
- \*1. Explain the action of the loud pedal in the piano-forte; and shew how the quality of the notes of that instrument depend upon the mode and place of percussion.
- 2. Shew that a sound wave travelling in an organ pipe will be reflected on reaching the end, whether the end be stopped or open. What difference will there be in the reflection in the two cases?
- \*3. Explain the occurrence of discords in the case of musical notes which contain no overtones.

- \*4. Shew that the multiplication and division of "vibration fractions" correspond to the addition and subtraction of intervals; and that, of the two intervals called the Fourth and Fifth, each is the inversion of the other.
  - \*5. Give some account of temperament.

# DYNAMICS.

#### APRIL 16TH .- 3 TO 6 P. M.

- N. B.—Answer only ten questions. Those with an asterisk have the higher values.
- (1). Given the displacement of a point P relative to a point Q, and that of Q relative to a third point O, find that of P relative to O.
- (2). A point moving with uniform speed in a circular path passes from one end of a diameter to the other in 10 seconds. The radius being 30 cm., find (a) the mean speed, (b) the mean velocity, (c) the instantaneous velocity at any instant.
- \*(3). The hodograph of a point moving in an ellipse in such a way that the moment of its velocity about the centre is constant, is a similar ellipse.
- (4). Find the range of a projectile on a horizontal plane, the magnitude and direction of the initial velocity being given; and shew that had the direction been different the range might still have been the same.
- \*(5). A moving point has a velocity of 1 ft. per sec. when at a distance of V a feet from a fixed point in its line of motion towards which its acceleration is directed, its acceleration being everywhere numerically equal to its distance from that point. After what time will it be at a distance of 1 ft.?
- \*'(6). A rigid body with one point fixed undergoes two successive rotations. Shew that the same displacement may be given it by a single rotation, and find the axis of this rotation.
- \*(7). Find the resultant of two angular velocities about parallel axes.
- (8). Find the dimensions of the derived unit of force. The unit of density being that of water and the units of time and mass 1 minute and 1 hundred-weight respectively, find the magnitude of the derived unit of force.
- \*(9). A particle slides in a vertical plane down the smooth edge of a circular disc with axis horizonal. Shew that if it start from rest at the highest point, it will quit the disc after describing an arc subtending at the centre an angle whose cosine is 2/3.
- \*(10). Shew that a particle will be in equilibrium if acted upon by three forces represented in direction by the perpendiculars from the angular points of a triangle on the opposite sides, and in magnitude by the reciprocals of the lengths of those perpendiculars.
- \*(11). Shew that the greatest velocity an agent working at the rate R can produce in a body against an opposing force F is R/F.
- (12). Apply the law of Energy to find the speed of the bob of a simple pendulum which has swung from a given extreme position through a given angle.

- \*(13). Establish the law of the Conservation of Energy for an extended system.
- \*(14). A thin rod is movable about a fixed point. Find the centre of percussion.
- \*(15). A heavy body is attached to the end B of a weightless rod AB. A string fastened to the end B passes over a smooth fixed peg C, through a ring at the end A of the rod, and supports a second heavy body. Determine the position of equilibrium.

# (Additional for First Class.)

APRIL 20TH.-10-11.30 A. M.

- N. B.—Any four of the following. Those with an asterisk have the higher values.
- \*1. A body is subjected to a strain which is of such a nature that the distances of pairs of points so placed in the unstrained body that the lines joining them are parallel, are changed in the same ratio. Shew that lines in the body which are straight and parallel before the strain are straight and parallel after the strain.
  - 2. Define the shear and prove that it is a homogeneous strain.
- \*3. Prove that the complete specification of the stress at any point of a strained body requires only six numerical data.
- \*4. Determine the strain produced by a simple longitudinal stress, in terms of the magnitude of the stress and the elasticities of figure and volume.
- \*5. Shew that the pressure at any point of a fluid in a static condition is the same in all directions, and that the same law holds for a fluid whose parts are moving relatively to one another, provided shearing stresses may be neglected.

### CHEMISTRY.

# INORGANIC CHEMISTRY.

APRIL 19TH.—10 A. M. TO 1 P. M.

Five questions only to be answered. All of equal value.

- 1.—Compare the effects of physical forces—magnetism, light and heat upon bodies, with the effects of chemical action, and give examples. Explain what is meant by chemical force or affinity, and distinguish it from cohesion. What are molecules? atoms? Explain briefly the process of chemical combination as shown in the union of sulphur and iron.
- 2. The relative weights in which bodies combine are invariable and are called equivalents. Give a full explanation of this statement, with examples. In what way is the equivalent of an element determined? When two bodies unite in several proportions, the weight of one being considered constant, the weight of the other varies according to a simple ratio. Explain, with examples. Give the equivalent, also the atomic, numbers of the following elements: O, C, S, H.

- 3. What is the chemical nature of the process of Combustion, what bodies usually enter into it, and what are the ordinary products? (Give examples of slow and rapid combustion.) A combustible substance, consisting of Carbon and Hydrogen, is introduced in a burning state into each of the following gases; what takes place in each case? and what are the products of combustion, if any: H, Cl, N, O, CO, CO<sub>2</sub>.
- 4. When a mixture of hydrogen and oxygen is exploded, in what proportion by volume do the two gases combine, and what is the relation between their volumes and the volume of the gas resulting from the combination. Explain the composition of Water, so as to show the number of atoms which its molecule contains. What are the ordinary dangerous impurities of well water, and how are they to be detected. What salts does sea-water contain, and from what source are they derived.
- 5. In what forms or combinations do the following elements occur most commonly in nature:—S, P, K, Ca, Fe, Pb, Au, Sb. Explain the apparent chemical reasons for their so occurring. Enumerate the principal metals whose sulphides are: (a) insoluble in acid solutions, (b) soluble in acid, but insoluble in neutral and alkaline sols., (c) soluble in water.
- 6. In what form, and to what extent, does Potash exist in soils; how do you explain its presence there. In what form does it exist in the plant, and in plant ashes. In what form and to what extent does Phosphorus exist in soils. Give formula for the salt that exists in bone, and explain how it may be made soluble.
- 7. Give a general view of the different classes of Metallic Oxides, showing the effect of the proportion of oxygen upon the several compounds as regards their basic or acid characters, with examples. Define what is meant by the terms: Base, Acid, Salt.
- 8. Write concisely in words (that is, translate into plain English), without any unnecessary explanation, the exact meaning of each of the following chemical equations:—
  - (1.)  $H_2 SO_4 + Cu_2 O = Cu_2 SO_4 + H_2 O$ .
  - (2.)  $H_2 SO_4 + Cu O = Cu SO_4 + H_2 O$ .
  - (3.)  $H_4 \text{ Si } O_4 2 H_2 O = \text{Si } O_2$ .
  - (4.)  $2 \text{ NH}_4 \text{ Cl} + \text{Ca O} = 2 \text{ NH}_3 + \text{Ca Cl}_2 + \text{H}_2 \text{ O}$ .

#### ORGANIC CHEMISTRY.

TIME : THREE HOURS.

# Five (5) questions only to be answered.

- 1. Carbon is said to be Tetratomic. What does this mean? Illustrate by examples. Show in what way substitution compounds are formed from Methane. Also, in what way Hydrocarbons of the Methane Series, containing more carbon atoms than one, may be formed without losing the type  $\mathrm{CH}_4.$
- 2, Describe the process of Elementary Analysis of an organic compound containing C, H and O, and sketch a diagram showing the apparatus used, with special regard to the relative positions of the several parts when put together. What are the probable sources of error, what precautions are necessary to ensure accuracy? State results obtained (or assume results) and give calculations showing conversion into weights of C, O and H.
- 3. What is the chemical constitution of an Alcohol? What are the more important Monatomic Alcohols? Describe Methyl Alcohol, Ethyl Alcohol, as regards their sources, constitution, and properties. In what way is absolute alcohol obtained?

- 4. Describe Acetic Acid as regards its mode of formation, constitutional relation to Alcohol, properties, and the principal salts which it forms, (Acetates). How is Ethyl Acetate prepared?
- 5. What is the chemical constitution of Chloroform? From what materials is it usually prepared? Describe the process, and explain in a general manner the probable re-actions that take place, as suggested by your knowledge of the chemical affinities of the elements or radicals involved.
- 6. Compare the chemical compositions of tallow, common soap, glycerine, palmitine, nitroglycerine, dynamite.

# PRACTICAL CHEMISTRY-ADVANCED COURSE.

### TIME: THREE HOURS.

- 1. Find the specific gravity of the Water sample A (Mineral Water), and describe the operation fully, noticing every precaution necessary to ensure accuracy. Give results obtained, with any requisite calculations, including deducted weight of bottle, (a previously unweighed bottle without counterpoise to be used).
- 2. Describe in detail the ordinary method of analysis of an Iron Ore, with necessary calculations. Find by analysis the amount of metallic iron in the sample B. State the several processes to which you have subjected it, and the results obtained.

# PRACTICAL CHEMISTRY-ELEMENTARY COURSE.

### TIME : THREE HOURS.

1. Find (1) one Acid, and (2) one Base in each of the Solutions, numbered  $\frac{x}{1}$ ,  $\frac{x}{2}$ , &c., to . . .  $\frac{x}{31}$ , or in as many of them as you can in the time allowed.

[The Bases and Acids were the following:

Base. Acid.	Base. Acid.
x=Argentic Oxide. Nitric.	x = Bismuthic Oxide. Hydrochloric.
<sup>x</sup> =Plumbic OxideAcetic.	x = Cupric OxideSulphuric.
$\frac{x}{3}$ =Plumbic OxideAcetic.	$\frac{x}{19}$ = AmmoniaOxalic.
$\frac{x}{4}$ =Strontia Nitric.	$\frac{x}{20}$ Distilled Water.
Z=BarytaNitric.	$\frac{x}{21}$ = Magnesia Sulphuric.
$\frac{x}{6}$ =Platinic OxideHydrochloric.	$\frac{x}{2}$ = Lime
*=Arsenious Oxide. Hydrochloric.	$\frac{x}{23}$ = Soda Carbonic.
$\frac{x}{8}$ =Lime	$\frac{x}{24}$ = Strontia Nitric.
$\frac{x}{9}$ = Mercuric Oxide. Hydrochloric.	$\frac{x}{25}$ StrontiaNitric.
To=Potassa	$\frac{x}{26}$ = Lime
x Mercurous Oxide. Nitric.	$\frac{x}{27}$ = Magnesia Sulphuric.
$\frac{x}{12}$ = Cupric Oxide Sulphuric.	$\frac{x}{28}$ Distilled Water.
$\frac{x}{13}$ = BismuthicOxide. Hydrochloric.	$\frac{x}{29}$ = Ammonia Hydrochloric.
$\frac{x}{14}$ = AluminaSulphuric.	$\frac{x}{30}$ = PotassaChloric.
x = Nickel OxideSulphuric.	x BarytaNitric.]
$\frac{x}{16}$ = AluminaSulphuric.	

2. Write out carefully the results of your determinations. In any case of failure, or uncertainty, point out probable or possible cause.

Standing of candidates will be calculated from number of accurate determinations, minus number of erroneous ones,—due value being allowed for explanations given under question 2.

# BOTANY.

Examiner ..... Professor Lawson.

APRIL 9TH,-10 A. M. TO 1 P. M.

Five questions only to be answered.

- 1. Give a general description of a vitally active Vegetable Cell, noticing particularly (a) the structure, nature and functions of its protoplasm, (b) the Cell Wall, its composition, special modifications, lignification and mineralization, (c) plastids, (d) protein granules, (e) starch, (f) crystals.
- 2. Compare, as regards their form and structure, (a) parenchyma cells, (b) epidermal cells with their trichomes and stomata, (c) cork cells, (d) wood cells, (e) spiral and dotted vessels or ducts, (f) bast cells, (g) cribrose cells, (h) latex cells,—and classify them.
- 3. Give a description of the modes of arrangement of the several tissue elements into *tissues*, of the tissues into *systems*, and the systems into *organs*.
- 4. Give a detailed account of the Circulation of Protoplasm in cells, Rotation, Amœboid movement, relations of protoplasmic movements to heat (giving optimum, maximum and minimum temperatures), continuity of protoplasm.
- 5. Relations of the Plant to the soil, absorption, ash constituents and their offices; transfer of water through the plant; compare transpiration and evaporation, and state effects of the former upon the plant, the air, and the soil.
- 6. Describe fully the process of Assimilation, or appropriation of carbon by the plant, describe the assimilating system of the plant, noticing fully the essential constituent of the assimilative cells, the raw materials required for assimilation, effects of light. Briefly, appropriation of Nitrogen by the plant.
- 7. Transmutation or changes of organic matter in the plant. Respiration. Classify principal organic products of the plant.
- 8. Give a sketch of the grouping or classification of plants into the larger groups, distinguished by the absence or presence of true seeds, the nature of the embryo, structure of the stem, venation of leaves, number of parts in the floral verticil, position and mutual relations as regards adhesion or separation of the calyx, stamens, petals and ovary, the presence of a spadix, and the texture of the floral envelopes (whether petaloid or glumaceous).
- 9. Give a brief account of each of the following Natural Orders, pointing out the most important characters by which they are distinguished:—Cruciferæ, Umbelliferæ, Leguminosæ, Compositæ, Conferæ.
- 10. Give an account of each of the following orders, with examples, and point out their essential distinctive characters:—Liliaceæ, Amaryllidaceæ, Trilliaceæ, Araceæ, Glumiferæ.

# EXAMINATIONS FOR HONOURS.

# I. - HONOURS IN MATHEMATICS AND PHYSICS.

# MATHEMATICS.

I.

# TRIGONOMETRY AND ANALYTICAL GEOMETRY.

APRIL 11.-10 A. M. TO 1 P. M.

1. Either of the following Problems. (1) Given  $\cos (A-C) \cos B = \cos (A-B+C)$ : to prove the tangents of A, B and C in Harmonical Progression. Or (2) given that the sines of A, B, C are in Arithmetical Progression, to prove that  $\tan \frac{A}{2}$ ,  $\tan \frac{B}{2}$ ,  $\tan \frac{C}{2}$  are also in A. P.

2. Given  $\sin \phi = m \tan \theta$ , and  $\sin \theta = n \tan \phi$ : prove

$$\cos^2\theta = m^2$$
.  $\frac{n^2+1}{m^2+1}$ .

3. A rectangular field is twice as long as it is broad, and the distances of a tree in it from three corners are a, b, c respectively. Find an equation for determining the sides.

4. Take an exponential expression for  $\sin \theta$ , and hence express  $\sin^{n}\theta$  in a series of descending multiples of  $\theta$ , when n is even.

5. Resolve  $x^{2n} - 2x^n \cos \theta + 1 = 0$  into Quadratic factors, and apply the result to decompose similarly  $x^{2n} - 2a^n x^n \cos \theta + a^{2n}$ , when  $\theta = \pi$ .

6. From B, the end of the diameter of a circle, measure off n arcs, BC, CD, DE, &c., all equal to each other, and from C, D, E, &c., draw chords to the other end of the diameter: then, if the first chord be

$$x + \frac{1}{x}$$
, the  $n^{\text{th}}$  will be  $x + \frac{1}{x^n}$ .

7. Shew that x.  $\frac{x^n - 1}{x - 1} = x^{\frac{n+1}{2}} \frac{\sum_{j=-\infty}^{n} \frac{n}{2}}{x^{\frac{j}{2}} - x^{-\frac{j}{2}}}$ : and use this knowledge

in summing to n terms the series  $(\cos \theta + \sqrt{-1} \sin \theta) + (\cos \theta + \sqrt{-1} \sin \theta)^2 + (\cos \theta + \sqrt{-1} \sin \theta)^3 + \&c.$ 

8. Deduce, from your knowledge of the theory of Equations, stating any objections if you have them, that

$$\cos\theta = \left(1 - \frac{4\theta^2}{\pi^2}\right) \left(1 - \frac{4\theta^2}{3^2\pi^2}\right) \left(1 - \frac{4\theta^2}{5^2\pi^2}\right) \dots$$
 and prove, by the aid

of the calculus, that  $\frac{1}{4} \tan \frac{\phi}{2} = \frac{\phi}{\pi^2 - \phi^2} + \frac{\phi}{3^2 \pi^2 - \phi^2} + \&c.$ 

- 9. Given the latitude of the place and the sun's altitude and declination: to find the hour of the day (solar time).
- 10. If  $ax^2 + bxy + cy^2 = 1$  be cut by the line mx + ny = 1: shew the meaning of  $ax^2 + bxy + cy^2 (mx + ny)^2 = 0$ : invent a problem which this equation would enable you to solve. Also adapt the method to the general equation,  $ax^2 + bxy + cy^2 + dx + ey + f = 0$ .
- 11. If a = 0,  $\beta = 0$ ,  $\gamma = 0$  be the equations to the sides of the triangle ABC, shew that the equation to the line joining the centres of the inscribed and circumscribed circles is,  $a(\cos B \cos C) + \beta(\cos C \cos A) + \gamma(\cos A \cos B) = 0$ .
- 12. Investigate the condition that the lines, lu + mv + nw = 0, l'u + m'v + n'w = 0 may be at right angles to each other.

## II.

# ANALYTICAL GEOMETRY AND CALCULUS.

## APRIL 17 .- 3 TO 6 P. M.

- 1. Find the polar equation to the line joining the points whose polar co-ordinates are  $(r_l, \theta_l)$  and  $(r_{ll}, \theta_{ll})$ . What does the equation become when one of these points is the origin? and what is the condition that the two points given and the third point  $(r_3, \theta_3)$  may be in the same straight line?
- 2. Deduce the equation to the tangent of the ellipse or hyperbola in terms of the angle it makes with the axis of x from considering the ultimate position of the secant y = mx + c.
- 3. In either of the same curves, prove that the rectangle of the perpendiculars on the tangent drawn from the foci is equal to the square of the minor or conjugate axis.
- 4. Chords are drawn through the focus of an ellipse at right angles. Their segments are  $r, r_1$  and  $\rho, \rho$ . Prove  $\frac{1}{r r_1} + \frac{1}{\rho \rho}$  is constant.
- 5. Explain the "eccentric angle" in the case of the ellipse: and prove that if a be the eccentric angle  $\frac{x}{a}\cos a + \frac{y}{b}\sin a = 1$  is the equation to the tangent to the ellipse.
- 6. If any straight line be drawn cutting a hyperbola and its asymptotes, the intercepts on it between the asymptotes and the curve are equal. Prove this simply by drawing a tangent to the curve parallel to the line.
- 7. If in the reduction of the general equation,  $ax^2 + bxy + cy^2 + &c. = 0$ , it turn out that  $b^2 = 4ac$ , by what steps do you proceed to the inference that the locus is a parabola?
- 8. Shew by considering the points at which the escribed circle of a triangle, opposite angle A, touches the sides, that  $\cos \frac{A}{2}\sqrt{-a} + \sin \frac{B}{2} \frac{C}{\sqrt{\beta}} + \sin \frac{C}{2} \sqrt{\gamma} = 0$  is the equation of this circle: a = 0,  $\beta = 0$ ,  $\gamma = 0$  being the equations to the sides.

- 9. Lines are drawn from the vertex of a parabola making angles a and  $\beta$  with the axis, and meeting the curve in P and P<sub>I</sub>. Prove that PP, is divided by the axis in the inverse ratio of the tangents of these
- 10. Shew that McLaurin's Theorem for the expansion of f(x) is only a case of Taylor's Theorem.
- 11. What are the circumstances in which Taylor's Theorem is said to "fail"? Taylor's Theorem needs Cox's or Lagrange's to to complete it: and what is the principle on which Cox's demonstrate. stration depends?

## III.

# DIFFERENTIAL AND INTEGRAL CALCULUS.

## APRIL 19.-10 A. M. TO 1 P. M.

- 1. An ellipse is made to revolve (1) round its major axis: (2) round its minor axis. Cut the greatest cylinder out of each of the solids so formed, the axis of the cylinder coinciding in each case with the axis of revolution, and compare their volumes.

2. If 
$$v$$
 and  $u$  be each a function of  $x$ , prove that 
$$\frac{d^n}{dx^n}(uv) = \frac{d^n u}{dx^n} + n \frac{d^{n-1}u}{dx^{n-1}} \frac{dv}{dx} + \&c., \text{ after the analogy of }$$

the binomial theorem. (Leibnitz's Theorem.)

3. If 
$$u = (\sin^{-1} x)^{\frac{2}{3}}$$
 prove  $(1-x^2)\frac{d^2 u}{dx^2} - x\frac{du}{dx} - 2 = 0$ ; and find

an expression for  $\frac{d^3u}{dx^3}$ .

- 5. Shew that if a straight line cut two axes of reference in such a manner that the product of the intercepts of them is constant, its envelope is a hyperbola.
- 5. Write the tests for concavity and convexity of a curve. (1) in rectangular co-ordinates, (2) in polar co-ordinates; and deduce from the expression for Radius of Curvature, that in general at a point of inflexion an infinitesmal portion of the curve is a straight line.
- 6. If  $r\theta = a$  be the equation to a curve, shew that its polar subtangent is constant; and if  $r^2 = a^2 \cos 2\theta$ , prove  $r^3 = a^2 p$ , where p is the perpendicular from the pole on the tangent.
- 7. Given the curve  $y^{\frac{2}{2}} = (x-a)\sqrt{x-b}$ ; if a < b there is a conjugate point: find if there are asymptotes.
- 8. Shew methods of integrating any two of the following expres-

$$\int \frac{1}{x^{n}\sqrt{ax^{2}+bx+c}}, \int e^{nx} \sin kx, \int \frac{1}{a+b\cos x} (a > b), \int \frac{x}{\sqrt{1-x^{2}}},$$
$$\int \frac{\cos^{n} \theta}{\sin^{m} \theta}.$$

9. Show that 
$$\int_{0}^{2a} \frac{x^m}{\sqrt{2ax-x^2}} = \pi a^m \frac{1.3.5 \dots (2m-1)}{1.2.3 \dots m}$$
.

- 10. Find the area of one loop of the lemniscate  $(r^2 = a^2 \cos 2\theta)$ : and shew the length of the curve is  $a^2 \int (\cos 2\theta)^{-\frac{1}{2}}$ .
- 11. What is a "pedal curve"? Explain 1st pedal, 2nd pedal, &c. Shew that the 1st pedal of a circle with respect to the end of a diameter is  $a (1 + \cos \theta)$ . (This can be done without the aid of the calculus.)

# MATHEMATICAL PHYSICS.

Examiner......J. G. MACGREGOR, D. Sc.

APRIL 13TH.-10 A. M.-1 P. M.

- $N.\ B.-A$ nswer only ten questions. Those with an asterisk have the higher values.
- \*(1.) A point moves in a plane curve. Shew that the direction cosines of the tangent at the point (x, y), with respect to the x and y axes respectively, are  $\rho \frac{d^2y}{ds^2}$  and  $-\rho \frac{d^2x}{ds^2}$ ,  $\rho$  being the radius of curvature at (x, y).
- (2.) Shew that if a point move under an acceleration perpendicular to the direction of its motion, its speed must be uniform.
- (3.) Obtain analytically the law of the composition of angular velocities.
- \*(4.) Shew analytically that the attraction of a uniform spherical shell on a particle outside it, is the same as it would be, if its mass were condensed in its centre.
- \*(5.) From a given point on the axis of y, a particle of given mass is projected with a velocity of given magnitude in a line parallel to the x axis (the axes being rectangular.) It is acted upon by a force proportional to its distance from the origin of co-ordinates and directed towards that point. Find the equation to the path of the particle.
- (6.) A particle is moving with a simple harmonic motion under a force which when expressed in poundals is equal to k times the distance (in feet) of the particle from the centre of force. Find the work done during the motion of the particle from a distance of a feet to a distance of b feet.
- \*(7) Shew that throughout a field of force due to an attracting mass of finite volume, the differential coefficients of the Potential are continuous.
- \*(8.) Prove Green's Theorem; and apply it to determine the surface integral of normal attraction over a surface enclosing a given attracting mass.
- (9.) Obtain equations expressing the rate of change of angular momentum of a system of particles (a) about any axis fixed in space, and (b) about any axis through the centre of mass, in terms of the moments of the external forces about that axis.
- \*(10.) Find the radius of gyration of a semi-circular disc of uniform thickness and of density varying directly as the square of the distance

from the centre, about an axis normal to its plane and through any point in the straight portion of the perimeter.

- \*(11.) Obtain the equations of motion of a rigid body movable about a fixed point; and shew how they are simplified in the case in which the momental ellipsoid of the body at the fixed point is a sphere.
- \*(12.) Deduce the equation of continuity generally, and apply it (a) to the case of a liquid, (b) to the case of a liquid enclosed in a rigid tube of uniform bore, and (c) to the case of a liquid whose motion is differentially irrotational.
- \*(13.) Find the rate of efflux of a liquid through a small orifice in a vessel which is kept filled to a given height.
- \*(14.) Prove that the rate at which the pressure of a substance varies with its temperature, when its volume is kept constant, is equal to the quotient of the mechanical equivalent of its latent heat of dilatation by its temperature, temperature being specified in terms of Thomson's absolute scale; and apply this result to shew that when an ideal gas is compressed at constant temperature, the energy expended in the compression is wholly converted into heat.
- (15.) Shew that the coefficient of elasticity of an ideal gas kept at constant temperature is numerically equal to the pressure, and that in the case of an ideal gas whose volume is changed adiabatically it is equal to the product of the pressure into the ratio of the specific heat at constant pressure to the specific heat at constant volume.

# II.-HONOURS IN MENTAL AND MORAL PHILOSOPHY.

# LOGIC.

Examiner ..... Professor Lyall, Ll. D.

# TIME: THREE HOURS.

- 1. What is Mill's account of the reasoning process? Wherein does Sir Wm. Hamilton differ from Mill, and what is Mill's quarrel with Hamilton in regard to the Extensive Syllogion?
- 2. What is our contention in regard to true reasoning? Is the generalization a record we consult, after having once made it, or how are we to regard it? How does this save the Syllogism from a charge of being petitory?
- 3. What do you understand by the Figures of the Syllogism? What is the special use of the Third Figure?
- 4. How is the Third the generalizing Figure, or how is the generalizing process founded upon it?
- 5. Show how the Formal Fallacies are just violations of the rules of the Syllogism. What are the Material Fallocies? Give an example of any oue of them.
- 6. Distinguish Inductive from Deductive Logic, and show what part of the process is inductive, and what part is essentially deductive.
- 7. Give the different stages of the inductive process, and point out where *Reasoning* comes in, whence the process is called *Inductive Reasoning*: a mismomer.

- 8. What part does Experiment perform in this process? What part Hypothesis?
- 9. "The planets revolve in elliptical orbits round the sun." Of what generalizing Syllogism may that be said to be the conclusion?
- 10. "This, that, and the other magnet attract iron: therefore all magnets attract iron." How does Sir Wm. Hamilton resolve or explain that process?

# METAPHYSICS.

# I.

## TIME : THREE HOURS.

- 1. Give Locke's account of our knowledge of Real Existence: and consider its consistency with his view (a) of the nature, (b) of the origin of Knowledge.
- 2. State and compare critically the interpretations of physical science offered by Locke, Berkeley, Hume, and Kant respectively.
- 3. Compare and contrast the views of Hume and Kant as to the source of "Necessity" in Knowledge.
- 4. Explain Kant's "Synthetic unity of Apperception," and contrast it with Descartes' "Cogito."
- 5. Explain the office of the Transcendental Imagination in Kant's theory of Knowledge.
- 6. How, according to Kant, does our Knowledge "begin with," and yet not "result from" Experience? Consider how far this distinction was recognized by Locke; and how far our view of the origin of Knowledge must affect our view of its validity.
- 7. With what justice may Hume and Kant respectively be regarded as founders of Agnosticism?
- 8. Investigate the justice of Kant's denunciation of the "Philosophy of Common Sense,"

#### II.

TIME: THREE HOURS.

Write an Essay on the following subject:—
"Kant's Answer to Hume."

## ETHICS.

Examiner.....Professor Seth.

## I.

# TIME: THREE HOURS.

Write an Essay on either of the following subjects:-

- (1) The Trancendental Theory of Ethics.
- (2) The Evolution of Morality.

#### II.

#### TIME : THREE HOURS.

- 1. How are the following positions refuted in Bk. I. of the Republic:—
  - (a) That "Justice is the interest of the stronger;"
  - (b) That "Injustice is more profitable than justice."
- 2. Sketch the main features of Plato's Ideal State, and consider its adequacy as the realization of his ethical ideas.
- 3. Explain Aristotle's conception of the End of life, distinguishing carefully the various elements which enter into it, and showing their mutual relation.
  - 4. State summarily Aristotle's doctrine of Justice.
  - 5. Investigate the psychological basis of Hedonism.
- 6. How, and with what success, does Sidgwick attempt to reconcile conflicting ethical theories?
- 7. Explain Kant's "practical" solution of the problems of "speculative" reason, and consider its value. Compare the Neo-Kantian position, as stated by Green.
- 8. Sketch Spencer's ethical theory, and give a critical estimate of it.

# III.-HONOURS IN ENGLISH LITERATURE AND HISTORY,

# ENGLISH LITERATURE.

Examiner ..... W. J. ALEXANDER, Ph. D.

## APRIL 9TH.-10 A. M.-1 P. M.

# T.

- 1. Suppose a race speaking one language and completely cut off from intercourse with other races: what would be the main and ultimate causes of change in their language? What would be the main conservative forces? Supposing the language absolutely uniform at first, under what conditions would dialects arise? What is the method historically in which dialects give way before a single norm of speech?
- 2. What changes in the quantity of vowels do we find when we compare Chaucer's English with early English?
- 3. Discuss the conjugation of the following verbs historically, explaining as fully as possible the changes they have undergone:—lead, fly, knit, speak, lie, send, find.
  - 4. Re-write in Modern English :-
- (a) Ac manegu dīglu thing sindon nearolice to smēageanne thætte se recerre mæge ongietan be sumum tācnum on his hīeremonna mōde eall thæt thær gehyddes lūtige, ond on thæm ānbīde the hē hira fandige, thæt hē mæge hwīlum ongietan micel of lytlum. Be thæm wæs suīthe ryhte to Ezechiēle thæm witgan gecueden: "Thu monnes sunu, thurhthyrela thone wāg.

- (b) And thet wes geworden, these the he seede, thurh gelæredra regolbryce and thurh læwedra lahbryce, thurh ricra reaffac, and thurh gītsunge wöhgestreona, thurh leoda unlaga, and thurh wöhdomas, thurh bisceopa asolcenesse and unsnotornesse, and thurh lyhtre yrthe Godes bydela, the sothes geswugedan ealles to gelôme, and clumedan mid ceaflum ther hi scoldan clypian, thurh fulne éac folces gælsan, and thurh oferfylla and mænigfealde synna heora eard hi forworhton, and sylfe hi forwurdan.
- 5. Decline brother, wiggend (warrier), niht, thes : give the present indicative of unnan (to grant), and mæg.
- 6. Re-write in classic West-Saxon the following from the Ancren Riwle :-
- (a) Auh witeth ou, and beoth iwarre (war), he seith, ure Loverd, vor monie cumeth to ou ischrüd mid lombes fleose.
- (b) Ure deorewurthe lefdi thet ouh to alle wummen beon vorbisne, was of so lüte speche thet nouhware ine holi write ne ivinde we thet heo spec bûte vor sithen.
- (c) A mon thet leie ine prisune ne schulde ne ne mühte üt, büte yif hit were uor te hongen.
- 7. Tell all you know of any connection between Chaucer or his works and Italy or Italian Literature.
  - 8. Give an abstract of the Parlament of Birds.

# II.

# APRIL 12TH.-3-6 P. M.

- 1. Explain the following phrases, giving full notes (etymological, etc.,) on the words italicised: -
  - (a) I saugh his sleeves purfieed atte hand with grys.
  - (b) Of yeddinges he bar utterly the prys.
  - (c) An anlas and a gipser al of silk.
  - (d) In daunger hadde had he at his own assize The yonge gurles of the diocise.
  - (e) The pilours diden business and cure.

  - (f) They foughten breeme.
    (g) I am thy ayel.
    (h) I have wel read in daun Burnel the Asse.
- Describe the scene which you conceive ought to be presented on the stage just as the curtain is about to fall at the close of Lear, naming the characters and supernumerary persons present,-their positions, attitudes, material surroundings, etc.
- 3. Describe fully the verse tests applied to Shakespeare, and the results.
  - 4. Discuss the merits and defects of Richard III. as a play.
  - Discuss Hamlet's relations with Ophelia.
  - Tell what you know of Ben Johnson as a man, and as a writer.
  - Write notes on :-7.
    - (a) He is franked up to fatting. (b) Like the formal vice, Iniquity. (c) His outward show which seldom or never jumpeth with the heart. -Rich. III.
    - (d) It outherods Herod. (e) Tickle o' the sere. (f) Drink
    - up Eisil. (g) Assays of bias.—Hamlet.
      (h) The capacity of your soft cheveril conscience would receive, if you might please to stretch it. (i) Thus hulling in the wild sea of my conscience. was a haberdasher's wife of small wit that railed at me till her pinked porringer fell off her head. -Henry VIII.

#### III.

#### APRIL 17TH.-3-6 P. M.

- 1. Discuss the question of the authorship of Two Noble Kinsmen, or, Give an analysis of the Ecclesiastical Polity, Bk. I.
- 2. Tell what you know of Friar Bacon and Friar Bungay, Mirror of Magistrates, and Shakespeare's Sonnets.
- 3. Quote one of Shakespeare's Sonnets; or describe Spencer's merit as a poet, illustrating as fully as you can.
- 4. Name the chief prose writers of the period with their principal works, briefly stating the nature and subject of each of these works and its merits and defects from the point of view of prose style.
- 5. Give some general statement of Bacon's philosophical ideas. Wherein did his originality and importance as a philosopher lie?
  - 6. Give a critical account of Browning's Caliban or of Saul.
- 7. Discuss Browning in as far as he is a poet who presents character objectively, illustrating what you say fully and definitely from the poems assigned.

# ENGLISH HISTORY.

#### I.

#### TIME : THREE HOURS.

- 1. Give an account of the trial of Bates, the views advanced at the trial, the decision and its immediate consequences.
- 2. "Bancroft had accordingly presented to the Star Chamber in 1605 a series of petitions in the name of the clergy which Lord Coke has denominated articuli cleri by analogy to some similar representations of that order under Edward II.? Explain.
- 3. "The Convocation had in 1606 drawn up a set of canons on the doctrine of the king's absolute power." Give the substance of the canons.
- 4. Negotiations between James and the Commons for giving up the feudal revenue. Write short account.
  - 5. Lord Coke's alienation from the court. Describe briefly.
- 6. Give an account of the dispute about the jurisdiction of the Court of Chancery in the time of James.
- 7. In 1616 "A cause happened to be argued in the Court of King's Bench wherein the validity of a particular grant of benefice to a bishop to be held in commendam came into question." Write a short account of case and principles involved.
- 8. "The nineteen propositions tendered to him at York in the beginning of June (1652) went to abrogate in spirit the whole existing constitution." Explain.
  - 9. Give your views of the trial and execution of Strafford.
  - 10. Give Hallam's views of the trial and execution of Charles I.

- 11. Hallam discusses the constitutional position of King and Parliament at the outbreak of the war. What are his views?
- 12. What was the position and strength of the Republican party at the beginning and close of the war?
- 13. The proposals to restore the monarchy gave rise to great constitutional difficulties. What were they? How were they solved?
- 14. The flight of James II, introduced grave constitutional difficulties. What were they?

# II.

## TIME: THREE HOURS.

- 1. The first Parliament of James vindicates its privileges. What were the chief points urged.
  - 2. Give an account of the Parliament of 1621.
  - 3. What was the result of Weston's administration of the finances?
- 4. Gardiner draws a comparison between Wentworth and Eliot. What are his views?
- 5. Why would the levying of Ship-money, without consent of Parliament, be much more reasonable on the part of Charles than it would be on the part of Victoria?
- 6. "We are in possession of the copious letters of the Pope's agent Cuneo, from which we may gather with certainty the relations of Charles with Catholicism." Explain.
- 7. "In August, 1633, a great alteration took place in the state of the English Church." Explain.
- 8. Give an account of the ecclesiastical condition of Scotland, the efforts of James to establish Episcopacy, and the state of affairs during the reign of Charles.
- 9. What were the terms of the pacification of Berwick? How were they viewed in Scotland? What were the results?
- 10. In the negotiations at Uxbridge, what did the Commons demand? What was the King willing to grant?
- 11. In 1847, the Army made proposals to the King which he rejected. In September, 1648, the Parliament made proposals which he accepted. Wherein did they differ? What proposals were most liberal to the king?
- 12. Were the reforms proposed by Barebone's Parliament such as would commend themselves to the English people at the present day?
- 13. Write an article on Oliver Cromwell. Show the difficulties of the position which he occupied. Point out the mistakes which proved so fatal to his administration. What has Carlyle to say about the massacre of Drogheda?

# III.

## TIME : THREE HOURS.

- 1. Trace briefly the relations existing between England and Spain during the reign of James I. Show the motives of both in proposing alliance, and causes which led to war.
- 2. 1612, Princess Elizabeth betrothed to the Elector Palatine. What motives led to the match? What other Prince sought her hand?

- 3. When the Bohemians sought James' help in aid of the Elector Frederic, "King James came now face to face with the greatest question of his life, which summed up and brought to light, so to speak, all the cross purposes and political aims among which he had long moved." Explain.
- 4. The Parliament of 1624 differed wholly from James on foreign policy.
- 5. In regard to movements of Mansfield's army James and Richilieu each sought to accomplish his own purposes. What were they?
- 6. England now suddenly at war with Spain and France together (1627). "The steps by which this result had been brought about throw an amusing light on the capacity of the young King and his Minister." Explain.
- 7. In 1630 Charles made peace with Spain. What were the terms of the treaty?
- 8. "John Taylor was sent to Vienna to protest against the provisions of the treaty (Prague), and to bring the Emperor to another determination. What came of Taylor's mission?
  - 9. How did the war in England affect the French in 1645-8?
- 10. In July 1652 war was declared against the Dutch. What was the cause?
- 11. In April 1654 Peace with Holland. What led to it? What were terms?
- 12. What was the grand aim of Cromwell's foreign policy? How far did it succeed?
- 13. After a year's negotiations a secret treaty was concluded in May 1670 at Dover. What led to it? What were the terms?
- 14. When and how did Louis seek to influence the policy of England by payments of money?

# SESSIONAL EXAMINATIONS.

# FACULTY OF LAW.

# EQUITY.

#### TIME : THREE HOURS.

- 1. (a) Write a short account of the origin and growth of Chancery Jurisdiction. (b) What is meant by property in equity as distinguished from property at law? (c) Distinguish between an "equity" and an "equitable interest."
- 2. (a) What causes gave rise to the Statute of Uses? (b) What were its provisions? (c) Define a trust. (d) An alien may be a trustee. Treat this proposition historically.
- 3. (a) Show by examples that equity courts treat valid charitable trusts with special favor. (b) Illustrate by an example the doctrine of cy pres. (c) How does the Statute of Frauds affect trusts? (d) Distinguish between executed and executory trusts.
- 4. (a) There are two leading classes of resulting trusts. Discuss these. (b) Treat of the presumption of advancement. (c) Discuss the question of a trustee's remuneration.
- 5. Distinguish between a mistake of law and a mistake of fact, and discuss, showing each kind as a ground for rescinding a contract. (b) Distinguish between accident and mistake. (c) Equity gives relief on account of accident. Explain this jurisdiction.
- 6. (a) What are the remedies of a mortgagee? (b) Illustrate tacking of mortgages. (c) Consolidation. (d) Describe shortly equitable mortgages.
- 7. (a) What is separate estate, and how may it be created. (b) What rights has a married woman to property at law, in equity and under the Married Woman's Property Act. (c) Under what circumstance may a wife's equity to a settlement arise.
- 8. Describe the following: (a) Election; (b) Conversion; (c) Ademption; (d) Satisfaction; (e) Performance.
- 9. (a) What is meant by assets? (b) How did lands in England become liable for the debts of a deceased person, and how here? (c) Before the statute, in what order did an executor pay his testator's debts, and in what order are they paid now?
- 10. (a) Describe the purposes for which Locke King's Act was passed, and what is its effect. (b) Discuss marshalling of assets. (c) Give in tabular form the priorities of beneficiaries as to the right of marshalling. (d) Describe the different kinds of legacies.

### CONFLICT OF LAWS.

Examiner.....Professor Weldon.

TIME : Two Hours.

1. "A foreign judgment in personam is merely prima facie evidence of a debt." Criticise this dictum of Lord Brougham.

Nova Scotia students will state the provisions of the Revised Statutes as to the value of foreign judgments sued on in Nova Scotia. State fully the grounds on which a foreign judgment may be impeached in New Brunswick.

Distinguish between judgments in rem and judgments in personam.

A, in Massachusetts, contracts with B, in Maine, that B is to have possession of A's sewing machine at once, but that A is to retain the property until the last of four quarterly instalments is duly paid, with a proviso, that if B is in default in making payments of either of the instalments, A shall at once resume possession of the machine, and that B only acquires the property when he has paid the four quarterly instalments in full. B having paid two quarterly instalments, moves to Nova Scotia seven months after the making of the contract and brings the machine with him, which, five months afterwards, he mortgages to a trader as security for the price of goods then furnished on the credit of the machine. The Nova Scotia statute declares that "every lease-of chattels, accompanied by immediate delivery and followed by an actual and continued change of possession whereby it is agreed that the property in the chattels shall remain in the lessor until the payment in full of the price shall be in writing and registered, otherwise the lien or property intended to be secured to the lessor shall be null and void, and of no effect, as against the mortgagee of the lessee."

Can A sustain trover for the machine against C?

- A vessel flying the French flag is libelled in the Vice-Admiralty Court at Halifax for injury done to a submarine electric cable. law will determine :-
  - (a) Whether the act is a tort?
  - (b) The measure of damages?

4. In the Isle of Man "no action shall be brought but within

three years next after the cause of action."

A, in May 1881, in Man, incurred a debt. In October, 1884, A emigrated to New Brunswick. In 1886 B followed him to New Brunswick and sued him in the courts of that province. Can A defend successfully on the Manx statute of limitations?

5. A physician practising in Newfoundland performed medical services for the defendant, also resident there, for which he sues in a Nova Scotia court, both plaintiff and defendant having removed to this country. By the statute of Nova Scotia it is provided that no person shall practice medicine in Nova Scotia unless he is registered as a duly qualified practitioner, and further that "no person shall be entitled to recover any charge for medicinal services unless he shall prove on the trial that he is duly registered" under the chapter. Plaintiff gave no such evidence, and defendant proved as a fact that medicinal services in Newfoundland were not recoverable by action, being in the nature of honorarium. Discuss the plaintiff's right to recover here.

# CONSTITUTIONAL HISTORY OF ENGLAND.

Examiner ...... Professor Weldon.

#### FIRST YEAR.

## TIME: THREE 'Hours.

- Explain the terms: Ordeal, Compurgation, Witan, Scutage, Fee, Trinoda Necessitas.
- 2. Shew that articles 12 and 14 of Magna Carta contain the germ of Parliament.
- 3. Give an account of the origin, constitution and powers of the three Appellate Courts: House of Lords, Judicial Committee of the Privy Council, and Court of the Exchequer Chamber.
- 4. "There were five principal checks upon the Royal Authority at the time of Henry VII." Name them.
- 5. Trace fully the origin of the Equitable Jurisdiction of the Chancellor.
- 6. Name three important privileges of parliament, and trace the development of either one.
  - 7. Give an account of the writ of attaint.
  - 8. Give a detailed account of the Habeas Corpus Act of Charles II.
- 9. Account for the political retrogression of England during the earlier Tudor reigns.
- 10. Give a detailed account of the Constitution of the Superior Courts of England under the Judicature Acts.
- 11. Give reasons for or against large electoral districts with several members for a district.
  - 12. Write short notes upon :
    - a. Disuse of Impeachments.
    - b. Defects of Jury Trials.
    - c. Distinction between Privy Council and Cabinet.
    - d. Origin of the principal items of the English Revenue of 1888.

## INTERNATIONAL LAW.

Examiner ..... Professor Weldon.

# Time : Two Hours.

- 1. Discuss at length the "Headlands Question" between England and the United States of America.
- 2. Discuss the right of the U. S. fishermen to buy bait and ice in Zanadian ports under the Convention of 1818.
- 3. In the absence of treaty, are states bound to surrender fugitive riminals? Under the Canadian Constitution, where there is no treaty, are the authorities empowered to give up fugitive criminals?

May Canada insist upon the surrender, by the U.S., of an American sitizen who has committed a treaty crime in Canada and sought an sylum in the U.S.? Give reasons.

- 4. Discuss the "Munro Doctrine."
- 5. Discuss the case of the Franconia.
- 6. What is the effect of war upon ante bellum contracts between the subjects of enemy states?

Illustrate fully with reference to Partnership, Marine Insurance and Affreightment Contracts.

7. Is a neutral state bound to suppress contraband trade by its subjects? What is "occasional contraband?" Explain the doctrine of Pre-emption.

What are the penalties of contraband?

8. "Free ships make free goods; and hostile ships make hostile goods." Are these rules of law? Are they widely in force by treaty? Are they inseparable?

Give fully the history of them.

# TORTS.

Examiner......J. Y. PAYZANT, A. M.

## TIME: Two Hours.

- 1. Describe briefly the law respecting "remote" and "proximate" cause. What rule is generally applicable in deciding what consequences are immediate or proximate?
- 2. A discharges his clerk for alleged dishonesty, and hearing that B is about to hire him, of his own accord, but in pursuance of what he considers to be his duty writes B, saying that he had discharged his clerk for stealing goods. A acts bona fide, but is mistaken in the charge he makes. B thereupon refuses to employ clerk. Has clerk any remedy against A?
- 3. Name the principal divisions of oral defamation. Why is it libellous to publish in writing words which if only spoken would not be actionable?

Quote from Lord Mansfield in Thorley v. Kerry.

- 4. Compare Pasley v. Freeman with Haycraft v. Creasy.
- 5. A, a physician, falsely represents to B, another physician, that his practice is worth \$5000 a year, for the purpose of inducing B to buy him out. A sends B his account books to verify the statement, B returns them without examining them, and purchases, relying on A's representation. The practice in reality is not worth \$1000 of which fact A was aware. Has B any remedy against A?
- 6. Distinguish between the following wrongs: Trespass to land, waste, trespass to personal property, conversion.
- 7. A buys 50 barrels of flour from B, terms cash on delivery. A fraudulently takes the flour from B's warehouse without his knowledge and does not pay him for it. He then sells one lot to a baker who immediately makes it into bread; another lot to a broker who immediately re-sells it, and the balance to another broker who purchases it not on his own account, but for and in the name of a merchant authorizing him. Describe what, if any, cause of action B has against the baker and the two brokers or either of the three.
- 8. State shortly the facts and the substance of the judgment in Donald v. Suckling.

- 9. Distinguish between Trespass and Nuisance, illustrating by St. Helen's Smelting Co. v. Tipping. Give your views respecting the law of nuisance applicable to interferences with our bodily comfort and enjoyment as distinguished from those affecting land, vegetation, &c.
- 10. Is there any distinction between mere negligence and contributory negligence considered in relation to the cause of the injury? Give examples and authorities.

# CONSTITUTIONAL LAW.

Examiner......Dr. Weldon.

## TIME: THREE HOURS.

- 1. Give rules to determine whether (a) the early statutes, (b) the common law, (c) the lex parliamenti of England are in force in Nova Scotia.
- 2. State fully the provisions of the B. N. A. Act with reference to the disallowance of Provincial Acts. Must the Governor-General, in disallowing such statutes, act with the advice of the Council? Give reasons. What was the practice before Confederation as to the disallowance of N. S. Acts?
- 3. In determining how far English laws are in force in a self-governing colony, what distinctions do you draw among settled, ceded, and conquered colonies? What between colonies with statutory constitutions, and others whose constitutions were given by Charter or Commission? Was the first N. S. Legislature the creature of an Imperial Statute?
- 4. Is the act of Manitoba chartering a railway to run to the International boundary, to connect with American railways, constitutional? Cite the pertinent sections of the B. N. A. Act and give full reasons.
- 5. From what source does the Vice-Admiralty Court in N. B. derive juristion? To what court must Vice-Admiralty appeals be taken?
- 6. Is that section of the N. S. Liquor Licence Law compelling Brewers to take out a license to sell, constitutional? Give reasons.

Is the so called "two-thirds clause" constitutional?

What rules do you deduce from the three Privy Council cases touching the constitutionality of laws affecting the sale of Intoxicating Liquors?

- 7. What method is available in Canada to remove a County Court Judge? What to remove a Judge of a Superior Court for misbehaviour?
- 8. Argue the question of the constitutionality of the N. S. Statute defining the privileges of the N. S. Legislature.
- 9. Give three important canons for construing the B. N. A. Act and fully illustrate their meaning.
- 10. What powers, if any, has the House of Commons of Canada retained as to the trial of Controverted Elections? Give authorities and reasons.
- 11. Shew the need of observing certain radical distinctions between the Canadian and American Federal Unions. Point out some of the more important differences.

## INSURANCE.

#### TIME: 10 A.M. TO 12 M.

- 1. Assuming that a policy of insurance is not delivered, what remedy would the assured have against the underwriters?
- 2. Name the principal risks covered by Marine Insurance. What risks have to be specified in the policy?
- 3. What is meant by Insurable Interest? Is it lawful for the same interest to be insured to the amount of double its value, and could such an insurance be recovered?
  - 4. What is Re-insurance? Double Insurance?

Can the mortgagor and mortgagee of a ship each recover the full value of a ship if they have separate insurance?

- 5. Explain the case of Lucena v. Crauford.
- 6. Give a definition of "Perils of the Sea," and refer to decided cases as to what will be covered by that expression?
- 7. What restriction is to be placed on the expression "all other perils" in a policy, in order to prevent recovery in respect to every possible accident to a ship?
- 8. When, if ever, can a loss caused by barratry be recovered for where the policy is only against perils of the sea?
  - 9. What kind of concealment vitiates a policy of Marine Insurance?
- 10. How would you ascertain whether or not a concealment was material? What is the test?
  - 11. When is a principal held liable for concealment by an agent?
- 12. What is the difference between a Representation and a Warranty?
- 13. What is a sufficient compliance with the warranty to sail by a given date?
- 14. What is the difference between an actual and constructive total loss?
  - 15. When is a notice of abandonment excused?

## CONTRACTS.

Examiner..... Professor Russell.

# TIME : THREE HOURS.

(Not more than ten questions are to be answered.)

1. "The case of *Dickinson* v. *Dodds* decides that knowledge in point of fact of the proposer's changed intention, however it reaches the other party, will make the proposer's conduct a sufficient revocation of the offer."—*Pollock*. Discuss this principle in connection with the case referred to, and criticise the case.

- 2. What classes of contracts are within the 4th and 17th sections of the Statute of Frauds respectively? What are the provisions of the statute? What is the present tendency of judicial opinion as to the supposed difference between the two sections as to their effect on the contracts to which they refer, i. e., (whether void or unenforceable.)
- 3. "All contracts are, by the law of England, distinguished into agreements by specialty, and agreements by parol; nor is there any such third class as contracts in writing," Rann v. Hughes. When and by whom has this doctrine been questioned? Discuss the point involved and state the present condition of the law.
- 4. What is the position of an infant with respect to contractual capacity? What is the law as to necessaries? "Quære whether evidence is admissible on the part of an infant defendant to prove that when the goods were supplied to him he was already sufficiently provided, but not to the knowledge of plaintiff, with goods of a similar description." How has this question been determined?
- 5. Explain the terms, condition precedent, condition subsequent, concurrent conditions? What distinction does Anson make between contingent promises and conditional promises? What are divisible promises and subsidiary promises? Illustrate.
- 6. In what various senses is the term warranty used and what is the true meaning of the term? State the case of Bannerman v. White. (Hops sold in the cultivation of which sulphur had been used.) By what term would you describe the seller's undertaking in that case?
- 7. What are the ingredients and legal consequences of Fraud? How has the term legal fraud been criticised? Illustrate with reference to a decided case, the difference between fraud which will render a contract voidable, and fraud amounting to mistake which will prevent the formation of a contract.
- 8. Plaintiff sues for services performed under an oral contract not to be performed within a year, and also for damages for breach of the agreement by wrongful dismissal. Discuss his right to recover under both counts of his claim. Had he wrongfully left the service, could he recover wages for the period he served on a quantum meruit? Give reasons for your answer.
- 9. In what cases will impossibility of performance, arising after the formation of the contract, excuse performance of it? State the principles or reasons on which the cases mentioned are founded.
- 10. A is indebted to B and B to C in a sum certain. They meet and all agree that A shall pay C the amount due B instead of paying B. What are the legal effects of the transaction? State the considerations supposed to exist for the several obligations and discharges effected, and test them by the principle that consideration must move from the party to whom the promise is made.
- 11. Discuss the validity of stock-jobbing transactions in this province.
- 12. "A contract confers upon the parties to it rights in rem as well as rights in personam." What does this mean? Discuss the proposition with reference to Lumley v. Gye and Bowen v. Hall.

## BILLS AND NOTES.

Examiner......Professor Russell.

TIME : THREE HOURS.

(Candidates will answer only ten questions.)

- 1. A note was made in Canada, payable there in Canada bills, which were made legal tender by statute. Held, that this was not a promissory note, not being payable in money. Discuss this ruling,—and also the following statement of Daniel. "It is not necessary that the money should be that current in the place of payment, or where the bill is drawn. It may be in the money of any country whatever."
- 2. An instrument in the form of a bill is drawn payable to the order of a person named, and signed by the drawer, but no drawee is named: (a) Is it a bill or note? (b) What is the legal position of one who accepts it? (c) What is the general rule as to ambiguous instruments? (d) A draws a bill, directed to himself, in favor of B. What is the legal effect of the transaction?
- 3. State the successive steps by which bills and notes became negotiable, and trace the course of legislation with reference to the modes of acceptance. Can a holder in this province refuse to take an acceptance made payable at a particular place?
- 4. "An acceptance \* \* is complete the moment it is written on the bill. Consistently with this view a subsequent cancellation before delivery would be nugatory." Discuss this opinion on principle and on authority.
- 5. What is the effect (a) of indorsing specially without the words "or order" a bill negotiable in its inception? (b) of indorsing to order of a particular person after a previous indorsement in blank? How is the latter question answered by the English Act?
- 6. What is "the doctrine in Penny v. Innis?" A sells goods to B and draws a bill on him for the price. C, intending to be surety for the payment signs under B's acceptance. What, if any, liability does he assume? What would be his position if he put his signature on the back of the bill? In what way could a bill be drawn to accomplish the desired result? What are the ojections to this method, and how should the matter be regulated by statute?
- 7. "Although the holder has given value for a bill or note (taken before maturity), yet if he took it under circumstances which ought to have excited the suspicions of a prudent and careful man, he cannot recover." Discuss this statement of the law.
- 8. Bills are pledged by a debtor with his creditor solely as collateral security for an existing debt, with no agreement for forbearance. Is the pledgee a holder for value?
- 9. An accommodation bill is endorsed away after maturity. Can the accommodation acceptor set up the defence, (a) with, or (b) without an agreement between the immediate parties that the bill should not be negotiated after maturity? Give reasons for the answer to b.
- 10. Under what circumstances is a bill said to be extinguished? A bill is paid at maturity by the drawer, to whom it is transferred. Is it extinguished? Would the answer be the same if the bill were accepted for the accommodation of the drawer? How would it be if the bill were paid by and transferred to the accommodation acceptor?

- (a) "If a bill payable to a third person is taken up by the drawer, it cannot be afterwards negotiated except through the payee, (Beck v., Robley)." Explain this, and give the reason for the distinction here taken.
- 11. When are a note payable on demand, a note payable at a specified period after demand, and a note payable by instalments respectively overdue, (a) for the purpose of bringing action against the maker, (b) for the purpose of subjecting a subsequent holder to equities?
- 12. A, a member of a firm of attorneys, draws without the authority of his co-partners, a cheque on the Union Bank, dated seven days ahead, which is cashed by B. The cheque is duly presented on the day it bears date and payment refused. Can the holder sue the firm on the cheque, or for money paid? Give reasons.
- 13. The holder of a bill for \$200 takes from the acceptor \$100 in full discharge of his claim against the acceptor, but expressly reserves his rights against the drawer, who is no party to the agreement. Is the drawer discharged? State the principle upon which he would claim to be discharged, with its limitations.

# REAL ESTATE.

Examiner......S. L. Shannon, Q. C.

TIME: THREE HOURS (FOR THE TWO SUBJECTS.)

- 1. How may Real Estate be acquired? State whether by conveyance or otherwise, and the modes of conveyance.
- 2. When a grant of land is obtained from the Crown by a party, what reservations are generally contained in it? And what is the effect of the reservations?
- 3. What are emblements? Is there any difference as to rights to emblements in tenancies for life and tenancies for years?
- 4. What is waste? What are the two kinds of waste? Give the particulars of each kind, and how far they are applicable to estates for life, and estates for years?
- 5. A testator devises his real estate to his wife A, remainder to his son B, in fee, but should B die without issue in the life time of the wife A, the remainder to C after the wife's death. What are the respective interests of B and C in the lands devised?
- 6. A lease is made for a certain period, but determinable within the period, at the election of the parties, or one of them, without naming the party; which party has the option of determining the lease under the provision contained in it?
- 7. What covenants run with the land? Describe them. What is the leading case on the subject?
- 8. A tenant being in arrears with his rent, his landlord took from him a bond for the amount, payable in three months. Subsequently, finding that his tenant was making away with his property, the landlord distrained for the rent before the bond was due. Could he do so? What is the law upon the subject?
- 9. State what is necessary to be done by a landlord, or his bailiff, in making a distress, and what he can, and what he cannot distrain.

- 10. The private way which a party has over another person's land becomes impassable by means of a flood, has the party a right to go over the adjoining land during the period of the flood? Is there any difference in such a case between a private way and a way of necessity?
- 11. The owner of lands appropriates surface water which flows over his land in no definite channel, and thereby prevents the water from reaching a water-course which it had previously supplied. Can he legally do so? Is the same law applicable to subterranean water?
- 12. What is the law in reference to Lateral Support? What is the principal case upon the subject?
- 13. Can the owner of a house and land adjoining, after selling the house, obstruct the light of the house by building on the land adjoining the house which he had not sold? State the reason for your answer.
- 14. A devise is made to an attesting witness, will this affect the validity of the will?
- 15. What are the formalities required by our statute on the execution of a will? Is there any difference between a will of real and a will of personal property?

# CRIMES.

Examiner. S. L. Shannon, Q. C.

### TIME: THREE HOURS.

- 1. From what sources is the criminal law of Canada derived? and where is it to be found?
- 2. What is a *Crime?* Does the public trial and punishment of an offender preclude the right, in all cases, of a private individual to claim damages for an injury done him?
  - 3. What is a Felony? and what a Misdemeanor?
  - 4. What is necessary to constitute a crime?
- 5. If a wife is concerned in the commission of a crime in her husband's company will she be considered guilty? Give the reasons for your answer, and state whether this is applicable in all crimes.
  - 6. Who are principals in, and who are accessories to a crime?
  - 7. Define treason, murder, and manslaughter.
- 8. Three soldiers go to rob an orchard. Two of them get into a fruit tree. The third stands at the gate with a drawn sword, and stabs the owner who tries to arrest him. Of what crime, if any, are the two in the tree guilty?
- 9. A injures B's finger. B is advised by a surgeon to have it amputated, but refuses, and dies of lockjaw. Is A guilty?
  - 10. Define larceny and burglary.
- 11. A buys a bureau from B at a sale with money in a secret drawer, of the existence of which neither A nor B is aware. A retains the money. Has he committed largeny? State the reasons for your answer.
- 12. A, in the night time, opened a sash window, put a crowbar under the shutter, three inches inside of the window, and tried to break open the shutter, but was not within the sash window. Has he committed burglary? Give the reason for your answer.

## PARTNERSHIP.

Examiner ...... Mr. Harrington, Q. C.

# N. B.—The student is expected to answer ten questions only.

- 1. A person owning an estate conveyed it to the projectors of a joint-stock company for \$50,000. Of this sum \$10,000 was paid him in cash, and he agreed to take paid up stock in the concern for the balance.—The company went into operation, two years elapsed, the stock was never in fact allotted him, and at the end of that time the company was in an admittedly bankrupt condition, The directors then offered him his stock certificates which he refused to take. He claimed to be a creditor for his \$40,000. On the other hand the creditors of the concern, having put it into liquidation, claimed that he was a stockholder and therefore a contributory. What are the rights of the respective parties?
- 2. Discuss the operation of the 4th section of the Statute of Frauds (English), relating to contracts for the sale of lands, upon the following transactions:—
- (a) Two persons in partnership verbally agree that one of them shall buy in his own name a piece of land to be used for partnership purposes, the profits to form partnership assets, the original cost to be borne equally by both. Such person makes the purchase, and then sets up the statute as an answer to the claim of the other for an account of the profits.

(b) Two persons, not partners, verbally agree to buy land, as above, to hold it in common and divide the profits. The land is bought, but

he in whose name it is refuses to account for the rents or profits.

3. Under what circumstances may a person who has paid a deposit on account of shares in a company about being formed, recover back such deposit? And when may the proprietors deduct from such amount, on repaying it, the expenses to which they have been put?

4. Give your opinion on the two following cases :-

(a) The Act incorporating a company enabled the directors to borrow money, when authorized so to do by a vote of a general meeting of shareholders. The directors borrowed money without any such vote, from persons not connected with the company, and unaware of the absence of such resolution.

(b) The incorporating Act enabled the company to borrow to the extent of \$10,000. The plaintiff, with the concurrence of all the members at a regular meeting, lent \$20,000, taking the company's

bonds for the amount.

Can these lenders recover those amounts.

- 6. For what causes will the court decree the dissolution of a partnership during the currency of the period for which the articles provide it is to continue?
- 7. State the rules relating to the effect upon a partnership of physical or mental incapacity of one of the partners.
- 8. State what that fund is, out of which, first, partners, and secondly, directors, may declare dividends. Distinguish between the powers in this respect of partners and directors, and state the consequence of the latter declaring a dividend out of the funds other than those allowed by the law.

9. Losses have occurred in the business of a firm under the circumstances below, and have been borne in the first instance by one only of the members. Give the rule in each case as to such member's right to contribution from the others:—

(a) The original purposes of the partnership were illegal, and the

loss was sustained by such illegal acts.

(b) The original purposes are not illegal, but all the members as a whole have done an illegal act for which one has been compelled to pay.

(c) The original purposes being legal, one partner has himself

knowingly committed an illegal act for which he has been compelled

to pay.

- 10. What is meant by the lien of partners, and describe how, through means of such lien, it comes about that creditors are paid first out of joint estate. Remark also upon the effect of the "lien" upon debts due to the firm by the members thereof, distinguishing between such debts as are incurred by virtue of the partnership relation and those incurred otherwise, giving an illustration of each of such classes of debts.
- 11. Two partners, upon a voluntary dissolution of the firm, agree that one of them shall convey to the other his entire interest in all the assets, the assignee to hold them for his own benefit. The joint creditors bring an action to have the firm's affairs wound up, and, finding the assets remaining in specie, require the partner to whom such assignment has been made to bring such assets into distribution. What is the rule?

TO B ... II . TO ...

- 12. Premising that good faith is exacted by the law from each partner in his dealings with the firm, what would be your opinion of the following cases:—
- (a) A firm were holders of a lease, the profits of which belong to the general account. When the lease was about expiring one of the members, without notice to the others, procured a renewal of it, and then dissolved the partnership. Subsequently he carried on business upon the devised premises and made profits from the lease. His former partner claimed a share of these profits.

(b) A partner with a view to renewing the business for his own benefit dissolved the firm, and then carried the same business on,

making profits which he refused to share with the other.

- 13. Within what limits is a firm liable: (a) for the torts, and (b) for the frauds and misappriopriations of one of its members.
- 14. State the rule governing the power of one partner to bind the firm by the following acts:—
  - (a) Drawing or accepting bills or notes.

(b) Borrowing money.

(c) The giving of a guarantee.

15. Suppose a firm of two to be dissolved by the death of one. The survivor, instead of winding up its affairs, continues to carry on the business in the original name, not paying over to representatives of deceased any of the profits. What are the rights of such representatives?

What would be the result if instead of making a profit, the survivor

had sustained a loss?

Would your opinion be influenced by the consideration of the solvency or insolvency of the concern at the time of death?

# PROFESSIONAL EXAMINATIONS.

# FACULTY OF MEDICINE.

PRIMARY, M. D., C. M.

(50 % required for pass in each subject.)

# ANATOMY,

(INCLUDING PRACTICAL ANATOMY).

Examiners....Geo. L. SINCLAIR, M. D., AND A. W. H. LINDSAY, M. D.

TIME: THREE HOURS.

- 1. Describe the Diaphragm,—its attachments, relations, openings, blood and nerve supply,—and indicate its functions.
- 2. Describe the course and relations of the External Carotid Artery, and name its branches. Indicate the course and distribution of the Facial branch of the Carotid, and mention the arteries with which it anastomoses.
- 3. Describe the Scalenus Anticus, Pectoralis Minor and Psoas Magnus muscles.
- 4. Describe the Internal Iliac Artery, stating its point of origin, length, direction and relations. Enumerate its branches, and give the course and relation of the Internal Pudic Artery.
  - 5. Describe the Duodenum, including its minute structure.
- 6. Describe the Anterior Crural Nerve. Enumerate its branches, and give their distribution.

# PHYSIOLOGY.

Examiner......J. Somers, M. D.

# TIME: THREE HOURS.

- 1. Life:
  - Describe the physical and vital phenomena accompanying organic (living) matter.

b. Also the distinguishing features of organic versus inorganic matter.

- c. What are proximate principles? How are they divided? Indicate the character, and give one example of each class,
- 2. The Blood:

Describe this fluid— $\alpha$ . Quantity and variations.

b. Appearance, specific gravity, temperature.
c. Physiological and Anatomical composition.

- 3. The Circulation. In a concise way, describe the organs of circulation, and the manner of the passage of blood from right to left ventricle.
  - Respiratory process.—Give a short description of this process.
- The Digestive process.—Describe the part of it taking place in the Duodenum.
- 6. Secretion. -a. Give the difference between secretions and excretions. b. Describe the characteristics of the urinary secretions (normal).
- 7. The Nervous System. Mention the divisions of nervous matter and describe each, viz.:
  - a. (Physiological), nerves and nerve centres, nervous cells and
  - b. (Anatomical), the arrangement into systems.
  - c. Motor as distinguished from sensory nerves. One example
  - d. The distinguishing characteristics of special sensory nerves.

# Of Generation:

- a. What is the Ovum? What the Spermatozoon?
- b. How does the holoblastic differ from the meroblastic egg?
  c. What is the Blastoderm? What the Cœlem?
- d. What are the exuviæ of the mammal at birth?

# MATERIA MEDICA.

(INCLUDING THERAPEUTICS AND PRACTICAL PHARMACY.)

Examiner ..... ......D. A. CAMPBELL, M. D.

### TIME: THREE HOURS.

- 1. Write in full a prescription for a diuretic mixture to contain not fewer than three drugs. Name the officinal preparations of such drugs, with doses.
  - 2. Explain fully the different methods of making Tinctures.
- 3. Explain hypodermic medication. Describe the syringe, method of using it, and advantages. What dangers must be guarded against, and name the drugs so employed.
- 4. By what means, and for what objects, would you produce diaphoresis?
- 5. Describe the chief therapeutic uses of Arsenic and Hydrate of Chloral.
  - Describe fully the pharmacology of Quinine.
- 7. Name the agents commonly employed to induce anæsthesia. Describe action, uses, and method of administering any one of them.

## CHEMISTRY.

TIME THREE HOURS

1. What is the chemical nature of the process of Combustion, what bodies usually enter into it, and what are the ordinary products? (Give examples of slow and rapid combustion.) A combustible substance, consisting of Carbon and Hydrogen, is introduced in a burning state into each of the following gases; what takes place in each case? and what are the products of combustion, if any: H, Cl, N, O, CO, CO, .

In what forms or combinations do the following elements occur most commonly in nature:—S, P, K, Ca, Fe, Pb, Au, Sb. Explain the apparent chemical reasons for their so occurring. principal metals whose sulphides are: (a) insoluble in acid solutions, (b) soluble in acid, but insoluble in neutral and alkaline solutions, (c) soluble in water.

3. Write concisely in words without any unnecessary explanation, the exact meaning of the following chemical equations:-

(1.) 
$$H_2 SO_4 + Cu_2 O = Cu_2 SO_4 + H_2 O$$
.

(2.) 
$$H_2 SO_4 + Cu O = Cu SO_4 + H_2 O$$
.

(3.) 
$$H_4 \text{ Si } O_4 - 2 H_2 O = \text{Si } O_2$$
.

(4.) 
$$2 \text{ NH}_4 \text{ Cl} + \text{Ca O} = 2 \text{ NH}_3 + \text{Ca Cl}_2 + \text{H}_2 \text{ O}$$
.

4. What are conclusive tests for the presence of Arsenic in cases of poisoning? Where the amount has to be estimated, how would you treat the contents of a stomach? A quantity of Arsenious Sulphide is precipitated from a solution; it weighs 8 grains. Find by calculation what that weight is equivalent to in Arsenious Acid, (i. e., what quantity by weight of the latter compound will contain the same amount of metallic Arsenic as 8 grains of Arsenious Sulphide.)

5. What tests would you apply to detect Mercury Salts, Silver Salts, Alcohol?

# BOTANY.

...... Prof. Lawson.

TIME: THREE HOURS.

1. Describe the vitally active vegetable cell, the process of celldevelopment, and the principal modification of the cell for special functions and beneficial purposes in the plant.

2. Describe the principal forms of tissue-elements forming the fibrous and tubular tissues of plants.

3. Explain the processes of Absorption of inorganic materials, and Assimilation or formation of carbohydrates.

4. Give a general outline of the classification of plants, pointing out the structural characters upon which the larger groups are founded.

5. Give the prominent or essential characters of each of the following natural orders, with, in every case, examples of medicinal plants belonging to the order :--

1. Ranunculaceæ.

2. Papaveraceæ.

3. Cruciferæ (Brassicaceæ). 4. Leguminosæ (Fabaceæ).

 Umbelliferæ).
 Solanaceæ (including Atropaceæ).
 Bubiaceæ = (Cinchonaceæ + Galie Rubiaceæ = (Cinchonaceæ + Galiaceæ).

# MUNRO EXHIBITIONS AND BURSARIES.

CANDIDATES for these Exhibitions and Bursaries, must fill np this Schedule, so far as it may be applicable to their case, and send it to the Principal. The letter containing it should be registered at the post office, addressed: "The President, Dalhousie College, Halifax, N. S.," and sent so as to reach him on or before September 1st, 1888.

Candidates for Junior Exhibitions and Bursaries, and Candidates for Senior Exhibitions and Bursaries who are not undergraduates of this University, must send with this Schedule certificates of good moral character, signed by clergymen or other persons occupying public official positions.

Candidates for Senior Exhibitions and Bursaries, who are not already undergraduates of this University, must send also the certificates required by § IV. 6; page 30.

(1.) Is it for a Senior or for a Junior Exhibition (or Bursary) that you are a candidate?
(2.) Have you ever matriculated in Arts at a University
(3.) If so, at what University?
(4.) And at what date ?
(5.) How many academic years have you spent as an undergraduate in Arts at a University or at Universities?
(6.) At what University or Universities were they spent?
[over.

(7.) Give the dates.
(8.) Have you ever before competed for the Exhibitions and Bursaries for which you are now a candidate?
(9.) If so, when ?
(10.) Name the High Schools or Academies attended by you, giving years of attendance at each.
(11.) If a candidate for Senior Exhibitions and Bursaries, in what groups of subjects do you wish to be examined?
Parent's or Guardian's name and address.
Candidate's present address
Signature in full
and the second s

# EXTRA POLITICAL ECONOMY THIRD TEAR.

- 1. Give substance of Cossa's chapter on importance of Political Economy.
- 2. State and examine some of the objections that are made to the study of Political Economy.
  - 3. Poltical Economy in Ancient times and middle ages.
- 4. A complete revolution took place during the 16th century in circumstances, institutions, opinions and theories alike, Explain.
- 5. The Economists of the 17th Century may be divided into three classes. Give them. Name a few leading writers.
  - 6. Write a brief article on the Physiocratic School.
  - 7. Give leading characteristics of Smith's "Wealth of nations".
  - 8. Give Cossa's views of the German Political Economists.

