# CALENDAR

OF

# DALHOUSIE COLLEGE

AND

# UNIVERSITY,

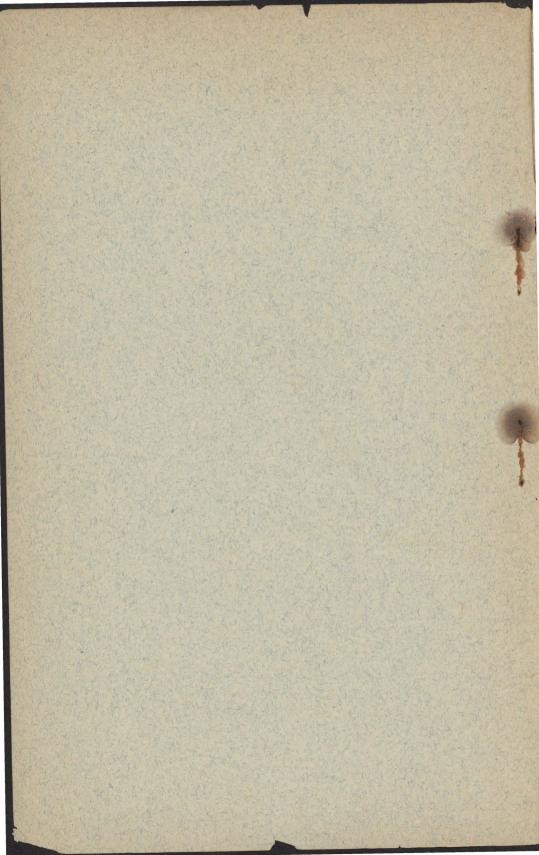
HALIFAX, NOVA SCOTIA.

1891-92



HALIFAX:

PRINTED FOR THE UNIVERSITY BY THE NOVA SCOTIA PRINTING COMPANY.
1891.



## CALENDAR

OF

# DALHOUSIE COLLEGE

AND

# UNIVERSITY,

HALIFAX, NOVA SCOTIA.

1891-92.



#### HALIFAX

PRINTED FOR THE UNIVERSITY BY THE NOVA SCOTIA PRINTING COMPANY. 1891.

# CONTENTS.

	AGE	P.	AGE
University Almanac	3	FACULTY OF LAW:	
Time Table, Faculty of Arts	6	Courses of Lectures	63
Historical Sketch	7	Academic Year	67
Benefactors	10	Admission of Students	67
Board of Governors	14	Degree of LL B	67
Senatus Academicus	14	Matriculation Examinations	67
Academic Staff	15	Course of Study for LL. B	68
D		Sessional Examinations	68
FACULTY OF ARTS:		Moot Courts	69
Courses of Instruction	17	Mock Parliament	69
The Academic Year	30	Academic Costume	70
Admission of Students	30	Library	
Degrees	30	Fees	70
Matriculation Examinations	31		
B. A. and B. L. Courses	34	FACULTY OF MEDICINE:	
Special Courses		Courses of Instruction	71
Attendance	42	Academic Year	73
Examinations	42		73
General Distinction	43	Matriculation Examinations	
Honours	44	Degree Examinations	
Short Courses	44	Primary M. D., C. M. Exami-	10
Evening Classes	45	notions	75
Medals and Prizes	45	rations. Final M. D., C. M. Examina-	10
Munro Exhibitions & Bursaries	46	tions	76
Residence	50	tions Academic Costume	
Church Attendance	50		78
Discipline	50	Fees	78
Degree of M. A	50	Institutions:	
Admission ad eundem Gradum			
Academic Costume			79
Fees			80
		The Gymnasium	81
FACULTY OF PURE AND APPLIED		Students' Societies	81
Science:			
Courses of Instruction	53	University Lists:	
The Academic Year	58	Degrees conferred, 1891	84
Admisssion of Students		General Pass List, 1891	85
Degrees	58	Honours, &c., 1891	87
Matriculation Examinations		Examinations, 1890-91	88
B. Sc. Courses			95
Attendance		Students, 1890-911	08
Examinations			
General Distinction		ALUMNI ASSOCIATION	10
Honours	61	APPENDIX - EXAMINATION PAPERS	
Munro Exhibitions & Bursaries		1890-91.	
		Matriculation and Junior	
Residence, etc		Munro Exhibitions and	
Admission ad eundem Gradum		Bursaries	;
Academic Costume		Senior Munro Exhibitions and	1
Fees			iii
T CC3	04	Δαιτος λ	111

### NOTICE.

Attention is directed to changes in §§ I, IV-VIII, X, XIV, XVI, XXIII-XL.

# University Almanac, 1891-92.

#### 1891.

- Aug. 24, M.—Last day for receiving notices of Supplementary and Matriculation Examinations (Law Faculty).
  - Sept. 1, Tu.—Session (Law Faculty) begins.—Matriculation and Supplementary

    Examinations (Law Faculty).—Registration and payment of class
    fees (Law Faculty).—Meeting of Law Faculty, 4 P. M.
    - 2, W.-Lectures begin (Law Faculty).
    - 3, Th .- Meeting of Senate, 11 A. M.
    - 4, F.-Meeting of Faculty of Arts, 11 A.M.-Meeting of Faculty of Law, 4 P.M.
    - Tu.—3 P. M., Registration of candidates for Matriculation and Bursary Examinations (Arts Faculty).
    - W.—Session (Arts Faculty) begins,—Examinations for Senior and Junior Munro Exhibitions and Bursaries, and for 1st and 2nd Year Matriculation (Arts Faculty), begin:
       9.45 A. M., Latin.—3 P. M., Greek.
    - 10, Th .- 10 A. M., Geometry .- 3 P. M., Arithmetic and Algebra.
    - 11, F.- 10 A. M., History and Geography. 3 P. M., English Language.
    - 12, Sa. 10 A. M., Chemistry. 3 P. M., Botany.
    - 14, M.- 10 A. M., French.-3 P. M., German.
    - " Supplementary Examinations (Arts Faculty) begin, 10 A. M.
    - 17, Th.—Intimation as to elective subjects, to be made by undergraduates of 3rd and 4th years, on or before this day.
    - " -Meeting of Faculty of Arts, 9 A. M.
    - " -CONVOCATION, 3 P. M.
    - F.—Matriculation, Registration and Gymnasium Tickets issued at hours specified in notice in College Hall (Arts Faculty).
    - " -Lectures begin (Arts Faculty).
    - 21, M.—Meeting of Faculty of Law, 4 P. M.
  - Oct. 5, M .- Meeting of Governors.
    - 7, W.—Final Matriculation Examinations (Arts Faculty) begin:
      3 P. M., English, History and Geography.
    - 8, Th .- 3 P. M., Classics and Modern Languages.
    - 9, F.- 3 P. M., Mathematics.
    - 10, Sa. 10 A. M., Chemistry
    - 13, Tu.-Meeting of Faculty of Arts, 1 P. M.
    - W.—Last day for receiving applications for Medical Matriculation Examinations.
    - 15, Th.-Meeting of Faculty of Arts, 4 P. M.
    - F.—Returns as to residence and Church attendance, to be made on before this day.
    - 28, W.—Session (Medical Faculty) begins. Matriculation Examination (Medical Faculty) begins.
    - 31, Sa.—Results of Medical Matriculation Examination declared and certificates issued.

- Nov. 2, M .- Registration, payment of class fees, and beginning of lectures (Medical Faculty).
  - 5, Th.-Meeting of Faculty of Law, 4 P. M.
  - 13, F .- George Munro's Day .- No lectures.
- Dec. 3, Th .- Meeting of the Faculty of Law, 4 P. M.
  - 17. Th.-Christmas Examinations (Arts Faculty) begin:

9 A. M., Latin.

11.15 A. M., French.

3.30 P. M., Botany, Junior Philosophy.

18. F.- 9 A. M., German.

11.15 A. M., Mathematics (1st and 2nd years), History (3rd year), Senior Physics.

3.30 P. M., English (1st year), Ethics.

- M .- 9 A. M., Political Economy, Classical History and Geography. 11.15 A. M., English (2nd, 3rd and 4th years).
  - 3.30 P. M., Chemistry (Inorganic and Organic).

22. Tu.-9 A. M., Greek.

11.15 A. M., History (4th year), Junior Physics.

3.30 P. M., Mathematics (1st and 2nd years), Senior Philosophy.

W .- No lectures .- Christmas vacation begins.

#### 1892.

Jan. 7, Th.-Lectures resumed.

" - Meeting of Faculty of Law, 4 P. M.

Feb. 1, M .- Meeting of Senate, 4 P. M.

4, Th .- Meeting of Faculty of Law, 4 P. M.

12, F .- Last day of Lectures (Law Faculty).

Mar. 1, Tu.-Last day for receiving M. A. Theses.

W .- Ash Wednesday. No lectures.

M .- Meeting of Senate, 4 P. M.

April 1, Th.-Meeting of Governors.-Last day for receiving applications for Primary and Final M. D., C. M. Examinations.

W .- Last day of Lectures (Arts Faculty). - Last day for returning books to 6. the University Library .- Meeting of Faculty of Arts, 4 P. M.

F .- Lectures close (Medical Faculty).

"-Spring Examinations (Arts Faculty) begin :

10 A. M., Practical Chemistry and Practical Physics.

9. Sa.—Certificates of Class attendance (Medical Faculty) issued.

11, M .- 9 A. M., Latin.

11.15 A. M., French.

P. M., Junior Philosophy.

Tu.-A. M., English (2nd, 3rd and 4th years). 12. 9 11.15 A. M., Additional French.

P. M., Senior Philosophy. 3

13. W .--A. M., Botany.

11.15 A. M., Mathematics, History (3rd year), Senior Physics.

3 P. M., Additional Latin.

A. M., English (1st year), Additional English (3rd and 4th years), Th - 9 14. 11.1 A. M., Political Economy.

P. M., Chemistry (Inorganic and Organic).

A. M., Greek. 15, F.- 9

11.15 A. M., Junior Physics, History (4th year).

3 P. M., Additional Greek (1st and 2nd years).

Sa. - 9 A. M., Mathematics, Additional Senior Physics.

11.15 A. M., Additional Junior Physics.

P. M., Additional Greek (3rd and 4th years), Additional English (1st and 2nd years).

April 18, M.- 9 A. M., German.

11.15 A. M., Additional Mathematies.

3 P. M., Ethics.

" -M. D., C. M. Examinations begin:

10 A. M.—1 P. M., Chemistry.

3 P. M.-6 P. M., Surgery.

19, Tu. 9 A. M., Additional Ethics.

11.15 A. M., Additional German.

3 P. M., Additional Senior Philosophy.

10 A. M.-1 P. M., Materia Medica.

3 P. M.-6 P. M., Medicine.

20, W.- 10 A. M.-1 P. M., Physiology.

3 P. M.-5 P. M., Histology.

3 P M.-6 P. M., Obstetrics, and Diseases of Women and Children.

21, Th.- 10 A. M.-1 P. M., Anatomy, and Clinical Examinations.

3 P. M.-6 P. M., Medical Jurisprudence.

22, F.—Oral Examinations (Faculty of Medicine).

23, Sa.—Meeting of Faculty of Arts, 10 A. M.

 M.—Meeting of Senate, 10 A. M.—Results of Examinations (Arts and Medical Faculties) declared.

26, Tu.-3 P. M., CONVOCATION.

# TIME TABLE — FACULTY OF ARTS.

Years.	Hours.	Monday	Tuesday.	Wednesday.	Thursday.	Friday.
First Year.	9 10 11 12 2 3	Latin. Mathematics. 2nd German. 1st German.	Inorg. Chem. Greek. Mathematics. English. 2nd French. 1st French.	Inorg. Chem. Latin. Mathematics. 2nd German. 1st German.	Greek. Mathematics. English. 2nd French. 1st French.	Inorg. Chem. Latin. Mathematics. 2nd German. 1st German.
Second Year.	9 10 11 '' 12 2	Junior Phil. Mathematics. Latin. English. 2nd German.	3rd French. Mathematics. Greek. Jun. Physics. 2nd French.	Junior Phil. Mathematics. Latin. English. 2nd German.	3rd French. Mathematics. Greek. Jun. Physics. 2nd French.	Junior Phil. Mathematics. Latin. Jun. Physics. English. 2nd German.
Third Year.	9 "" 10 "" 11 "" 12 "" 2 3 ""	3rd German. Org. Chem. Sen. Physics.  History. Ethics. Chem. Lab. Latin. Adv. Math. Chem. Lab.	3rd French.  Greek (1st yr.) Pol. Economy Adv. Classics. Jun. Physics.  Chem. Lab. Greek (3rd yr.) Const. Hist. Botany. Chem. Lab. 2nd French. 1st French. Senior Phil.	3rd German Sen. Physics. History. Ethics. Chem. Lab. Latin. Adv. Math. Chem. Lab. Ist German.	3rd French. Org. Chem. Greek (1st yr) Pol. Economy Adv. Classics Jun. Physics. Chem. Lab. Greek (3rd yr) Const. Hist. Botany. Chem. Lab. 2nd French. 1st French. Senior Phil.	3rd German. History. Jun. Physics. Chem. Lab. Adv. Math. Chem. Lab. 1st German.
Fourth Year.	9 " 10 " 11 " 12 " 1 2 3	3rd German. Org. Chem. Const. Law. Sen. Physics. Adv. Physics. Ethics. Chem. Lab. Latin. Chem. Lab.	3rd French. Pol.Economy. Adv. Classics. History. Contracts.* Greek (2nd yr) Chem. Lab. Greek (4th yr) Botany. Adv. Math. Chem. I.ab. Adv. Phil. 2nd French. Senior Phil.	3rd German. Const. Law. Sen. Physics. Adv. Physics. Ethics. Chem. Lab Latin. Chem. Lab.	3rd French. Org. Chem. Pol. Economy Adv. Classics. History. Contracts.* Greek (2nd yr) Chem. Lab. Greek (4th yr) Botany. Adv. Math. Chem. Lab. Adv. Phil. 2nd French. Senior Phil.	3rd German.  Chem. Lab.  Adv. Math. Chem. Lab.  Adv. Math. 2nd German.

<sup>\*</sup>The hour of this class may be changed if any of the members of it wish to take the History Class.

## 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 under 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 College.

(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, centrol and disposition of the buildings 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 Pro'essor 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 be 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 Gevernors 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 with 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 desirous 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 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 virtue of 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 Medicine was organized, which in 1875 developed into the Halifax Medical College. In 1885 the Faculty was re-organized.

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. In 1884, he founded a Professorship in Metaphysics. From 1883 till 1890, he provided Tutors in Classics and Mathematics. Since 1880, he has provided the University with Exhibitions and Bursaries, to the amount of \$68,248.61, 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 Philosophy respectively.

Iy 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 of his subscription to the Building Fund. 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.

In 1887, J. F. Avery, M. D., made the following bequest to the College:—

"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."

In 1887, Mrs. Harriet Elizabeth Mackenzie, or Morrison, of Stornoway Scotland, formerly of Pictou, N. S., made the following bequest:—

"To Dalhousie College, £1,000 for founding a bursary for students attending said College, subject to such conditions and regulations as

the governing body of said College may appoint, but with this proviso, that said bursary shall be called the 'Mackenzie Bursary,' and that students of the name of Mackenzie, Maclean, and Fraser shall have a preference in the selection of beneficiaries therefor."

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. Robert 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. Maclean, 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, Wm. Miller, Prof. Macdonald, \$250 each; Prof. MacGregor, A. & W. Mackinlay, \$225 each; Prof. Alexander, Judge Graham, \$200 each; James Scott, R. B. Seeton, Rev. John McMillan, Wm. Robertson, J. C. Mackintosh, H. McD. Henry, John Y. Payzant, Pearson, Morrison & Forbes, \$150 each; J. J. Stewart, \$120; Rev. E. Scott, Peter Ross, H. W. C. Boak, Pictou Academy, \$100 each; Wm. B. Wallace, Arthur Drysda'e, E. L. 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, \$10,640.

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. Flemming, 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, E-q., \$125; J. J. Bremner, Esq., \$120; B. H. Collins, Esq., J. Donaldson, Fsq., 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., James 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, Esq., 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, \$200; The Alumni Association, \$150; J. F. Avery, Esq., M. D., Thom s 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. Maclean, Esq., Robert Morrow, Esq., Mon. 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 been Professors or Lecturers in the University:

REV. THOMAS McCulloca, D. D., 1838-43, President, and Frofessor of Moral Philosophy, Logic and Rhetoric.

REV. ALEXANDER ROMANS, 1838-42, Professor of Classics.

Rev. James McIntosh, 1838-44, Professor of Mathematics and Natural Philosophy.

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

REV. GEORGE CORNISH, M. A., LL. D., now Professor of Classics, McGill College, 1856-7, Professor of Classics.

THOMAS McCulloch, 1863-5, Professor of Natural Philosophy.

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

HERBERT A. BAYNE, M. A., Ph. D., F. R. S. C., late Professor of Chemistry, Royal Military College, Kingston, Ont., 1877-79, Lecturer on Organic Chemistry and Chemical Analysis.

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

REV. DAVID HONEYMAN, D. C. L., F. S. A., F. R. S. C., late Provincial Geologist, 1878-83, Prof. of Geology and Palæontology.

REV. JAMES Ross, D. D., 1863-85, Principal, and Professor of Ethics.

J. G. Schurman, M. A., D. Sc., now Professor of Ethics and Metaphysics, Cornell University, 1882-86, Professor of English Literature and Metaphysics.

How. Sir 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, 1882-88, Lecturer on Equity Jurisprudence.

W. J. ALEXANDER, B. A., Ph. D., now Professor of English in the University of Toronto, 1884-89, Professor of English Language and Literature.

REV. WM. LYALL, LL. D., F.R.S.C., 1863-90, Professor of Philosophy.

# Palhousie College & Aniversity.

### BOARD OF GOVERNORS.

Hon. Sir Adams G. Archibald, K. C. M. G., P. C., M. P., D. C. L., Q. C., Chairman.

HON. SIR CHARLES TUPPER, BART, K. C. M. G., C. B., M D.

Hon. S. L. Shannon, D. C. L., Q. C., Judge of Probate.

REV. JOHN MCMILLAN, M. A., B. D.

REV. PRESIDENT FORREST, D. D., D. C. L.

Hon. Alfred G. Jones, P. C.

JOHN DOULL, Esq.

REV. ROBERT MURRAY.

WALLACE GRAHAM, Esq., A. B., Judge of the Supreme Court.

E. L. Newcombe, Esq., B. A., LL. B., Representative of the Alumni Association.

ADAM BURNS, Esq.

A. H. MacKay, Esq., B. A., B. Sc., F. R. S. C., Principal of the Halifax Academy.

HIS WORSHIP THE MAYOR OF HALIFAX, ex officio.

D. A. CAMPBELL, Esq., M. D., Representative of the Alumni Association.

James Forrest, B. A., Treasurer. William M. Doull, Secretary.

## SENATUS ACADEMICUS.

REV. JOHN FORREST, D. D., President.
CHARLES MACDONALD, M. A.
JOHN JOHNSON, M. A.
GEORGE LAWSON, PH. D., LL. D., F. I. C., Secretary.
J. G. MACGREGOR, M. A., D. Sc.
RICHARD C. WELDON, M. A., PH. D., M. P.
JAMES LIECHTI, M. A.
BENJAMIN RUSSELL, A. M.
JAMES SETH, M. A.
ARCHIBALD MACMECHAN, B. A., PH.D.

### ACADEMIC STAFF.

REV. PRESIDENT FORREST, D. D., D. C. L., F. S. Sc. Lond., George Munro Professor of History and Political Economy.

CHARLES MACDONALD, M. A. (Aberd.), Professor of Mathematics.

John Johnson, M. A. (Dub.), McLeod Professor of Classics.

George Lawson, Ph. D., Ll. D., F. I. C., F. R. S. C., McLeod Professor of Chemistry and Mineralogy.

James Liechti, M. A. (Vind.), McLeod Professor of Modern Languages.

James Gordon MacGregor, M. A. (Dal.), D.Sc. (Lond.), F.R.SS. E&C.,

George Munro Professor of Physics.

RICHARD CHAPMAN WELDON, A. M. (Mt. All.), Ph. D. (Yale), George Munro Professor of Constitutional and International Law.

Benjamin Russell, A. M. (Mt. All.), Professor of Contracts, Lecturer on Bills and Notes, Sales and Equity.

James Seth, M. A. (Edin.), George Munro Professor of Philosophy.

Archibald MacMechan, B. A. (Toronto), Ph. D. (J. H. U.), George

Munro Professor of English Language and Literature.

HON. SAMUEL LEONARD SHANNON, D. C. L. (Vind.), Q. C., Judge of Probate, Lecturer on Real Property and Crimes, and Examiner in Medical Jurisprudence.

WALLACE GRAHAM, A. B. (Acad.), Judge of the Supreme Court, Lecturer on Insurance.

JOHN YOUNG PAYZANT, A. M. (Acad ), Lecturer on Torts.

C. Sidney Harrington, Q. C., Lecturer on Evidence and Partnership. Hon. Charles J. Townshend, B. A., B. C. L. (Vind.), Judge of the Supreme Court, Lecturer on Equity Jurisprudence.

WILLIAM HENRY WADDELL, Lecturer on Voice Culture and Elocution.

John Somers, M. D. (Bell. Hosp. Med. Coll., N. Y.), Examiner in

Medicine.

GEORGE L. SINCLAIR, M. D. (Coll. P. and S., N. Y.), M. D. (Univ. Hal.), Examiner in Anatomy and Practical Anatomy.

D. A. CAMPBELL, M. D., C. M. (Dal.), Examiner in Materia Medica and Therapeutics.

A. W. H. LINDSAY, B. A. (Dal.), M. D., C M. (Dal.), M. B., C. M. (Edin.), Examiner in Anatomy and Practical Anatomy.

JOHN STEWART, M. B., C. M. (Edin.), Examiner in Surgery.

A. C. Page, M, D. (Harv.), President N. S. Medical Board, Examiner in Obstetrics and Diseases of Women and Children.

Hon. D. McN. Parker, M. D. (Edin.), L. R. C. S. Edin., Examiner in Medicine.

Edward Farrell, M. D. (Coll P. and S., N. Y.), Examiner in Surgery.

Andrew J. Cowie, M.D. (Univ. Penn.), M. R. C. P. Lond., Examiner in Clinical Medicine.

John F. Black, M D. (Coll. P. and S., N. Y.), Examiner in Clinica Surgery. ALEXANDER P. REID, M D., C. M. (McGill), L. R. C. S. Edin., L. C. P. and S. Can., Supt. Hospital for Insane, Examiner in Medical Jurisprudence.

ARTHUR MORROW, M. B., C. M. (Edin.), Examiner in Physiology and Histology.

HOWARD MURRAY, B. A. (Lond.), Lecturer on Classics.

M. A. Curry, M. D. (Univ. N. Y.), Examiner in Obstetrics and Diseases of Women and Children.

MURRAY McLaren, M. D., Examiner in Physiology and Histology.

A. H. MacKay, B. A. (Dal.), B. Sc. (Hfx.), F. R. S. C., Lecturer on Zoology.

MARTIN MURPHY, D. Sc. (Vind.), C. E., Provincial Government Engineer, Lecturer on Civil Engineering.

EDWIN GILPIN, JR., A. M. (Vind.), F. G. S., F. R. S. C., Inspector of Mines, Lecturer on Mining.

F. W. W. DOANE, C. E., Halifax City Engineer, Lecturer on Surveying.

Librarian: Professor Seth.

Curator of the Museum: Professor Lawson.

Instructor in Gymnastics: SERGEANT KELLY.

Janitor: ARCHIBALD DUNLOP.

# Faculty of Arts.

THE PRESIDENT.
CHARLES MACDONALD, M. A.
JOHN JOHNSON, M. A.
GEORGE LAWSON, Ph. D., LL. D.
JAMES LIECHTI, M. A.
J. GORDON MACGREGOR, D. Sc.
JAMES SETH, M. A.
ARCHIBALD MACMECHAN, Ph. D.

Secretary of the Faculty—Professor MacMechan.

LECTURER: H. MURRAY, B. A.

## § I.—Courses of Instruction.

#### I.-CLASSICS.

(McLeod Professorship.)

Professor.....John Johnson, M. A.

#### First Year Latin Class.

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

#### Subjects of study:

Cicero: Pro Milone (Purton's, Macmillan, N. Y., \$0.60). \* Pro Lege Manilia (Wilkin's, Macmillan, N. Y., \$0.75). Virgil: Æneid, Book VI. (Page's, Macmillan, N. Y., \$0.40). Composition: Arnold's Latin Prose by Bradley. (Gage & Co., Toronto, \$1.50). Grammar: Syntax and Prosody. (Allen and Greenough's. Ginn, Boston, \$1.30). History: Roman History, (Smith's, Harpers, N. Y.).

<sup>\*</sup> Students seeking a First or Second Class Distinction are examined in this additional subject. An "unseen" passage will also be set for translation.

#### 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, N. Y., 40c. each; Books I-IV, \$1.60). Livy: Book I, (Stephenson's, Macmillan, N. Y., \$0.40). Composition: Easy pieces for Latin Prose, Second Series, (Champneys and Rundall, Longmans, N. Y., \$0.50). History: Grecian History, (Smith's smaller edit., Harpers, N. Y.).

#### Third and Fourth Years Latin Class.

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

Subjects of study in alternate years:

For 1891–92.—Tacitus: Agricola, (Church & Brodribb's, Macmillan, N.Y., \$0.55). Plautus: Captivi, (Lindsay's, Macmillan, N.Y., \$0.60). Juvenal: Satires III, X, XIII, (Hardy's, Macmillan, N.Y., \$1.25).—Composition: Bennett's Second Latin Writer, (Longman's, N.Y., \$1.10). + Sallust: Catiline's Conspiracy, (Turner's, Longmans, N.Y., \$0.60). + Roman Provincial Administration by Arnold, (Macmillan, N.Y., \$1.75).

For 1892-93.—Horace: Selected Satires, (Macleane's small ed., with notes, Whittaker, London). Tacitus: Annals, Book I, (Furneaux', Macmillan, N. Y., \$0 50).—Composition: Bennett's Second Latin Writer, (Longman, N. Y.. \$1.10) + Tacitus: Annals, Bk. XIV. † Merivale's Hist. of the Romans, chaps. xxx, xxxi, xxxii, xxxii, xxxix-xli.

#### First Year Greek Class.

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

Subjects of study:

Lucian: Vera Historia, (Jerram's, Macmillan, N. Y., \$0.40.) \*Xenophon: Cyropædia, Book I, (Bigg's, Macmillan, N. Y., \$0.50). Composition: Elementary Greek Prose Competition, (by Fletcher & Nicholson. pub. by W. Bailie, Kingston, Ont., \$1.00), introductory rules; oral and \*written exercises.—Grammar: Accidence, (Goodwin's, Ginn & Co., Boston, \$1.65).

#### Second Year Greek Class.

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

Subjects of study:

Homer: Odyssey, Book IX, (Edward's, Macmillan, N. Y., \$0.60). Xenophon: Hellenica, Book I, (Underhill's, Macmillan, N. Y., \$0.75). \*Demosthenes: Olynthiacs, (Heslop's, Rivingtons, London, \$0.86).—Composition: As in First Year's Class; also Sidgwick's Introduction to Greek Prose Composition, (Longmans, N. Y., \$1.50.)

<sup>\*</sup> Students seeking a First or Second Class Distinction are examined in this additional subject. An "unseen" passage will also be set for translation.

<sup>†</sup> For private reading for a First Class. An "unseen" passage also will be set for translation for a First or Second Class.

#### Third and Fourth Years Greek Class.

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

Subjects of study in alternate years:

For 1891-92.—Plato: Apologia Socratis: (Adam's, Macmillan, N. Y., \$0.90.) Aeschylus: Prometheus Vinctus (Prickard's, Macmillan, N. Y., \$0.50).—Composition: Sidgwick's Introduction to Greek Prose Composition: introductory rules; oral and \*written exercises, \* Philology: Müller's Science of Language, vol. I, chaps. 1-7. †Plato: Republic, Book I, (Warren's, Macmillan, N. Y., \$1.50).

For 1892-93.—Demosthenes: Philippics, I, II, III, (Tarbell's, Ginn & Co., Boston, \$1.10). Euripides: Medea, (Verral's, Macmillan, N.Y., \$0.90).—Composition: Sidgwick's Introduction to Greek Prose Composition; oral and \*written exercises. \* Philology: Peile's Primer of Comparative Philology, Macmillan, N.Y., \$0.35. † Euripides: Hecuba.

#### Advanced Class.

Twice or three times a week.

In this class the Latin and Greek Subjects prescribed for the Special Course in Classics are read, and Prose Composition 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:

Macmillan: Progressive French Reader, II. year, (Fasnacht). Molière; Le Bourgeois Gentilhomme, (Macmillan & Co.). Scribe: Le verre d'eau. 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.). Corneille: Cinna. Translation from English writers. Exercises ir Syntax. Translation of unspecified passages from modern authors.

Molière's Misanthrope (Macmillan & Co.) and either Saintine's Picciola or Madame de Staël's L'Allemagne are prescribed for private reading to candidates for a First Class position.

Text Books: As in First Class. Outlines of the History of French Literature (Saintsbury's Primer).

<sup>\*</sup> Students seeking a First or Second Class Distinction are examined in this additional subject. An "unseen" passage will also be set for translation.

<sup>†</sup> For private reading for a First Class. An "unseen" passage will also be set for translation for a First or Second Class.

#### Third French Class.

Tuesdays and Thursdays, 9-10 A. M.

Subjects of study :

From 1891-92.—Molière: Les Précieuses ridicules. Racine: Phèdre. Corneille: Horace. Translations from English writers. Original essays. Translation of unspecified passages from modern authors.

From 1892-93.—Molière: Les femmes savantes. Racine: Iphigénie. Corneille: Le Cid. (Macmillan & Co.). Translations from English writers. Original essays. Translation of unspecified passages from modern authors.

Molière's Tartufe (Macmillan & Co.,) and either Victor Hugo's Les Travailleurs de la mer (Rivingstons) or Scribe's Bertrand et Raton are prescribed for private reading to candidates for a First Class position.

Tevt Books: As in Second Class. Saintsbury's Short history of French Literature.

#### First German Class.

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

Subjects of study:

Buchheim: German Reader, Part II. Schiller: Wilhelm Tell (Macmillan & Co.). Gustav Freytag: Die Journalisten, or Hauff: Das kalte Herz. Exercises in Grammar and Composition.

Text Books: German Grammar will be announced at the opening of the Session.

#### Second German Class.

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

Subjects of study:

From 1891-92.—Goethe: Hermann und Dorothea (Clarendon Press.). Lessing: Minna von Barnhelm (Macmillan & Co.). Transations from English writers. Original compositions. Translation of unspecified passages from modern authors.

From 1892–93.—Goethe: Egmont. Schiller: Maria Stuart. (Macmillan & Co.) Translations from English writers. Original compositions. Translation of unspecified passages from modern authors.

Schiller's Jungfrau von Orleans, and either Heine's Prosa (Macmillan & Co.). or Schiller's Historische Skizzen (Clarendon Press), are prescribed for private reading to candidates for a Flrst Class position.

Text Books: As in First Class. Critical outline of the Literature of Germany by Alb. Selss, Ph. D. (Longmans, Green & Co).

#### Third German Class

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

Subjects of study:

For 1891-92.—Lessing: Nathan der Weise. Goethe: Egmont. Prose composition. Translation of unspecified passages from modern authors.

For 1892-93.—Lessing: Minna von Barnhelm (Macmillan & Co.). Goethe: Götz von Berlichingen (Macmillan & Co.). Prose composition. Translation of unspecified passages from modern authors.

Schiller's Wallenstein's Tod, (George Bell & Sons) and either Goethe's Faust, Part I. (by Jane Lee; Macmillan & Co.) or Heine's Harzreise (Macmillan & Co.) are prescribed for private reading to candidates for a First Class position.

Text Books: As in Second Class.

#### Advanced German Class.

Twice a week.

The subjects studied in this class will be those prescribed for the special course of English and German (§viii (8)). The course will extend over two years.

In 1891-92.—Middle High German: Grammar (Wright's Middle High German Primer). Selections from Wackernagels Kleineres Altdeutsches Lesebuch. Selections from authors of the 16th, 17th and 18th centuries. Prose composition.

In 1892–93.—Middle High German: Grammar (Paul's Grammar). Selections from Wackernagel's Kleineres Altdeutsches Lesebuch. Selections from Swiss and Plattdeutsch dialect literature. The rest a prescribed for 1891–92.

Other text books will be announced at the opening of the session.

### III.-ENGLISH LANGUAGE & LITERATURE.

(George Munro Professorship.)

Professor ..... ARCH'D MACMECHAN, PH.D.

#### First Year Class.

Tuesdays and Thursdays, 12-1 P. M.

General Principles of Composition. Characteristics of Style. Exercises, twice a week, throughout the year.

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, \*Absalom and Achitopel Addison: Select Essays. Pope: Rape of the Lock. \*Essay on Man, Johnson: Life of Pope, \*Lives of Dryden, Addison and Gray. Gray: Elegy. Goldsmith: Traveller, Deserted Village, \*Select Essays. Burns: Twa Dogs, Cotter's Saturday Night. Macaulay: Samuel Johnson.

Two reports on private reading, assigned by the instructor, are required from each student.

Books recommended. Clarendon Press edition of Dryden; Hale's Longer English Poems (Macmillan),—which contains all the poetry read in the class.

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

#### Second Year Class

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

Exercises in Composition, weekly. Critical readings of select works of Shakespeare and Milton. Lectures.

Shakespeare: As You Like It, Romeo and Juliet. \*Midsummer Night's Dream, \*Henry V., Macbeth, The Merchant of Venice, \*Julius Cæsar, \*The Tempest. Milton: Comus; Paradise Lost, Bks. I.—V.

One written report on a special piece of work, assigned by the instructor, is required from each student. Candidates for First Class are required to present two such reports.

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

#### Third and Fourth Years Class.

#### Twice a week.

The object of this course is to complete the study of Eighteenth Century and Elizabethan Literature, by linking it, on the one hand with Chaucer and, on the other, with the literature of onr own day. The completed course is intended to furnish the student with an outline picture of English literature from Chaucer to Tennyson.

1891-2.—Scott: Waverley, Marmion. Byron: Childe Harold Wordsworth: Poems, selected and edited by Matthew Arnold. Tennyson: Rowe & Webb's selections. Browning: My Last Duchess, Lost Leader, Andrea del Sarto, The Bishop Orders his Tomb, Epistle f Karshish. Ruskin: Sesame and Lilies. Carlylz: Sartor Resartus.

History of Literature: Oliphant.

For Distinction. A thesis on a subject assigned by the instructor. 1892-93.—Chaucer: Prologue, Knightes Tale and Nonne Prestes Tale. Sweet's Middle English Primer, II. Spenser: Faerie Queen, Bks. I., II. Marlowe: Dr. Faustus.

History of Literature: Morley: English Writers. V.

For Distinction. *Chaucer*; Minor Poems, (ed. Skeat); The Prioresses Tale, Sire Thopas, The Monkes Tale, The Clerkes Tale, The Squires Tale.

#### Advanced Class.

#### Three times a week.

Development of English Language and Literature to the year 1300, with special study of select works (§ viii, 6.)

#### IV.-HISTORY AND POLITICAL ECONOMY.

(George Munro Professorship.)

#### Third Year History Class.

Mondays and Wednesdays. 11 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.

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

Candidates for First Class Distinction will be examined on Hallam's Middle Ages, Bryce's Holy Roman Empire, and Introductory Sections of Robertson's Charles V.

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 Grusades; 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.

Candidates for First Class Distinction will be examined on Green and Guizot, and a few chapters to be specified in the others.

Books recommended: Green's England, vol. iv.; Guizot's France (Masson's Abridgment); Menzel's Germany; Motley's Dutch Republic; Bancroft's United States; McMaster's History of the People of the United States; Parkman's France and England in North America.

#### 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 undergraduates taking the Special Course in English and English 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.

A knowledge of the history and bibliography of the subject as presented in Cossa's "Guide to the study of Political Economy" will be required of students seeking First Class Distinction.

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 reading prescribed in the works of leading writers on the subject.

#### V.-PHILOSOPHY.

(George Munro Professorship.)

Professor.....James Seth, M. A.

#### Junior Philosophy.

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

The work of this class will consist, before Christmas, of a course of lectures on Logic, supplemented by exercises in Jevons' *Elementary Lessons in Logic* (Macmillan & Co.); and, after Christmas, of a course of lectures on Psychology, in connection with which short essays and private readings will be prescribed.

### Senior Philosophy.

Tuesdays and Thursdays, 3-4 P. M.

After an introductory account of the nature and scope of Philosophy, in its various departments, the chief types of metaphysical theory will be expounded in the light of their historical development, and subjected to critical examination, viz: I. Dualism, as exemplified by the Scottish Philosophy of Common Sense; II. Materialism, Ancient and Modern; III. Idealism, as exemplified by the philosophy of Berkeley.

Readings and essays will be prescribed in connection with the course, and Fraser's Selections from Berkeley (Clarendon Press) will be made the basis of discussion in class.

#### Ethics.

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

After an introductory account of the province and method of Ethics, and its relation to other branches of Philosophy, the chief theories of the ethical End will be explained and critically examined, viz.: the Intuitional, the Utilitarian, (psychological and evolutional), and the Transcendental. An attempt will then be made to formulate an independent position, in the light of the ethical postulate of Freedom.

The work of the class will be conducted mainly by lectures, but will also embrace short essays and special readings, as well as free discussion of the subjects of the course. Butler's Sermons on Human Nature (Cassell's National Library), Mill's Utilitarianism (Humboldt Library), and Spencer's Data of Ethics (Humboldt Library,) will be read in class. From candidates for First Class Distinction the following additional reading will be expected:—Kant's Fundamental Principles of the Metaphysic of Morals, (Abbott's Transl., Longmans & Co.), and Green's Prolegomena to Ethics, Bks. II. & III, ch. I. (Clarendon Press).

#### Advanced Philosophy.

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

The work of this class, intended primarily for undergraduates taking the Special Course in Philosophy, will consist of (a) a course of lectures on the Philosophy of Kant, in the light of the preceding development of Modern Philosophy; (b) a careful study of Ladd's Outlines of Physiological Psychology, (Charles Scribner's Sons).

### VI.-MATHEMATICS.

Professor. ...... C. Macdonald, M. 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, Theory of Notation; Selected 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 the Fifth, and the Sixth Book, with Geometrical Exercises and Practical applications.

After the middle of February, attendance at the Class on Fridays, will be *optional*, except for those who are trying for First or Second Class distinctions. But the Professor reserves to himself the right of excluding any whom he may have judged unequal to the work of his Friday class.

Books recommended—Colenso's or Todhunter's or Deighton's, (George Bell & Sons) Elements of Euclid, Hall & Knight's Elementary Algebra, Todhunter's Algebra, or Hall & Knight's Higher Algebra, (The latter book is recomme ded 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.

The daily meeting of the Class is subject to the following explanations:

After the Christmas Examinations, the Class will be resolved into two divisions, a Lower and a Higher.

The Lower or Ordinary Division will meet on four or three days a week, according as the general progress of the Class may demand. The Higher Division will meet on the remainder of the five days a week. Fitness to enter the Higher Division is determined by the Professor, according to the general standing and previous record of the student.

In the Lower or Ordinary Division of the Class, the subjects of study

Geometry.—Sixth Book of Euclid revised; Cockshott & Walters's Conic Sections; the Parabola; Easy Geometrical Exercises, with practical applications; 21 Propositions of the Eleventh Book of Euclid.

TRIGONOMETRY.—Analytical Plane, as far as, but exclusive of, DeMoivre's Theorem. The use of Logarithms, and of the chief Mathematical Tables. Solution of Plane Triangles; Mensuration of Heights and Distances; Elementary Problems in Navigation.

ALGEBRA.—Permutations and Combinations; use of the Binomial Theorem; Properties of Logarithms; Compound Interest; Elements of the Doctrine of Chances.

In the Higher Division, the subjects are-

GEOMETRY. - Parabola, Ellipse, and Modern Extensions of Euclid.

TRIGONOMETRY.—As in the Lower Division, with Extensions; DeMoivre's Theorem, with Higher Angular Analysis; Sphericai Trigonometry, as far as the solution of Right-angled Triangles, with applications to easy Astronomical problems.

ALGEBRA.—Investigations connected with the subjects studied in the Ordinary Division, with illustrations and examples of a more difficult kind. For First or Second Class at the Examinations, acquaintance with the subjects treated in this Division is necessary.

Books recommended—Algebras—Todhunter's, or Hall and Knight's (best.) †Lock's Plane Trigonometry; Cockshott and Walters's Geometrical Conics (Macmillan & Co.); Chambers's Logarithmic, &c., Tables. For Higher Division—Todhunter's Spherical Trigonometry; Casey's Sequel to First Six Books of Euclid, (Longmans, Green & Co., London.)

#### 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; Theory of Equations: Differential Calculus

Books recommended—Lock's Plane Trigonometry; C. Smith's, and Todhunter'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 tr. ated may, however, be used.

The Second Division meets twice a week.\* Subjects: Spherical Trigonometry; Theory of Equations; Differential Calculus; Integral Calculus, with Differential Equations; Application 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.

#### VII.-PHYSICS.

(George Munro Professorship.)

### Junior 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, the mathematical knowledge assumed being no greater than may be acquired in the First Year Class.

Books recommended:—Students who aim at Distinction will be expected to read in connection with the lectures the following books: 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). Other students are recommended to read Stewart's Lessons in Elementary Physics (Macmillen & Co.).

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

<sup>†</sup> This work is published in two volumes. The first of these—"A Treatise on Elementary Trigonometry"—is sufficient for the ordinary class.

#### Senior Physics Class.

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

The subjects studied in this case will be treated in a less elementary manner than in the Junior Class, a knowledge of the Mathematics of the Second Year Class being assumed. As the course is too extensive to be completed in one session, different departments of it will be taken up in alternate years.

In 1891-92: - Heat, including a discussion of heat engines, and Electricity and Magnetism, including a discussion of dynamo-electric machinery. Maxwell's Theory of Heat (Longmans & Co.), and Cumming's Theory of Electricity, (Macmillan & Co.), will be used as text-books, and candidates for Distinction will be expected to be familiar, not only with the portions of these books treated in class, but also with the portions not so treated.

In 1892-93:—Kinematics, Dynamics, and the properties of elastic solids and fluids. The Professor's Kinematics and Dynamics, (Macmillan & Co.) will be used as a text-book, and candidates for Distinction will be expected, not only to acquire a power of solving more difficult problems than those set for men who merely aim at passing, but also to read portions of the text book not treated in class.

#### Advanced Mathematical Physics Class.

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

The subjects studied will include various departments of Physics. The mode of treatment will be such as to give students an introduction to the application of the higher mathematies to the study of physical problems. They will therefore be assumed to have a sufficient knowledge of Analytical Geometry and of the Differential and Integral Calculus. As the course is too extensive to be completed in a single session, different portions will be taken up in alternate sessions.

In 1891-92 the subjects treated will be:—Kinematics of a point, of a rigid system, and of a deformable system; Dynamics (including Statics) of a particle, of systems of particles (including strings), of extended bodies, of rigid bodies, of elastic solids, and of fluids; Wave Motion, with application to Sound and Light.

In 1892-93 the subjects treated will be:—Dynamics, the portions bearing on the doctrine of Energy; Thermodynamics; Electrodynamics (including Electrostatics.)

Books recommended:—Students will be referred by the Professor to various works during the course. Those most frequently referred to will be: Tait and Steele's Dynamics of a Particle (Macmillan & Co). Todhunter's Analytical Statics (Macmillan & Co), Aldis's Rigid Dynamics (Deighton, Bell & Co.), Besant's Hydromechanics (Deighton, Bell & Co.), Baynes' Thermodynamics (Clarendon Press), and Masoart and Joubert's Electricity and Magnetism (De la Rue & Co., London), vol I.

#### Practical Physics Class.

#### (At least five hours a week.)

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

Members of the class who wish to become science teachers will be allowed to devote part of their time to acquiring facility in devising and executing illustrative experiments.

Books recommended: — For ordinary use—Glazebrook and Shaw's Practical Physics (Longmans, Green & Co.), For reference—Stewart & Gee's Elementary Practical Physics (Macmillan & Co.), Ayrton's Practical Electricity (Cassell & Co.), Gray's Absolute Measurements in Electricity and Magnetism (Macmillan & Co.), and Kohlrausch's Physical Measurements (J. & A. Churchill).

#### VIII .- CHEMISTRY.

(McLeod Professorship.)

#### Inorganic Chemistry Class.

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

Subjects of lectures:

General Principles. Chemical Affinity. Laws of Combination, by weight. Equivalents. Laws of Combination, by volume. The Elements. Compounds. Atomicity. Nomenclature; Notation; Formulæ, Equations. The Non-metallic 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.

Text Book —Greene's edition of Wurtz's Elements of Modern Chemistry—the whole of the Inorganic part (Lippincott, Philadelphia.)

#### Organic Chemistry Class.

Mondays and Thursdays, 9-10 A. M.

Subjects of lectures:

Principles of Classification. Elementary Analysis. Methane and its Homologues, and their Substitution Compounds. The Monatomic Alcohols, and related compounds and Derivatives; Aldehydes, Ethers, &c. The Fatty Acids. Compound Ethers. Polyatomic Alcohols, Ethers and Acids. Cyanogen and its compounds.

Aromatic Compounds. Benzene. Aniline Compounds. Terpenes. Alkaloids.

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

Text Book.—Greene's Edition of Wurtz's Elements of Chemistry—the Organic part. Reference works: Roscoe & Schorlemmer, Watt's Dictionary, &c.

#### Chemical Laboratory.

The Chemical Laboratory is open daily (except Saturdays) from 9 a.m. to 1 p.m. Students taking their first Laboratory course are required to attend at an hour when the Professor is not engaged in lecturing.

PRACTICAL CHEMISTRY.—Systematic Separation and Detection of the several Metallic Bases and of 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 Students taking the Special Course in Experimental Physics and Chemistry, and also for Students who, having taken Pructical 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 Metallic Ores, Coal, and other Mineral Substances, Fertilizers, Soils, Mineral Waters; Sanitary Examinations of Water, Air and Food; Detection and Quantitative Estimation of Poisons.

Laboratory students are allowed the use of the ordinary Laboratory apparatus and furnishings, and of inexpensive reagents, but are required to provide themselves with evaporating basins, test-tubes, platinum, gold and silver salts, and other expensive materials which they may require, and to replace apparatus which they may destroy. Those who wish to work in special departments, or to engage in original research, will have to furnish themselves with the necessary apparatus.

Text Book.—Fresenius's Quantitative Analysis. Special works in the College Library, will be recommended when necessary. Books needed in actual work are kept in the Balance Room.

#### 1X.-BOTANY.

#### Tuesdays and Thursdays, 12-1 P. 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. Experiments on living plants, in regard to transpiration, growth and movements, and the examination of tissues, cell development, &c., will be conducted in the Laboratory Balance Room.

Text Book.—Goodale's Physiological Botany (vol. 11. of Gray's Botanical Text Book.) Field Books for Summer Work—Gray's Manual of Botany of the Northern States; Gray's How Plants Grow, with Lawson's Fern Flora of Canada, as Appendix, (Mackinlay); Macoun's Catalogues of Canadian Plants.

- § II.—The Academic Year.—The academic year consists of one session. The session of 1891–92 will begin on Wednesday, 9th September, 1891, and end on Tuesday, 26th April, 1892.
- § 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 (§ xxiii).
- (2.) Registered students may, on presentation of their Registration Tickets and on payment of the proper fees (§ xxiii), enter any of the ordinary classes of the College. The Advanced Classes are open 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.) Two baccalaureate degrees are conferred in the Faculty of Arts, those, viz., of Bachelor of Arts (B. A.), and Bachelor of Letters (B. L.).\*
- (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; v, 2; and vi, 2-3), and (b) matriculating, i. e., entering their names on the Matricula or Register as 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.

<sup>\*</sup> The degree of Bachelor of Science hitherto conferred in this Faculty will henceforth be conferred in the Faculty of Science.

- (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. If their examinations are approved in some subjects but not in others, they may be admitted as Undergraduates on passing in the latter at the Final Matriculation Examination (October 7th-9th.).
- (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  $\S$  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. One Latin Book. The following books are recommended:

For 1891.—Cæsar—Gallic War, Books IV and V.; or Virgil—Æneid, Book II. Composition—As in Arnold's, by Bradley, Exer. 1-44.

For 1892.—Cæsar—Gallic War, Books IV. and V.; or Virgil, Æneid, Book III.

 $\ensuremath{\operatorname{Greek}}$  .—Grammar. One Greek book. The following books are recommended :

For 1891.—Xenophon—Anabasis, Book V. or VI. or VII. For 1892.—Xenophon, Anabasis, Book I. or II. or VII.

FRENCH.—Voltaire: Charles XII., Books I. and II.; or Octave Feuillet: Le Roman d'un jeune homme pauvre. 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.), Dritter Abschnitt; or Schiller's Der Neffe als Onkel, Act I. Grammar: Declensions of the Articles, Nouns, and Ad)ectives.

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 The names of the languages and of the books selected (or the approved equivalents) must be sent to the President, at least one week before the date of the Examination.

- 3. ARITHMETIC AND ALGEBRA.—Arithmetic. Algebra: Simple Rules, and Simple Equations of one unknown quantity, not involving surds.
  - 4. Geometry.—Euclid's Elements, Books I. and II.
- 5. English.—Composition: Nothing but an essay will be required. More attention will be paid to the candidate's power of expression, than to his knowledge of fact. Legible writing, correct spelling and punctuation will be considered indispensable. Grammar: Analysis, and parsing of extracts. Poetical Literature: Longfellow: Evangeline.
- 6. HISTORY AND GEOGRAPHY.—Outlines of English and Canadian History, and General Geography.
- 7. OPTIONAL SUBJECT.—INORGANIC CHEMISTRY.—Nomenclature, Notation, Equivalent and Atomic Numbers. General Principles of Inorganic Chemistry. The Non-metallic Elements, and their more important compounds. Candidates must be able to read chemical formulæ and equations, so as to explain their meaning in words, and to express in formulæ the composition of common salts, and, in form of equations, or dinary chemical reactions.

This subject is not required; but a candidate taking it will be exempted from attendance on the lectures of the Chemistry class until after the Christmas vacation.

The above examination may be conducted partly viva voce.

- (2.) Candidates who hold Teacher's Licenses of Grade B, issued by the Nova Scotian Education Office, shall be exempted from the following subjects of the above Examination:—Latin, French, Arithmetic and Algebra, Geometry, English and History and Geography, provided these subjects were included in the examination by which they gained their Licenses.—Candidates who hold Licenses of Grade A shall be allowed to matriculate as undergraduates of the First Year without examination.—Candidates who hold Teachers' Licenses, issued by the Education Offices of other Provinces, may be exempted from parts of the above examination, on application to the Faculty.
- (3.) Candidates who fail in a portion of the above Examination may, nevertheless, by special permission of the Faculty, be allowed to matriculate conditionally; but they will be required to pass in such portion at a subsequent date.
- (4.) This examination will be held at the College on September 9th-14th, 1891. For the benefit of candidates unable to present themselves on these days, an opportunity will be granted of appearing for examination on October 7th-10th. 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. (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.)

Latin.—The ordinary\* subjects of the First Year Class, as specified in  $\S$  I (1), together with one additional book.

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

FRENCH.—The subjects of the First French Class, as specified in  $\S 1$  (II).

GERMAN.—The subjects of the First German Class, as specified in § I (II).

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  $\S$  I (vi).

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 (§ I, III)—or the equivalents thereof.

5. HISTORY AND GEOGRAPHY.—The subjects of the First Year Matriculation Examination.

6. INORGANIC CHEMISTRY.—The subjects of the First Year Class (§ I, VIII.)—Candidates may omit this subject; but in that event they must either pass the examination thereon 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 Examinations of the First Year, shall be exempt from further examination therein.

(3.) Candidates who hold Teachers' Licenses of Grade B, issued by the Nova Scotian Education Office, shall be exempted from the following subjects of the above Examination:—The subjects of the First Year Matriculation Examination in English, and History and Geography.—Candidates who hold Licenses of Grade A, shall be exempted from Latin, Greek, Mathematics, the subjects of the First Year Matriculation Examination in English, History and Geography, and Inorganic

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

Chemistry, provided these subjects were included in the examination by which they gained their Licenses.—Candidates who hold Teachers' Licenses issued by the Education Offices of other Provinces may be exempted from parts of the above examination on application to the Faculty.

- (4.) 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.
- (5) This examination will be held at the College on September 9th-14th, 1891. For the convenience of candidates unable to appear on these days, an opportunity will be granted of appearing for examination on October 7th-10th. But no student will be allowed to enter as an undergraduate at a later date, without the special permission of the Faculty.
- § VII.—Ordinary 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 ordinary courses for B. A. and B. L. The details of the subjects studied in these classes, will be found under Courses of Instruction (§§ 1, XXIV, and XLL.)

#### 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. For B. A.—Mathematics. For B. L.—Mathematics or Junior Physics.
  - 4. English.
  - 5. Junior Philosophy.

## Third Year.

1. For B. A.—Latin or Greek. The language selecter must have been taken during the first two years. For B. L.—German or French.

2. For B. A.—Junior Physics. For B. L.—Junior Physics or any one of subjects 4—5. (Junior Physics must be taken either in the Second or Third Year).

3. History.

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

a. Greek. g. Political Economy.

b. Hebrew. h. Ethics.

c. French. i. Senior Philosophy.

d. German. j. Organic Chemistry, or e. English. Medical Chemistry.

f. Constitutional History k. Practical Chemistry.

(Law Faculty). l. Botany. m. Zoology (Science Faculty).

Undergraduates are required, on or before September 17th, 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.

An undergraduate who takes subject f in the Third Year and subjects k and l in the Fourth Year may complete his course in the Faculty of Law in two years.

An undergraduate who has already passed the Matriculation Examination of the Faculty of Medicine (see Regulations of the Faculty of Medicine) may complete one Medical Academic Year in the third year of his Arts Course, by taking subjects j (Medical Chemistry), k and l. To complete his year in this Faculty he will require to take also subjects 1, 2 and 3.

## Fourth Year.

Any five of the following\*:-

a. Latin.

 a. Latin.
 d. French.

 b. Greek.
 e. German.

. Hebrew. f. English.

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

- q. History.
- h. Political Economy. ‡
- i. Ethics.
- i. Senior Philosophy.
- k. Constitutional Law (Law Faculty).
- l. Contracts
  (Law Faculty).
- m. Senior Physics.
- n. Practical Physics.
- o. Organic Chemistry, or Medical Chemistry.
- p. Practical Chemistry.
- g. Botany.
- r. Zoology (Science Faculty).

Undergraduates are required, on or before September 17th, to submit to the President for approval, the names of the subjects 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 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.

A certificate of attendance on a New Testament Greek class in any recognized College, will exempt from one subject 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 subject. If the Hebrew class be one of five hours a week, attendance on it will exempt from two subjects.

An undergraduate who has already passed the Matriculation Examination of the Medical Faculty (see Regulations of that Faculty) may complete one Medical Academic Year by taking subjects of (Medical Chemistry), p, and q, in the Fourth Year. But he will not be allowed to take these subjects in this year if he have already taken them in the Third.

No class in which the subjects studied are the same from year to year, can be taken twice as part of the course.

§ VIII.—Special Courses for Degrees.—(1.) An undergraduate shall be allowed, during his Third and Fourth Years, to restrict his attention to a more limited range of subjects than that of the ordinary course, by entering upon one of the Special Courses, provided he has either attained both a First Class standing at the previous Examination in the subject corresponding to that of the Special Course selected, and a satisfactory standing in the other subjects, or received the special permission of the Faculty.

(2.) Special Courses are provided in the following departments, viz., (1) Classics, (2) Latin and English, (3) Greek and English, (4) English and German, (5) English and English History, (6) Philosophy, (7) Mathematics and Mathematical Physics, (8) Experimental Physics and Chemistry. Undergraduates in Arts may take special courses in any one of the

 $<sup>\</sup>ddagger$  The Advanced Class may be taken as an ordinary class in the Fourth Year. (See  $\S$  I, iv.)

37

above departments; undergraduates in Letters in any one of departments 4, 5, 6, 7, and 8.

- (3.) An undergraduate taking a special course in any of the above departments shall be required to attend the Advanced Classes provided in the subjects of such departments (§ I), to make progress satisfactory to the l'rofessors who conduct such classes, and to pass the examinations in the subjects of such department. He shall be allowed to omit, from the subjects of the ordinary course, certain subjects specified below, and may select as his ordinary classes in any year, any of the classes of that year, subject to the following regulations and to the approval of the Faculty.
- (4.) The examinations in the subjects of the Special Course shall be held at the end of the Fourth Year.
- (5.) Undergraduates taking the Special Course 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.

I. Candidates will be required to have a critical knowledge of the following works, in addition to those prescribed in the ordinary course :-

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, Books I., II.
Livy: Books XXI., XXII.

Tacitus: Germania; Annals, Book II.

II. Candidates will be required to shew a general knowledge of one prose and one verse subject, to be chosen by them from the following list:

Plautus: Trinummus, Aulularia.

Terence: Andria, Heautontimorumenos.
Juvenal: The Satires not read in class, (Hardy's edit.)

Persius: Satires.

Cicero: Select Letters, (Muirhead's edit., Rivingtons, London). Livy: Books II., III., Iv.

Tacitus: Books I., II.

## III. Composition.—Prose.

- IV. LITERATURE. —Crutwell's History of Latin Literature, selected chapters.
- V. Philology.—Peile's Introduction to Greek and Latin Etymology; Comparative Philology by Papillon.

#### GREEK.

I. Candidates will be required to have a critical knowledge of the following works, in addition to those of the ordinary course:

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.

II. Candidates will be required to shew a general knowledge of one prose and one verse subject, to be chosen by them from the following list:

Aeschylus: Agamemnon, Choephorae.
Sophocles: Oedipus Coloneus, Antigone.
Euripides: Phoenissae, Bacchae, Hippolytus.
Herodotus: Any two books, excluding the Second.

Thucydides: First and Seventh Books.

Aeschines: Contra Ctesiphontem.

Demosthenes: De Falsa Legatione.

## III. Composition.—Prose.

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

- V. LITERATURE.—Mahaffy's History of Greek Literature, the portions bearing on the authors and subjects read by the candidate during his college course. Haigh's Theatre of the Greeks.
- 6) Undergraduates taking the Special Course 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. They shall be examined in the following subjects, viz:

#### LATIN.

The Latin subjects prescribed for the Special Course in Classics.

#### ENGLISH.

The historical development of the language and literature to the year 1300. Sweet, Anglo-Saxon Reader (exclusive of poetical selections), Sievers, O. E. Grammar trans. by Cook, Part II., Morris, Specimens of Early English, I., and Lounsbury, History of the English Language.

History of the Elizabethan and Early Stuart Literature. *Marlowe*, Edward II. *Webster*, The Duchess of Malfi. *Greene*, Friar Bacon and Friar Bungay. *Sidney*, Apologic for Poetrie. *Hooker*, Ecclesiastical Po ity, Book I. *Bacon*, Advancement of Learning, Select Essays. *Shakespeare*, Henry VI., Pts. II. and III., Romeo and Juliet, Lear, Henry VIII., Two Noble Kinsmen.

Books recommended: History of Literature: Saintsbury, Brooke. Clarendon Press "Mermaid" and Arber Editions of Elizabethan works.

(7.) Undergraduates taking the Special Course 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. They shall be examined in the following subjects, viz.:

#### GREEK.

The Greek subjects prescribed for the Special Course in Classics.

#### ENGLISH.

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

(8.) Undergraduates taking the Special Course in **English** and **German** must have taken German in the first and second years of their course, and may in each of the third and fourth years omit any two subjects of those years except English and German. They shall be examined in the following subjects:—

#### ENGLISH.

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

#### GERMAN.

Middle High German: Grammar (Wright's Middle High German Primer); Selections from Hartmann von Aue, Walther von der Vogelweide, Nibelungenlied, Wolfram von Eschenbach, Freidank or or Gotfried von Strassburg, Sebastian Brant (Wackernagels Kleineres Altdentsches Lesebuch).

Selections from Swiss and Plattdeutsch dialect literature.

German literature of the 16th, 17th and 18th centuries, with selections from authors of that period.

Two of the chief literary works of Göthe not read in the ordinary

Translation of unspecified passages from any modern High German author.

Prose composition.

(9.) Undergraduates taking the Special Course 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. They shall be examined in the following subjects, viz.:—

#### ENGLISH.

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

#### ENGLISH HISTORY.

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

Books recommended: Green'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 Ulistory 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.

(10.) Undergraduates taking the Special Course in **Philosophy** may, in each of the third and fourth years of their course, omit any one of the subjects of those years, except Senior Philosophy, which must be taken in both the Third and Fourth Years, and Ethics, which must be taken in the Third Year. They shall be examined in the following subjects:—

Plato's Theaetetus and Republic, (omitting Books VII. and IX.) Aristotle's Nicomachean Ethics, (omitting Books VI. and VII.) Locke's Essay on Human understanding: Books II. and IV.

Fraser's Selection from Berkeley.

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

Kant's Critique of Pure Reason and Critique of Practical Reason. Reid's Essay's, vi.

Mill's Logic.

Ladd's Outlines of Physiological Psychology.

Green's Prolegomena to Ethics. Spencer's Data of Ethics Sidgwick's Methods of Ethics.

A general knowledge of the Psysiology of the Brain and Nervous System and a thorough knowledge of Formal Logic will be expected from all candidates; and an Essay will be prescribed to each, to be written in connection with the work of the Advanced Class.

(11.) Undergraduates taking the Special Course 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 must take the Senior Physics Class in both the third and fourth years. 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.

Either: Kinematics (a) of a point (b) of a rigid system, and (c) of a deformable system; Dynamics (including both Statics and Kinetics) (a) of a particle, (b) of systems of particles (including flexible strings), (c) of a rigid body, (d) of elastic solids, and (e) of fluids; and Wave Motion, with application to Sound and Light.

Or: Dynamics, the portions bearing on the doctrine of Energy; Thermodynamics; and Electrodynamics (including Electrostatics).

These subjects are to be treated by the application of analytical Geometry and the Differential and Integral Calculus.

(12.) Undergraduates taking the Special Course 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, and Organic and Practical Chemistry, and must take the Senior Physics class in both the third and fourth years. 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. The extent of knowledge required is such as may be obtained by a study of the following books:—MacGregor's Kinematics and Dynamics, (Macmillan & Co.); Tait's Properties of Matter, (A. & C. Black); S. Taylor's Sound and Music, (Macmillan & Co.); Aldis's Geometrical Optics, (Deighton, Bell & Co.); Lloyd's Wave Theory of Light, (Longmans); Maxwell's Theory of Heat, (Longmans); Stewart's Treatise on Heat, (Clarendon Press); Cumming's Theory of Electricity, (Macmillan & Co.), and S. P. Thompson's Elementary Lessons in Electricity and Magnetism, (Macmillan & Co.)

They shall be required to show an intimate knowledge of the following original memoirs: Joule's papers on the determination of she 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., vII., VIII., VIII.

They shall be required also to show ability to determine practically important physical constants, such as Density, Specific Heat, Electrical Resistance, &c., and simple physical laws.

#### 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.

 $For\ reference:\ Roscoe\ \&\ Schorlemmer;\ Watt's\ Dictionary\ of\ Chemistry,\ and\ other\ reference\ works\ in\ the\ Balance\ Room\ Library.$ 

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 Poisson, (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.

- § 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.) With the exception of persons who have qualified for matriculation at the Final Matriculation Examination (§§ v. (4), and vi, (5).), no undergraduate shall be allowed to register as such more than ten days after the opening of classes without the special permission of the Faculty.
- (3.) Undergraduates of any year, who may have previously attended one or more of the classes of that year, and passed in the subjects of them, shall be exempted by the Faculty from attending those classes a second time.
- § X.—Examinations.—(1.) Undergraduates are required to appear as candidates at the various examinations held in connection with the classes which they may attend as parts of their course, and to prepare such theses, essays, reports, &c., as may be prescribed by the professor. In all classes two examinations are held, one just before the Christmas vacation and the other after the close of lectures in the Spring. In some classes other examinations are held at dates appointed by the Professor. In the determination of the Pass List and in the award of Class Distinctions, which may be of two grades—First and Second Class, the results of these various examinations and the degree of excellence shewn in theses, essays, reports, &c., shall be taken into consideration.

General Students are admitted to the above Examinations as well as undergraduates, and their position in the Pass and Distinction Lists are determined in the same way.

Certificates are issued to members of each class stating with what degree of regularity they have attended and what standing they have attained.

- (2.) Undergraduates who are exempted by § IX. (3), from attendance on one or more classes, shall be exempted also from passing the 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 who fails to obtain a position on the Pass List in one or more subjects, at the end of any ression, shall be allowed a Supplementary Examination in such subject or subjects at the beginning of any subsequent Session, on the day appointed for that purpose in the University Almanac, (Sept. 14th, 1891).

The ordinary fee for a Supplementary Examination shall be Two Dollars. But, to restrain undergraduates from giving the Examiners unnecessary trouble, a fee of Six Dollars will be required in the following cases: (1) if the undergraduate have absented himself from the Examination for reasons considered insufficient by the Faculty; (2) if his answers at the Examination have been reported by the Examiner as having no value; (3) if he have failed to pass in more than two subjects.

- (5.) An undergraduate who has failed to pass in any subject, will not be allowed to enter, as an undergraduate, a more advanced class in the same subject, or a class requiring a knowledge of the subject in which he has failed, until he has either passed the Supplementary Examination, or satisfied the Faculty that he is able to prosecute the work of the class with profit.
- (6.) An undergraduate who fails either to appear, or to pass, at a Supplementary Examination, shall not be allowed a second Supplementary Examination in the same Session, except by special permission of the Faculty; and in cases in which a second Examination is granted, a fee of Three Dollars will be charged in addition to the Supplementary Examination fee.
- (7.) Undergraduates wishing to appear as candidates at any Supplementary or Special Examination 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
- (8.) 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 may be summarily expelled from the Examination room, and he shall be subject to such other penalty as the Faculty may see fit to impose.
- § XI. Degrees with General Distinction.— Degrees with General Distinction will be conferred on undergraduates for special excellence shewn at the Examinations of the Third and Fourth Years of any of the ordinary courses for degrees, the Mathematics of the Second Year being for the purposes of this rule regarded as a Third Year Class.

In awarding such Distinction the Faculty, while requiring that candidates shall attain a good standing in all their classes, will lay special stress on the attainment of a high standing in a few related subjects.

The Distinction awarded may be of the First or Second Rank.

§ XII. — Degrees with Honours. — Degrees with Honours in any of the departments of study in which Special Courses are provided, will be conferred on undergraduates for special excellence shewn at the Examinations in the subjects of such courses.

The Honours awarded may be of the First or Second Rank.

A candidate for Honours may defer his examinations in the subjects of his Special Course until a year after he has passed the 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 examinations of such Special Course.

- § XIII.—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 XLI.)
- (2.) To students who attend the classes of the following courses with regularity and pass the 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, and 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 Junior Philosophy; Physics or Inorganic Chemistry. (The alternative subjects so far as the Time table may permit.)
- (4.) Two Years Course of Literary and Scientific Studies.—First Year—French or German, English, Mathematics, Botany, Inorganic Chemistry. Second Year.—French or German, English Literature, Physics, Organic Chemistry, Practical Chemistry.
- (5.) Two Years Course in Subjects bearing on Journalism.—First Year.—French, English Literature (1st and 2nd Years classes), History (3rd and 4th Years classes), Junior Philosophy or Political Economy. Second Year.—French, Advanced English Literature, Ethics, Political Economy, Constitutional History, Constitutional Law.
- (6) Two Years Course in Subjects bearing on Commerce.—First Year.—French, German, English, Mathematics, Chemistry. Second Year.—French, German, English Literature, Political Economy, Physics, Law of Contracts.

§ XIV.—Evening Classes.—During the past session evening classes, of two hours a week each, were conducted in Mathematics and Chemistry for the benefit of artizans. It is intended to open similar classes in the present session in Chemistry and Physics, should there be sufficient demand.

## § XV.-Medals and Prizes.

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

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 in the department of Latin and English, or in that of Greek and English, or in some other department.

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 Philosophy, the winners of other medals being excluded. In the event of its not being awarded in this department, it may be awarded in some other department.

The Sir William Young Gold Medal, founded by bequest of the late Hon. Sir William 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.

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 Examinations 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, 1892.

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 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., will be awarded on graduation to that member of the graduating class, who, during the Third and Fourth Years of his Course, has distinguished himself most among those taking the ordinary B. A. Course.

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 of the Special Course in 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 Examinations of the Second Year in English Literature.

§ XVI. — Munro Exhibitions and Bursaries.—
(1.) The following Exhibitions and Bursaries are offered by George Munro, Esq., of New York, to be competed for at the beginning of the Session of 1891–92:—

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

- (2) The Junior Exhibitions and Bursaries are offered for competition to candidates for matriculation in Arts or Science, provided they have previously neither matriculated\* at any University conferring degrees in these departments, 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 B. A. and B. Sc. Courses. Candidates must have completed the Second Year of their 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 undergratuates of the First or of the Second Year respectively.

<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.

- (4.) The Junior Exhibitions and Bursaries shall be held during two years, provided the holder (a) attend in consecutive years, to the satisfaction of the Faculty, the classes proper to the first and second years of the B. A. or B. Sc. Course, Greek being taken as one of the subjects of each of those years if the holder select the B. A. Course; (b) † pass in all the subjects of the first year, and attain a Second Class standing in at least one of them, and (c) pass in the subjects 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 B. A. or B. Sc. Course, provided the holder (a) attend in consecutive years, to the satisfaction of the Faculty, the classes proper to the third and fourth years of his Course, (b) pass in all the subjects of the third year, and either obtain a Second Class standing in one of them or obtain the favourable report of a Professor on work done in one of the Special Courses, and (c) pass in the subjects 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 letter addressed to the President, and sent so as to reach him on or before September 1st, 1891. In making such application they must send (a) a statement signed by themselves to the effect that they are not precluded by any of the conditions of § xvi (2) or (3), from competing for these Bursaries, and (b), if they have not already been students at this College, a certificate of good moral character signed by a clergyman or other person occupying a public official position.
- (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.

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

- (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 8th-11th, 1891.
- (12.) The subjects of examination for the Junior Exhibition and Bursaries shall be as follows:—
- 1. Latin.—Casar. Gallic War, Books IV and V, and Virgil, Æneid, Book II.—Grammar: Accidence, Prosody, Scansion of Hexameter Verse. \*Text Book: Smith's Latin Grammar.—Prose Composition: As in Arnold's Latin Prose Composition by Bradley, Exs. 1-44. An "unseen" prose passage will be set for translation.
- 2. Greek.—Xenophon, Anabasis, Books V., VI. and VII.—Grammar: Accidence (omitting accentuation), chief rules of Syntax. \*Text Book: Smith's Greek Grammar.—Pro-e Composition: As in Fletcher and Nicholson, (A. Bailie, Kingston, Ont.) Exs. 1-28. An "unseen" prose passage will be set for translation.
- 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.) The subjects of Examination for the Senior Exhibitions and Bursaries of 1891–92 shall be any two of the following groups:—

## A.—CLASSICS.

Latin: Horace, Odes, Book IV. Cicero, Selected Letters, (Prichard and Bernard's, sold by Macmillan, N. Y.) An "unseen" passage will also be set for translation. Composition: An easy piece of English to be turned into Latin Prose. (For models, see Champeney's and Rundall's Easy Pieces for Latin Prose, 2nd series, Rivingtons, London.)

GREEK: Herodotus, Book VI. (Shuckburgh's, sold by Macmillan, N. Y.) An "unseen" passage also will be set for translation. Composition: Translation of simple passages. (For models, see Sidgwick's Introduction to Greek Prose Composition.)

#### 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

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

0

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.

Lounsbury: History of the English Language, Pt. I.; Spenser: Faerie Queen, Bk. II.; Shakespeare: Merchant of Venice, Henry V.; Scott: Marmion; Scott (Eng. Men of Letters Series.)

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 will not be allowed to present themselves for examination in all three.

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

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

The subjects of Examination for the Senior Exhibitions and Bursaries of 1892–93, shall be as follows:—

A.—CLASSICS.

The same as for 1891-92.

B.—MATHEMATICS.

The same as for 1891-92.

C.—ENGLISH.

Lounsbury: History of the English Language, Pt. I.; Jonson: The Alchemist; Shakespeare: Midsummer Night's Dream, Henry IV., Pt. I.; Coleridge: Ancient Mariner, Christabel, Kubla Khan; Coleridge (Eng. Men of Letters Series.)

D.—CHEMISTRY AND EITHER PHILOSOPHY OR PHYSICS.

Chemistry.—The subjects of this Examination will be the same as those embraced in the Course of Lectures on Inorganic Chemistry, given under the heading "Inorganic Chemistry Class," on page 28 of this Calendar.

Philosophy.—Jevon's Elementary Lessons in Logic (Macmillan & Co.), Fowler's Inductive Logic (Clarendon Press); and Clark Murray's Handbook of Psychology (Dawson Brothers, Montreal.)

Physics.—The subjects of examination will be the same as those studied in the Junior Physics Class. But the paper will consist largely of problems of a more difficult order than those taken up in the class.

Candidates are recommended to revise thoroughly the books prescribed for Distinction in the Junior Class and in addition to work through Jones' Examples in Physics (Macmillan & Co.).

Candidates shall be required to present themselves for examination in two, and two only, of the above groups, A, B, C, D. Of the two one must be either A or B, and the other may be any other of the four. The relative values of the four groups will be the same.

§ XVII.—Residence.—All students are required to report their places of residence to the President on or before the day appointed in the University Almanac, (October 16th).

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.

- § XVIII.—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, (October 16th), 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.
- § XIX.—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 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.

§ XX.—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.

A Bachelor of Arts of at least one year's standing shall be entitled to the Degree of Master of Arts, on passing an examination in a course of study to be approved by the Faculty, and of about the extent represented by the academic work of a single year

Examinations for M. A will be held at the time of the Spring Examinations for B. A. In special circumstances an examination may be granted in the Autumn, but in that case a fee of Ten Dollars will be charged.

Candidates must give at least a month's notice of their intention to appear at an M. A. Examination.

For fee see § xxiii.

- § XXI.—Admission ad Eundem Gradum.—Graduates of Universities approved by the Senate, who have received their degrees in course, shall be admitted ad eundem gradum in this University, on producing satisfactory proof of character and academic standing. For fee see § xxiii.
- § XXII.—Academic Costume.—(1.) Bachelors and Masters of Arts and Bachelors of Letters 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. 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.
- § XXIII.—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 taking more than one class, except undergraduates who entered the	
College previously to 1891–92	\$4 00
Registration Fee, payable by students taking only one class and by undergraduates who entered the College previously to	
1891–92	2 00
Gymnasium Fee, payable annually by all male students attend-	
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	0 00
every three months of practical work in Laboratory	6 00
Supplementary Examination Fee, payable on giving the notice	
required by § x. (7) either \$2.00 (or § x. (4))	6 00
Additional Fee for Second Supplementary Examination, if	2 00
granted (§ x, 6.)	3 00
by § x. (7)	2 00
Fee for Special Certificate of Standing.	5 00

Undergraduates who entered the College previously to 1891–92 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 the second years of their 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 these 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.

Undergraduates entering the College in and after 1891–92, after having attended as parts of their course, two of the ordinary classes bonducted by any Professor, shall be allowed, without payment of fees, to attend as parts of their course, any other ordinary classes, not being practical experimental classes, conducted by said Professor.

Undergraduates taking special courses shall be required to pay to each Professor whose Advanced Class or Classes they may require to attend, one fee for the first of such classes attended, but they shall be allowed to attend the second Advanced Class without fee, provided it be not a practical experimental class.

Undergraduates taking Advanced Classes as parts of the ordinary courses, shall be required to pay fees for such classes.

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

Fee for the B. A. or B. L. Diploma. which is payable by candi-	
dates before the Spring Examinations of the Fourth Year,	
and will be returned in case of failure \$ 5	00
Fee for M. A. Diploma, which must accompany the Thesis, or	
intimation of intention to appear for examination, and will	
be returned if the degree be not conferred 10	00
Fee for B. A. or M. A., (ad eundem gradum) 10	

<sup>†</sup> The Latin and Greek Classes of any one year shall be considered a single class.

# Faculty of Pure and Applied Science.

The President (ex officio).

Charles Macdonald, M. A.

George Lawson, Ph. D., I.L. D.

James Liechti, A. M.

J. Gordon MacGregor, D. Sc.

James Seth, M. A.

Archibald MacMechan, B. A., Ph. D.

A. H. MacKay, B. A., B. Sc.

Martin Murphy, D. Sc., C. E.

Edwin Gilpin, Jr., A. M., F. G. S.

F. W. W. Doane, C. E.

Dean of the Faculty: Prof. MacGregor.

# § XXIV.—Courses of Instruction.

## I.-MATHEMATICS.

Professor...... C. Macdonald, M. A.

The classes will be the same as those of the Arts Faculty, (§ I, vI.)

#### II.-PHYSICS.

Professor......J. G. MAGGREGOR, D. Sc.

#### Junior Physics Class.

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

The subjects will be the same as in the Arts Faculty, ( $\S$  I, vII); but candidates for the degree of B. Sc. will be required to do the work prescribed for Distinction.

## Senior Physics Class.

Mondays and Wednesdays, 10-11 A. M.

The general work of the class will be the same as in the Arts Faculty, (§ I, vII). But candidates for the degree of B. Sc. in Engineering, will have their attention specially directed to technical applications of the subjects discussed.

In 1891-92, when Heat, (including Heat Engines) and Electricity and Magnetism (including Dynamo-electric Machinery) will be the subjects discussed, they will be required to read in connection with the class work, and under the supervision of the Professor, the more important chapters of Cotterill's Steam Engine (E. & F. N. Spon), and Thompson's Dynamo-electric Machinery (E. & F. N. Spon).

In 1892-93, when Dynamics, Hydro-dynamics and Elasticity will be discussed, they will be required to pursue a specified course of reading on Graphical Methods and Hydraulics.

## Advanced Mathematical Physics Class.

As in the Faculty of Arts, (§ I, VII).

## Practical Physics Class.

As in the Faculty of Arts, (§ I, VII).

## III.-CHEMISTRY.

## Inorganic Chemistry Class.

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

As in the Faculty of Arts, (§ I, VIII).

#### Organic Chemistry Class.

Mondays and Thursdays, 9-10 A. M.

As in the Faculty of Arts, (§ I, VIII).

#### Practical Chemistry.—Chemical Laboratory.

In addition to the work sketched in § I, VIII, instruction will be given to students of this Faculty in the use of the Blow-Pipe for qualitative determinations, in wet processes for quantitative estimates, in the examination of building materials, &e.

#### IV.-MINERALOGY AND LITHOLOGY.

Leeturer......G. Lawson, Ph. D.

## Systematic Class.

A course of systematic instruction in Mineralogy and Lithology will be conducted in the Museum, illustrated by the McCulloch Collection.

#### Assaying.

The work of this class will be devoted to mineral analysis and the assaying of ores of Iron, Copper, Lead, Manganese, &c., Gold Quartz, Plaster, Coal, &c.

## V.-APPLIED MECHANICS.

Interim Lecturer ...... J. G. MACGREGOR, D. Sc.

#### Twice a week.

The object of this class is to study the practical application of Dynamics to the various branches of Engineering. The series of lectures will form a two years course, so arranged that students may enter the class at the beginning of either year. The subject studied will be as follows:—

In 1891-92: Resumé of the Principles of Dynamics so far as required in the subjects to be studied.—The Mechanics of Machinevy, including (a) Kinematics: relative velocities and accelerations; velocity and acceleration diagrams; link-work, wheel-teeth, belts, cams, the screw, conic mechanisms, bevel and skew gearing, parallel motions, hydraulic connections, &c. (b) Kinetics: centrifugal force, governors, fly-wheels, &c. (c) Statics: equilibrium of mechanisms. (d) Energetics: production, transmission and measurement of power, prime movers, force and work diagrams.—The Elements of Machine Design.—The work of the class will consist chiefly of the former portion, Mechanics of Machinery. The latter portion will be studied privately by students, under the supervision of the Lecturer. Text-books and books of reference will be announced at the opening of the class.

In 1892-93: Resumé of the Principles of Statics, so far as required in the subject to be studied.—The Theory of Structures and the Strength of Materials.—Details of the class work, text books, &c., will be given in the Calendar of the year.

## VI.-DRAWING.

The University provides no instruction in this department, but the following classes of the Victoria School of Art and Design, in the City of Halifax, are recognised as qualifying for a degree:

Mr. George Harvey's classes in the subjects of Free-hand Drawing, Geometrical Drawing, Shaded Drawing from the Round, Modelling in Clay, Principles and Practice of Decorative Design, Elements of Perspective and the History of Art. This course of instruction extends over three years and is the one to be taken by students preparing for Science Masterships in Schools.

Mr. Larkin's classes in Mechanical Drawing, including Practical Geometry, Descriptive Geometry, Projection of Lines, Planes and Solids, Sections by Planes, Developments, Penetrations, Curved Surfaces and Surfaces of Revolution, Preparation of Working Drawings of Machines to scale. This course of instruction extends over three years, and is the one to be taken by Engineering Students.

The class in Building Construction and Architecture may be taken by Civil Engineering Students instead of the third year of the Mechanical Drawing Class.

The classes of the Art School meet twice a week for two hours. The fee is \$8 for the whole year.

## VII.-CIVIL ENGINEERING.

Lecturer. ..... M. MURPHY, D. Sc., Provincial Engineer.

Once a fortnight.

The subjects treated will be:—Materials and Constructions; Earthwork, Masonry; Carpentry; Structures of Timber, Stone and Iron; the Construction of Common Roads; Railways; Bridges; Water Supply for Towns; and Reclamation of land from the sea.

Such works as are named above are generally in operation in Nova Scotia, under the supervision of the Provincial Engineer, and advanced students in the Engineering Class will be afforded an opportunity of examining them under construction.

Text-books and books of reference will be announced at the opening of the class.

## VIII.-SURVEYING.

Lecturer.....F. W. W. DOANE, C. E.

Once a fortnight.

The subjects treated will be: Chain Surveying; Angular Surveying; Calculating Areas; Use and Adjustment of Transit, Theodolite, Level (Dumpy, Wye, &c.), Aneroid Barometer, Plane Table, and other field instruments; Contour Surveying; Plotting; Topography; Levelling (including indirect and barometric).

Practical operations will be carried on in the field and will include Chain and Compass Surveys, Measurement of Base Lines, Triangulation Survey, Preliminary and Location Survey of a line of road, setting out work, etc.

Students will be expected to keep complete notes and to prepare all drawings required from them.

Text-books and books of reference will be announced at the opening of the class.

#### IX.-MINING.

Lecturer. ..... E. GILPIN, JR., A. M.

#### A Course of Twelve Lectures.

The subjects of the lectures will be: Geology in relation to Mining; Occurrence of Veins and Beds; Preliminary Operations; Valuation of Properties; Shaft and Slope Sinking; Mining Operations; Unstratified and Stratified Minerals; Ventilation; Pumping; Hoisting; Mining Appliances, Tools, &c.; Cleaning of Ores and Coals.

Text-Books (preliminary list): Smith's Coal Mining; Andre's Treatise on Coal Mining; Chance's Coal Mining, Pennsylvania; Dane's Metalliferous Mines; Merrivale's Notes and Formulæ; Geikie's Outlines of Field Geology.

## X.-BOTANY.

Lecturer ......G. Lawson, Ph. D., Ll. D.

In addition to the work laid down in the Faculty of Arts (§ I, IX), practical instruction will be given in the use of the Microscope, Preparing of Sections, Mounting of Preparations, and Microscopical Analysis.

## XI.-ZOOLOGY.

Lecturer.....A. H. MACKAY, B. A., B. Sc., F. R. S. C.

Fridays, 4 to 5.30 P. M., and Saturday Mornings at 9 A. M., when necessary to complete dissections.

Lectures on Systematic Zoology will for the present year be combined with the practical laboratory work, which will form the all important part of the course, and may be provisionally outlined as follows:

Laboratory Work:—The comparative anatomy of easily obtainable typical animals from their dissection, with microscopic demonstrations in histology. Subjects: The human skeleton, and the general dissection of such as the following species: Mammalia: The eat, sheep and rabbit; Aves: the crow or sparrow, pigeon, and duck or goose; Reptilia: the snake; Amphibia: the frog and salamander; Pisces: the skate, eel, and cod or herring, mackerel or trout; Arthropoda: the lobster and an insect; Annulata: The earth worm; Mollusca: the squid or whelk, and the clam or oyster; Echinodermata: the sea-urchin and star-fish; Coelenterata: hydrozoa; Protozoa: sponges, infusoria and rhizopods; Cell Life in Zooid Vegetation: the bacteria, desmidiaceæ, diatomaceæ and other algæ.

Systematic Zoology:—Animal structures and their functions. The classification of vertebrates and invertebrates to the *orders*, with a knowledge of common representative species. The vertebrate fauna of the Atlantic provinces of Canada in general detail.

Text Books will be announced at the opening of the course.

## XII.-PHYSIOLOGY.

The University provides no instruction in this subject, but the class conducted in the Halifax Medical College by Prof. A. Morrow, M. B., C. M., is recognised as qualifying for a degree. The class meets daily at 11—12 A. M. The fee for the course is \$12.00.

#### XIII.-ANATOMY.

The University provides no instruction in this subject, but the Systematic and Practical classes (including the Histology class) conducted in the Halifax Medical College by A. W. H. Lindsay, M. D., Professor of Anatomy, and G. C. Jones, M. D., Demonstrator, are recognised as qualifying for a degree. The Anatomy Class meets daily at 10—11 A. M.; fee \$12.00. The Practical Anatomy Class meets daily, 8—10 P. M.; fee \$12.00. The Histology class meets once a week; fee \$4.00.

## XIV.-MENTAL SCIENCE.

The class in Mental Science is that known in the Arts Faculty as Junior Philosophy, (§ I, v).

## XV .- ENGLISH.

Professor ...... A. MacMechan, Ph. D.

As in the Arts Faculty, (§ I, III).

## XVI.-FRENCH AND GERMAN

Professor......J. Liechti, M. A.

As in the Arts Faculty, (§ I, II).

- § XXV.—The Academic Year consists of one session. The Session of 1891-92 will begin on 9th September, 1891, and end on the 26th April, 1892.
- § XXVI.—Admission of Students.—The regulations for the admission of students are the same as in the Arts Faculty, (§ III).
- § XXVII.—Degrees.—Two degrees are conferred in the Faculty of Science, those, viz., of Bachelor of Science (B. Sc.), (in either pure Science or Engineering), and Bachelor of Engineering (B. E.)

The regulations for the admission of students to the courses of study leading to these degrees are the same as in the Faculty of Arts, (§ IV, 2-7).

Undergraduates who have completed a portion of their Arts or Science Courses either in this University or elsewhere, will be admitted to such advanced standing in the courses leading to the above degrees, as the subjects which they have studied may seem to warrant, and arrangements will be made to enable them to complete the courses in as short a time as possible.

§ XXVIII.—Matriculation Examinations. — The examination by which a student may gain entrance to the first year of the various courses in this Faculty, is the same as in the Faculty of Arts, (§ V).

The subjects of the examination by which a student may gain entrance to the Second Year of the various courses in this Faculty, consist of the subjects of the First Year Matriculation Examination and of the First Year of the course in which he wishes to enter (§ XXIX). The regulations for this Examination are the same as in the Faculty of Arts, (§ VI).

§ XXIX.—Courses of Study for Degree of B. Sc.—Seven Courses of Study are provided, which lead to the Degree of B. Sc., viz. :—

Course A, which has as main subjects Mathematics and Physics, and is suited to the requirements of students who wish to prepare themselves for higher teaching positions in these departments, or to obtain a thorough ground-work for a subsequent course in Engineering.

Course B, which has as main subjects Experimental Physics and Chemistry, and is intended to meet the wants of students who wish to prepare themselves for higher teaching positions in these departments, or for engaging in chemical industries.

Course C, which includes a study of the various sciences, of Modern Languages and of Drawing, and is designed to meet the wants of students who aim at Science Masterships in our High Schools.

Course D, which has as main subjects Chemistry and Biology, and is especially suitable for students who intend to enter upon the study of Medicine. A sufficient number of the scientific subjects included in the medical curriculum, are studied in this course to enable the student taking it to shorten his subsequent medical course by one year.

Courses E, F, G, in Civil, Mechanizal and Mining Engineering respectively. In these courses, Mathematics, Physics, Chemistry and their applications to the various departments of Engineering are studied pari passu. Through the kind co-operation of leading engineers in the city of Halifax, the University is able to provide very complete courses in these departments, so far as that can be done without workshops and testing laboratories. As no funds are available at present for establishing these desirable adjuncts, students are recommended to spend their summer vacations in the field, the workshop, or the mine. The Dean of the Faculty will be glad to recommend diligent students to Engineers, under whom they wish to secure the opportunity of engaging in practical work during the summer.

Students of Engineering who aim at becoming Electrical Engineers, may begin the necessary practical study of Electricity by taking the Practical Physics Class. But the outfit of the Physical Laboratory is at present too meagre to warrant the University in offering a special course in this department.

The following is a statement of the classes which must be attended in these various courses. Details as to the subjects studied in these classes will be found under Courses of Instruction, (§ XXIV). Classes to which the letters A, B, &c., are attached, are to be taken in the Courses thus indicated. Those

to which no such letters are attached, are common to all the Courses.

## First Year.

- (1.) Mathematics.
- (2.) Inorganic Chemistry.
- (3.) For A, B, E, F, G, Drawing. For C, D, Botany.
- (4.) English.
- (5.) French or German\*.

Practical work in Botany will be prescribed for students taking Courses C, D, the work to be done during the summer vacation.

## Second Year.

- (1.) Mathematics.
- (2.) Junior Physics.
- (3.) Practical Chemistry.
- (4.) Drawing.
- (5.) English.
- (6.) French or German \*

## Third Year.

- (1.) For A, Advanced Mathematics. For B, C, D, Practical Chemistry. For E, F, G, Advanced Mathematics (partial course).
- (2) For A, B, E, F, G, Senior Physics. For C, D, Practical Physics.
- (3) For A, C, D, Mental Science. For B, Assaying. For E, F, G, Applied Mechanics.
- (4.) For A, B, C, D, French or German\*. For E, F, G, Drawing.
- (5.) For B, D, Organic Chemistry. For C, Drawing. For E, F, G, Surveying.
- (6.) For C, D, Zoology. For F, G, Assaying.

## Fourth Year.

- (1.) For A, Advanced Mathematics. For B, D, Practical Chemistry. For C, Organic Chemistry. For E, F, G, Advanced Mathematics (partial course).
- (2.) For A, B, E, F, G, Senior Physics For C, D, Physiology.
- (3) For A, Advanced Mathematical Physics. For B,
  Practical Physics. For C, Drawing. For D,
  Anatomy. For E, Advanced Mathematical Physics
  (partial course), or Practical Physics. For F,
  Advanced Mathematical Physics (partial course).
  For G, Mining.

<sup>\*</sup> As under present arrangements, Latin and Greek are necessary subjects in the examination for the highest grade of Teachers License in the Province of Nova Scotia, these subjects may be substituted for French and German, so far as the Time Table may permit, by undergraduates taking Course C.

- (4.) For A, French or German or Practical Physics. For B, C, D, French or German.\* For E, F, G, Applied Mechanics.
- (5.) For B, C, E, G, Mineralogy and Lithology. For D, Practical Anatomy. For F, Practical Physics.
- (6.) For D, Histology. For E, F, G, Civil Engineering.

An undergraduate taking Course D, who wishes his Fourth Year to qualify for a medical degree, must, previously to his entering upon it, have satisfied the requirements of the Medical Faculty with regard to Matriculation. (See Faculty of Medicine.)

- § XXX.—Attendance.—The regulations as to attendance are the same as in the Faculty of Arts. (See § IX).
- § XXXI.—Examinations. The regulations as to Examinations are the same as in the Arts Faculty. (See § X).
- § XXXII.—The Degree of B. Sc. with General Distinction will be conferred on an undergraduate, on the same conditions as the corresponding degree in the Faculty of Arts, (§ XI).
- § XXXIII.—The Degree of B. Sc. with Honours will be conferred on an undergraduate on the same conditions as the corresponding degree in the Faculty of Arts, (§ XII), but the only departments in which it will be conferred in this Faculty, are those of Mathematics and Mathematical Physics, and Experimental Physics and Chemistry.
- § XXXIV.—Medals and Prizes.—The Sir Wm. Young Gold Medal, the Waverley Prize, the New Shakspere Society's Prize, and in some years the Governor-General's Gold and Silver Medals, are open for competition to students of the Faculty of Science. (See § XV).
- § XXXV.—The Munro Exhibitions and Bursaries are open for competition to candidates for Matriculation, and to undergraduates entering the Third Year in this Faculty. For regulations see § XVI.
- § XXXVI.—Residence, etc.—The regulations as to residence, church attendance, and discipline, in this Faculty, are the same as in the Faculty of Arts. (See § XVII—XIX).
- § XXXVII.—The Degree of Bachelor of Engineering (B. E.), will be conferred on a Bachelor of Science who has taken the Degree in one or other of the departments of Engineering, at any date not less than one year after graduation, provided he satisfy the following conditions:

<sup>\*</sup>As under present arrangements, Latin and Greek are necessary subjects in the examination for the highest grade of Teachers License in the Province of Nova Scotia, these subjects may be substituted for French and German, so far as the Time Table may permit, by undergraduates taking Course C.

- (1.) He must furnish certificates from an engineer or engineers, approved for this purpose by the Faculty, shewing that he has been engaged in practical work in some one department of Engineering under their supervision for a period of at least two years, and that he has exhibited satisfactory diligence and progress. A part or all of this time may be spent in any approved Engineering School which possesses workshops or testing laboratories.
- (2.) He must hand in to the Faculty designs for some constructive work, prescribed by the Faculty, in the department in which he has been engaged in practical work, the designs to be accompanied by complete working drawings giving full details, bills of materials and estimates. The designs must be accompanied by a declaration to the effect that he has received no assistance in preparing them, and he must be prepared to explain and defend his designs before the examiners.
- § XXXVIII.—Admission ad eundem gradum.—Graduates in Science of Universities approved by the Senate, who have received their degrees in course, shall be admitted adeundem gradum in this University, on producing satisfactory proof of character and academic standing.
- § XXXIX. Academic Costume. Bachelors of Science and of Engineering shall be entitled to wear black stuff gowns and hoods. The distinction part of the costume is the hood, which is to be as follows:

For B. Sc.—Black stuff, with a lining of white silk bordered with crimson silk.

For B. E.—Black stuff, with a lining of white silk bordered with purple silk.

Successful candidates for these degrees must 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.

§ XL.—Fees.—The regulations as to fees payable by students, shall be the same as in the Faculty of Arts. (See § XXIII).

The graduation fees are as follows:

# Faculty of Caw.

THE PRESIDENT, (ex officio.)

Professors: Weldon,

RUSSELL,

Lecturers: Shannon,

TOWNSHEND, J.,

GRAHAM, J.,

PAYZANT,

HARRINGTON.

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

## § XLI.—Courses of Lectures.

The following courses of lectures to be given in the Session of 1891-92, will begin on the 2nd September, 1891, and end on the 12th February, 1892.

# CONSTITUTIONAL AND INTERNATIONAL LAW.

(George Munro Professorship.)

#### Constitutional Law.

Two lectures per week.

Subjects of lectures:

Law of Parliament. Select Cases in Constitutional Law, British North America Act.

Text book: Cartwright's Cases.

## Constitutional History.

Two lectures per week.

Subjects of lectures:

Anglo-Saxon Royalty. The Judicial System of the Anglo-Saxons. The Witanagemote. Feudalism in England. Origin and Growth of the two Houses of Parliament. Origin and Development of Trial by Jury. Origin and Development of the Courts of Law. The Royal Prerogative. History of the Law of Treason. The Liberty of the

Person. The Liberty of the Press. History of Party Government. Origin and Development of the Cabinet System. History of the Reform Bills. The Written Code of the Constitution. Magna Carta. Petition of Right. Bill of Rights. Habeas Corpus.

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: Woolsey's International Law.

## CRIMES.

Lecturer ...... Professor Weldon.

One lecture per week.

Subjects of lectures:

Sources of Criminal Law. Felonies and Misdemeanors. 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: Burbidge's Digest of Criminal Law.

## REAL PROPERTY.

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

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.

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

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 and authentication of contracts; Statute of Frauds. Causes vitiating agreements; mistake, fraud, duress, &c. Discharge of contracts, rescission, performance, payment, release, merger, &c. Leading cases.

Text books: Finch's Cases, and Anson on Contracts.

## EQUITY JURISPRUDENCE.

Lecturer ......PROFESSOR RUSSELL.

One lecture per week, extending over two years,

Subjects of lectures:

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

Text book : Smith, H. A.

#### MARINE INSURANCE.

One lecture per week.

Subjects of lectures:

Parties to and Agents for Marine Insurance; The Policy; Duration; 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.

## PARTNERSHIP AND COMPANIES.

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

One lecture per week.

[1891-2.]

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.

## EVIDENCE.

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

One lecture per week.

[1892-3.]

Subjects of lectures:

Nature of Proof, Troduction and Effect of Evidence, Relevancy, Instrument of Evidence.

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

## NEGOTIABLE INSTRUMENTS.

Lecturer......Professor Russell.

One lecture per week.

[1891-2.]

Subjects of lectures:

Formal requisites. Consideration. Indosement and Transfer. Real and personal defenses. Over-due paper. Notice of Dishonor. Protest. Bill of note.

Text book: Chalmers on Bills.

## SALES OF PERSONAL PROPERTY.

Lecturer ...... Professor Russell.

One lecture per week.

[1892-3.]

Subjects of lectures:

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

Teat book: Benjamin on Sales.

- § XLII.—The Academic Year.—The academic year consists of one session. The Session of 1891 2 will begin on the first of September, 1891, and end on the 23rd of April, 1897
- § **XLIII.**—**Admission of Students.**—(1.) Student 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 § LII), enter any of the classes of the Faculty.
- (3.) Students who wish to obtain University Degrees must become undergraduates. They may become undergraduates by (a) passing either one of the Matriculation Examinations or a recognized equivalent, and (b) matriculating, i. e., entering their names on the Matricula or Register as Undergraduates.
- (4.) Students who are not undergraduates are known as General Students.
- § XLIV.—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 their enter in the 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.
- § XLV.—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:—

LATIN.—First three books of Cæsar. First book of Virgil, or first book of Gaius or Justinian.

Greek.—First two books of Xenophon's Anabasis.

Candidates may substitute French or German for Greek.

The papers in the above subjects will contain questions on Grammar.

MATHEMATICS.—Arithmetic, as in *Hamblin Smith's*; Algebra, as in *Todhunter's* Algebra for beginners; Geometry, *Euclid*, Books I, II, III and IV, with easy exercises.

English.—Grammar, Analysis and Composition, as in Nova Scotia prescribed text books for the public schools. Critical study of Shakespeare's plays. For September, 1891, and February, 1892. The Merchant of Venice (Rolfe's edition recommended).

HISTORY AND GEOGRAPHY.—British and Canadian History, as in Nova Scotia prescribed text books for the Public Schools; General Geography, as in the prescribed text books.

- (2.) Persons desirous of appearing as candidates at this examination must give notice to the Dean of the Faculty on or before August 24th, 1891; and they shall be required to pay a fee of \$5.00 or the morning of the day of Examination.—The Examination will be held next Session on Tuesday, September 1st, 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.

# § XLVI.—Course of Study for Degree of LL. B.

#### First Year.

1. Real Property.

3. Contracts.

Crimes.

4. Torts.

5. Constitutional History.

#### Second Year.

1. Equity.

- 3. Negotiable Instruments.
- 2. Partnership and Companies. 4. Constitutional Law.
  - 5. Conflict of Laws.

#### Third Year.

1. International Law.

3. Evidence.

2. Insurance.

4. Equity.

5. Sales of Personal Property.

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.

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 comparatively little advantage from the lectures. The Course having been very considerably enlarged, the Faculty apprehend that students who are doing regular office work during the Session, will find it quite impossible to pass with credit the required examinations.

- § XLVII.—Sessional Examinations.—(1.) The Sessional Examinations will be held in February, 1892, on the completion of the lectures in the several subjects.
- (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 violates 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 less than thres 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.) If an Undergraduate fail to pass in more than two subjects at any Sessional Examination, he shall lose his Session.
- (5.) Undergraduates who wish to present themselves at a Supplementary Examination, must give notice to the Dean of the Faculty on or before August 24th, 1891.
- (6) The Supplementary Examination for the present year will begin September 1st, at 10 o'clock, A. M. Fee, \$5.00, payable on the morning of Examination.
- § XLVIII.—Moot Courts.—Moots 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.
- § XLIX.—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.

- § L.— 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.
- § LI.—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.
- § LII.—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 requested to pay their Class Fees and sign the University Register on Tuesday, 1st September, 1891, at 10 A.M., in the office of the Law School.

Registration Fee, payable only by general students		00
students		00
Fee for the classes of the First Year, payable by undergraduates	40	00
Fee for the classes of the Second Year, payable by undergraduates	40	00
Fee for the classes of the Third Year, payable by undergraduates	35	00
Fee for LL. B. diploma, which is payable before the final exami-		
nation, and will be returned in case of failure	10	00
Fee for the Matriculation Examination	5	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). GEORGE LAWSON, PH. D., LL. D., JOHN SOMERS, M. D., GEORGE L. SINCLAIR, M. D., DONALD A. CAMPBELL, M. D., C. M. A. W. H. LINDSAY, M. D., C. M., JOHN STEWART, M. B., C. M., A. C. PAGE, M. D., DANIEL MCNEIL PARKER, M. D., EDWARD FARRELL, M. D., Andrew J. Cowie, M. D., JOHN F. BLACK, M. D., ALEXANDER P. REID, M. D., ARTHUR MORROW, M. B., C. M., SAMUEL LEONARD SHANNON, D. C. L., Q. C., MATTHEW A. CURRY, M. D., MURRAY McLAREN, M. D. Dean of the Faculty: Prof. Lawson. Secretary of the Faculty: Dr. LINDSAY.

§ LIII.—Courses of Instruction.—1. Instruction is provided by the University in the following subjects of the Medical Curriculum:

## I. CHEMISTRY.

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

Daily Lectures, 9 A. M.-10 A. M.

With experimental demonstrations,

Part I.—Inorganic.—Object and nature of the Science. General Principles: Chemical Affinity; Laws of combination, by weight, by volume. The Elements. Equivalence; Atomicity. Nomenclature; Notation; Formulæ; 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, etc.

The Metals: their physical and chemical characters; Classification. The Metals and their compounds considered in detail. 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 testing 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. Monatomic Alcohols and their derivatives; Methyl Alcohol; Chloroform. Ethyl Alcohol; Ether; Nitrous Ether; Nitric Ether. Alcohols. Aldehydes. Volatile Fatty Acids, Compound Ethers. Chloral. Chloroform. Polyatomic Compounds. Glycerin. Fats. Saponification. Organic Acids. Sugar and Starches. Fermentation. 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 determining their chemical composition, and presence of Glucose, Albumen, &c., in urine. Analysis of Milk, Alcoholic Solutions, &c.

 $\mathit{Text\ book}$ : Greene's Edition of Wurtz's Elements, or any equivalent work may be used.

#### Practical Chemistry.

Systematic Courses of testing for Metallic Bases, and Inorganic and some of the more common Organic Acids, with special exercises. Where students can give the necessary time, this course will be followed by processes of detection of Metallic Poisons; examination of Urine for Glucose, Albumen; nature of Calculi and other deposits. Sanitary Analysis:—Atmospheric Air; Water. Mineral Waters.

Laboratory books: Macadam's Practical Chemistry. Bowman's Medical Chemistry, and other special works are kept in the Laboratory Library for use of Students. Special Tables are used in the Laboratory.

## II. BOTANY.

Lectures Tuesdays, Thursdays and Fridays, 12 A. M.-1 P. M.

The Vegetable Cell: its structure and contents, with microscopic demonstrations. 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. This part of the course will be fully illustrated by specimens, drawings and preparations.

Text books: Goodale's Physiological Botany (being Vol. II of Gray's Botanical Text Book); Gray's How Plants Grow, with Lawson's Fern Flora.

Field Books for Summer Work: Gray's Manual of Botany of the Northern States. Macoun's Catalogue of Canadian Plants.

- 2. Students wishing to attend the above courses may do so either as General Medical Students without preliminary examination, or as regular Undergraduates in Medicine. 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 at the Halifax Medical College or at any other recognized School of Medicine.
- 4. Attendance on classes by those registered as General Medical Students will not qualify for Degree Examinations in this Faculty.
- § LIV.—The Academic Year.—The Academic Year consists of one session. The session of 1891-92 will begin on Wednesday, October 28th, 1891, and end on Tuesday, April 26th, 1892.

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 and two of 50 each. Certificates indicating less than 90 p. c. of attendance upon any class will not be accepted without valid reason for absence being shown.

- § LV.—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.
- § LVI. Matriculation Examination. 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 the Matriculation Examination of this Faculty or some other examination recognized by the Senate as sufficient.
- 2 The following are the subjects of the 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) Questions 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 re-translation 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.
- (5.) Elements of Mathematics, comprising (a) Geometry, Euclid, Books I, II, and III; (b) Algebra, including Simple Equations.
- (5.) Elements of Dynamics (Mechanics), comprising Elementary Kinematics, Statics, Kinetics and Hydrostatics, as treated in Blaikie's Elements of Dynamics+ (Thin, Edinburgh).
  - (6 and 7.) 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 French.
- (d) Natural Philosophy, as in Balfour Stewart's Elementary Physics† (Macmillan & Co.)
- (e) Logic, as in Jevon's Elementary Lessons in Logic + (Macmillan & Co.)
- 3. This Examination will begin on Wednesday, the 28th of October, 1891, in the College Hall, and 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 (specifying in such notice 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.
- This 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 medical students; and also 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.
- 5. A certificate of the possession of a University Degree in Arts, or of the Teacher's Grade A License of Nova Scotia, or

<sup>\*</sup> Latin for 1891, Cæsar, Gallic War, Bks. IV. and V.; or Virgil, Æneid, Bk. II.

Latin for 1892, Cæsar, Gallic War, Bks. IV. and V.; or Virgil, Æneid, Bk. III.

Greek for 1891, Xenophon, Anabasis Bk. V. or VI. or VII.

Greek for 1892 Xenophon, Anabasis, Bk. I. or III. or VII.

In French, Voltaire's Charles XII., Books I. and II or Octave Feuillet. In

German, Adler's Reader (Appleton & Co.), Dritter Abschnitt, or Schiller's Der Neffe

als Onkel, Act I.

t These books are mentioned to show the extent of knowledge expected. Other books may of course be used by candidates.

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.

- 6. The Matriculation and Sessional Examinations 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 tanto*.
- 7. 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.
- § LVII.—Degree Examinations.—Candidates for the Degrees of M. D. and C. M. shall be required to pass two examinations—the Primary and Final M. D., C. M. examinations, and to have satisfied at the dates of the examinations certain conditions as to attendance on classes, etc.

# § LVIII.—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 the Matriculation Examination, 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 either in this University, in the Halifax Medical College, or in some other 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 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 thirty lessons in Practical Dispensing, or of having had three months' practice in the dispensing of drugs with a recognized apothecary or dispensing medical practitioner.

- 2. The Primary M. D., C. M. Examination will be held in the third week in April. 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 Undergraduates of the University befor the date of the examination, and to pay before the date of the examination one-half of the amount of the graduation fee.
- 3. Candidates may appear for examination in Botany, and Histology, one academic year after passing the Matriculation Examination, on presentation of the certificates specified above, so far as they apply to these subjects.
- 4. If so disposed, candidates may, at the end of their second year, elect to appear for examination in any two (but not less than two) or more of the remaining subjects of the Primary Examination, provided always that Chemistry shall be one of such elected subjects.
- 5. Candidates who appear for examination in Botany, etc. at the end of the first year, will be required to pay one-sixth of the amount of the graduation fee and the remainder of the half fee at their next examination in other Primary subjects. Should the candidate fail to pass in any subject or subjects, the fee will not be returned to him, but he will be admitted to one subsequent Examination in such subject or subjects on payment of one-half the original fee.
- § LIX.—Final M. D., C. M. Examination.—1. Candidates for this examination shall be required to furnish certificates to the following effect, viz.:—
- I, the undersigned, being desirous of obtaining the Degree of Doctor of Medicine and Master of Surgery, do hereby declare that I have attained the age of twenty-one years, or (if the case be otherwise), that I shall have attained the age of twenty-one years before the next graduation day, and that I am not (or shall not be at that time) under articles as a pupil or apprentice to any Physician, Surgeon or Apothecary.

  (Signed),

  A. B.
- (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.

(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. Examinations either in this University or at the Halifax Medical College, or at some other recognized 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 attended during three academic years courses of lectures as above.

Note—Persons beginning the study of Medicine after Jan. 1st, 1892, shall not be allowed to constitute an *annus medicus* by studying in a physician's office, in all such cases at least four academic years will be required by this Faculty.

- (4.) Of having, after passing the Matriculation Examination, attended at the Halifax Medical College, or at some other School of Medicine approved by the Senate, two courses of 100 lectures each, in each of the following subjects, viz. :—Principles and Practices 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; one course of fifty lectures in Medical Jurisprudence, including Hygiene and Insanity, one course of at least 25 demonstrations in Pathology, and one course of at least 20 lectures in Ophthalmology, Otology and Laryngology.
- (5.) 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, and of having attended during at least six months the practice of a Dispensary or of the out-patient department of a general hospital.
- (6.) 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 recognized practitioner.
- (7.) Of having obtained proficiency in the practice of Vaccination under a recognized practitioner.
- 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, (including Hygiene and Insanity). In Medicine and Surgery there shall also be practical clinical examinations conducted at the bedside, cases being submitted for diagnosis and treatment.

<sup>\*</sup> The Medicine paper may include questions in Pathology.

<sup>†</sup> The Surgery paper may include questions in Ophthalmology, Otology, etc.

- 3. Candidates may appear for examination in Medical Jurisprudence (including Hygiene and Insanity) alone, three academic years after passing the Matriculation Examination, on presentation of the certificates specified above, so far as they apply to this subject.
- 4. This examination will be held in the third week in April. Candidates are required to transmit the certificates specified above to the Secretary of 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 in any subject or subjects, the fee will not be returned to him, but he will be admitted to one subsequent Examination in such subject or subjects, on payment of one-half the original fee.
- § LX.—Academic Costume, etc.—1. Doctors of Medicine of this University shall be entitled to wear black stuff gowns and hoods. The hoods shall have a lining of scarlet silk bordered with white silk.
- 2. 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.
- 3. Before receiving his degree, the candidate will be required to sign the following oath or affirmation:—

#### SPONSIO ACADEMICA.

In Facultate Medicinæ Universitatis Dalhousianæ.

Ego, Doctoratus in Arte Medica, titulo jam donandus, sancto coram Deo cordium scrutatore, spondeo;—me in omni grati animi officio erga Universitatem Dalhousianam ad extremum vitæ halitum, perseveraturum; tum porro artem medicam caute, caste, et probe exercitaturum; et quoad potero, omnia ad ægrotorum corporum salutem conducentia, cum fide procuraturum; quæ denique, inter medendum, visa vel audita silere conveniat, non sine gravi causa vulgaturum. Ita præsens mihi spondenti adsit Numen.

§ LXI. Fees.—The following fees, payable by candidates for the degrees of M. D., C. M., are in all cases payable in advance:—

Registration Fee \$ 2	00
Matriculation Examination Fee 10	00
Chemistry Class Fee	00
Chemistry Laboratory Fee 6	00
Botany Class Fee 6	00
	00

## Enstitutions.

## THE UNIVERSITY LIBRARY.

The General † Library consists of about 3500 volumes, selected to meet the wants especially of students of the Faculty of Arts.

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; and the Robert Morrow Collection of works on Northern Antiquities and Languages, presented by Mrs. Robert Morrow.

During the past year 139 volumes have been added to the Library. Volumes have been presented by the following:—A. Graham Bell, Esq., 1; Rev. D. R. Goodwin, 1; W. H. Magee, Esq., Truro, 2; W. H. Waddell, Esq., Halifax, 1; P. S. Hamilton, Esq., 1; Hon. Geo. E. Foster, Minister of Finance, Ottawa, 1; J. D. Logan, Esq., 1; Professor Andrew Seth, University of St. Andrews, 1; Professor James Seth, 1; Professor J. G. MacGregor, 4; E. J. James, Esq., 1; President Forrest, 2; The Editors of the Dalhousie Gazette, 1; The Bureau of Education, U. S. A., 4; The U. S. Naval Observatory, 2; The Smithsonian Institution, 5; Geological and Natural History Survey of the Dominion of Canada, 3; Railway Department Ottawa, 1; Presbyterian General Assembly of Canada, 1; Messrs. Macmillan & Co, 36; Messss. A. & W. Mackinlay, 3.

Also Calendars, &c., by the following:—Universities of London, Aberdeen, St. Andrew's, Glasgow, Univ. Coll. Dundee, Melbourne, Harvard, Yale, Johns Hopkins, Cornell, Baltimore Med Coll., Kansas City Med. Coll., Buenos Aires, Toronto, McGill, Queen's, Bryn Mawr, Lehigh, Coll. Physicians and Surgeons, Ontario, Manitoba, Presbyterian College, Halifax, Mt. Allison, Laval, Vassar, Univ. of California, Univ. of Georgetown, Columbian University, Y. M. C. A. Year Book.

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

## 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. It formed the museum of Professor 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; a systematic series of minerals and rock specimens; collections of shells, fossils, and Indian implements, and collections of dried specimens of native plants. The collection was partly made by Rev. Thomas McCulloch, D. D., the first President of the College.

The Patterson Archæological Collection.—This collection of Indian Antiquities was made by Rev. George Patterson, D. D., while engaged during a number of years in researches regarding the history and modes of life of the aborigines of Nova Scotia. The collection was presented by him to the College in 1889, on the condition that the Governors should make suitable "provision for the preservation and exhibition of the same, in such a manner as is usual in well-managed museums." It is kept as a separate collection. It contains 288 specimens, separately catalogued, and is arranged conveniently for reference. About 250 of the specimens have been obtained in Nova Scotia; they represent the stone age of its aboriginal inhabitants, and form an almost complete representation of the articles usually found among the remains of the native races of North America. There are also a number of similar articles from the United States, Scotland, the West Indies, and especially the New Hebrides. The classified catalogue of the collection, which is arranged according to the method adopted in the description of the Archæological Collections of the Smithsonian Institution, contains full particulars of the localities where the several specimens were obtained.

Donations of Dried Plants from the Pacific Islands and Australia have been made by Rev. Hugh Robertson and Rev. Joseph Annand, M. A., New Hebrides; and of Nova Scotian Plants by Mr. George G. Campbell, B. Sc, Truro.

A Collection of Carboniferous Fossils, from the coal measures at Spring Hill, has been presented by Mr. Swift, of the Spring Hill Mines, Cumberland County.

<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.

## 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 entitled to the use of the Gymnasium:
- (2.) Students shall be entitled to instruction in gymnastics without the payment of any additional fee.
- (3.) Graduates and members of the Alumni Association shall be admitted to the classes, on payment of a fee of three dollars.

## STUDENTS' SOCIETIES.

## General Students' Meeting.

This meeting is held regularly in November and February to conduct business in which all the students of the University are interested. Special meetings may be called by the President at any time.

#### OFFICERS.

President	A. R. HILL, '92.
Vias Danielouta	(J. A. Mackinnon, (Law), '92.
Vice-I residents	J. A. Mackinnon, (Law), '92. J. S. Kennedy, B. A. (Medicine).
Secretary	J. W. Logan, '93.

## Arts Students' Meeting.

This meeting is held regularly in October and April to conduct business in which the Arts students alone are interested. Special meetings may be called at any time by the President.

#### OFFICERS.

President		 				R.	H.	GRAHAM,	'92.
Vice-Presi	dent	 			00	 .HA	RRY	PUTNAM.	
Secretary .						.D.	M.	ROBINSON,	'93.

## The Sodales Debating Club.

The Sodales Debating Club meets weekly during the session, subjects of general interest being discussed. The officers are elected at the first meeting after the opening of the session.

#### OFFICERS FOR LAST YEAR.

President						. A.	R.	HILL, '92.	-
Vice-President						. A.	W	. MACKAY.	'94.
Secretary						.G.	F.	Johnson,	'92.

## The Medical Debating Society.

Meetings of this Society are held weekly throughout the session. Topics of general interest are discussed, and papers on medical subjects are read by city doctors.

#### OFFICERS FOR LAST SESSION.

President	W. Johnson.
Vice-PresidentJ.	S. KENNEDY.
Secretary and Treasurer E.	J. MEYER.

#### The Mock Parliament.

The Mock Parliament meets weekly. All students of the University are welcome, but only students in law are allowed to take part in the debates, which are mostly of a political nature, on questions of the day. It is conducted strictly in accordance with parliamentary procedure.

#### OFFICERS FOR 1890-91

Speaker		В.	A.
Deputy	Speaker L. X. McDonald.		
Clerk	MR MUNRO		

## Young Men's Christian Association.

Meetings of the Association are held every Saturday evening at the College.

#### OFFICERS.

President	.John A. MacIntosh, '92.
Vice-President	.J. D. MACKAY, '94.
Recording Secretary	Geo. F. Johnson, '92.
Corresponding Secretary	.J. W. Logan, '93.
Treasurer	W. C. Morrison, '92.

#### The Dalhousie Athletic Club.

#### OFFICERS.

Honorary PresidentREV. PRESIDENT FORREST, D.D.
President
Vice-President E. M. Bill, (Law) '92.
Secretary D. G. MACKAY, '93.
Treasurer J. W. Logan '93

Executive.—J. A. Mackinnon, (Law), '92; J. G. Fraser, '92; W. E. Thompson; W. S. Thompson, '92; J. D. Logan, '92.

#### The Moot Court.

The Moot Court is intended for law students only, so far as arguing is concerned. It is conducted as nearly as possible after the manner of the Supreme Courts, and all law students of second and third years standing are required to take part in at least one case during the session. (See Law Calendar.)

## The Philomathic Society.

The objects of this Society are: (a) to stimulate interest in Literature, Science and Philosophy; (b) to encourage thorough study and independent investigation in special departments; (c) to give practice in the presentation of subjects, and in the experimental illustration of lectures; (d) to encourage the formation of collections in Botany, Zoology, Geology, Local History, &c. Meetings are held fortnightly during the College session.

#### OFFICERS.

President	K. G. T. Webster, '92.
	D. S. MacIntosh, (Arts) '92. F. Congdon, (Law) '91.
Vice-Presidents	F. Congdon, (Law) '91.
and the second the little and the second	R. J. McDonald, (Medicine).
Secretary-Treasurer	T F WEST B A '91

Executive Committee.—J. W. Logan, '93; G. F. Johnson, '92; Geo. Patterson, M. A.

## University Lists.

## DEGREES

Conferred April 23rd, 1891.

#### BACHELOR OF ARTS.

DECEMBER OF MARK	
BAXTER, AGNES SIME	. Halifax.
Brehaut, James William	Murray Harbor, P. E. I.
Cox, George Hastings	.Shelburne.
GOODWIN, EMILY MAUD	
GRIERSON, JOHN ARTHUR	. Kentville.
HUGH, DAVID DOUGLAS	. Murray Harbor, P. E. I.
JORDAN, ELIJAH JOHN	. Murray Harbor, P. E. I.
KENNEDY, JAMES SIMON	, Pt Philip, Cumb. Co., N.S.
McCurdy, James Farquhar	Halifax.
MacGlashen, John Archibald	New Glasgow, N. S.
Maclean, John Brown	Hopewell, N. S.
McMillan, Charles Edward	
McMillan, Frederick Alexander	. Alberry Plains, P. E. I.
McNaughton, Elizabeth	. St. John, N. B.
MAGEE, WILLIAM HENRY	
Moore, Clarence Leander	. Salisbury, N. B.
Morash, Albert Victor	
MUNRO, CHRISTOPHER	. Valleyfield, P. E. I.
OLIVER, ALLYNE CUSHING LITCHFIELD.	
ROBINSON, CHARLES BUDD	Pictou.
STAIRS, HENRY BERTRAM	. Halifax.
THOMPSON, FENWICK WILLIAMS	Merigomish.
Tupper, James Waddell	
WEST, THOMAS FREDERICK	

#### BACHELOR OF LETTERS.

MONTGOMERY,	JOHN	 Dalhousie, N. B.
Muir, Ethel		 Halifax.

## BACHELOR OF LAWS.

ALLISON, EDMUND POWELL, B. A	Halifax.
Congdon, Frank Hinkle	Halifax.
DAVISON, JAMES MACGREGOR, B. A	Halifax.
FAIRWEATHER, STEWART LEE	St. John, N. B.
LOGAN. HANCE JAMES	Amherst.

McDonald, Allan Joseph, B. A	Little Glace Bay, C. B.
McDonald, Joseph	
McNeill, Alexander, B. A	Port Hood.
PATON, VINCENT JOHN, B. A	. Halifax.
RUGGLES, NEPEAN CLARKE	Halifax.
SHAW, ALFRED ENOS, B. A	Avonport.
WHITE, THOMAS HOWLAND	Shelburne.
WICKWIRE, HARRY HAM, B. A	Canning, Kings Co.

#### DOCTOR OF MEDICINE AND MASTER IN SURGERY.

Johnson,	ISAAC WE	LLWOOD.	 	. Tatamagouche.
HAMILTON	, CHARLES	ALFRED	 	. Boylston.

#### MASTER OF ARTS.

#### GENERAL PASS LIST.

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

#### FACULTY OF ARTS.

## For B. A. Degree.

FOURTH YEAR: Baxter, Agnes S.; Brehaut, J. W.; Cox, G. H.; Goodwin, Emily M.; Grierson, J. A.; Hugh, D. D.; Jordan, E. J.; Kennedy, J. S.; McCurdy, J. F.; McGlashen, J. A.; Maclean, J. B.; McMillan, C. E.; McMillan, F. A.; McNaughton, Elizabeth; Macrae, A. O.; Magee, W. H.; Moore, C. L.; Morsh, A. V.; Munro, C.; Oliver, A. C. L.; Robinson, C. B.; Stairs, H. B.; Thompson, F. W.; Tupper, J. W., West, T. F.

THIRD YEAR: Archibald, Sara E; Bakin, F. W. M.; Campbell, R. S.; Graham, R. H.; Gratz, H. G.; Harrington, Emily B.; Hill, A. R.; Johnson, G. F.; Johnson, J. B.; Macdonald, A. F.; Macdonald, A. J.; McIntosh, D. S; MacIntosh, J. A.; Mackay, M. S.; McNeill, R.; Robertson, S. N.; Webster, K. G. T.; Weston, Clara P.; Weston, R. A.

SECOND YEAR: Barnstead, A. S.; Finlayson, D.; Forbes, E. W.; Grant, R. J.; Keefler, R. T.; Kellogg, Mary H.; Logan, J. W.; McDonald, Ida G.; McKay, D. M.; McKay, T. C.; McLean, C. A.; Murray, Lucy C.; O'Brien, R. F.; Rankine, J.; Robinson, D. M; Ross, G. E.; Ross, H.

FIRST YEAR: Archibald, Alex. D.; Bigelow, H.; Brehaut, E.; Fraser, H. M.; Gordon, A. M.; Grant, M. F.; Grant, M. D.; Gray, W. S.; Hobrecker, Clara; Johnson, E. W.; McKay, A. W.; Mackay, J. D.; McKenzie, Ellen M.; McPhee, Margaret J.; Putnam, J; Ross, Mary S.; Simpson, F. S., Yorston, F.; Macintosh, J.

#### For B. L. Degree.

FOURTH YEAR: Montgomery, J.; Muir, Ethel.

SECOND YEAR: Fraser, J. G.

For B. Sc. Degree.

SECOND YEAR: Arthur, G.

FIRST YEAR: McDougall, G. D.

#### FACULTY OF LAW.

## For LL. B. Degree.

THIRD YEAR.—Allison, Edmund P.; Congdon, Frank H.; Davison, James McG.; Fairweather, Stewart L.; Logan, H. J.; McDonald, Allan Jos.; McDonald, Joseph; McNeill, Alexander; Paton, V. J.; Ruggles, Nepean C.; Shaw, Alfred E.; White, Thomas H.; Wickwire, Harry H.

SECOND YEAR.—Bill, Edward M.; Casey, Clarence E.; Corbett, Jacob E.; Dockrill, George O'G. M.; Doyle, Matthew N.; Fraser, Alex. H. R.; Fulton, Edgar M.; Fulton, Joseph A.; Fulton, Willard H.; Johnstone, Lewis M.; Mathers, Frederick F.; McDonald, Lauchlin X.; Murray, Robert G.; Sangster, Herbert W.; Smith, Bowyer S.; Trueman, Walter H.

FIRST YEAR.—Anderson, Albert Hudson; Bennett, Richard B.; B.own, Harry Whidden; Burns, Clement Bancroft; Cameron, Daniel Alexander; Comben, Charles; Congdon, Herbert Eugene; Fulton, Joseph Avard; Graham, Blackwood; Kenny, Joseph Burke; March, Stephen Edgar; Morine, Alfred B.; Munro, Henry Havelock; MacCoy, Wensley Blackall; Payzant, John Albert; Puddington, Henry F.; Rowlings, Geo. A. R.; Tilley, Leonard P. D.; Woodworth, Charles Milton.

## FACULTY OF MEDICINE.

#### Primary M. D. C. M. Examination.

Drysdale, Geo. N.; \*Hamilton, Charles Alfred; Irwin, Archer; Meyer, Edw. J.; Turnbull, Geo. D.; \*Woodworth, P. C.

## Final M. D. C. M. Examination.

Hamilton, Charles Alfred; Johnson, Isaac Wellwood.

<sup>&</sup>quot; Passed part last year.

## HONOURS, MEDALS, Etc., 1890-91.

#### HONOURS.

Classics. - First Rank, -- J. W. Brehaut.

English and English History.—First Rank.—J. W. Tupper. PHILOSOPHY. -First Rank. - D. D. Hugh. Second Rank. - E. J.

Jordan. MATHEMATICS AND MATHEMATICAL PHYSICS.—First Rank.—Agnes S. Baxter.

#### GENERAL DISTINCTION.

First Rank.—C. B. Robinson. Second Rank.—C. L. Moore and A. C. L. Oliver.

#### MEDALS.

GOVERNOR-GENERAL'S SILVER MEDAL. -D. D. Hugh. SIR WILLIAM YOUNG'S GOLD MEDAL.—Agnes S. Baxter. GOVERNOR-GENERAL'S GOLD MEDAL. - J. W. Tupper.

#### SPECIAL PRIZES.

AVERY PRIZE. - C. B. Robinson. WAVERLEY PRIZE. - J. Rankine. EARLY ENGLISH TEXT SOCIETY'S PRIZE. - J. W. Tupper. NEW SHAKSPERE SOCIETY'S PRIZE.—J. W. Logan.

#### SENIOR MUNRO EXHIBITIONS.

(1) Bakin, F. W M. [ Johnson, G. F. (2) Webster, K. G. T. Robertson, S. N.

#### SENIOR MUNRO BURSARIES.

- (1) Hill, A. R. (5) McNeill, Rodk. McIntosh, D. S. (2) Johnson, J. B. (6) (3) Weston, R. A. (7) Macdonald, A. F.
  - Archibald, Sara E. (8) MacIntosh, J. A.

## JUNIOR MUNRO EXHIBITIONS.

(3) Gordon, Alex. McL. Brehaut, Ernest. (4) Ross, Mary S. Fraser, Hugh McL. (5) Gray, Wm. S.

#### JUNIOR MUNRO BURSARIES.

- McKay, Angus Wm. Ross, Hedley. (6) Archibald, Alex. D.(7) McDouald, Ida Grace. (8) Johnson, Eben Wm. (9) Simpson, Francis S. (10) Bigelow, Harry V. McKenzie, Ellen M. McPhee, Margaret J. (3)
  - Grant, Melville F.

## EXAMINATIONS, 1890-91.

#### 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.)

FIRST YEAR.—Archibald, Adams Douglas; Archibald, Alex. David; \*Astwood, Joseph Benjamin; Bigelow, Harry Veeder; Brehaut, Ernest; Fraser, Hugh McLeod; Gordon, Alex. MacLennan; Grant, Melville Finlay; Grant, Milton Daniel; Gray, William Smith; Hobrecker, Clara Charlotte; Johnson, Eben Wm.; \*MacDonald, Alex. James; McDonald, Ida Grace; McKay, Angus Wm.; McKay, Donald Macgregor; McKenzie, Ellen Margaret; McPhee, Margaret Janet; Murray, Robert Harper; Ross, Hedley; Ross, Mary Sophia; Simpson, Francis Stewart; Tattrie, Geo. Phillips.

SECOND YELR. - Keefler, Ralph Tupper; \*Tobin, Wm. Richard. .

#### SUPPLEMENTARY EXAMINATION.

THIRD YEAR.—Greek.—Macrae, A. O. Latin.—Grierson, J. A. History.—Howatt, C. A.; Thomson, J. W. Metaphysics.—Thompson, F. W.

Second Year.—Geometry.—Campbell, R. S.; Thomson, J. W. Algebra.—Logan, J. D.

FIRST YEAR.—Mathematics.—McNutt, Elvin. English.—O'Brien, R. F.; Robinson, D. M.

#### SPECIAL EXAMINATION.

Latin. - Munro, C.

#### 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.)

#### GREEK.

FOURTH YEAR: Class I—Brehaut, J. W. Class II—Goodwin, Emily. Passed—McNaughton, Elizabeth; Oliver, A. C. L.; Kennedy, J. S.

Third Year: Class I—McNeill, R. Class II—Robertson, S. N.; Johnson, G. F. Passed—MacIntosh, J. A.; Archibald, Sarah; Macdonald, A. F.; Logan, J. D.; Johnson, J. B.

Second Year: Class I—McKay, T. C; Martin, Alb.; Ross, Hedley. Class II—Logan, J. W.; Forbes, E. W. Passed—Robinson, D. M; McLean, C. A.; Rankine, J.; Ross, G. E.; Grant, R. J.; Barnstead, A. S.; McKay, D. G.; Thompson, Willard; (O'Brien, R. T.; Murray, Lucy;) McDonald, Ida.

<sup>\*</sup> With conditions.

First Year: Class I—Brehaut, Er.; Ross, Sophia; Fraser, Hugh M. Class II—Gordon, A. M.; Gray, W. S.; Mackay, Angus W. Passed—Grant, Melville F.; Putnam, James; Grant, Milton D.; McPhee, Margaret; Simpson, Frank; (Hebb, Bertha; Tattrie, G. P.;) Mackintosh, John; Archibald, Adams; Archibald, Alex. D.; (McNairn, W. W.; Bigelow, Henry;) (McKay, W. P.; Woodman, W. F.;) (Smith, W. A.; Johnson, E. W.;) Murray, R. H.; Milligan, G. S.; McKenzie, Ellen; Mackay, J. D.; Macdonald, Peter.

#### LATIN.

FOURTH YEAR: Class I .-- Brehaut, J. W.; Rolinson, C. B.

THIRD YEAR: Class I—McNeill, Rod. Class II—Johnson, G. F. Passed—Webster, K. G. T.; Gratz, H. G.; McDonald, A. F.; Campbell, R.; Graham, R. H.; McIntosh, D. S.

Second Year: Class I— Logan, J. W. Class II—Martin, Alb.; Ross, Hedley; McKay, T. C. Passed—Rankine, J.; Forbes, E. W.; Dickie, Bessie; McLean, C. A.; Murray, Lucy; Kellogg, Mary; Robinson, D. M.; Finlayson, Dun.; Ross, G. E.; McArthur, S. J.; Barnstead, A. S.; McDonald, Ida; Annand, Ed.; McKay, D. G.; Putnam, H.; Grant, R. J.; O'Brien, R. F.; Keefler, R. T.

FIRST YEAR: Class I—Brehaut, Er.; Gordon, A. M.; (Ross, Sophia; Gray, W.S.) Class II—(McKay, Angus W.; Grant, Milton D.;) Simpson, Frank; McPhee, Margaret. Passed—Fraser, Hugh M.; Putnam, James; Grant, Melville F.; Archibald, Alex. D.; Hebb, Bertha; Mackintosh, John; (Hobrecker, Clara; Bigelow, Henry;) Milligan, G. S.; Archibald, Adams; (Johnson, E. W.; Lawson, Thomas;) (Mackay, J. D.; McKenzie Ellen; Murray, Robert H.; Woodman, W.;) Smith, W. H.; Tattrie. G. P.; Macdonald, Peter; McNairn, W. W.; Yorston, Fred.; (Crawford, J. A.; McKay, W. P.; Shaw, George.)

#### FRENCH.

Third Class: Class I—Brehaut, J. W.; Kellogg, May. Class II—Arthur, Geo. Passed—Fraser, J. G.

Second Class: Class I—McNaughton, Elizabeth; Hugh, D. D.; Goodwin, Emily M.; McCurdy, Jas. F. Class II—Finlayson, D.; Thomson, Jas. W.; McNeill, Roderick; Tobin, W. R. Passed—Grierson, J. A.; Keefler. R. T.

FIRST CLASS: Class I.—Bakin, F. W.; McKittrick, F. J. A. Class II—McIntosh, D. S.; Borden, H. C. Passed — McDougall, Geo. D.; Yorston, Fred.; Murray, N. F.; McKeen, Geo. W.

#### GERMAN.

THIRD CLASS: Class II—Dickie, Bessie.

Second Class: Class I—Baxter, Agnes S. Class II—Tupper, J. W. Passed—Putnam, H.; Arthur, Geo.; Fraser, J. G.: McNutt, Elvin; Montgomery, John.

FIRST CLASS: Class I—Harrington, Emily B.; Archibald, Sarah E.; Fraser, Thos. M. Class II—Webster, K. G. T.; Robertson, S. N.; Mahon, J. A.; Hill, A. R.

#### ENGLISH.

THIRD AND FOURTH YEARS; Class I—Archibald, Sarah E; Harrington, Emily B.; Tupper, J. W. Class II—Muir, Ethel; Webster, K. G. T.; Weston, Clara P. Passed—Stairs, H. B.; Thomson, J.

Second Year: Class I—Logan, J. W.; McArthur, S. J.; McKay, T. C. Class II—(Murray, Lucy C.; Ross, H.;) Arthur, G.; Ross, G.; Rankine, J.; Putnam, H.; Kellogg, May. Passed—(McKay, D.; Grant, R.· J.;) Martin, A.; (Jamieson, Harriet; Robinson, D.;) Forbes, E. W.; Thompson, W.; Finlayson, D.; McLean, C. A.; Borden, H. C.; (Barnstead, A. S.; Mitchell. G.; Tobin, W. R.;) McDonald, Ida G.; Putnam, Ella J.; Dickie, Bessie; O'Brien, R.-F.; (McNutt, Elvin; Putnam, Charlotte;) Annand, E. E.; Keefler, R. F.)

FIRST YEAR: Class I — McKay, A. W. Class II—McIntosh, J.; Yorston, F.; McPhee, Margaret; McKay, J. D.; Ross, Mary S. Passed — (Hebb, Bertha J.; McDonald, P. M.; Smith, W. A.;) Simpson, F.; McKenzie, Miss M.; (Brehaut, E.; Hobrecker, Miss C. C.;) (Gordon, A. M.; Murray, H.T.;) Fraser, T. M.; Fraser, H. M.; Gray, W. S.; Bigelow, H. V.; Putnam, J.; McKittrick, F. J. A.; (Archibald, Alex.; Jobb, H. L.;) Woodman, W. Y.; (McDougall, G. D.; McIntosh, C. D.;) (Dickson, H. C.; Putnam, Charlotte; Grant, M. F.;) McKay, W. P.; Putnam, Ella J.; Archibald, Adams; Johnson, E. W.; (McNairn, W. W.; Shaw, G.;) (Murray, R. H.; Grant, M. D.)

#### HISTORY.

FOURTH YEAR: Class I—(Tupper, J. W.; Macrae, A. O.;) McMillan, F. A.; McNaughton, Elizabeth; Harrington, Emily B.; Oliver, A. C. L; Robinson, C. B. Class II—Cox, G. H.; Stairs, H. B. Passed—Grierson, J. A.; Montgomery, John; McLean, J. B.; Munro, Christopher; West, T. F.; McMillan, C. E.; (Muir, Ethel; McCurdy, J. F.;) Goodwin, Emily; Thompson, F. W.; Campbell, D. M.; (McGlashen, J. A.; Thompson, J. W.; Morash, A. V.)

Third Year: Class I—(Campbell, R. S.; Archibald, Sarah E.;) Weston, Rolfe; Webster, K. G. T.; MacIntosh, J. A.; MacIntosh, D. S. Class II—Graham, R. H.; Gratz, H. G. Passed—Mahon, J. A.; McKay, M. S.; McDonald, A. J.; Johnson, J. B.; Morrison, W. C.; McPonald, A. F.; (Logan, J. D.; Fraser, T. M.)

### POLITICAL ECONOMY.

Class I—Oliver, A. C. L.; MacRae, A. O.; Putnam, Charlotte; Stairs, H. B.; McLean, J. B.; MacIntosh, J. A. Class II—Graham, R. H.; Hill, A. R.; Putnam, Ella J.; Kennedy, J. S.; West, T. F.; McDonald, A. F. Passed—McDonald, A. J.; Morrison, W. C.; McCurdy, J. F.; McKay, M. S.; McMillan, C. E.; Cox, G. H.; Logan, J. D.; Fraser, T. M.

#### ADVANCED POLITICAL ECONOMY.

Class I—Hugh, D. D.; McMillan, F. A.; Montgomery, J. A.; Jordan, E. J. Class II—Muir, Ethel. Passed—Grierson, J. A.

#### ADVANCED PHILOSOPHY.

Class I-(Macrae, A. O.; Robinson, C. B.)

#### SENIOR PHILOSOPHY.

Class I—Hugh, D. D.; Jordan, E. J.; Robinson, C. B. Class II—Macrae, A. O.; Hill, A. R.; MacIntosh, J. A. Passed—Logan, J. D.; West, T. F.; Johnson, G. F.; Robertson, S. N.; Muir, Ethel; Maclean, J. B.; McMillan, F. A.; Gratz, H. G.; MacKay, M. S.; Kennedy, J. S.; (Morrison, W.C.; Macdonald, A.J.;) McMillan, C. E.

#### JUNIOR PHILOSOPHY.

Class I—Murray, Lucy C.; McKay, Thos. C.; Kellogg, May H.; Mitchell, G. F.; McArthur, S. J. Class II—McDonald, Ida G.; (Grant, R. J.; Rankine, Jas;) Forbes, E. W.; Logan, J. W.; Ross, Hedley; Finlayson, D.; Ross, Geo. E.; (Fraser, J. G.; Keefler, R. T.; McKay, D. McG.;) Robinson, D. M.; Jamieson, Harriet J.; (Arthur, Geo.; McLean, C. A.) Passed—Annand, E. E.; Putnam, H.; Martin, A.; O'Brien, R. F.; Parker, L. W.; Barnstead, A. S. Passed in Logic—Thompson, W. S.

#### ETHICS.

Class I—Macrae, A. O.; Robinson, C. B.; Hill, A. R. Class II—McMillan, F. A.; Robertson, S. N.; West, T. F.; Muir Ethel. Passed—Johuson, G. F.; Munro, C.; MacLean, J. B.; (McNaughton, Elizabeth; McGlashen, J. A.;) Campbell, D. M.; (Goodwin, Emily; Cox, G. H.;) (McCurdy, J. F.; Thompson, F. W.;) Morash, A. V.; Montgomery, J.

#### MATHEMATICS.

SECOND YEAR: Class I — Rankine, J.; Mackay, T. C.; Kellogg, May. Class II—Ross, G.; McDonald, Ida G. Passed—Grant, R. J.; Mackay, D. G.; Mitchell, G. F.; McLean, C. A.; Logan, J. W.; Forbes, E. W.; Thompson, W. S.; Barnstead, A. S.; Ross, Hedley; Annand, E. E.; O'Brien, R. F.; Keefler, R. T.; Finlayson, D.; McArthur, S. J.; Jamieson, Harriet J.; Arthur, G.; Robinson, D. M.; Murray, Lucy C.; Putnam, H. Passed in Geometry and Mensuration—Martin, Albert; Thomson, J. W.

FIRST YEAR: Class I — Gordon, A.; Ross, Mary; Brehaut, E. Class II—Fraser, H.; McIntosh, John; Grant, Melville; McKittrick, F. J. A.; McKay, J. D.; Dickson; McKay, A. W.; Tattrie. G.; Simpson; (Gray; Putnam;) McPhee, Margaret. Passed—Archibald, Adams; Hebb, Bertha; MacIntosh, C. D.; (Johnson, E. W.;) Bigelow, H.; McKenzie, Ellen;) Lawson, Thomas; McDougall; Woodman; Hobrecker, Clara; Smith, W. H.; Grant, Milton; Murray, R.; Crawford; (Yorston, F.; Archibald, Alex.; Parker, L. Passed in Geometry—Hattie; McKay, W. P.; McNairn.

#### JUNIOR PHYSICS.

Class I — Bakin, F. W. M.; Weston, Clara P. Class II—Johnson, J. B.: Weston, R. A. Passed—McIntosh, D. S.; Gratz, H. G; Robertson, S. N.; Hill, A. R.; Archibald, Sarah E.; Johnson, G. F.; Mackay, M. S.; Macdonald, A. J.; Mahon, J. A.; Campbell, R. S.; Graham, R. H.; Murray, N. F.; Morrison, W. C.; (Fraser, J. G.; MacIntosh, J. A.;) (Macdonald, A. F.; McKeen, G. W.)

## SENIOR PHYSICS.

Class II—Baxter, Agnes S. Passed-Moore, C. L.

## DYNAMICS.

Class I—Weston, R. A.; Moore, C. L.; Bakin, F. W. M. Class II—Weston, Clara P. Passed—Johnson, J. B.

#### PRACTICAL PHYSICS.

Class I-Moore, C. L.

#### INORGANIC CHEMISTRY.

Class II—Ross, Sophia M.; MacIntosh, Jno.; Mackenzie, Ellen M.; Hobrecker, Clara; McKittrick, F. J. A.; Yorston, Fred'k; Brehaut, Ernest; McPhee, Margaret. Passed—Hebb, Bertha B.; Gordon, A. M.; Mackay, J. D.; Putnam, Jas.; Mackay, A. W.; Woodman, W. I.; Dickson, H. C.; Johnson, E. W.; Grant, Melville F.; Mackintosh, C. D.; Smith, W. A.: Crawford, J. A.; McDougall, Geo. D.; Grant, Milton D.; Gray, W. S.; Simpson, Frank; Jobb, F. L.; Fraser, Hugh M.; Astwood, J. B.; Parsons, J.; Milligan, Geo. S.; Bigelow, H. V.; Archibald, Alex. D.; Archibald, Adams D.

#### ORGANIC CHEMISTRY.

Class I—Cox, G. H.; Oliver, A. C. L. Class II—West, T. F.; McMillan, C. E Passed--Johnson, J. B.; Jordan, E. J.; McKeen, G. W.

#### PRACTICAL CHEMISTRY.

Class I—Arthur, Geo.; McIntosh, D. S.; Johnson, J. B.; McKittrick, F. J. A.; Murray, N. F.; Jordan, E. J.; Thomson, Jas. W.; Gratz, H. G. Class II—McKeen, G. W.

#### ADVANCED PRACTICAL CHEMISTRY (ANALYSIS).

Class I—Cox, Geo. H.; West, T. F.; Oliver, A. C. L.; Kennedy, J. S. Class II—C. E. McMillan.

#### BOTANY.

Class I—Goodwin, Emily M.; Mahon, J. A. Class II—McNaughton, Elizabeth; McMillan, F. A. Passed—Hugh, D. D.; Fraser, J. G.; Campbell, R. S.; McDougall, G. D.

#### FACULTY OF LAW.

#### SESSIONAL EXAMINATIONS.

#### CLASS LISTS.

(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.)

#### CRIMES.

Class I—Bennett; Woodworth: Morine; Rowlings; Payzant. Class II—Montgomery; Brown; March; Cameron. Passed--Anderson; Burns; Comben; Fulton, J. A.; Graham, B.; Grierson; Kennedy; Munroe; Puddington; Russell; Tilley,

#### THIRD YEAR EQUITY.

Class I—Allison; Paton; McNeill; Shaw; Thompson; Davidson. Class II—Ruggles; Logan; Congdon; Wickwire; Casey. Passed—Cahalane; Fairweather; McDonald, A. J.; McDonald, Jos.

#### CONSTITUTIONAL HISTORY.

Class I—Woodworth; Bennett; Rowlings; Payzant. Class II—Cameron; Brown; Graham, R. H.; Munroe; Campbell; Morine; Tilley; Anderson; Comben. Passed—Burns; Doyle; Fulton, J. A.; Fulton, E. M.; Graham, B.; Kenny; McCoy; March; McDonald, L. X.; Puddington; Russell.

#### SECOND YEAR EQUITY.

Class I—Johnstone; McKinnon; Blanchard; Schurman; Sangster. Class II—Casey; McDonald, L. X.; Mathers; Smith, B. S.; Trueman; Fulton, W. H. Passed—Bill; Blackadar; Calder; Corbett; Dockrill; Doyle; Fraser; Fulton, E. M.; Murray; McLean.

#### CONTRACTS.

Class I—Bennett; Woodworth; Payzant; Cameron; Montgomery; Rowlings; Morine. Class II—Grierson; Brown; March; Puddington. Passed—Anderson; Burns; Cahalane; Comber; Crowe; Fulton, J. A.; Graham, B.; Kenny; MacCoy; Munroe; Russell; Tilley; Stairs.

BILLS AND NOTES.

White.

#### INTERNATIONAL LAW.

Class I—Congdon; McNeil; Shaw. Class II—McDonald, A. J.; McDonald, Jos.; Davidson; Logan; Paton. Passed—Cahalane; Casey; Fairweather; Ruggles; Wickwire.

#### CONSTITUTIONAL LAW.

Class I—Smith; Dockrill; Mathers; Stairs; Johnstone; Montgomery; Trueman. Class II—Sangster; Calder; Grierson; Fraser; Bill; Fulton, W. H.; White. Passed—Blackadar; Blanchard; Casey; Corbitt; Doyle; Fairweather; Fultor, E. M.; McLean; McDonald, L. X.; Murray.

#### SALES.

 $\begin{array}{l} {\it Class} \ I{\it --} {\it Dockrill} \ ; \ Schurman \ ; \ McNeil \ ; \ Paton \ ; \ Allison \ ; \ Davidson \ ; \ Trueman \ ; \ Shaw \ ; \ Fulton, \ W. \ H. \ ; \ Thompson \ ; \ Johnstone \ ; \ Mathers \ ; \ Morine. \ {\it Class} \ II{\it --} {\it Casey} \ ; \ Wickwire \ ; \ McDonald, \ L. \ X. \ ; \ Bill \ ; \ Murray \ ; \ McKinnon \ ; \ Calder \ ; \ Smith \ ; \ Ruggles \ ; \ Fraser. \ {\it Passed-Blanchard} \ ; \ Gongdon \ ; \ Corbett \ ; \ Doyle \ ; \ Fairweather \ ; \ Fulton, \ E. \ M. \ ; \ Logan \ ; \ McDonald, \ A. \ J. \ ; \ McDonald, \ Jos. \ ; \ Sangster. \end{array}$ 

#### CONFLICT OF LAWS.

Class I—Schurman; McKinnon; Dockrill; Johnson; Trueman; Mathers; Smith. Class II—Bill; McDonald, L. X.; McLean; Casey; Fulton; Fraser; Morine. Passed—Blanchard; Calder; Corbett; Davidson; Doyle; Fairweather; Fulton; Murray; Sangster.

#### REAL PROPERTY.

Class I—Rowlings; Bennett; Schurman; Woodworth; Munroe; McKinnon; Graham; Puddington; Morine. Class II—Comben; March; Cameron; Anderson; Brown; McCoy. Passed—Burns; Crowe; Fulton, J. A.; Kenny; Payzant; Russell; Tilley.

#### EVIDENCE.

Class I—(Mathers; Schurman;) Fulton, W. H.; Johnstone; Congdon; Calder; Casey; Dawson; Ruggles; Thompson; McNeill; Allison; Corbett; Morine. Class II—Bill; McDonald, L. X.; Paton; Sangster; Trueman; Dockrill; Fraser; Fulton, E. M.; Smith, B. S.; McDonald, A. J.; McKinnon. Passed — Blackadar; Blanchard; Doyle; Fairweather; Logan; McDonald; Murray, Joseph; Shaw; McKenzie;

#### FACULTY OF MEDICINE.

#### PRIMARY M. D. C. M. EXAMINATIONS.

#### CLASS LISTS.

· (Containing the names, arranged in order of merit, of students who have passed in the various subjects.)

ANATOMY.—Drysdale, Geo. N.; Irwin, Archer; Meyer, Edward J.; Turnbull, Geo. D.; Woodworth, P. C.

Physiology.—Drysdale, Geo. N.; (Irwin, Archer; Turnbull, Geo. D.;) Meyer, Edward J.; (Rice. Frank E.; Thomson, Geo. F.;) McAulay, Murdoch W.; Coady, Patrick.

HISTOLOGY.—Turnbull, George D.; Rice, Frank E.; Drysdale, Geo. N.; Meyer, Edward J.; Coady, Patrick; Morrison, D. A.

Materia Medica.—(Drysdale, Geo.N.; Turnbull, Geo.D.;) Irwin, Archer; Rice, Frank E; Meyer, Edward J.; Coady, Patrick; Morrison, D. A.; McAulay, Murdoch W.

Pharmacy.—Turnbull, Geo. D.; Irwin, Archer; Drysdale, Geo. N.; Rice, Frank E.; Meyer, Edward J.; McAulay, Murdoch W.; Fairbanks, Harry G.; Coady, Patrick; Morrison, D. A.

CHEMISTRY.—Kennedy, Jas. S.; Rice, Frank E.; Meyer, Edw. J.; Drysdale, Geo. N.; Turnbull, George D.; McAulay, Murdoch W.; Irwin, Archer; Morrison, D. A.; (Fairbanks, H. G.; Coady, Patrick.)

Practical Chemistry.—Byers, David W.; (Rice, Frank E.; Turnbull, Gco. D.;) Hamilton, Charles A. Meyer, Edward J.; Irwin, Archer; (Bethune, Donald J.; Cogswell, Wm. F.; Kennedy, Jas. S.; Macdonald, Robert J.;) (Coady, Patrick; Fairbanks, Harry G.; Grierson, George T.; McAulay, Murdoch W.; Morrison, D. A; Simpson, H. O.)

Botany.—Hamilton, Charles A.; McKay, Katherine J.; (Chisholm, Alex. J.O.; Macdonald, Robert J.:) (Kennedy, Jas.S.; McKay, Wm. A.;) Brundage, Edgar M.; (Byers, David W.; Cogswell, Wm. F.; Murray, Geo. W.; Simpson, H. O.; Thomson, Geo. F.;) Haché, Henry C.; (Bethune, Donald J.; Grierson, Geo. T.)

SURGERY.—Hamilton, Charles A.; Johnson, Isaac W.

CLINICAL SURGERY. — Johnson, Isaac W.; Hamilton, Chas. A.

MEDICINE. - Johnson, Isaac W.; Hamilton, Chas. A.

CLINICAL MEDICINE.—(Hamilton, Charles A.; Johnson, Isaac W.)

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.—Hamilton, Charles A.; Jonhson, Isaac W.

MEDICAL JURISPRUDENCE.—(Grant, Wm.; Hamilton, Charles A.; Johnson, Isaac W.; Woodworth, P. C.)

## 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 errors or omissions in the following list.

The signs and numbers prefixed in some cases to the names have the following significations:—

- <sup>1</sup> Graduated with First Rank Honours in Classics.
- <sup>2</sup> Graduated with Second Rank Honours in Classics.
- 3 Graduated with First Rank Honours in Latin and English.
- 4 Graduated with Second Rank Honours in Latin and English.
- <sup>5</sup> Graduated with First Rank Honours in Greek and English.
- 6 Graduated with Second Rank Honours in Greek and English.
- 7 Graduated with First Rank Honours in English and German.
- 8 Graduated with Second Rank Honours in English and German.
- 9 Graduated with First Rank Honours in English and English History.
- 10 Graduated with Second Rank Honours in English and English History.
- 11 Graduated with First Rank Honours in Philosophy.
- 12 Graduated with Second Bank Houours in Philosophy.
- <sup>13</sup> Graduated with First Rank Honours in Mathematics and Mathematical Physics.
- <sup>14</sup> Graduated with Second Rank Honours in Mathematics and Mathematical Physics.
- <sup>15</sup> Graduated with First Rank Honours in Experimental Physics and Chemistry.
- 16 Graduated with Second Rank Honours in Experimental Physics and Chemistry.
- 17 Graduated with General Distinction of the First Rank.
- 18 Graduated with General Distinction of the Second Rank.
- + Governor-General's Gold Medallist.
- t Governor-General's Silver Medallist.
- § Sir William Young's Gold Medallist.
- \* DeMill Gold Medallist.
- ¶ Mackenzie Gold Medallist.
- a Sometime Munro Tutor in Mathematics.
- b Sometime Munro Tutor in Classics.

<sup>14</sup> Adams, H. S., Jesuits' College, MontrealB. A., 188	4
†1Aiton, W., Sussex, N. B	5
Allan, Rev. John M., Edinburgh B. A., 1873; M. A., 187	6
Allison, Edmund P., Halifax, N. S B. A., 1889; LL. B., 189	1
Allison, Matthew G., Windsor, N. S B. A., 188	6
Annand, Rev. Joseph, New HebridesB. A., 1869; M. A., 187	2
Archibald, Rev. F. W., M.A., B.D., Ph.D., (obit.)B. A., 187	7
Archibald, Rev. W. P., Cavendish, P.E.I., B.A., 1873; M. A., 187	8
Armstrong, B. H., HalifaxLL. B., 189	0
Armstrong, E. H., Weymouth Bridge, N. S LL. B., 188	8
§18 Baxter, Agnes S., HalifaxB. A, 189	1
Bayne, Prof. H. A, Ph. D., F. R. S. C., (obit.) B. A., 1869	;
M. A., 1872.	
Bayne, Rev. S. E., Mabou	1

+2Bell, F. H., Halifax	
+2Bell, J. A., Riverside, Cal	
Bennett, A. W., Hopewell, N. B	.LL. B., 1885
Bethune, J. L., Baddeck, C. B M. D	
Blanchard, C. W., Truro	
Boak, H. W. C., Halifax	
Bowser, William J, Kingston, N. B	
<sup>1</sup> Brehaut, J. W., Murray Harbor, P.E.I	
<sup>12</sup> Brown, Ernest N., Lower Newcastle, N. B	B. A., 1889
Bruce, Rev. W. T., M. D., Coldstream, Col. Co	.B. A., 1872
Bryden, Rev. C. W., Selkirk	
<sup>12</sup> Buchanan, James J., Sydney, C. B	B. A., 1887
Burgess, Rev. J. C., Danville, Col , U. S. A	.B. A., 1867
<sup>14</sup> Burkitt, Robert J., Athenry, IrelandB.A., 1889	M. A., 1890
Cahan, Charles H., M.P.P., Halifax B.A., 1886;	LL. B., 1899
Cairns, Rev. J. A., M. A., Upper Musquodoboit	.B. A., 1878
Calder, Rev. John, Springville, N. S	.B. A., 1886
Calkin, William S., Truro	
Cameron, A. G., Newton, Guysborough	.B. Sc., 1882
<sup>10</sup> Cameron, C. S., Halifax	
‡Cameron, Rev. J. H., Bass River, N.B	.B. A., 1878
Cameron, William, Merigomish, N. S	
Cameron, Rev. J. J., Shakespere, Ont B.A., 1868	
Campbell, Alexander J., Trnro, N. SB.A, 1886	
Campbell, Alexander, Sydney, C. B	.LL. B., 1889
Campbell, D. A., Halifax, N. S M. D	
Campbell, D. F., E. River, St Mary's, N.S	
Campbell, George G., Truro	
a§14 Campbell, George M., Halifax, N. S	B. A., 1882
Campbell, J. R., Jr., St. John, N. B	Lt. B., 1888
Campbell, William R, Truro	
Carmichael, J. M., New Glasgow, N. S	B. A. 1872
Carr, Rev. A. F., Alberton, P.E.I B. A., 1868	M A 1871
Carson, Rev. G. S., Pictou, N. S	
Carter, Titus James, Andover, N. B	
Carter, William D., Richibucto, N. B	
Chambers, F. B., Truro	
Chambers, R. E., Truro	
Chapman, A. E., Salisbury, N. B.	
Chase, Rev. J. H., Onslow	
Chisholm, Don., Antigonish M. D.	C M 1874
Chisholm, Joseph A., Helifax	
Christie, Rev. T. M., (obit.)	
Clarke, Daniel McD., West River, Pictou Co., N. S	
Cluney, Andrew, Halifax	
<sup>10</sup> Coffin, Rev. Fulton J., Trinidad	B. A., 1886
*9Coffin, Victor E., Mt. Stewart, P. E. I	
Cogswell, G. A., Port Williams, N. S.	
Cogswell, G. A., Fort Williams, N. S	. D. A., 1890

Congdon, Frank H., HalifaxLL. B., 1891
Congdon, Fred. T., LL.B. (Toronto), Halifax, ad eundem gradum,
LL. B., 1889.
<sup>2</sup> Coops, Frank H., Milton, Queen's Co., N. SB. A., 1887
Costley, Alfred, HalifaxB. A., 1881
Cox, George H., ShelburneB. A., 1891
Cox, Robinson, Stewiacke
Creelman, Rev. D. F., (obit.) B. A., 1873; M. A., 1880
+14Creelman, H. G., B. Sc., Vans Dunlop Scholar, Edinburgh Univ.,
B. A., 1881.
Creighton, J. G. A., Montreal B. A., 1868
Creighton, H. S., Dartmouth B. A., 1880
<sup>11</sup> Craighton, James E., Instructor Cornell Univ., Ithaca, N. Y,
B. A., 1887.
Crowe, Walter, Sydney, C. B Ll. B., 1889
+10Crowell, Rev. Edwin, Yarmouth B. A., 1880; M. A., 1891
Cummings, Seldon W., B. A., Truro, N. S Ll. B., 1889
Cruikshank, Rev. W., B. D., Montreal B. A., 1872
Davidson, J. F., Pinos Altos, Grant Co., New Mexico. B. A., 1882
Davison, James McG., Halifax B. A., 1889; LL. B., 1891
DeWolf, G. H., Tintern, England
Dickie, Alfred, Upper StewiackeB.A., 1879; M. A., 1883
Dickie, Henry, Upper StewiackeB. A., 1883
Dill, Rev. Edmund M., Parrsboro'
Doull, W. S., Halifax B. A., 1875; Ll. B., 1885
Duff, Kenneth, LunenburgB. A., 1873
Emmerson, R. R. J., (obit) B. A., 1879
Fairweather, F. L., Maitland LL. B., 1890
Fairweather, Stewart L., St. John, N. B. B. A., 1891
Fisher, J. M., Lower Stewiacke
12 Fitzpatrick, H. H. K., Spring Hill, N. S. B A., 1885; M. A., 1888
Fitzpatrick, Rev. James, Saltsprings
Forbes, Antoinette, Little Harbor, Pictou Co B. A., 1887
Forrest James, Halifax
Forsyth, George O., B. A., Port Hawkesbury, C. B., LL. B., 1889
Frame, J. F., Maitland
<sup>11</sup> Fraser, Alex., West River, Pictou Co., N. SB. A., 1889
Fraser, Hon. D. C., M. P., New Glasgow, N. S B. A., 1872
Fraser, Rev. D. S., Springside, Col., U. S. AB. A., 1874
Fraser, Donald, Pictou
Fraser, Donald, 11ctod
Fraser, John K. G., Alberton, P. E. I
‡Fraser, W. M., Halifax B.Sc., 1880; B. A., 1883
Fraser, W. R., Wright High Sch., Baltimore, MdB. A., 1882
Frazee, Victor G., Academy, PictouB. A., 1889
Fulton, Eben, Middle Stewiacke B. A., 1890
*9Fulton, Edward, Lower Stewiacke, N. S
Fulton, G. H., M. D., C. M
Fulton, W. H., Halifax
Turon, 11. 11., 11mmax

*9Gammell, I., Montreal	
†George, Rev. J. L., M. A., Dartmouth	В. А., 1878
Goodwin, Emily M., St. John, N. B	B. A., 1891
Grant, David K., Riverton, Pictou Co., B.A., 1888;	M. A., 1891
Grant, W. R., (obit.)	
Gregory, E. C., Antigonish	
Grierson, John A., Kentville	
Grierson, Robert, Halifax	
Gunn, Rev. Adam, Kennetcook	
Hamilton, C. A., Boylston	
Hamilton, C. F., B. A., North Sydney, C. B	Lt. B. 1890
Hamilton, H. H., Pictou	
Hanright, Fred. W., B. A., Windsor	
Harvey, McLeod, Newport, N. S	
Henry, Joseph K., Shubenacadie, N. S	
Henry, William A., Halifax, N. S	
<sup>2</sup> Herdman, Rev. J. C., B. D., Calgary, N. W. T	B A 1874
	. D. A., 10/4
M. A., 1887. Herdman, W. C., PictouB. A., 1874;	M A 1991
Herdman, A. W., Pictou	
Hiltz, C. W., (obit.)	J. D. 1802
Howay, F. W., New Westminster, B. C	
Huggins, W. H., St. John, N. B	. LL. B., 1890
‡ <sup>11</sup> Hugh, David D., Murray Harbor, P. E. I	.B. A., 1891
Hunter, John, California	.B. A., 1873
Ives, W. B., Pictou, N. S	.LL. B., 1885
Jennison, Hedley V., New Glasgow, N. S.	
Johnson, Rev. George M., (obit)	
Johnson, Isaac W., Tatamagouche	
Jones, Frank, Digby	
Jones, H. T., Halifax	
<sup>12</sup> Jordan, Elijah J., Murray Harbor, P. E. I	.B. A., 1891
†Jordan, Rev. L. H., B. D., MontrealB.A., 1875;	
Kennedy, J. S., Port Philip, N. S	
Kent, H. V., Truro, N. S	, C. M., 1890
Kinsman, F. S., M.D., Centreville	.B. A., 1880
Knowles, J. H., New Bedford, Mass	.B. A., 1882
Laird, Alex., Sunbury, Ont	.B. A., 1890
+1Laird, A. G., Charlottetown, P. E. I	.B. A., 1889
Laird, G. A., Manitoba	.B. A., 1877
Landells, R., Cedar Hill, B. C	.B. A., 1882
Lane, Charles W., Pictou	. Ll. B., 1887
<sup>12</sup> Langille, R. M., Pictou B. A., 1885;	M. A., 1888
LeNoir, M. U., Halifax	
Lewis, Rev. Abner W., Chebogue, N. S	
<sup>18</sup> Lewis, E. W., Monston, N. B	
Lindsay, A. W. H., M. B., C. M., Halifax	
M. D., C. M., 1875.	

Lippincott, Aubrey, M.D., Pittsburg, Pa
Locke, R. T., Lockeport
Logan, H. J., Amherst LL. B., 1891
Logan, Melville, HalifaxB. A., 1873
Logan, Rev. Richmond, Santa Monica, Cal. B.A., 1877; M.A., 1880
Lovett, Henry A., B. A., Kentville, N. S LL. B., 1889
Lyons, William Alexander, HalifaxL.B., 1887
McBride, Richard, New Westminster, B. CLL. B., 1890
McColl, A., New Glasgow, N. S
McCready, Charles A., Moncton, N. BLL. B., 1888
McCully, Frank A., B. A., Sussex, N. B LL. B., 1887
McCurdy, J. F., Halifax B. A., 1891
McCurdy, S. T., New GlasgowB. A, 1877
McDonald, A. J., B. A., Little Glace Bay, C BLL. B., 1891
Macdonald, C. D., PictouB. A., 1873
McDonald, Rev. Donald, B.D., Port Hastings, C. B. B. A., 1884
Macdonald, Ed. M., PictouLL. B., 1887
McDonald, Joseph, North Sydney, C. BLL. B., 1891
‡14Macdonald, J. A., HalifaxB.A., 1883; LL. B., 1886
McDonald, J. H., (obit.)B.A., 1867; M. A., 1870
Macdonald, Robert J., Hopewell, N. S
Macdonald, William, PictouB. A., 1888
McDonald, William, B. A., PictouLL. B., 1890
Macdonald, W. M., HalifaxB. A., 1888
McDowell, Isaac, (obit.)
MacGlashen, J. A., New Glasgow, N. SB. A., 1891
McGregor, Rev. Daniel, AmherstB. A., 1874
MacGregor, Prof. J. G., D.Sc., F.R.SS. E.&C., Halifax . B. A., 1871;
M. A., 1874.
<sup>14</sup> MacGregor, T. S., Little Bras d'Or, C. BB. A., 1882
McInnes, Hector, HalifaxLL. B., 1888
Mackay, Adams A, B.A., Halifax, N. S LL. B., 1888
<sup>14</sup> Mackay, A. H., B.Sc., F.R.S.C., Halifax
<sup>16</sup> McKay, D. O., Heathbell, Pictou Co
Mackay, Ebenezer, High School, New Glasgow, N. S. B. A., 1886
<sup>14</sup> Mackay, H. M., Academy, Pictou, N. S
McKay, Rev. Kenneth, Richmond, N. BB. A., 1868
‡15 Mackay, Neil F., Regina, N. W. TB. A., 1886
McKeen Rev J. A., Orono, OntB. A., 1873
aşl <sup>14</sup> Mackenzie, A. S., Lecturer Bryn Mawr College, Pa. B. A., 1885
McKenzie, Hugh, TruroB.A., 1872; M. A., 1875
Mackenzie, Prof, J. J., Ph.D., (obit.) B.A., 1869; M. A., 1872
McKenzie, Rev. James, PugwashB. A., 1878
McKenzie, Rev. J. W., East St. Peter's, P.E.IB. A., 1882
McKenzie, William J., West Bay, C. B B. A., 1888
MacKinnon, Don. Alex., Georgetown, P. E. I LL. B., 1887
MacKinnon, J. A., Cow Bay, C. B B. A., 1890
Mackintosh, D. C., Springville, N. S B. A., 1890
‡McKittrick, Burgess, Sydney, C. BB. A., 1877
4 stollietten, Dargess, Cyano, C. D

	4.	
McLatchy, Henry F., Hillsboro', N. B.		
<sup>2</sup> McLean, I. M., M. D		1879
McLean, Rev. J. A., Harvey, N. B		1876
Maclean, J. B., Hopewell, N. S		1891
McLennan, Daniel, Port Hood, C. B		1888
McLennan, J. W., B. D., Sydney, C. B. B. A., 1883; M.		1887
McLennan, S. J., Sydney, C. B		1888
McLeod, Rev. A. W., Ph. D., Vale, Pictou Co. B. A., 1875; M.		
<sup>12</sup> MacLeod, Ambrose W., Dunstaffnage, P. E. I	Alexander of the second	1888
McLeod, Rev. Don., Priceville, Ont		1874
+5MacLeod, F. J., Charlottetown Royalty, P. E. I		1890
*9 MacLeod, George, Murray River, P. E. I		1888
McLeod, J. M., M. A., Valleyfield, P. E. I		1885
MacLeod, Rev. J. W. (obit.)		1880
$b\!+\!\!{}^1\mathrm{McLeod},$ J. P., Principal High School, Victoria, B. C.		1884
§ <sup>13</sup> McLeod, Malcolm J., Belfast, P. E. I	The state of the s	1887
McMillan, C. E., Whycocomagh, C. B		1891
McMillan, Finlay, Sheet Harbor, N. S M. D., (		1872
McMillan, F. A., Alberry Plains, P. E. I		1891
‡McMillan, Rev. G. W., Malpeque, P. E. I		
McNaughton, Elizabeth, St. John, N. B		
McNaughton, Rev. Samuel, Preston, G.B., B.A., 1867; I		
McNeil, Alex., B. A., Port Hood, C. B	LL.B.,	1891
McNeill, Albert H., Charlottetown, P. E. I		
<sup>9</sup> McNeill, Charlotte M., Ladies' College, Halifax	B. A.,	1887
McPhee, D. L., Little Bras d'Or, C. B	LL.B.,	1890
Macrae, Alex. W., M. A., St. John, N. B		
McRae, William, (obit.)		1872
Magee, Edgar A., Vancouver, B. C		1888
Magee, W. H., Normal School, Truro	B. A.,	1891
<sup>14</sup> Martin, K. J., Charlottetown, P. E. I		1885
Mason, Rev. W. A., Georgetown, P. E. I	В. А.,	1877
Matheson, J. A., Halifax, N. S		1888
Mellish, H., Charlottetown, P. E. IB. A., 1882;		1890
Millar, Rev. E. D., Lunenburg		1869
Millar, Geo., Tatamagouche		1890
Miller, J. J., Halifax		1885
Milliken, Albert E., Moncton, N. B		1886
Montgomery, John, Dalhousie, N. B		1891
Mooney, P. C. C., Halifax		1886
<sup>18</sup> Moore, C. L, Salisbury, N. B		1891
Moore, Edmund, Chatham		1872
Morash, A. V., Lunenburg		1891
§ <sup>18</sup> Morrison, A. M., Dartmouth, N. S		
Morrison, Aulay, New Westminster, B. C		
Morse, C., Ottawa	LL.B.,	1885
Morton, Joseph H., M. D., Shelburne		
§18 Morton, Silvanus A., Milton, Queen's Co., N. S		
Muir, Ethel, Halifax	B. L.,	1891

Muir, W. H., L R. C. P. & S. Edin., Truro. M. D., C.	M.,	1875
Munro, Christopher, Valleyfield, P. E. I		1891
Munro, G. W., 17-27 Vandewater St., New York B	. A.,	1878
Munro, Rev. J. R., Antigonish, N. S		1876
Murray, J. S., North Sydney, C. B		1877
a§14Murray, Prof. D. A., Univ. of City of New YorkB	. A.,	1884
Newcombe, E. L., <i>LL.B.</i> , Halifax B. A., 1878; M	I.A.,	1881
<sup>10</sup> Newcombe, Margaret F		1885
<sup>14</sup> Nicholson, Alfred, M. A., Southport, P. E. I B		1886
Notting, Thomas, TruroL		1890
<sup>14</sup> Oliver, A. C. L., DigbyB	. A.,	1891
Oxley, C. H., B. A., Oxford, N. SL		1890
<sup>12</sup> Oxley, J. M., <i>LL. B.</i> , Ottawa		1874
Paton, Vincent J., Halifax, N. SB. A., 1889; L.		1891
Patterson, G.G., New Glasgow, B.A., 1882; M.A., 1887; L		1889
Pitblado, Colin, M. D., C. M., (obit.)B		1876
Pollok, A. W., (obit.) B	. A.,	1872
Putnam, Homer, Lower Onslow, N. S		1889
Putnam, William G., Maitland	. A.,	1887
Rattee, E. J., Owen Sound		1890
§ <sup>18</sup> Reid, A. G., Halifax		1883
<sup>11</sup> Ritchie, Eliza, Ph.D., AssoProf., Wellesley College. B		1887
Robert, Cassimir, Arichat, C. B		1875
Roberts, J. A., BridgewaterL		1890
Robertson, Henry McN., Barrington, N. SL	L.B.,	1886
Robertson, T. R., Annapolis, N. S B. A , 1888; L		1890
<sup>†1</sup> Robinson, Alexander, Sussex, N. B		1886
17Robinson, C. B., Pictou		1891
14Robinson, G. E., Charlottetown, P. E. 1		1886
Robinson, Rev. J. M., Moncton B		1873
Rogers, Rev. Anderson, YarmouthB		1887
Rogers, Henry W., AmherstL. Ross, Alexander, Dalhousie, N. BB	L D.,	1887
Ross, Henry T., B. A., BridgewaterL		1889
Ross, Rev. William, Prince William, N. B B		1873
14Rowlings, G. A. R., Musquodoboit HarborB		1890
Ruggles, N. C., HalifaxL		1891
Russell, Rev. A. G., Oyster Bay, L. I., N. Y B	Δ.	1871
Russell, Joseph A., Vancouver, B. CL	. д.,	1887
<sup>17</sup> Schurman, G. W., Freetown, P. E. I		1890
Scott, Rev. Ephraim, New GlasgowB. A., 1872; M		1875
Scott, Rev. Prof. H. McD., B. D., Chicago B	Δ.,	1870
Scott, J. McD., (obit.)B		1877
Sedgewick, J. A., Halifax B. A., 1881; LI		1885
Sedgewick, Robert. Q.C., Dep. Min. of Justice, Ottawa. B	Δ	1867
Shaw, A. E., B. A., Avonport	r R	1891
<sup>10</sup> Shaw, Henry C., Stanhope, P. E. I	Δ.	1887
†Shaw, James C., Stanhope, P. E. I.	Δ.,	1887
Shaw Robert (objt.)		

Simpson, Rev. Isaac, New York State, U. S. A	.B. A.,	1868
Sinclair, J. A., St. John, N. B		
Smith, Rev. D. H., TruroB. A., 1867:	M. A.,	1871
Smith, Rev. Edwin, Stewiacke		
Smith, E. B., Truro, N. S		
Smith, H. McN., Halifax		1884
<sup>10</sup> Smith, Rev. James F., B. D., (obit.)B. A., 1886;		1890
Smithers, Allan, Halifax, N. S	.B. A.,	1889
<sup>10</sup> Soloan, D. M., Pictou	.В. А.,	1888
Spencer, Rev. W. H., Montague, P. E. I		1881
Stairs, H. B., Halifax	.B. A.,	1891
Stevens, D. J., Halifax		1890
Stewart, Alexander F., Pictou	.B. A.,	1887
14Stewart, Anne A., Pictou		
<sup>18</sup> Stewart, Dugald, Upper Musquodoboit, N. S		
Stewart, F. I., Charlottetown, P. E. I		1889
‡14Stewart, J. McG., Pictou	.B. A.,	1876
Stewart, Rev. Thomas, B. D., Sussex, N. B		
Stramberg, H. M., New Westminster, B. C		1875
Sutherland, Rev. J. M., Virden, Man	В. А.,	1869
Sutherland, Robert, (obit.)		1872
‡9Sutherland, J. S., St. James, Char. Co., N. B		
Taylor, W. B., (obit.)		1884
<sup>10</sup> Thompson, A. W., M. A., Durham, Pictou Co		1885
Thompson, F. W., Merigomish		1891
Thompson, Stanley R., Oxford, N. S		1886
Thomson, A. E., Halifax!	-	
Thomson, Walter K., Halifax		
Thorburn, W. M., I. C. S., Madras Pres, India		1870
Tobin, Thos. F., Halifax, N. S		1889
Torey, E. J., Windsor		1882
Troop, Arthur G., A. B., Dartmouth, N. S		1886
Trueman, A. I., St John, N. B B. A., 1872;		1878
b+2Trueman, Prof. J. S., Allegheny Coll., Meadville, Pa		1882
Tuffts, Rev. W. M., M. A., Bedeque, P. E. I		1885
†9Tupper, J. W., New Glasgow, N. S		
Turner, D. F. D., London, G. B		
†14 Waddell, Prof. John, Ph. D., D. Sc., Kingston, Ont		1877
Wallace, Rev. J., Lone City, Amadon Co., Cal., U.S. A		
Wallace, W. B., Halifax		1885
Walsh, Wm. W., Halifax		
Wells, Wm. W., Point de Bute, N. B		
West, T. F., York, P. E. I.		
White, T. H., Shelburne		
Whitford, Jos. A., Bridgewater, N. S		
Whitman, Alfred, Halifax B. A., 1878;		
Wickwire, H. H., B. A., Canning, N. S.	LL.B,	1891

## UNDERGRADUATES, 1890-91.

## IN ARTS.

## FOURTH YEAR.

The state of the second of the second of	the state of the same of the same
Baxter, Agnes Sime	
Brehaut, James William	
Cox, George Hastings	. Shelburne.
Goodwin, Emily Maud	.St. John, N. B.
Grierson, John Arthur	Kentville.
Howatt, Cornelius A	. Halifax.
Hugh, David Douglas	. Murray Harbor.
Jordan, Elijah John	
Kennedy, James Simon	Port Philip, Cumberland Co.
McCurdy, James Farquhar	. Halifax.
McGlashan, John Archibald	
Maclean, John Brown	
McMillan, Charles Edward	A THE RESERVE THE PROPERTY OF
McMillan, Frederick Alexander	
McNaughton, Elizabeth	
Macrae, Archibald Oswald	
Magee, William H	
Moore, Clarence Leander	
Morash, Albert Victor	
Munro, Christopher	
Oliver, Allyne Cushing Litchfield	
Robinson, Charles B	
Stairs, Henry Bertram	
Thompson, Fenwick Williams	
Thomson, James William	
Tupper, James Waddell	
West, Thomas Frederick	The state of the s
, L.odorion	

## THIRD YEAR.

Archibald, Sara Elizabeth	. Sherbrooke.
Bakin, Frank Wright Mudge	Digby.
Campbell, Robert Sedgewick	
Graham, Robert Henry	
Gratz, Humphrey Gilbert	
Harrington, Emily Bevan	Halifax.
Hill, Albert Ross	Five Islands.
Johnson, George F	. Upper Stewiacke.
Johnson, James Bayne	. Loch Broom, N. S.
Logan, John Daniel	
Macdonald, Alvin Fraser	. Hopewell.
Macdonald, Alexander John	. Malagawatch.
McIntosh, Donald Sutherland	Pleasant Bay.
MacInsosh, John A	Halifax.

Mackay, Murdoch Sutherland	.Cariboo River.
Mackenzie, Alexander	. Baddeck, C. B.
McNeill, Roderick	St. Catherines, P. E. I.
Morrison, William Chisholm	. Loch Lomond.
Pelton, Charles Sanford	. Yarmouth.
Robertson, Samuel Napier	. North Bedeque, P. E. I.
Webster, Kenneth Grant Tremaine	. Yarmouth.
Weston, Clara Paine	. Augusta, Maine, U. S. A
Weston, Rolfe A	West Mt. Vernon.
The second secon	

## SECOND YEAR.

SECOND Y	EAR,
Annand, Edward Ernest	Truro.
Barnstead, Arthur Stanley	Halifax.
Finlayson, Duncan	Grand River.
Forbes, Edward William	Dartmouth.
Grant, Robert J	Sunnybrae.
Jamieson, Harriet Jane	. Halifax.
Keefler, Ralph Tupper	Bridgewater.
Kellogg, Mary Helen	Halifax.
Logan, Jotham Wilbert	Pictou.
McArthur, Samuel Johnson	Tyne Valley, P. E. I.
McDonald, Ida Grace	Sherbrooke.
McKay, Donald McGregor	Lorne, Pictou Co.
McKay, Thomas	Dartmouth.
McLean, Charles Archibald	Englishtown, C. B.
McNutt, Elvin	Halifax.
Martin, Albert	. Valleyfield, P. E. I.
Murray, Lucy Christine	Studholm.
O'Brien, Robert Faulkner	Noel, Hants Co.
Rankine, James	New Westminster, B. C.
Robinson, D. M	. Sussex, N. B.
Ross, George Edward	Newport.
Ross, Hedley	Stanley, P. E. I.
Thompson, Willard Sutherland	New Glasgow.
Tobin, Willard Richard	North Sydney, C. B.

## FIRST YEAR.

	Archibald, Alexander David	Valley Station.
	Astwood, Joseph Benjamin	Bermuda.
	Bigelow, Harry Veeder	.Truro.
	Brehaut, Ernest	Murray Harbor.
	Fraser, Hugh McLeod	. Pictou.
	Fraser, John Alexander	Roger's Hill.
	Gordon, Alexander McLennan	. Halifax.
	Grant, Melville Findlay	.Cow Bay, C. B.
0	Grant, Milton Daniel	. Hopewell.
	Gray, William Smith	. Hopewell.
	Hobrecker, Clara Charlotte	. Halifax.
	Johnson, Eben William	Upper Stewiacke.

MacDonald, Alexander James	North Sydney, C. B.
Macdonald, Peter Maclaren	Pictou.
Macintosh, John	Malagawatch, C. B.
McKay, Angus William	Grand River.
Mackay, John Daniel	
McKay, William Park	
McKenzie, Ellen Margaret	
McPhee, Margaret Jane	
Murray, Robert Harper	
Parsons, John Storrs	
Putnam, James	Maitland.
Rindress, Horace	
Ross, Mary Sophia	
Simpson, Frank Stuart	
Yorston, Frederic	Pictou.
AL AL MINES	A. A. Maria A. Plad Int.

#### IN LETTERS.

FOURTH YEAR.

Montgomery, John ..... Dalhousie, N. B. Muir, Ethel ..... Halifax.

SECOND YEAR.

Fraser, James Gordon...... New Glasgow, N. S.

#### IN SCIENCE.

THIRD YEAR.

McKeen, George Wilbert ...... Baddeck, C. B. Murray, Norman F. ..... Truro.

SECOND YEAR.

Arthur, George......Alberton, P. E. I.

EIRST YEAR.

McDougall, George Dewar.....Oxford, N. S.

Wickwire, Harry Ham, B. A..... Rothesay.

#### IN LAW.

THIRD YEAR.

Congdon, Frank Hinkle ... Halifax.
Davison, James MacGregor, B. A. Halifax.
Fairweather, Stewart Lee ... St. John, N. B.
Logan, Hance James ... Amherst.
McDonald, Allan Joseph, B. A. Little Glace Bay, C. B.
McDonald, Joseph ... North Sydney.
McNeil, Alexander, B. A ... Port Hood.
Paton, Vincent J., B. A ... Halifax.
Ruggles, Nepean Clarke ... Halifax.
Shaw, Alfred Enos, B. A ... Avonport.

## SECOND YEAR.

	Bill, Edward Manning, B. A	Billtown, N S.
	Casey, Clarence Edward, B. A	Halifax.
	Corbett, Jacob Edward	Folly Village.
	Dockrill, George O'Gorman Mahon	New Westminster, B. C.
	Doyle, Matthew Nicholas	Halifax.
-	Fraser, Alexander Hugh Ross	Port Hood, C. B.
	Fulton, Edgar Melville	Truro.
	Fulton, Joseph Avard	Lower Stewiacke.
	Fulton, Willard Hill, B. A	Halifax.
	Johnstone, Lewis Martin	Halifax.
	Mathers, Frederick Francis	Halifax.
	McDonald, Lauchlin Xavier	Sydney, C. B.
	Murray, Robert Gray	St. John, N. B.
	Sangster, Herbert Warren, B. A	Sackville, N. B.
	Smith, Bovyer Sidney	St. John, N. B.
	Trueman, Walter Harley	St. John, N. B.

#### FIRST YEAR.

Anderson, Albert Hudson, B. ALu	inenburg.
Bennett, Richard B	opewell, N. B.
Brown, Harry Whidden, B. A W	olfville.
Burns, Clement Bancroft, B. A Ha	alifax.
Cameron, Daniel AlexanderSo	uth Sydney.
Comben Charles, B. AJa	cksonville.
Congdon, Herbert EugereBe	erwick.
Fulton, Joseph AvardLo	
Graham, BlackwoodBr	cookfield.
Kenny, Joseph Burke	alifax.
March, Stephen Edgar Br	ridgewater.
Morine, Alfred BSt	
Munro, Henry Havelock Ya	armouth. ·
MacCoy, Wensley Blackall, B. A Ha	alifax.
Payzant, John Albert, B. A	alifax.
Puddington, Henry FSt	John, N. B.
Rowlings, George A. R., B. AM	usquodoboit Harbor.
Tilley, Leonard P. DSt	. John, N. B.
Woodworth, Charles Milton, B. AW	eston.

## IN MEDICINE.

## FOURTH YEAR.

Hamilton, Charles Alfred.	Boylston.
Johnson, Isaac Wellwood	Tatamagouche.

## THIRD YEAR.

Fairbanks,	Harry	Gray	 Halifax.	
Grant, Wil	lliam .		 Boulardarie, C.	В.

·Irwin, Archer Shelburne.	
Turnbull, George DykemanDigby.	
Woodworth, Percy ChurchillKentville.	

# SECOND YEAR,

Byers, David Walter	. Annan.
Coady, Patrick	. Margaree Forks, C. B.
Drysdale, George Nelson	. Windsor.
Kennedy, James Simon	. Port Philip.
Meyer, Edward James	. Halifax.
Morrison, Daniel Allen	Loch Lomond, C. B.
McAulay, Murdoch William	.Grand River, C. B.
McDonald, Robert James, B. A	. Hopewell.
Rice, Frank Ernst	. Digby.
Thomson, George Felix	. Halifax.

# FIRST YEAR.

Bennett, George Arlington	Halifax.
Bethune, Donald John	Baddeck, C. B.
Brundage, Edgar Moses	.Upper Greenwich, N. B.
Chisholm, Alexander William	. Margaree Forks.
Cogswell, William Forlong	Port Williams.
Grierson, George Loney	.Kentville.
Haché, Henry Clement	Cheticamp.
McKay, George Finlay	. North Sydney, C. B.
McKay, Katherine	Plainfield.
McKay, William A	. New Glasgow.
Murray, George William	Halifax.
Simpson, Henry Osmond	Dartmouth.

# GENERAL STUDENTS, 1890-91.

# IN ARTS.

Angwin, Frank H.:	
Archibald, Adams D	. Halifax.
Borden, Henry Clifford	Grand Pre.
Campbell, Donald McDonald	Orwell, P. E. I.
Crawford, James Andrew	.Cardigan, P. E. I.
Dickie, Bessie	.Upper Stewiacke.
Dickie, Joan	Truro.
Dickson, Henry Chase	. Onslow.
Fraser, James McAlmon	. New Glasgow.
Fraser, Thomas Munro	
Fraser, Simon Alexander	
Gabriel, James McNutt	
Hattie, Joseph Howe	
Hebb, Bertha Boyd	
Jobb, Frank Leslie	
Lawson, Thomas	
Liechti, Bertha	
McIntosh, Charles Daniel	
McKittrick, Frederick James Alex	
McNairn, William Wallace	
Mahon, James A	
Milligan, George Seaton	
Mitchell, George Fletcher	
Morrison, William Johnson Holt	
Murray, Hazen Thomas.	
Myers, James Scott	
Parker, Lewis Wentworth	
Parsons, Mabel Helena	
Potter, Alexander	
Putnam, Charlotte	
Putnam, Ella Jean	
Putnam, Harry	
Shaw, George Smith	
Smith, Rev. James Festus, B. A	
Smith, William Avery	
Tattrie, George Phillips	
Torey, Wilberforce Wellington	
Woodman, Walter Yewins	.Digoy.
The state of the s	

# IN LAW.

Blanchard,	John Waddell	Windsor.
Campbell,	Robert Sedgewick	Tatamagouche.
Creelman.	William Albert	Halifax.

Crowe, Robert William, B. A	Halifax.
Graham, Robert Harry	New Glasgow.
Grierson, John Arthur	. Kentville.
Macrae, Archibald Oswald	.St. John, N. B.
Montgomery, John	. Dalhousie, N. B.
McKenna, Louis Augustus	. Dartmouth.
Pelton, Chas. Sanford	. Yarmouth.
Russell, Frank Weldon	. Dartmouth.
Stairs, Henry Bertram	. Halifax.
Thompson, William Ernest	
White, Thomas Howland, B. A	. Shelburne.

# IN MEDICINE.

Arthur, George	 . Alberton, P. E. I.
Moore, Edgar Allan	 . Salisbury, N. B.

# SUMMARY.

#### FACULTY OF ARTS.

FACULTY OF ARTS.	
Undergraduates	dida
General Students	
Students, Arts Faculty	146
FACULTY OF LAW.	
Undergraduates	
General Students	
Students, Law Faculty	60
FACULTY OF MEDICINE.	
Undergraduates	
General Students 2	
Students, Medical Faculty	31
Students, Faculties of Arts, Law and Medicine	237
Deduct, studying in more than one Faculty	8
Total	229

# 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 in 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.

President J. McG. Stewart, B. A.
Vice-Presidents
W. B. WALLACE, LL. B.
Vice-Presidents C. H. CAHAN, B. A., LL. B., M. P. P.
G. G. Patterson, M. A., Ll. B. John Montgomery, B. L.
JOHN MONTGOMERY, B. L.
Secretary
TreasurerJ. A. Sedgewick, B. A., Ll. B.
Executive Committee   G. W. Schurman, B. A.  J. G. MacGregor, M. A., D. Sc.  W. D. Cameron.
J. G. MacGregor, M. A., D. Sc.
Executive Committee \ W. D. CAMERON.
GEORGE CAMPBELL, B. A., M. D. HECTOR McInnes, Ll. B.
HECTOR McInnes, Ll. B.

APPENDIX. Market Control State of the Williams State of the 

# APPENDIX.

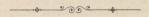
# EXAMINATION PAPERS, 1890-91.

# FACULTY OF ARTS.

# MATRICULATION

AND

## JUNIOR MUNRO EXHIBITIONS AND BURSARIES.



#### LATIN.

(For Exhibitions and Bursaries).\*

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

CÆSAR: GALLIC WAR, BOOKS II., III. VIRGIL: ÆNEID, BOOK II.

TIME: THREE HOURS.

I.

#### A. Translate:

Ubi vero moveri et adpropinquare moenibus viderunt, nova atque inusitata specie commoti legatos ad Caesarem de pace miserunt, qui ad hunc modum locuti: non existimare Romanos sine ope divina bellum gerere, qui tantae altitudinis machinationes tanta celeritate promovere possent, se suaque omnia eorum potestati permittere dixerunt. Unum petere ac deprecari: si forte pro sua clementia ac mansuetudine, quam ipsi ab aliis audirent, statuisset Aduatucos esse conservandos, ne se armis despoliaret. Sibi omnes fere finitimos esse inimicos ac suae virtuti invidere; a quibus se defendere traditis armis non possent. Sibi praestare, si in eum casum deducerentur, quamvis fortunam a populo Romano pati, quam ab his per cruciatum interfici, inter quos dominari consuessent.

- 1. What are the subjects of "moveri," permittere," "praestare"?
- 2. Give the rules for the datives and ablatives without prepositions in the extract.
- 3. Turn into oratio recta the sentences (a) "Non se existimare . . . permittere; (b) "Sibi praestare . . . . consuessent."

<sup>\*</sup> The Matriculation paper is not printed this year.

#### B. Transiate:

Quod iussi sunt, faciunt ac subito omnibus portis eruptione facta neque cognoscendi, quid fieret, neque sui colligendi hostibus facultatem relinquunt. Ita commutata fortuna eos, qui in spem potiundorum castrorum venerant, undique circumventos interficiunt et ex hominum milibus amplius triginta, quem numerum barbarorum ad castra venisse constabat, plus tertia parte interfecta reliquos perterritos in fugam coniciunt ac ne in locis quidem superioribus consistere patiuntur.

- 1. "Omnibus portis"; give their names.
- 2. "Cognoscendi," "colligendi," "potiundorum"; parse fully, noting any peculiarity.
  - 3. (a) What are the Latin names of the rivers: Rhine, Rhone, Sambre, Aisne?
    - (b) The modern names of some towns are derived from those of tribes mentioned in these books of Cæsar.
- 4. How did Cæsar get the government of Gaul? In what years did he hold it? What province had he previously governed? Write in Latin the day, the month, and the year of the City in which he died.

#### TT.

#### A. Translate:

Hanc pro Palladio, moniti, pro numine laeso
Effigiem statuere, nefas quae triste piaret.
Hanc tamen immensam Calchas attollere molem
Roboribus textis coeloque educere iussit,
Ne recipi portis aut duci in moenia possit,
Neu populum antiqua sub religione tueri.
Nam si vestra manus violasset dona Minervae;
Tum magnum exitium—quod dî prius omen in ipsum
Convertant!—Priami imperio Phrygibusque futurum;
Sin manibus vestris vestram adscendisset in urbem;
Ultro Asiam magno Pelopea ad moenia bello
Venturam, et nostros ea fata manere nepotes.

1. Write short notes on "Palladio," "Pelopea ad moenia."

- 2. Write in full the main clause of the sentence : " Nam si . . . . futurum."
- 3. Explain the use of the mood and tense of "piaret," "possit," "convertant," "violasset."
  - 4. Et gener auxilium Priamo Phrygibusque ferebat Infelix qui non sponsae praecepta furentis Audierit.

Write an explanatory note, and account for mood of audierit.

5. Scan vss. 192-4.

#### III.

- 1. Name the gender and write the nom. and gen. in both numbers, if used, and note peculiarities of declension of; "moenibus," "ope," "se," "armis," "quibus"—"nefas," "mănibus," "urbem."
  - 2. What words are declined like alter?
- 3. Name some verbs of the 1st conj. that have the perf. and supine like those of the 2nd conj.
- 4. Turn the following into the corresponding form of the other voice (if used): Movēris, ceperis, tueri, ferre (two forms), agitate (two forms), petet, videt.

- 5. Show how the word "world" may be differently rendered in Latin according to its various meanings.
  - 6. The relative qui is used in three ways.
- 7. When is the English infinitive translated into Latin by a subjunctival clause?
- 8 What classes of verbs govern the dative? What is the peculiarity of their use in the passive?
- C. Translate into Latin: After hearing this, Cæsar remained with all his men on the top of the mountain for several days, being afraid of the enemy surrounding him in the plain. But so far were they from wishing to attack him that they marched at full speed into their own territories.—When fifty years old, he was forced to depart from Rome, the city he was born in, and to go to Rhegium, an almost deserted town. It cannot be denied that he was a man of courage; it is questionable whether he was one of sense.

#### GREEK.

(For Exhibitions and Bursaries).\*

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

XENOPHON: ANABASIS, BOOKS IV., V., VI.

TIME: THREE HOURS.

I.

#### A. Translate:

Καὶ τότε έλεγον ὅτι τυγχάνοιεν φρύγανα συλλέγοντες ὡς ἐπὶ πῦρ κἄπειτα κατίδοιεν ἐν τῷ πέραν ἐν πέτραις καθηκούσαις ἐπ' ἀυτὸν τὸν ποταμὸν γέροντά τε καὶ γυναϊκα καὶ παιδίσκας ὥσπερ μαρσίπους ἱματίων κατατιθεμένους ἐν πέτρα ἀντρώδει. Ἰδοῦσι δέ σφισι δόξαι ἀσφαλὲς εἰναι διαβῆναι· οὐδὲ γὰρ τοῖς πολεμίοις ἱππεῦσι προσβατὸν εἰναι κατὰ τοῦτο. Ἐκδύντες δ' ἔφασαν ἔχοντες τὰ ἐγχειρίδια γυμνοὶ, ὡς νευσόμενοι, διαβαίνειν·

- 1. Note a change of construction in this Extract.
- 2. Ἰδοῦσι δέ σφισι δόξαι ἀσφαλὲς εἰναι διαβαίνειν. What were the actual words used by the men?
- 3. Ἐκόὑντες δ' ἐφασαν ἔχοντες κ. τ. λ. Account clearly for the use of the nominative in this sentence. Distinguish διαβαίνειν as used therein from διαβῆναι above.
  - 4. Parse : κατίδοιεν, ἀντρώδει, ἐκδύντες, νευσόμενοι.

# B. Translate:

Περὶ δὲ αὐτὸν τὸν ναὸν ἄλσος ἡμέρων δένδρων ἐφυτεύθη, ὅσα ἐστὶ τρωκτὰ ὡραῖα. Ὁ δὲ ναὸς ὡς μικρὸς μεγάλω τῷ ἐν Ἐφέσω εἰκασται, καὶ τὸ ξόανον ἔοικεν ὡς κυπαρίττινον χρυσῷ ὄντι τῷ ἐν Ἐφέσω. Καὶ στήλη ἔστηκε παρὰ τὸν ναὸν γράμματα ἔχουσα. ἹΕΡΟΣ Ὁ ΧΩΡΟΣ ΤΗΣ ᾿ΑΡΤΕΜΙΔΟΣ. ΤΟΝ ΈΧΟΝΤΑ ΚΑΙ ΚΑΡΠΟΥΜΕΝΟΝ ΤΗΝ ΜΕΝ ΔΕΚΑΤΗΝ ΚΑΤΑΘΥΕΙΝ ΈΚΑΣΤΟΥ ἘΤΟΥΣ. ἘΚ ΔΕ ΤΟΥ ΠΕΡΙΤΤΟΥ ΤΟΝ ΝΑΟΝ ἘΠΙΣΚΕΥΑΖΕΙΝ. ᾿ΑΝ ΔΕ ΤΙΣ ΜΗ ΠΟΙΗΙ ΤΑΥΤΑ ΤΗΙ ΘΕΩΙ ΜΕΛΗΣΕΙ.

<sup>\*</sup> The Matriculation paper is not printed this year.

- 1. ὅσα ἐστὶ τρωκτὰ ὡραῖα. Explain the construction of ὅσα.
- 2. Account for the use of the infinitives in this Extract, and the the case of ETOYS.
  - 3. Write the last sentence in small letters.
  - 4. How is this passage connected with the Anabasis?

#### C. Translate:

Ταῦτα παρελαίνων ελεγε καὶ ἄμα ὑφηγεῖτο ἐπὶ φάλαγγος, καὶ τοὺς πελταστὰς ἐκατέρωθεν ποιησάμενοι ἐπορεύοντο ἐπὶ τοὺς πολεμίους. Παρήγγελτο δὲ τὰ μὲν δόρατα ἐπὶ τὸν δεξιὸν ὡμον ἔχειν, ἔως σημαίνοι τῷ σάλπιγγι· ἔπειτα δὲ εἰς προσβολὴν καθέντας ἔπεσθαι βάδην καὶ μηδένα δρόμω διώκειν. Ἐκ τούτου σύνθημα παρήει, ΖΕΥΣ ΣΩΤΗΡ, ἩΡΑΚΛΗΣ ἩΓΕΜΩΝ. Οἱ δὲ πολέμιοι ὑπέμενον, νομίζοντες καλὸν ἔχειν τὸ χωρίον.

- 1. ἐπὶ τῆς φάλαγγος. Explain this military formation. What is the opposite term?
- ἐπὶ τὸν δεξιὸν ἄμον ἔχειν. What is the force of this combination of preposition, case and verb.
  - 3. μηδένα δρόμφ διώκειν. Distinguish this from οὐδένα δρόμφ διώκειν.
  - 4. Decline in the singular ZEYΣ, ΣΩΤΗΡ, 'ΗΡΑΚΛΗΣ, 'ΗΓΕΜΩΝ.

#### II.

- Name the part of the verb in which these forms are found and give their present indicative in the same person, number, and voice: ἐώρα, ἐκταθείς, διήρουν, κατεκαύθη, μετάσχοι, ἥει.
- 2. Distinguish μέσος ὁ ποταμός from ὁ μέσος ποταμός—ὁ αὐτὸς βασιλεύς from αὐτὸς ὁ βασιλεὺς—ὁ ἐμὸς φίλος from ἐμὸς φίλος—πᾶσα ἡ πόλις from ἡ πᾶσα πόλις, and πᾶσα πόλις—οἱ ἄλλοι from οἱ ἔτεροι—ἔρ' ἐν from ἔρα μή.
- 3. "Some" may be expressed in different ways in: some say—some were killed, others escaped—some say one thing, some another—he drank some wine—he sent some soldiers.
- 4. Translate the following phrases: ἐς τοῦτο ἄνοιας ἦλθον—ὡς εἶχον τάχους—ἑαντοῦ εἶναι—ἀνὰ τρεῖς—εἰς διακοσίους—ὡς τάχιστα—νεκρὸς μείζων ἢ κατ' ἄνθρωπον.
  - 5. Give one example of each of the uses of the middle voice.
- 6. Translate into Greek: There they stayed for one day on account of the depth of the river, but on the next day having crossed it, the soldiers proceeded.—It is far easier to withdraw than to fight with the enemy.—How many soldiers died at Marathon?—He said that the youths had seen a large army marching through the country. (Express this in two ways).—He ordered his companions not to advance up the mountain

#### FRENCH.

Examiner ...... J. LIECHTI, M. A.

(For Matriculation.)

TIME: THREE HOURS.

A. Translate: Voltaire.—Charles XII.

Le czar Pierre quitta la Russie en 1698, n'ayant encore régné que deux années, et alla en Hollande, déguisé sous un nom vulgaire, comme s'il avait été un domestique de ce même le Fort, qu'il envoyait ambassadeur extraordinaire auprès des Etats-généraux. Arrivé à Amsterdam, inscrit dans le rôle des charpentiers de l'amirauté des Indes, il y travaillait dans le chantier comme les autres charpentiers. Dans les intervalles de son travail il apprenait les parties des mathématiques qui peuvent être utiles à un prince, les fortifications, la navigation, l'art de lever des plans. Il entrait dans les boutiques des ouvriers, examinait toutes les manufactures; rien n'échappait à ses observations. De là il passa en Angleterre, où il se perfectionna dans la science de la construction des vaisseaux : il repassa en Hollande, et vit tout ce qui pouvait tourner à l'avantage de son pays. Enfin, après deux ans de voyages et de travaux auxquels nul autre homme que lui n'ent voulu se soumettre, il reparut en Russie, amenant avec lui les arts de l'Europe.

- 1. Le czar Pierre quitta la Russie en 1698. Write this sent. in the interrog. form, expressing 1698 in letters. Parse and give principal parts of quitta. The English to leave may be expressed by partir, sortir, oublier, laisser. Prove it by translating: He left his purse. My friend will soon leave for England. Leave the room, he said to me. This gentleman will leave a large fortune to his children.
- 2. Nayant... que deux années. Mention the principal negative adverbs. Account for the use of ne in the above sent., and state its analogous term. Turn into French: Have you ever been in Paris? No Sir, never. He is no longer among the living (vivants). No human being. No one. Nothing.
- 3. Entrait... des ouvriers. Parse entrait, and write down the present Indicat. and the imperf. Subjunct. of this verb. Give the fem. of ouviers and translate: English male and female labourers. Illustrate the use of des as partitive article. Write in French: We have kind friends; have you any? Yes we have some.
- 4. De son pays. Parse son, and mention its corresponding pronominal form. Turn into French: Her Majesty, the Queen. His Majesty, the Emperor. How do you express the English its; give some exs.
- 5. Neût voulu se soumettre. Parse eût, and write down the Imperative and the Subjunct, present of this verb. Translate: Qu'y a-t-il? Vous avez raison. Il a mal à la tête.
- B. Translate: Le roi (Charles XII.) quitta alors sa frégate pour s'aller mettre dans la première chaloupe, à la tête de ses gardes. L'ambassadeur de France était alors auprès de lui: "Monsieur l'ambassadeur, lui dit-il en latin (car il ne voulait jamais parler français), vous n'avez rien à démêler avec les Danois: vous n'irez pas plus loin, s'il vous plaît." Sire, lui répondit le comte de Guiscard, en français, le roi mon maître m'a ordonné de résider auprès de votre majesté; je me flatte que vous ne me chasserez pas aujourd'hui de votre cour, qui n'a jamais été si brillante." En disant ces paroles, il donna la main au

roi, qui sauta dans la chaloupe, où le comte de l'iper et l'ambassadeur entrèrent. On s'avançait sous les coups de canon des vaisseaux qui favorisaient la descente. Les bâteaux de débarquement n'étaient encore qu'à trois cents pas du rivage. Charles XII, impatient de ne pas aborder assez piès ni assez tôt, se jette de sa chaloupe dans la mer, l'épée à la main, ayant de l'eau par delà de la ceinture.

- 1. L'ambassadeur . . . . de lui. Write this sent. in the negat. interog. plural form. Give the principal parts of était, and write down the future of it. Show by some exs. how the English possessive is expressed in French.
- 2. Sire, lui repondit le comte. The English her may be rendered by lui, elle and la, illustrate by short exs. Write the plural of lui (conjunct. and disjunct.), and the femin. of: comte, monsienr, neveu, fils, acteur, parleur, homme, baron.
- 3. Vous n'irez pas plus loin. Parse and give principal parts of irez. Write down the positive and superlative of plus., and the comparative and superlative of: bon, mauvais, peu. Translate: As good as he; not so good as he; greater than he; most; least.
- 4. Parse and give principal parts of: mettre, voulait, répondit, jette. Write the femin. in French of: white, long, greek, fine, young, low. Translate: How old are you? I am twenty-one. To-day is the 16th of September.

#### GERMAN.

Examiner ... . . . . . . . . . . J. LIECHTI, M. A.

(For Matriculation.)

TIME : THREE HOURS.

A. Translate: - Der Wanderer und die Quelle.

Ein Wanderer kam im heissesten Sommer zu einer Quelle. Er war stark und lange gegangen; Schweiss stand auf seiner Stirne und seine Zunge war vom Durste fast vertrocknet. Da sah er dies silberhelle Wasser, glaubte, hier neue Kräfte zu sammeln, und trank mit gierigen Zügen. Aber die schneidende, zu schnell abwechselende Kälte wirkte so schädlich auf ihn, dass er zu Boden sank.—"Ach. schändliches Gift!" rief er. "Wer hätte unter einem so reizenden Anschein solch eine Bosheit vermuthet?"

"Ich ein Gift?" sprach die Quelle. "Wahrlich, du verläumdest mich. Sieh, die Flur rings umher grünet und lebt durch mich. Von mir tränken sich die Heerden, und Tausende deiner Brüder fanden hier Erfrischung und Labetrank. Nur Uebermaass und Unvorsichtigkeit von deiner Seite machen dir den Genuss schädlich, Ich bin schuldlos an deinen Schmerzen und selbst an deinem Tode, sollte er dir auch

bevorstehen.

1. Im heissesten Sommer. Account: (a) for the contraction im; (b) for the termination esten in heissesten. Prefix the defin. article to heissesten Sommer and decline those words in the 4 cases singular and plural.

2. Dass er zu Boden sank. Parse dass, and illustrate the difference between dass and das; decline the latter word in the 4 cases sing, and plural. Write the genitive sing, and the nomin. plural of: Boden, Quelle, Gift, Bosheit, Tod, Mann, Herr, Sohn.

3. Write the first sent. of passage  $A:(\alpha)$  in the plural; (b) in the negat interrog. form, sing. Decline ein, and translate: No man. I have not seen him. No, he is not at home.

- 4. Die schneidende Kälte. Decline this sent, in the 4 cases sing, with and without the article. When does the adjective remain uninflected? State an example.
- 5. Ich bin schuldlos an deinen Schmerzen, Write this sent. with the subject in the plural and the object in the singular, Parse and give principal parts of: kam, war, glaubte, hätte, sprach, sollte.
  - B. Translate: Gute Geduld.

Ein Franzose ritt eines Tages auf eine Brücke zu, die so schmal war, dass zwei Reiter einander kaum darauf ausweichen konnten. Ein Engländer betrat zugleich das entgegengesetzte Ende derselben, und als Beide auf der Mitte waren, wollte keiner dem Andern Platz machen, "Ein Engländer geht keinem Franzosen aus dem Wege," sagte du Britte. Der Franzmann erwiederte: "Mein Pferd ist auch ein Engländer!" Aber der Engländer machte sich wenig aus diesem Einfalle, sondern sagte: "Ich kann warten, ich habe hier die schönste Gelegenheit, die heutige Zeitung zu lesen, bis es euch gefällt, Platz zu machen." Also zog er kaltblütig eine Zeitung aus der Tasche, wickelte sie auseinander und las darin eine Stunde lang, während dass der Franzose eine Pfeife Taback hervornahm und zu rauchen anfing. Die Sonne neigte sich allmählig gegen die Berge hinab und sah nicht aus, als ob sie die Thoren noch lange anschauen wollte.

- 1. Can you account for the prepos. zu in the first clause of this passage. Write the plural of: Franzose, Tages, Brücke. Can you give another term for: eines Tages? Turn into German: The day is fine. We shall have a fine day.
- 2. Die so schmal war. Parse die, and state what other word may be used instead of it in this connection. What case or cases, number or gender, do the following words represent: dem, der, den, die?
- 3. Als Beide auf der Brücke waren. What case does auf govern? if you were to write auf die Brücke instead, how would you have to alter the sent.? Why is the verb waren at the end of the clause, instead of after the subject?
- 4. Hein Pferd ist auch ein Engländer. Write this sentence in the plural.
  - 5. Point out all the prepositions and the regular verbs in passage B.

#### ENGLISH.

Examiner ..... ARCHIBALD MACMECHAN, Ph. D.

TIME: THREE HOURS.

- 1. Write and punctuate the passage dictated.
- 2. Analyse to "friezes."
- 3. Parse be, more, must, either, which.
- 4. Combine each of the following groups into one complex sentence:
  - (a.) Man is a rational animal. Man is endowed with the highest capacity Man sometimes mistakes his best interests. Man sometimes considers trifles with all his energies. Man considers trifles as the principal object of desire in this fleeting world.

- (b.) Strafford struggled with a remarkable courage. Strafford struggled with a remarkable ingenuity. Strafford struggled against the list of charges He struggled against the list of charges for fifteen days. He had melted his audience to tears. His defence was pathetic. The trial was suddenly interrupted.
- 5. Discuss the syntax of the following sentences, amending if necessary;—
  - (a.) No one would write a book unless he thinks it will be read.
  - (b.) Each of the sexes should keep within its proper bounds, and content themselves with the advantage of their particular district.
  - (c.) Party spirit rages as it too generally does in Dublin at this time, and was attended by party duels, in superseding which there is undoubtedly some improvement.
  - (d.) William of Orange has exercised a powerful influence on the history of his country.
  - (e.) These kind of statements, only to be made by such whose experience guarantees their accuracy, occur everywhere throughout the book.
  - (f.) Lord Erskine was fond of this anecdote; he told it to the editor the first time he had the honour of being in his company.
  - 6. How can the meaning of the English verb be modified by
    - (a.) Changes in the root vowel;
    - (b.) Changes in the termination.
- 7. Describe the place you live in, or relate a short story or anecdote, or give the plot of a favourite book.
  - 8. Reproduce in simple prose the substance of the following:
    - Long hours ago, while yet the morn was blithe, Nor sharp athirst had drunk the beaded dew;
    - A reaper came, and swung his cradled scythe
      Around this stump, and sheering slowly drew
      Far round among the clover, ripe for hay,
    - A circle clean and gray;
      And here among the scented swathes that gleam
      Mixed with dead daisies, it is sweet to lie
      And watch the grass and the few clouded sky,
      Nor think but only dream.

#### HISTORY AND GEOGRAPHY.

Examiner ..... President Forrest.

TIME : THREE HOUBS.

#### ENGLISH HISTORY.

- 1. Give a brief outline of history of England from 449-1046, narrating simply the great changes that took place during these centuries.
  - 2. Give the leading events of the reign of William and Mary.
- 3. What kings ruled England during the progress of the Hundred Years War?

- 4. In the reign of Richard II. trouble arose with the peasantry and laboring classes. What led to it? How was it settled?
  - 5. What was the condition of Ireland in the reign of Charles I.?
- 6. When did England abolish the slave trade? When did she abolish slavery?
- 7. When and how did England gain possession of Ireland, Jamaica, Ceylon, Australia, Cape Breton?

#### CANADIAN HISTORY.

- 1. Give a short account of Cartiers' third voyage to Canada.
- 2. Give a short account of the expedition of the Marquis de la Roche.
  - 3. Give a short account of the founding of Montreal.
- 4. 1755 A.D. "The end of the great conflict was foreshadowed by the success of the English in Nova Scotia." Write notes.
- 5. By what Act was Canada divided into two provinces? What was the population of each province at the separation?
- 6. What effect had the following treaties on the state of Canada: St. Germain-en-Laye, Breda, Utrecht, Aix-la-Chapelle, Paris 1763?
- 7. Give the leading facts of the early history of New Brunswick. Prince Edward Island.

## GEOGRAPHY.

- 1. State accurately the zone or zones in which each of the continents lies.
- 2. If a traveller were to pass around the world on the same parallel of latitude with New York, through what waters, countries, islands and states would he pass?
- 3. Give the coast waters of North America, principal rivers of Asia, mountain ranges of Europe.
- 4. Bound Indiana, Oregon, Belgium, Arabia, Kings Co., N. S., Kings Co., N. B., Kings Co., P. E. I.
- 5. Locate Antwerp, Bremen, Manila, Florence, Munich, Pisa, London, Ont., St. George, N. B., Tusket, N. S., Georgetown, P. E. I.
- 6. Name the cities of Europe and North America with a population of 300,000 and over.
- 7. Give as nearly as you can the latitude of St. Petersburg, Stockholm, Paris, Rome, Constantinople, Trinidad, Jamaica, Java, Auckland.

#### MATHEMATICS.

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

(For Matriculation.)

#### GEOMETRY AND ALGEBRA.

TIME: THREE HOURS.

1. Enunciate the propositions of Euclid dealing with the equality of triangles.

2. Prove that triangles on the same base and between the same parallels are equal.

3. If a straight line be divided into two parts, the square on the whole line is equal to the sum of the squares on the parts, together with twice the rectangle contained by them. Prove this.

4. "If a straight line be divided into two equal and also into two unequal parts, the sum of the squares on the unequal parts is equal to . . . . . " Complete the enunciation and prove the proposition.

5. Construct a square equal to a given rectilineal figure.

6. Resolve into factors :

$$4x^3y - 12x^2y^2 + 8xy^3$$
  
and  $m^{10} + 10m^5 + 10^5 + 16$ .

7. Find the difference between

$$\frac{a^2 - 3ab + 2b^2}{a - 2b}$$
 and  $\frac{a^2 - 7ab + 12b^2}{a - 3b}$ .

8. Simplify:

$$\frac{1}{8(x-1)} + \frac{1}{4(3-x)} + \frac{1}{8(x-5)} + \frac{1}{(1-x)(x-3)(x-5)}$$

9. Find the square root of  $9x^4 + 30x^3 + 37x^2 + 20x + 4$ .

10. 
$$\frac{x-6}{8} + \frac{4-7x}{15} = \frac{4x-37}{40}$$
 Find  $x$ .

11. A man gives away fifty cents more than half the money he has: and again twenty-five cents more than half the sum then remaining to him, and now has two dollars left. How much had he at first?

(For Junior Munro Exhibitions and Bursaries.

#### ARITHMETIC AND ALGEBRA.

TIME: THREE HOURS.

1. Two navvies undertook to excavate 1032 yards of earth, at the rate of 1½ cents per foot, calculating that they could each cut an average of 2½ yds. per hour, working 9 hours per day: but the work proving stiffer than they had expected, they could cut only 4 yds. in the time they had expected to do 5. After 5 days they gave up the job, forfeiting 15 per cent. of pay for the work done. Find what wages each received, and the fraction of the work left undone.

2. Prove the rule for the multiplication of Fractions by treating this example:

$$\frac{5}{8} \times \frac{9}{10}$$
.

- 3. \$3728\frac{2}{3} is divided among A. B, and C, so that A's share: B's : 1:1\frac{1}{2}, and B's: C's::1:1\frac{1}{4}: what are their several shares?
- 4. If  $x^2+ax+b$ ,  $x^2+a_lx+b_l$ ,  $x^2+a_nx+b_n$ , have a common measure: prove  $(a-a_l)(b-b_n)=(a-a_n)(b-b_l)$ . Write also the L. C. M., in terms of  $x,a,b,a_l$ , &c., of these expressions.

5. If 
$$x+y+z=1$$
, and  $\frac{1}{x}+\frac{1}{y}+\frac{1}{z}=0$ ; prove  $x^2+y^2+z^2=1$ .

6. Given 
$$x+y=a$$
,  $x^2+y^2=b^2$ , and  $x^3+y^3=c^3$ : prove  $3 ab^2-a^3-2 c^3=0$ .

- 7. Divide x-y by x-y, and write at length  $\left(\frac{1}{2}, \frac{2}{3}, -\frac{p}{2}\right)^2$ .
- 8. The difference between two numbers is 3. Shew that the difference of their cubes, together with three times their product equals three times the square of their sum.
  - 9. Shew that if 2s = a + b + c,

then 
$$s(s-a)(s-b)(s-c) = \frac{1}{16} \left( 2a^2b^22b^2c^2 + 2c^2a^2 - (a^4 + b^4 + c^4) \right)$$
.

- 10. Prove that  $\frac{3\sqrt{2}}{\sqrt{3}+\sqrt{6}} \frac{4\sqrt{3}}{\sqrt{6}+\sqrt{2}} + \frac{\sqrt{6}}{\sqrt{2}+\sqrt{3}} = 0$ .
- 11. Prove  $(-1+\sqrt{-3})^3=8$ .
- 12. Solve any two of the following equations :--

(1) 
$$\frac{x^2}{x-1} + \frac{6x^2 + 2x + 1}{3x+1} = 1 + 3x$$

(2) 
$$\frac{\sqrt{a^2 + x^2} + \sqrt{a^2 - x^2}}{\sqrt{a^2 + x^2} - \sqrt{a^2 - x^2}} = \frac{b}{c} \ \mathcal{W}$$

(3) 
$$x + \sqrt{x^2 - 2} = a - a$$
.

13. Given the simultaneous equations:

$$\begin{array}{ll} x\,y\!=\!\alpha\;(x\!+\!y\!+\!z)\\ y\,z\!=\!b\;(x\!+\!y\!+\!z) & \text{find } x,\;y,\;\text{and } z.\\ z\;x\!=\!c\;(x\!+\!y\!+\!z) \end{array}$$

#### GEOMETRY.

TIME: THREE HOURS.

- 1. If two triangles have two sides of the one equal to two sides of the other, and the contained angles supplementary, they are equal in area.
- 2. "All the exterior angles formed by producing the sides of any polygon are together equal to four right angles." Is this always true? Illustrate your answer fully.

- 3. On a given base construct a triangle equal to a given parallelogram and having an angle at the base equal to a given angle.
- 4. If an angle of a triangle be acute, the square of the side opposite to it is less than the sum of the squares of the containing sides. Enunciate and prove the relative proposition of Euclid. Also, if, the base being fixed, the vertex of the triangle be moved till it fall into the line of the base, what becomes of the proposition?
- 5. Prove, from the last question, that if from the ends, B and D, of the base of a triangle, C being the vertex, perpendiculars BQ and DP be drawn to the sides,  $BD^2 = CB.BP + CD.DQ$ .
- 6. From the property of the circle that the perpendicular from the centre on a chord bisects it, deduce the property that the tangent is at right angles to the diameter drawn from its extremity.
- 7. The opposite angles of a quadrilateral inscribed in a circle are together equal to two right angles.
- 8. Four points in a plane are given. With nothing but a rule to measure lengths, and no means of drawing a perpendicular or circle, how would you ascertain whether a circle would pass through all the points?
- 9. If O be the intersection of the perpendiculars in question 5, prove CB.BP = QB.BO, and CD.DQ = PD.DO.
- 10. The lines joining the alternate angles of a regular Hexagon trisect one another.
- 11. Assuming that the line joining the middle points of two sides of a triangle is equal to half the third side, solve the following:—
  The base of a triangle is fixed and the sum of the sides is constant. If from an end of the base a perpendicular be let fall on the bisector of the exterior angle at the vertex, the locus of its foot is a circle.
- 12. PQ is the common chord of two circles, X and Y: PD is a chord of X and a tangent to Y: through Q a line FQG is drawn, meeting Y in F, and X in G. Prove that GD is parallel to PF.
- (N. B.—In preparing your Geometry, if you have used any Textbook other than Euclid's Elements, name it.)

# SENIOR MUNRO EXHIBITIONS AND BURSARIES.

#### A.—CLASSICS.

#### LATIN.

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

HORACE: EPODES; PLINY: SELECTED LETTERS.

TIME: THREE HOURS.

I.

# A. Translate:

Ibis Liburnis inter alta navium, Amice, propugnacula, Paratus omne Cæsaris periculum Subire, Mæcenas, tuo. Quid nos, quibus te vita si superstite Jucunda, si contra, gravis ? Utrumne jussi persequemur otium, Non dulce, ni tecum simul, An hunc laborem mente laturi, decet Qua ferre non molles vivos? Feremus et te vel per Alpium juga, Inhospitalem et Caucasum, Vel Occidentis usque ad ultimum sinum, Forti sequemur pectore. Roges, tuum labore quid juvem meo, Imbellis ac firmus parum? Comes minore sum futurus in metu, Qui major absentes habet; Ut assidens implumitus pullis avis Serpentium allapsus timet Magis relictis, non, ut adsit, auxili Latura plus præsentibus. Liberter hoc et omne militabitur Bellum in tuæ spem gratiæ, Non ut juvencis illigata pluribus Aratra nitantur mea, Pecusve Calabris ante sidus fervidum Lucana mutet pascuis, Neque ut superni villa candens Tusculi Circæa tangat mænia. Satis superque me benignitas tua Ditavit: haud paravero Quod aut avarus ut Chremes terra premani,

(a) "Quid nos, quibus te vita si superstite
 Jucunda, si contra, gravis?"
 (b) "An hunc laborem laturi."

Discinctus aut perdam nepos.

Write these sentences in full.

2. "Per Alpium juga, Inhospitalem et Caucasum, Vel occidentis usque ad ultimum sinum."

What other difficult journeys and distant regions are similarly mentioned by Horace? Quote, if you can.

3. (a) "Liburnis," "Calabris," "Circæa," "discinctus." Write short notes on these epithets.

- (b) Argoo, Neptunius, Thyesteas, Terminalibus. Explain these epithets and the connection in which they are used in the Epodes.
- 4. Scan: (a) Ibis Liburnis inter alta navium-
  - (b) Quo, quo scelesti ruitis? aut cur dexteris-
  - (c) Fervidiore mero arcana promorat loco.

### II.

#### B. Translate:

Cum venissem in socrus meae villam Alsiensem, quae aliquando Rufi Vergini fuit, ipse mihi locus optimi illius et maximi viri desiderium non sine dolore renovavit. Hunc enim colere secessum atque etiam senectutis suae nidulum vocare consueverat. Quocumque me contulissem, illum animus, illum oculi requirebant. Libuit etiam monimentum eius videre, et vidisse paenituit. Est enim adhuc imperfectum, nec difficultas operis in causa, modici ac potius exigui, sed inertia eius cui cura mandata est. Subit indignatio cum miseratione, post decimum mortis annum reliquias neglectumque cinerem sine titulo, sine nomine iacere, cuius memoria orbem terrarum gloria pervagetur. Ad ille mandaverat caveratque ut divinum illud et immortale factum versibus inscriberetur:

hic situs est Rufus, pulso qui Vindice quondam imperium adseruit non sibi sed patriae.

Tam rara in amicitiis fides, tam parata oblivio mortuorum ut ipsi nobis debeamus etiam conditoria extruere omniaque heredum officia praesumere. Nam cui non est verendum quod videmus accidisse Verginio? cuius iniuriam ut indigniorem sic etiam notiorem ipsius claritas facit. Vale.

- 1. (a) "Quocumque me contulissem, . . . illum oculi requirebant." What construction would have been used by Cicero?
  - (b) "Post . . . . jacere." Explain the grammatical connection of this phrase with the sentence. How else might it have been written?
- 2. Relate the historical incident mentioned in the verses of the extract and scan them.
  - 3. Translate add write explanatory notes on the following:
    - (a) Lucubrare Vulcanibus incipiebat, non auspicandi causa sed studendi.
    - (b) Inde jam non inurbane Σοφοκλεῖς vocantur (ἀπὸ τοῦ σοφῶς καὶ καλεῖσθαι); isdem latinum nomen impositum est Laudiceni.
    - (c) Quid si [te] heredem quidem instituisset ex asse?
  - 4. (a) Pliny tells several ghost stories: relate one of them and give the various words he uses for "ghosts," or
    - (b) Pliny narrates the first instance of hired applause in court.
- C. Translate into Latin: When Hannibal, being conquered by Scipio, fled to Antiochus, King of Syria, ambassadors were sent from Rome to demand his surrender. Among them was Scipio who asked Hannibal whom he thought to be the greatest general. Hannibal replied that Alexander, King of Macedon, seemed to him to be the greatest, because with small forces he routed countless hosts. Then when Scipio asked whom he put second, "Pyrrhus," said he, because he was the first who taught how to measure out a camp and no one could better choose ground or place guards. Again on Scipio asking whom he placed third, he replied "myself." Then Scipio smiling said "What then would you say if you had conquered me?" "I should have placed myself before Alexander, Pyrrhus and all others."

#### GREEK.

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

HERODOTUS: BOOK II.

TIME : THREE HOURS.

I.

#### A. Translate .

Εὶ δὲ δεῖ μεμψάμενον γνώμας τὰς προκειμένας, αὐτὸν περὶ τῶν ἀφανέων γνώμην ἀποδέξασθαι, φράσω διότι μοι δοκέει πληθύεσθαι ὁ Νεῖλος τοῦ θέρεος. τὰν χειμερινὰν ὡρην ἀπελαννόμενος ὁ ἡλιος ἐκ τῆς ἀρχαίης διεξόδον ὑπὸ τῶν χειμώνων, ἔρχεται τῆς Λιβύης τὰ ἀνω. ὡς μέν νυν ἐν ἔλαχίστω δηλῶσαι, πᾶν εἰρηται τῆς γὰρ ὰν ἀγχοτάτω ἡ χώρης οὐτος ὁ θεὸς, καὶ κατὰ ἡν τινα, ταύτην εἰκὸς διψῆν τε ὑδάτων μάλιστα, καὶ τὰ ἐγχώρια ῥεύματα μαραίνεσθαι τῶν ποταιῶν.

- 1. γνωμας τὰς προκειμένας. Give the substance of any one of them and of the objections of Herodotus.
- 2. ἀπελαννόμενος ὁ ήλιος ἐκ τῆς ἀρχαίης διεξόδον. Explain the meaning.
  - 3. ώς μέν νυν ἐν ἐλαχίστω δηλῶσαι. Quote similar phrases.
- 4.  $\tau \tilde{\eta} \varsigma \gamma \tilde{\alpha} \rho \ \tilde{\alpha} \nu \ \tilde{\alpha} \gamma \kappa \sigma \tilde{\alpha} \tau \omega \ \kappa$ . Write this sentence in Attic form and parse  $\tau \tilde{\eta} \varsigma$ .

#### B. Translate:

Τὰς δὲ στήλας τὰς ιστα κατὰ τὰς χώρας ὁ Αἰγύπτου βασιλεὺς Σέσωστρις, αὶ μὲν πλεῦνες οὐκέτι φαίνονται περιεοῦσαι· ἐν δὲ τῷ Παλαιστίνη Συρίη αὐτὸς ὅρεον ἐούσας, καὶ τὰ γράμματα τὰ εἰρημένα ἐνεόντα. εἰσὶ δὲ καὶ περὶ Ἰωνίην δύο τύποι ἐν πέτρησι ἐγκεκολαμμένοι τούτου τοῦ ἀνδρὸς, τῷ τε ἐκ τῆς Ἐφεσίης ἐς Φώκαιαν ἔρχονται, καὶ τὴ ἐκ Σαρδίων ἐς Σμύρνην. ἐκατέρωθι δὲ ἀνὴρ ἔγγέγλνπται, μέγαθος πέμπτης σπιθαμῆς, τῷ μὲν δεξιῷ χερὶ ἔχων αἰχμὴν, τῷ δὲ ἀριστερῷ τόξα, καὶ τὴν ἀλλην σκευὴν ὡσαύτως· καὶ γὰρ Αἰγυπτίην καὶ Αἰθιοπίδα ἔχει. ἐκ δὲ τοῦ ὥιου ἐς τὸν ἔτερον ὡμον διὰ τῶν στηθέων γράμματα ἰρὰ Αἰγύπτια διἡκει ἐγκεκολαμμένα, λέγοντα τάδε· ΕΓΩ ΤΗΝΔΕ ΤΗΝ ΧΩΡΗΝ ΩΜΟΙΣΙ ΤΟΙΣΙ ΕΜΟΙΣΙ ΕΚΤΗΣΑΜΗΝ.

- 1.  $\sigma \tau \dot{\eta} \lambda a \varepsilon \tau \dot{\eta} \tau \varepsilon \mu \dot{\epsilon} \gamma a \theta o \varepsilon \pi \dot{\epsilon} \mu \tau \eta \varepsilon \sigma \pi \iota \theta a \mu \dot{\eta} \varepsilon$ . Account for the cases. Explain the phrase  $\pi \dot{\epsilon} \mu \pi \tau \eta \varepsilon \sigma \pi \iota \theta a \mu \dot{\eta} \varepsilon$  and give the size in our measure.
  - 2. ὡσαύτως. Explain the meaning.
  - 3. Some words of the Extract (B) have a different form in Attic.

#### C. Translate:

'Εποιήθη δὲ ὧδε αὕτη ἡ πυραμίς· ἀναβαθμῶν τρόπον, τὰς μετεξέτεροι κρόσσας, οἱ δὲ βωμίδας ὀνομάζουσι. τοιαύτην τὸ πρῶτον ἐπεί τε ἐποίησαν αὐτὴν, ἤειρον τοὺς ἐπιλοίπους λίθους μηχανἤσι ξύλων βραχέων πεποιημέηνσι. χαμάθεν μὲν ἐπὶ τὸν πρῶτον στοῖχον τῶν ἀναβαθμῶν ἀείροντες, ὅκως δὲ ἀνίοι ὁ

λίθος ἐπ' αὐτὸν, εἰς ἐτέρην μηχανὴν ἐτίθετο, ἐστεῶσαν ἐπὶ τοῦ πρώτου στοίχου. ἀπὸ τούτου δὲ ἐπὶ τὸν δεύτερον ἔλκετο στοίχον ἐπ' ἄλλης μηχανῆς. ὁσοι γὰρ δὴ στοῖχοι ἤσαν τῶν ἀναβαθμῶν, τοσαῦται καὶ αὶ μηχαναὶ ἤσαν εἰ τε καὶ τὴν αὐτὴν μηχανὴν, ἐοῦσαν μίαν τε καὶ εὐβάστακτον, μετεφόρεον ἐπὶ στοῖχον ἕκαστον, ὅκως τὸν λίθον ἑξέλοιεν. λελέχθω γὰρ ἤμῖν ἐπ' ἀμφότερα, κατάπερ λέγεται.

- 1.  $\dot{a}$ ναβαθμῶν τρόπον— $\dot{a}$ νίοι. Parse these words accounting for case and mood.
  - 2. εἴ τε καὶ κ. τ. λ. Supply ellipsis.
- 3. What remarkable object has H. omitted in his account of the wonders of Egypt?

#### II.

- 1. What verbs are used by H. as "auxiliaries"? Give examples of their use,
- 2. Parse these forms which are found in Book II., giving the Attic: ἀποδεδέχαται, σταῖς, τεν, κατέαται, κόμμι, ἀλῶσι, ὥρεον, ἀπαμμένους, κατίσαι, βιούς.
- 3. Give the terms used by H. for "northwards," &c., with the corresponding Latin,
- 4. Show by simple examples how "future conditions" are expressed?
- 5. Accentuate the following sentences: Εγω ει μη περι πολλου ηγευμην μηδενα ξεινων κτεινειν, οσοι υπ' ανεμων ηδη απολαμφθεντες ηλθον ες χωρην την εμην, εγω αν σε υπερ του Ελληνος ετισαμην, ος, ω κακιστε ανδρων, ξεινιων τυχων, εργον ανοσιωτατον εργασαο . . . Αλλα αυτα εγω τω Ελληνι ξεινω φυλαξω, ες ο αν αυτος ελθων εκεινος απαγαγεσθαι εθελη.
- 6. Turn the preceding sentences into regular "indirect speech" in the Attic dialect after a past tense of  $\lambda \dot{\epsilon} \gamma \omega$ .

Translate into Greek: After hearing all this, he sends a message as quickly as possible to Proteus at Memphis, to this effect: "A stranger has come, a Trojan by race, who has committed an impious act in Greece; for having deceived his friend's wife, he has come here with her and a great deal of property, having been carried to this country by winds. Are we then to allow him to sail off unharmed, or are we to deprive him of what he came with?" In reply Proteus sends a person with this message: "Seize this man, whoever he is, and bring him to me, that I may know what he will say about the matter." So he seized Alexander and detained his ships.

## B.-MATHEMATICS.

# GEOMETRY AND TRIGONOMETRY.

TIME: THREE HOURS

1. Through a given point in space draw a plane parallel to a given plane.

2. From the property that the areas of triangles upon the same base are to one another as their altitudes, prove that if three lines, AD, BE, CF, drawn from the angles of the triangle, ABC, to the opposite sides, intersect in O.

 $\frac{DO}{AD} + \frac{EO}{BE} + \frac{FO}{CF} = 1.$ 

3. The distances of any two points from the centre of a circle are inversely proportional to the distances of their polars from the same: and if P and Q be the points and Pp and Qq be the shortest distances to their polars, PQ subtends equal angles at p and q.

4. The sides of a triangle, ABC, are all produced, and a transversal cuts the produced parts in a, b, c (opposite the several angles). State and prove, from your diagram, a fundamental property of such a transversal.

5. If from any point without a circle two tangents and a secant be drawn, four points in the circumference are thus determined: prove that if from any other point in the circumference lines be drawn to these four, they form a harmonic pencil.

6. Given the diameter of a circle and two parallel chords (2r, 2a, 2b): find the breadth of the included zone.

7. In an Ellipse, the perpendiculars from the foci on the tangent at any point, meet it in the circumferences of the auxiliary circle: and their rectangle is equal to the square on the semi-minor axis.

8. A circle of radius r includes another circle of radius  $r_i$ : the distance between their centres is c. Shew that the locus of the centre of a circle which touches them is an ellipse of eccentricity,  $\frac{c}{r+r}$ .

9. If  $\sin\vartheta=\sin\phi$  and also  $\cos\vartheta=\cos\phi$ : then must  $\vartheta$  and  $\phi$  differ by a multiple of  $2\pi$ .

10. If  $A+B+C=180^{\circ}$ , prove

 $(\sin\,\mathrm{B} - \sin\,\mathrm{C})\,\cot\,\frac{\mathrm{A}}{2} + (\sin\,\mathrm{C} - \sin\,\mathrm{A})\cot\,\frac{\mathrm{B}}{2} + (\sin\,\mathrm{A} - \sin\,\mathrm{B})\,\cot\,\frac{\mathrm{C}}{2} = 0.$ 

11. Give a full sketch of the manner in which a Table of Natural sines and cosines is calculated, with some account of the tests applied to measure the accuracy of the calculations.

12. ABCDEF is a regular Hexagon whose centre is O, and P is any point in the diameter AD. Prove that  $^1_6$ th of the sum of the squares of the lines drawn from P to the angles of the Hexagon =  $(\text{side})^2 + \text{OP}^2$ .

#### MISCELLANEOUS.

TIME: THREE HOURS.

1. Given the base of a triangle, and the ratio (m:n) of the sides. Find the equation for determining the sides.

2. Prove 
$$\tan \frac{n}{n} - \tan \frac{n-1}{m+n} = \frac{\pi}{4}$$
.

3. In the ambiguous case in Plane Trigonometry, a and b being the given sides (a > b), and c and  $c_l$  the two values of the third: (1) prove  $cc_l = a^2 - b^2$ : (2) the circumscribing circles of the triangles are equal.

4. If A,B,C,D are the angles of any Quadrilateral, an application of DeMoivre's Theorem enables you to prove very speedily that the sum of the tangents of these angles = the sum of their products, take 3 and 3.

5. Write the series for  $\cos m\theta$  and  $\sin m\theta$  in terms of the powers of  $\cos \theta$  and  $\sin \theta$ ; and thereafter express  $\cos 5 \theta$  wholly in terms of  $\cos \theta$ .

6. Give a sketch of the steps by which it is shewn that

$$\cos x + \sqrt{-1} \sin x = \varepsilon^{x\sqrt{-1}}$$

7. If  $\tan \theta = \frac{b}{a}$ , shew by Demoivre's Theorem that

$$\left(\begin{array}{c} \frac{m}{n} & \frac{m}{n} & \frac{m}{2n} \\ \left(\begin{array}{c} a+b\sqrt{-1} \end{array}\right) + \left(a-b\sqrt{-1} \right) = 2 \left(a^2+b^2\right) \frac{m\theta}{2n} \\ \end{array}$$

8. State the fundamental principle of the Theory of Indeterminate Coefficients, with its limitations, Apply it, when explained, to this case,  $\frac{\sin x}{\log (1+x)} = a + bx + cx^2 + &c.$ , so as to shew that you could determine a, b, c &c.

9. If in the equation,  $x^3 + px^2 + qx + r$ , one root is known to be equal to the sum of the other two, prove  $4 pq = 8r + p^3$ .

10. Find the formula that determines the numerically greatest  $\frac{p}{q}$  term of the expansion of (1+x),  $\frac{p}{q}$  being positive; and the condition that two successive terms may be equal. Also, find what term is numerically the greatest in the expansion of (1-x),  $x=\frac{5}{4}$ .

11. A wagers with B that, in a single throw with 5 dice, three of them at least will shew the same face. On this he stakes \$1: against him B stakes \$4. Query (1) which has the advantage in the bet? (2) how many throws must A be allowed in order to have a chance just superior to B's on an even bet?

#### C.-ENGLISH

Examiner..... Archibald MacMechan, Ph. D.

LOUNSBURY: HISTORY OF THE ENGLISH LANGUAGE, Pt. I.; SPENSER: FAERY QUEENE, BK. I.; SHAKESPEARE: KING JOHN, AS YOU LIKE IT; BYRON: CHILDE HAROLD.

TIME: THREE HOURS.

N. B.—Not more than two questions to be answered in each section.

- 1. Account for the chief points of difference between Middle and Modern English.
- 2. To what extent was English a composite language before the Norman Conquest?
- Discuss and estimate the direct and indirect influence of Latin on the English Language.

- 4. Discuss the fitness of introducing the grotesque element into the Faery Queene e g., Lucifera's five coach-horses in Cant. IV. Point out the symbolism in each case.
- Write critical notes on the metre, the allegory, and the diction of the Faery Queene.
  - Explain fully ten of the italicised words:

Ye all forwearied be. Etsoones I thought her such.

Hunting full greedy after salvage blood.

.... a woful stowre for him she late endured. .... in mind to reave his life.

... their tailes dispedden wide.

Their harts she gh-sseth by their humble guise;

And lying down upon the sandie graile.

.... the askall routes appall,

Therewith the gyant buckled him to fight,

.... his visage wexed pale.

That darkesome cave.

The second was as almner of the place.

..... his thillant speare

..... the ground whereon his feet was pight.

- 7. About which of the three, Arthur, John, or Faulconbridge, does the interest of King John centre?
- 8. How has Shakespeare made the play interesting, when nearly all the characters except Arthur are commonplace, and no mention is made of Magna Carta?
- 9. Describe in full the character of Rosalind. Characterize As You Like It.

#### D

- 10. Show how Childe Harold illustrates Byron's politics, religious ideas, and literary opinions.
- 11. Give the history of its production. Compare the stanza with Spenser's. (What reasons does Byron give for adopting it?)
- 12. Quote any passage of two stanzas which you admire, and tell why you admire it.

