

#  <br> OF <br> <br> DALHOUSIE COLLEGE <br> <br> DALHOUSIE COLLEGE <br> <br> UNIVERSITY. 

 <br> <br> UNIVERSITY.}

HALIFAX, NOVA SCOTIA.

1887-88.


HAIIFAX:
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## NOTICES.

The more important changes in this Calendar will be found in §§ I, II, VII, viII, IX, x, XI.

For the Medical Matriculation Examination see § xiII.

Copies of this Calendar, with the Examination Papers set in the session of 1886-7, may be obtained, at twenty-five cents each, from H. Barnes, Esq., Nova Scotia Printing Co., Halifax, N. S.

## ERRATUM.

Page 34.-From the list of elective subjects of the B. A. and B. L. Courses in the Fourth Year omit International and Criminal Law.

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## University Almanac, 1887-88.

## 1887.

Aug. 24, W.-Last day for receiving notices of Supplementary and Matriculation Examinations (Law Faculty).
Sept. 6, Tu.-Session (Law Faculty) begins. Matriculation and Supplementary Examinations (Law Faculty).
6, " -Registration and payment of class fees (Law Faculty).
6, "-Meeting of Law Faculty, 4 P. M.
3, M.-Meeting of Governors.
7, f(
8. 曹-Meeting of Faculty of Arts, 11 A. M. $=$ Meeting of Faculty of Law, 4 P.m. P. M., Registration of Candidates for Matriculation and Bursary Examinations and for Preliminary (Medical) Examination.
 Munro Exhibitions and Bursaries, for 1st and 2nd Years Matriculation Examinations (Arts Faculty), and Preliminary (Medical) Examination in General Education, begin :

10 A. M., Latin.
3 р. м., Greek.
7, Ih $10 \mathrm{~A} . \mathrm{m} .$, Mathematics.
3 р. м., 』itto.

1 M.-
10 A. M.. English (Jun. Ex. and Bur., and Matric.)
3 р. м., ditto.
10 A. M., Chemistry and Natural Philosophy.
3 p. m., Elementary Mechanics and Botany.
10 Tu - 10 A. м., French and German.
" -Supplementary Examinations (Arts Faculty) begin 10 A. M.
12, W-Entrance Examinations (3nd, 3rd and 4th years); Examinations for Senior Munro Exhibitions and Bursaries, and 2nd Year Matriculation Examination (Arts Faculty) continued:

10 A. M., Classical History and Geography.
3 p. m., English Literature and History.
214. F.-Meeting of Faculty of Arts, 10 A. . .

Matriculation, Registration and Issue of Gymnasium Tiekets, 2 f. m.
2171 M.-Class Tickets (Arts Faculty) issued 11 A. M. -1 P. M. -Meeting of Faculty of Law, 4 P. M.
18, Tu.-Convocation, 3 p. m.-Opening address by Professor Seth.
19, W.-Lectures begin.-
20, Th.-Meeting of Faculty of Arts, 4 P. m.
Nov. 3, Th.-Meeting of Faculty of Law, 4 p. M.
14, W:-Final Matriculation Examinations (Arts Faculty) begin:

$$
3 \text { Р. M, English. }
$$

7, M.- $\quad 3$ р. м., Classics and Modern Languages.
8, Tu.- 3 р. м., Mathematics.
1\%, Nf-Meeting of Faculty of Arts, 1 p. M.
1 -Thanksgiving Day-No Lectures
ty H-Meeting of Faculty of Arts, 4 P. M.
14 - 4 -Returns as to Residence, \&c., (Arts Facuilty) to be made on or before this day.
Dec. 3, Th.-Meeting of the Faculty of Law, 4 p. m.
22, " -No Lectures. Christmas Vacation begins.

## 1888.

Jant. 3, Tu.-Meeting of Governors.


4, W.-Lectures resumed.-Supplementary Entrance Examinations,-Classicall History and Geography, 3.30 P. M.
5, Th.-Meeting of Faculty of Law, 4 P. M.-Supplementary Entrance Examinations, English Literature and History, 3.30 p. m.
9, M.-Meeting of the Faculty of Arts, 4 P. M.
Feb. 2, Th. -Meeting of the Faculty of Law, 4 P. M.
6, M.-Meeting of Senate, $4 \mathrm{P} . \mathrm{M}$.
14, Tu.-George Munro's Day. No lectures.
15, W.-Ash Wednesday. No lectures.
17, F.-Last day of Lectures (Law Faculty).
20, M.-Sessional Examinations (Law Faculty) begin.
Mar. 1, W.-Last day for receiving M. A. Theses.
30, F.-Good Friday. No lectures.
April 3, M.-Meeting of Governors.
20, Thlat Last day of Lectures (Arts Faculty).-Meeting of Faculty of Arts 4 P. M.
10, M.-Sessional Examinations (Arts Faculty) begin:
10 A. M., Betany, Hon. English Literature and History.
3 P. M., French,
11, Tu.-
2
3 p. M., Addl. Latin (1st and 2nd years), Hon. Classies, Hon. Philosophy, Hon. English Literature and History, and Hon. Ex, Physics.
12, W.- 10 A. M., Botany, Ethics, Hon. Mathematics, and Hon. Chemistry.
13, Th.--
$10 \mathrm{~A} . \mathrm{M}_{0}$, reek.
3 p. M., Addl. Greek and Latin (1st and 2nd years), Hon. Philosophy, Hon. English Literature and History, and Hon. Chemistry.
14, F.- 10 A. m., ट्टाie, Hon. Classics, Hon. Math. Physies, and Hon. Ex. Physics.
43 P. M., Metaphysies, Practical Chemistry, Hon. Philosophy and Hon. English Literature and History.
17, M.- 10 A. M., Mathematies, Physies (3rd and 4th years), and Hon Classics.
3 P. M.,-Mathematics, Dynamies, and Hon. Classies.
18, Tu.
10 A. M., Engtish Language and Literature, and History-
3 p. M., Hon. Classics, Hon. Mathematies, Hon. Philosophy, Hon. English Literature and History, Hon. Chemistry, and Zddd. English.
19, W.- $10 \mathrm{~A} . \mathrm{M}$. , German-
3 p. M., Addl. Mathematies, Hon. Ex. Physics, and AddI. Latin and Greek (3rd and 4th years).
20, Th.- 10 A. M., Chemistry, Hon. Classics, Hon. Mathematios, Hon. Philosophy, and Hon. English Literature and History.
3 p. M., Polltical Economy.
fo 14 -Last day for returning books to the Library.
' 10 A. M., Addl. Physics.
240 Heeting of Faculty of Arts, $10 \mathrm{~A} . \mathrm{m}$.
25, Tu.-Mecting of Senate, 10 A.M.-Results of Sessional Examinations declared.
26, W.- $\quad 10.30$ A. M., Foot-ball Match : Old vs. Young Dalhousie.
3 P. M., Confocatlon.

# TIME TABLE-FACULTY OF ARTS. 




## [Extract from Minutes of Board of Governors.]

The Governors of Dalhousie College desire to put on record their sense of the irreparable loss they have sustained in the death of Sir Wiluiam Young, who was a member of this Board ever since 1842, and Chairman for a period of thirty-five years.

When the institution, under a reorganization of its constitution, entered upon a new life, it found Sir William an able and efficient friend. He aided largely in starting it on the career of usefulness in which it has made such splendid progress. It was due largely to his steady and unflinching support that the institution was able, during its earlier years, to overcome the obstacles that stood in its way, and now that it has reached a stage of progress of which its friends have reason to be proud, the Board cannot forget-and they gratefully acknowledge-that much of this success is due to the unwearied exertions and large-hearted munificence of our lamented colleague.

If at this moment we may see, rising on a magnificent site in the heart of our city, a building worthy of the position which the University has achieved, we owe it to the generous impulse which led Sir William to offer the aid without which the Governors would still have been restricted to a building and a site utterly unsuited for an educational institution like Dalhousie.

The fact that the last public act of our generous benefactor-one which he himself believed to be the last public act in which he was to take part-was the laying of the corner-stone of the new buildirg, connects the last days of our venerable colleague in a special manner with the institution which he had so loved and favored in the vigor of his manhood.

The liberal provision he made in his will for the numerous charities which form the pride and the glory of this city, shows the thorough catholicity of his benevolence, while the ample legacy he left to this institution-the crowning act of a long list of favors bestowed upon it, shows how deeply the university was imbedded in his affection.

We record with grateful emotions our estimate of the great services and generous benefaction of our lamented colleague.

## HISTORICAL SKETCH.

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

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

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

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

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

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

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

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

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

## An Act for the Regulation and Support of Dalhousie 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 folioxs :-

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

This Act was afterwards amended by the following Acts :-
An Act to Amend the Act for the Regulation and Support of Dalhousie College.
(Passed the 6th day of May, A. D., 1875).
Be it enacted by the Governor, Council, and Assembly, as follows :-

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

An Act to Provide for the Organization of a Law Faculty in connection with Dalhousie College, and for other purposes.
(Passed the 14th day of April, A.D., 1881.)

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

1. The Governors of Dalhousie College, at Halifax, shall, in addition to the powers conferred on them by section 2 of chapter 27 of the Acts of 1875, entitled, "An Act to Amend the Act for the Regulation and Support of Dalhousie College," have power to organize a Faculty of Law in connection with such College; and to appoint professors or lecturers in law, and out of the revenues of the College to provide for the maintenance and support of such Faculty, and to make rules for the regulation and management of such Faculty, and for the granting of degrees in law on the same principles as obtain in other universities, and to vary and amend such rules from time to time.
2. Section 3 of chapter 24 of the Acts of 1863, entitled, "An Act for the regulation and support of Dalhousie College," is amended by adding the words "and governor" after the word "professor" in the said section, and any individual who has hitherto endowed a chair or chairs in the College shall have a right to nominate a governor for each chair endowed, in the same way as if section 3 aforesaid had been originally passed as now amended.
3. Section 1 of the said chapter 27 of the Acts of 1875 , is amended by adding the words "provided, however, that in the event of any body of Christians, individual, or number of individuals, endowing and supporting one or more chairs or professorships in the said College, as provided by sections 2 and 3 of the Act hereby amended, and of such body of christians or individuals nominating a professor or governor
by virtue thereof, the number of Governors may be increased beyond fifteen, but such increase shall be limited to the number of such chairs or professorships as may after the passing of this Act be founded by virtue of the said said sections 2 and $3 . "$

In pursuance of the Act of 1863, the Presbyterian Chureh 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 se-organized and the Halifax Medical College affiliated.

In 1883 a Faculty of Law was added.
In 1879, Geo. Munro, Esq., of New York, a native of this Province, placed in the hands of the Governors the funds necessary for the endowment of a Professorship of Physics. In 1881, he established a Professorship of History and Political Economy. In 1882, he founded a chair of English Language and Literature. In 1883, he added to the staff of the College a Professor of Constitutional and International Law, and Tutors in Classics and in Mathematics. In 1884, he founded a Professorship of Metaphysics. Since 1880, he has provided the University with Exhibitions and Bursaries, to the amount of $\$ 65,700$, 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 neighbering 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 Chatrs of Physics, of History and Political Economy, of English Language and Literature, of Constitutional and International Law, and of Metaphysics respectively.

In 1883, Alexander McLeod, Ese., 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 Chatrs of Classics, Ceemistry 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 Wm. 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 New Building. The following are extracts from his will :-
"I bequeath to the Governors of Dalhousie College at Halifax, the sum of $\$ 4000$ to be kept continually invested by them, and that they shall apply the income derived therefrom in founding and maintaining a prize of a gold medal of the value of $\$ 50$, to be called Sir Williame 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 theirbuilding 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 residize 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."

The new College in course of erection will be completed in September. It will be one of the most commodious and comfortable college buildings in Canada. For its completion the Governors will require about $\$ 25,000$ in addition to the money now in hand. In response to an appeal for this amount about ten thousand dollars have already been subscribed, and the Governors hope that the Alumni asd other friends of Dalhousie will heartily respond to their call. They are quite confident that if they can complete and pay for the new building this year, the University will enter upon an era of prosperity such as it never before enjoyed. They therefore earnestly call the attention of all the friends of Dalhousie to this important matter. An earnest, united effort at the present time will place the University in a position certain to command success.

The following donations have been made to the Endowment Fund :
Hon. Sir Wm. Young, W. J. Stairs, Esq., Hon. Stayley Brown, John Gibson, Esq., John P. Mott, Esq., Wm. P. West, Esq., Thos. A. Ritchie, Esq., and Hon. Robt. Boak, $\$ 1000$ each ; Adam Burns, Esq., Peter Jack, Esq., Hon. Jeremiah Northup, Prof. Lawson and Alex. McLeod, Esq., $\$ 500$ each.

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

Hon. Sir Wm. Young, $\$ 560$; John Doull, Esq., $\$ 400$; J. S. Maclean, Esq., $\$ 300$; J. F. Avery, Esq., M. D., S. Fleming, Esq., C.M.G., Rev. Principal Grant, D. D., W. J. Stairs, Esq., Thos. Bayne, Esq., John Gibson, Esq., Rev. J. McMillan, B.D., and John Nacnab, Esq., $\$ 200$ each; Jameș Scott, Esq., and A. K. Mackinlay, Esq., $\$ 180$
each; Hon. R. Boak, and the Medical Faculty, $\$ 160$ each; Rev. President Forrest, D.D., Hon. A. G. Jones, and Geo. Thomson, Esq., $\$ 150$ each ; A. Burns, Esq., $\$ 125$; J. J. Bremner, Esq., $\$ 120$; B. H. Collins, Esq., J. Donaldson, Eisq., Prof. J. DeMill, Prof. J. Johnson, Prof. G. Lawson, Prof. J. Liechti, Alex. McLeod, Esq., Robt. Morrow, Esq., Hon. Jeremiah Northup, Joseph Northup, Esq., T. A. Ritchie, Esq., Rev. Principal Ross, D.D., Ed. Smith, Esq., R. H. Skimmings, Esq., John Stairs, Esq., Jas. Thomson, Esq., and Hon. Sir Charles Tupper, $\$ 100$ each ; J. W. Carmichael, Esq., C. D. Hunter, Esq., Major-General Laurie, Messrs. Lawson, Harrington \& Co., Prof. C. Macdonald, J. P. Mott, Esq., and Hon. Judge Ritchie, $\$ 80$ each; G. P. Mitchell, Esq., and Hon.S. L. Shannon, \$60 each ; J. B. Duffus, Esq., R. W. Fraser, Esq., Peter Jack, 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 Wm. Young, $\$ 500$; Prof. J. G. MacGregor, $\$ 200$; The Alumni Association, $\$ 150$; J. F. Avery, Esq., M.D., Thos. Bayne, Esq., Hon. R. Boak, Alex. McLeod, Esq., John MacNab, Esq., Hon. Jeremiah Northup, W. J. Stairs, Eisq., 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., Robt. Morrow, Esq., Hon. J. W. Ritchie, James Thomson, Esq., and a Friend, $\$ 50$ each; with smaller sums amounting to $\$ 645$.

For other benefactions, see Library, Museum, and Gymnasium.

In addition to the members of the present staff, the following have occupied Professorial Chairs in the College between the dates and in the subjects set opposite their names:
Rev. Thomas McCulloch, D.D., 1838-43, President, and Professor of Moral Philosophy, Logic and Rhetoric.
Rev. Alexander Romans, 1838-42, Classics.
Rev. James McIntosh, 1838-44, Mathematics and Natural Philosophy.
Rev. Frederick Tomkins, M.A., LL.D. (Lond.), now Barrister, London, G. B., 1856-7, Mathematics and Natural Philosophy.
Rev. George Cornish, B. A. (Lond.), now Professor of Classics, McGill College, 1856-7, Classics.
Thomas McCulloch, 1863-5, Natural Philosophy.
John James MacKenzie, M.A., Ph.D., 1877-79, Physics.
Herbert A. Bayne, M. A., Ph. D., F. R. S. C., late Prof. of Chemistry, Roy. Mil. Coll., Kingston, Ont., 1877-79, Organic Chemistry and Chemical Analysis.
James DeMill, A.M., 1866-80, Rhetoric and History.
Rev. David Honeyman, D.C.L., F.S.A., F.R.S.C., Provincial Museum, Halifax, 1878-83, Geology and Palæontology.
Rev. James Ross, D.D., 1863-85, Principal, and Professor of Ethics.
J. G. Schurman, M.A. (Lond.), D.Sc. (Edin.), now Prof. of Ethics and Metaphysics, Cornell Univ., 1882-86, English Literature and Metaphysics.
Hon. J. S. D. Thompson, now Minister of Justice, 1883-86, Lecturer on Procedure and Evidence.

## Bathonsic College \& Emibersity.

## BOARD OF GOVERNORS.

Hon. Sir Adams G. Archibald, K. C. M. G., P. C., D. C. L., Q. C., Chairman.
Hon. Sir Charles Tupper, K. C. M. G., C. B., M. D., M. P.
Hon. S. L. Shannon, 1. C. L., Q. C., Judge of Probate.
James F. Avery, Ese., M. D.
Rev. John McMillan, M. A., B. D.
Rev. President Forrest, D. D.
Hon. Alfred G. Jones, P. C., M. P.
John S. Maclean, Esq.
Peter Jack, Esq.
John Doull, Esq.
Rev. Robert Murray.
Hon. James Macdonald, Chief Justice.
Wallace Graham, Eisq., A. B., Q. C.
His Worship the Mayor of Halifax, ex officio.
R. Sedgewick, Esq., B.A., Q.C., Representative of the Alumni Association.
J. Norman Rirohie, Judge Supreme Court, Nova Scotia. Geo. Thomson, Esq.

Ghorge Thomson, Treasurer.<br>William M. Doull, Secretary.

## SENATUS ACADEMICUS.

Rev. John Forrest, D. D., President.
Rev. William Lyale, LL. D.
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.
William J. Alexander, B. A., Ph. D.
James Liechti, M. A.
Benjamin Russell, A. M.
James Seth, M. A.

## ACADEMIC STAFF.

Rev. President Forrest, D. D., F. S. Sc. (Lond.), George Munro Professor of History and Political Economy.
Rev. William Liyall, Ll. D., F. R. S. C., Professor of Logic and Psychology.
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.
Rtchard Chapman Weldon, a. M. (Mt. All.), Ph. D. (Yale), George Munro Professor of Constitutional and International Law.
Hon. Samull Leonard Shannon, D. C. L. (Vind.), Q. C., Lecturer on Real Property and Crimes.
James Thomson, Q. C., Lecturer on Real Property.
Wallace Graham, A. B. (Acad.), Q. C., Lecturer on Insurance.
Robert Sedgewick, B. A. (Dal.), Q. C., Lecturer cn Equity Jurisprudence.
Benjamin Russeli, A. M. (Mt. All.), Professor of Contracts and Commercial Law.
John Young Payzant, A. M. (Acad.), Lecturer on Torts.
Williay John Alexander, B. A. (Lond.), Ph. D. (J.H.U.), George Munro Professor of English Language and Literatare.
C. Sydney Harrington, Q. C., Lecturer on Evidence and Partnerships.

James Seth, M.A. (Edin.), George Munro Professor of Metaphysics and Ethics.
William Henry Waddell, Lecturer on Voice Culture and Elooution.
Howard Murray, B. A. (Lond.), George Munro Tutor in Classics.
Arthur Stanley Mackenzie, B. A. (Dal.), George Murro Tutor in Mathematics.
David Bailey, Instructor in Gymnastics.

> Librarian :-Professor Alexander.

Assistant Librarians: $\left\{\begin{array}{l}M_{R} . \\ M_{R} .\end{array}\right.$ Murray.

Curator of the Museum : Professor Lawson.

Janitor: Archibald Dunlop.

## fianultu of Adrts.

The President.<br>Professors: Lyall, Macdonald, Johnson, Lawson, Liechiti, MacGregor, Alexander, Seth.<br>Secretary of the Faculty-Professor MaoGregor.

Tutors: Murray, MacKenzie.

## § I.-COURSES OF INSTRUCTION.

## I.-CLASSICS.

(McLeod Professorship.)
Professor $\qquad$ John Johnson, M, A.
Tutor Howard Murray, B. A.

## First Year Latin Class.

Professor's Class-Mondays, Wednesdays, and Fridays, 10-11 A.M. $\ddagger$ Tutorial Class-Mondays and Wednesdays, 12 M. -1 P.M.

## Subjects of study :

Cicero: Pro Milone (Purton's, University Press, Cambridge,) *Pro Lege Manilia (Wilkins's, Macmillan \& Co., London, - - Virgil : Aeneid, Book VI. (Conington's school edit., Whittaker, London, or Greenough's, Ginn \& Co., Boston.)-Composition : Principia Latina, Part IV., (latter half), and Easy Pieces for Latin Prose, (First Series), (Champneys and Rundall, Rivingtons, London.)

[^0]Second Year Latin Class.
$\ddagger$ Mondays, Wednesdays and Fridays, 11 A.M.-12 M.
Subjects of study :
Horace: Odes, Books I, *II, *III, (Stephenson's, Macmillan \& Co., London). Livy : Book I, (Stephenson's, Maemillan \& Co., London).-Composition : Principia Latina, Part V.
$\dagger$ Third and Fourth Years Latin Class.
Mondays, Wednesdays and Fridays, 12 M. -1 P.M.
Subjects of study in alternate years:
For 1887-8.-Tacitus : Agricola (Church \& Brodribb's, Macmillan \& Co., London.) Plautus: Captivi (Harrington's, Harpers, N. Y.) Juvenal: Satires III, X, XIII, (Weale's Series.)-Composition: Bennett's Second Latin Writer (pub. by Rivingtons, London.)

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

## First Year Greek Class.

Tuesdays and Thursday., 10-11 A. M. ; Fridays, 12 M. -1 P. M. $\ddagger$ (Conducted by the Tutor.)
Subjects of study :
Lucian: Vera Historia, (Jerram's, Clarendon Press, Oxford.) *Xenophon: Cyropædia, Book I (Gorham's, Whittaker, London.) Composition: Elementary Greek Prose Composition, (by Fletcher \& Nicholson, pub. by W. Bailie, Kingston, Ont.,) (introductory rules ; *written exercises.)—Grammar : Accidence, (Goodwin's.)

## Second Year Greek Class.

$\ddagger$ Tuesdays and Thursdays, 11 A.M. -12 M.
Subjects of study :
Homer : Odyssey, Book IX, (Major's, Macmillan \& Co., London.) Xenophon: Hellenica, Book II. (Hailstone's, Macmillan \& Co., London.) *Demosthenes: Olynthiacs, (Oxford ed. with notes.)Composition : Initia Greca, Part III. Latter half (introductory rules; *written exercises.)

[^1]
## †Third and Fourth Years Greek Class.

$$
\text { Tuestays and Thursdays, 12 } M_{0}-1 \quad P, M_{0}
$$

Suhjects of study in alternate years:
For 1887-8. -Plato : Apologia Socratis. Aeschylus: Prometheus Vinctus.-Composition : Sidgwick's Introduction to Greek Prose Composition (introductory rules ; *wxitten exercises).-Philology : Miller's .Science of Language, vel. I, chaps. $\mathrm{k}-7$.

For 1888-9.--Demosthenes: Philippics II, III. Euripedes; Medea. -Composition: Sidywick's Introduction to Greek Prose Composition (introductory rules; *written exercises).-Philology : Peile's Primer of Comparative Philology.

## Advanced Class. <br> Twice or three times a weok.

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

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\begin{aligned}
& \text { II.-MODERN LANGUAGES. } \\
& \text { (McLeod Professorship.) }
\end{aligned}
$$

## "First French Class.

> Tuesdays and Thursdays, 3-4 PM.

Suhjects of study:
Guizot: Guillaume le Conquérant (Hachette Co.). Molière: Le Bourgeoin Gentilhomme, (Macmillan \& Co.). Exercises in Grammar and Composition.

Text Books: Brachet's Public Schoel 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: L'Avare. Racine : Athalir, (Macmillan \& Co.). Translation from English writers. Exercises in Syntax.

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

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

[^2]Third French Class.
Tuesdays and Thursdays, 9-10 A.M.
Subjects of study :
Molière: Les femmes savantes, (Macmillan \& Co.) Corneille : Horace, (Clarendon Press). Translations from English writers. Original Essays. Lectures on French Literature.

Moliére's Tartuffe is prescribed for private reading to candidates for a First Class position at the Sessional Examinations.

Text Books: Brachet's Public School French Grammar.

## First German Class.

Mondays, Wednesdays and Fridays, 3-4 P. M.
Subjects of study :
Adler's Reader, parts III, IV and V, ; Schiller: Wilhelm Tell, Act I. Exercises in Grammar and Composition.

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

Second German Class.
Mondays, Wednesdays and Fridays, 2-3 P. M.
Subjects of study :
For 1887-8.-Goethe : Hermann und Dorothea. Schiller : Maria Stuart. Translations from English writers. Lectures on German Literature.

For 1888-9. Schiller : Maria Stuart. Goethe : Egmont. Translations from English writers. Lectures on German Literature.

Schiller's Geschichte des dreissigjährigen Kriegs, Part I., Book I., is prescribed for private reading to candidates for a First Class position at the Sessional Examinations of 1888.

Text Boole: As in First Class.

## Third German Class.

Mondays, Hednesdays and Fridays, 9-10 A. M.
Subjects of study :
For 1887-8.-Lessing : Nathan der Weise. Goethe: Egmont. Prose composition. Lectures on German Literature.

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

Schiller's Wallenstein's Tod is prescribed for private reading to candidates for a First Class position at the Sessional Examinations of 1888.

## III.-ENGLISH LANGUAGE \& LITERATURE.

(George Munro Professorship.)
Professor
W. J. Alexander, Ph. D.

## First Year Class.

Tuesdays and Thursdays, 12-1 P. M.
Composition, erabracing Exereises in the formation of sentences, General Principles of Composition, Characteristics of Style, etc.Students are required to write weekly exercises (for the most part on subjects connected with the course on English Literature), which are returned with corrections, after being criticised by professor and students.

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 eritically :-

Dryden: Mac Flecknoe, St. Cecilia's Day, Alexander's Feast, "Stanzas on Oliver Cromwell, *Astrea Redux, *Annus Mirabilis, *Absalom and Achitophel.

## Addison: Select Essays.

Pope: Rape of the Lock.
Johnson: London, Vanity of Human Wishes, Life of Dryden, *Lives of Pope, Addison, and Gray.
Gray: Elegy.
Gollsmith: Traveller, Deserted Village, *Select Essays.
Macaulay: Samuel Johnson.
Books recommended: Nichol's Composition Primer (Macmillan); Hudson's Selections from Addison and Goldsmith, (Ginn \& Heath, Boston): Clarendon Press Edition of Dryden ; Hale's Longer Eaglish Poems (Macmillan)-which contains all the poetry read in the class.

## Second Year Class.

Mondays, Wednesdays, and Fridays, 12-1 P. M.
Critical veading of select works of Shakespeare and Milton, with lectures thereon:-

Shakespeare: *Romeo and Juliet, Merchant of Venice, "As You Like It, Henry IV.. Pts. I. and II., Henry V., *Macbeth, *Winter's Tale. Milton: Comus, Paradise Lost, Bks. I.-IV.

Bonks recommended $=$ Rolfe's Edition of the separate plays of Shskespeare. Dowden's Shakespere Priner, Clarendon Press Edition of Milton, Vol. I.

## Advanced Class.

Mondays and .Wednesdays, 3-4 P. M.
Early English: Development of the Language illustrated by the study of Sweet's Anglo-Saxon Reader (exclusive of the poetical extracts), Sweet's First Middle English Primer, Sweet's Second Middle English Primer, Chaucer's Prologue, Knight's Tale and Nonne Prestes Tale (Clarendon Press), and Lounsbury's History of the English Language.

[^3]Fridays, 3-4 P.M.
Poetry of the 19th Century: Lectures on the works of Robert Browning with readings.

Books recommended: Selections from Browning, First Series (Macmillan, N. Y.g $\$ 1.50$, or Lovell's Library, 25 cents), and Second'Series (Macmillan, N. Y:, \$1.50.)

## IV.-HISTORY AND POLITICAL ECONOMY.

(George Munro Professorship.)
Arafesson
Rev. Breshbena forkast.

## Third Year History Class.

Mondays and Wèdnesdays, 11 A.M. -12 M., and Friblays, $10-11$ A.M.,
Subjects of study :

## Mediæval History and Modern History to 1555.

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

Text Book: Gibbon's Decline and Fall of the Roman Empire (Student's Edition)
Books recommended: Hallam's Middle Ages; Bryce's Holy Roman Empire; Irving's Mahomet and his Successors; Guizot's History of Civilization; Michaud'a History of the Crusades ; Robertson's Charles V. ; Stubb's Constitutional History of England.

## Fourth Year History Class.,

Twesdays 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 exams inations on prescribed reading. In the lectures books of reference will be named and select portions specified for reading.

Text Books : Green's England'; Guizot's Erance (Masson's Abrìdgemend) ; Menzel's: Germany.

## Advanced History Class:

Once w week.
Subjects of study :

## English History from 1603 to 1689.

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

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

## Political Economy Class.

Tuesdays and Thursdays, 10-11 A. M.
The work of this class will be conducted by means of lectures and examinations on prescribed reading.

Text Books : Mill's Principles of Political Economy.
Books recommended : Smith's Wealth of Nations, Cairnes' Principles of Political Economy, Carey's Principles of Social Science, Roscher's Politcal Economy, Fawcett's Free Trade and Protection, Carey's Harmony of Interest.

## V.-METAPHYSICS AND ETHICS.

(George Munro Professorship.)
Professor James Seft, M. A.

Metaphysics Class (Third and Fourth Years).
Tuesdays and Thursdays, 10-11 A. M.
After an introductory account of the nature and scope of Philosophy in its various departments, and a general sketch of the history of Metaphysics, attention will be concentrated on Modern metaphysical theories. Here the history of Cartesianism will first be traced; and afterwards, in more detail, the development of modern Sensationalism in Locke, Berkeley and Hume, leading up to the Critical Philosophy of Kant. The significance of Berkeley in the latter movement will receive special attention, and his philosophy, as contained in the class Text Book, will be made the subject of detailed study, oral examination and discussion.

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

## Ethics Class (Fourth Year).

$$
\text { Mondays, Wednesdays and Fridays, } 11 \text { A. M.-12 M. }
$$

The work of this class will consist of two parallel courses, (1) Theoretical; (2) Historical.
(1). In the Theoretical Course, after an introductory account of the nature, subject-matter and method of Etbics, its relation to other branches of philosophy, and more particularly to psychology, the subject will be considered under two heads, as follows :-
(a.) The nature of Moral Action - the ethical End or Standard, as explained in Intuitionalism; Hedonísm, Egoistic, Altruistic and Evolutionistic ; and Transcendentalism.
(b.) The nature of Moral Agency or Will-power, as explained in Libertarianism, Determinism and Transcendentalism.
(2.) In the Historical Course, an account will be given of the history of Greek Ethics, that of modern Ethics being treated in connection with the theoretical course.

The work of the class will be conducted mainly by lectures, but will also embrace oral examination and discussion in class. Occasional short essays will also be prescribed,

Text Books: (Theoretical) Calderwood's Hand-book of Moral Philosophy, (Macmillan \& Co.) ; (Historical) Sidgwick's Outlines of the History of Ethics (Macmillan \& $\mathrm{Co}_{2}$ )

## Advanced Class.

Tuesdays and Thursdays, $12 M-1 P . M$.
This class is intended mainly, though not exclusively, for candidates for Honours in Philosophy.

The following courses will be given in alternate sessions :-
A. Ethics. (1.) In Ancient Ethics, Plato's Republic and Aristotle's Nicomachean Ethics will be made the subject of detailed study.
(2.) In Modern Ethics, the theories of Kant, Green, Spencer and Sidgwick will be critically examined and compared.
B. Metaphysics. (1) In Ancient Metaphysics, after an account of Early Greek Philosophy, Plato's speculative views, as they may be gathered from the various Dialogues, will be specially studied.
(2.) In Modern Metaphysics, the course will be devoted to the Philosophy of Kant, as explained in the Critique of Pure Reason, and in its relations to later German Philosophy as well as to present philosophical problems and tendencies.

In session 1887-8, Course A will be given.

## VI.-LOGIC AND PSYCHOLOGY.

$\qquad$

## Second Year Class.

Mondays, Tuesdays, Wednesdays and Thursdays, 3-4 P.M.
This course will consist of lectures on Mind and its phenomena, the laws and faculties of Cognition, comprising a review of the doctrines of Locke, Reid, Stewart, Brown, Hamilton, and the modern Sensationalist School,-with the philosophy of the Emotions. Under Logic will be considered-the nature of Concepts, Judgments and Reasonings; the opposition and conversion of Propositions; the different orders of Syllogism ; the Fallacies ; the doctrine of Method; the sources of Error and the means of their correction.

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

## Advanced Class.

$$
\text { Fridays, 2-3 } P \text {. }
$$

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

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

## VII.-MATHEMATICS.

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Professor . ................................ C. Macdonald, M. A.
    Tutor . ................... A. S. Mackenzie, B. A.
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## First Year Class.

$$
\text { Daily, } 11 \mathrm{~A} . \mathrm{M} .-12 \mathrm{M} .
$$

Subjects of study :
Algebra.-Involution, Evolution, Theory of Indices, Equations of the First and Second Degree, Proportion, Inequalities, Indeterminate Equations, Variation, Progressions ; Propositions in the Theory of Equations, with Horner's method of approximating the roots of an Equation of a Degree higher than the Second.

Geometry.-First and Second Books of Euclid revised, Third and Fourth Books, Definitions of Fifth, and Sixth Book to the TwentyFourth Proposition, with Geometrical Exercises and Practical applications.

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

Books recommended-Colenso's or Todhunter's or Hamblin Smith's (Miller \& Co.), Elements of Geometry ; Colenso's or Todhunter's Algebra.

## Second Year Class.

$$
\text { Daily, } 10-11 \text { A. } M
$$

Subjects of study :
Geometry.-Sixth Book of Euclid finished. Drew's Conic Sections, Parabola and Ellipse. Geometrical Exercises continued.-For First or Second Class ; 21 Propositions of the Eleventh Book of Euclid.

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

Algebra.-Permutations and Combinations, Binomial Theorem, Properties of Logarithms, Compound Interest, Annuities. Probakilities. -For First or Second Class ; Extension of Ordinary Course. Investigations connected with the Binomial Theorem, Indeterminate Coefficients, and the Theory of Logarithms, with applications.

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

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

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

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

Books recommended-Colenso's Algebra, 1st part and, for the additional subjects, 2nd part also; or Todhunter's Plane Trigonometry; Todhunter's Spherical Trigonometry; Chamber's Legarithmic, \&c. Tables.

## Advanced Class.

## There are two Divisions in this Class :

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


#### Abstract

Books recommended-Todhunter's Plane Trigonometry; C. Smith's Conic Sections ; Todhunter's Theory of Equations; Hall's Differential and Integral Calculns ; Todhunter's Spherical Trigonomety. Any Standard Works on the subjects treated may, however, be used.


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

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

# VIII.-PHYSICS. <br> (George Munro Professorship.) 

Professor,
J. G. MacGregor, D. So.

Third Year Physics Class.
Tuesdays, Thursdays and Fridays, 11 A. M. -12 M.
Subjects of the lectures :
The elements of Dynamies ; the properties of solid and fluid bodies ; Heat; Electricity and Magnetism; Light and Radiant Heat ; and Sound. These subjects will be treated in an elementary manner, Dynamics only in so far as a knowledge thereof may be necessary in the study of the other subjects of the course.

Boolcs recommended-For students who aim at passing merely, Lodge's Elementary Mechanics (W. \& R. Chambers) and Stewart's Lessons in Elen entary Physics (Macmillan \& Co.)-For students who wish to pass with distinction, Lodge's Mechanics, 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).

## Fourth Year Physics Class.

Mondays and Wednesdays, 10-11 A. M.
The subjects studied in this class will be the same as those of the Third Year Class, but they will be treated in a less elementary manner. In the present session attention will be directed more especially to Heat and Electricity.

Candidates for a First Class position at the Sessional Examinations will be examined on S. Taylor's Sound and Music (Macmillan \& Co.), to be read by them privately.

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

## Dynamics Class.

Tuesdays and Thursdays, 10-11 A. M.

## The lectures will be on the following subjects:

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

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

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

The Text Book wilk be prescribed at the opening of the session,

## Advanced Mathematical Physics Class.

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\text { Mondays and Wednesdeys, } 11 \text { A. M.-12 } M \text {. }
$$

The subjects of the lectures will be as follows:
Kinematics : Dynamies of a Particle and of a Rigid Body ; Hydrodynamics; Thermodynamics; Electrodynamics.-Students will be assumed to have a sufficient knowledge of the Differential and Integral Calculus.

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

Books recommended : Tait and Steele's Dynamies of a Particle (Mamillan \& Co.), Aldis' Rigid Dynamies (Deighton, Bell \& Co.), Besant's Hydromechanies (Deighton, Bell \& Co ), Tait's Sketch of Thermodynamics (Douglas, Edinburgh.).

## Practical Physics Class.

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

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

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

## I X.-CHEMISTRY.

## (McLeod Professorship.)

Professor .Geo. Lawson, Ph. D., Ll. D.

## Inorganic Chemistry Class.

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

## Subjects of Lectures :

General Principles: Chemical Affinity. Laws of Combination, by weight, by volume. The Elements. Compounds. Equivalent and Atomic Numbers; Atomicity. Nomenclature; Notation ; 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 (Lippincott, Philadelphia.)

Organic Chemistry Class.
Mondays and Wednesdays, $10-11$ A. M.

## Subjects of Lectures:

Principles of Classification : the Fatty Series; Aromatic Compounds. Methane and its Homologues, and their Substitution Compounds. Monatomic, Diatomic, Triatomic, and Hexatomic Alcohols. Compound Ethers; Monatomic, Diatomic, and Tetratomic Acids; Aldehydes; Cyanogen; Amines; the Carbohydrates; Artificial Bases. Benzol and its Derivatives. Alkaloids; Amides; Colouring Matters; Albuminoids. Outline of Animal Chemistry.

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

## Chemical Laboratory.

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

Text Book : Macadam's Practical Chemistry.
Quantitative Analysis. - Instruction is provided in Quantitative Analysis, for the benefit of candidates for Honours in Experimental Physics and Chemistry, and also for students who, having taken Practical Chemistry in their Third Year, are desirous of taking it again in
their Fourth Year. Other persons, having a sufficient knowledge of Chemistry. will also be admitted. Instruction is offered not only in General Quantitative Analysis, but also in special work, such as the analysis of Ores, Coal, and other Mineral Substances, Fertilizers, Soils, articles of Food and Drink, Mineral and Household Waters, \&c.

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

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

> X.-BOTANY.

Professor .Geo. Lawson, Ph. D., Lu. D.

Tuesdays and Thursdays, $10-11 \mathrm{~A} . \mathrm{M}$.
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 and Plant Movements. Also Classification, as illustrated by the leading natural orders of North American plants. A Biological Laboratory, in connection with this class, will be fitted up in the new College Building.

Text Book: Goodale's Physiological'Botany (vol. II. of Gray's Botanical Text Book.) Field Book for Summer Work: Gray's Manual.
§II.-THE ACADEMIC YEAR.-The academic year consists of one session. The session of $1887-8$ will begin on Thursday, 6th October, 1887, and end on Wednesday, 26th April, 1888.

The extension of the session of 1888-9 and of subsequent sessions to eight months is under consideration.*
§ 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 $\dagger$ (on first entering the College), (b) entering their names in the Register (annually), and (c) paying the annual Registration fee (§xxI).
(2.) Registered students may on payment of the proper fees ( $\S \times x \mathrm{x}$ ), enter any of the ordinary classes of the College. The Tutorial classes are open to members of the ordinary classes in connection with which they are held ; the Advanced classes, to students who have sufficient knowledge of the subjects taught in them.

[^4](3) Students who are candidates for degrees are known as Undergraduates, others as Geueral Students.
§IV.-DEGREES.-(1.) Three baccalaureate degrees are conferred in the Faculty of Arts, those, viz., of Bachelor of Arts (B. A.), Bachelor of Letiers (B. L.) and Bachelor of Science (B. Sc.)
(2.) Persons who wish to obtain University Degrees must become Undergraduates. Persons of either sex may become Undergraduates by (a) passing either one of the Matriculation Examinations or a recognized equivalent (\$§ vand vi), and (b) matriculating, i. e., entering their names on the Matricula or Register of Undergraduates.
(3.) 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 $\S x$.
(4.) 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 degress at the end of three academic years.
(5.) Undergraduates of other Universities may, on producing satisfactory certificates, be arlmitted 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.
§ V.-FIRST YEAR MATRICULATION EXAMINATION, -(l.) The following are the subjects of this Examination :

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

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

For 1887 : Caesar, Gallin War, Book I. ; or Ovid, Metamorphoses, Book IV., Fabb. 1, 2, 11, 12, 13, 14, 15 ; Book V., Fabb. 1, 6, 7.

For 1888: Caesar, Gallic War, Book I. ; or Virgil, Aeneid, Book I.
For 1889 : Coesar, Gailic War, Books 1I. and III. ; or Virgil, Aeneid, Book I.

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

For 1887 : Xenophon, Anabasis, Book II. or Book III.
For 1888: Xenophon, Anabasis Book III. or Symposium (Wiman's, pub. by J. Allyn, Boston.)

For 1889: Xenophon, Anabasis, Book IV., or Symposium (See above).
French.-Voltaire: Charles XII, Books I and II ; or Scribe, Bertrand et Raton (Comédie).-Questions in Grammar limited to the Accidence, and based upon the passages selected.-Easy English sentences for translation into French.

German.-Adler's German Reader (Appleton \& Co.), Zweiter Abschnitt, 1-4 and 14-17 (inclusive).-Grammar:-First 16 lessons in Otto's German Grammar (omitting the 10th, 11th and 12th lessons).
N. B.-Instead of the books recommended above in Latin, Greek, French and German, candidates may offer equivalents which are not included in the course of study. Such equivalents must have been previously approved by the President.
3. Mathematics.-Arithmetic. Geometry: Euclid's Elements, Books I. and II. Algebra : Simple Rules, and Simple Equations of one unknown quantity, not involving surds.
4. English.-Language: Grammar, Analysis, Writing from Dictation, Composition. History and Geography: Outlines of English and Canadian History, and General Geography.

The above examination may be conducted partly viva voce.
(2.) Candidates for Munro Exhibitions and Bursaries, whose examinations are approved by the Faculty, shall be exempt from further examination for matriculation.
(3.) Candidates taking French or German, and those who wish to offer equivalents, are required to give notice to the President, of their intention to appear at this Examination, at least one week before the day on which it is held, and in giving such notice they must state which of subjects 1 and 2 they take and what equivalents they offer instead of books speciiied above.
(4.) This examination will be held in the College on October 5th-8th, 1887. For the benefit of candidates unable to present themselves on these days, an opportunity will be granted of appearing for examination on November 4th-8th. 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:

[^5]Candidates for $B$. L. must pass in two languages, of which one must be French or German.-Candidates for B. Sc. must pass in one modern language and in Botany.)

Latin.-The ordinary* subjects of the First Year Class, as specified in § I, together with one additional book.

Greek. -The ordinary* subjects of the First Year Class, as specified in § I, together with one additional book.

French.-The subjects of the First French Class, as specified in § I.

German. - The subjects of the First German Class, as specified in $\S \mathrm{I}$.

Botany.-The subjects of the lectures of the Botany Class, as specified in § I.
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 § I.
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)-or the equivalents thereof.
5. Inorganic Chemistry.-The subjects of the First Year Class (§ I). -Candidates may omit this subject ; but in that event they must take it instead of one of the elective subjects in the Third Year.

The above examination may be conducted partly viva voce.
(2.) Candidates who have previously passed in any one or more of the above subjects, or in any portion thereof, either at the Matriculation Examination or at the Sessional Examinations of the First Year, shall be exempt from further examination therein.
(3.) Persons wishing to enter the Second Year must also present themselves for examination in the subjects of the Second Year Entrance Examination (see § x, 2) either on October 12th or on January 4th. But candidates for B. L. are exempted from the examination in Classical Geography, and candidates for B. Sc. from the examination in Classical History and Geography.
(4.) Candidates must give at least one fortnight's notice to the President, of therr intention to appear at this examination ; and in giving such notice they must state in what Latin,

[^6]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 in the College on October 5th-11th, 1887. For the convenience of candidates unable to appear on these days, an opportunity will be granted of appearing for examination on Nov. 4th-8th. But no student will be allowed to enter as an undergraduate at a later date without the special permission of the Faculty.
§ VII.-COURSES OF STUDY FOR DEGREES OF B. A. AND B. L.-The following is a list of the classes which undergraduates are required to attend in the four years of the B. A. and B. L. courses. The details of the subjects studied in these classes, will be found under Courses of Instruction, (\$§ I and xxI ).

## 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 Prefessor considers them fitted.

## Second Year.

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

## Third Year.

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

4-5. Any two of the following*:
a. Greek.
b. Hebrew.
c. French.
d. German.
e. Constitutional History (Law Faculty).
f. Political Economy.
g. Metaphysics.
h. Dynamics.
i. Organic Chemistry.
j. Practical Chemistry.
k. Botany.

Undergraduates are required, on or before the 13 th of October, to submit to the President for approval the names of the two subjects, 4-5, which they may wish to select.

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

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

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

## Fourth Year.

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

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

| $a$. | Greek. | i. | Constitutional Law. |
| :--- | :--- | :--- | :--- |
| $b$. | Hebrew. | j. | International and Crimi- |
| $c$. | French. |  | nal Law. |
| d. | German. | k. | Physics. |
| $e$. | History. | l. | Dynamics. |
| $f$. | Political Economy. | m | Organic Chemistry. |
| g. | Metaphysics. | n. | Practical Chemistry. |
| $h$. | Christian Evidences. | o. | Botany. |

Undergraduates are required, on or before the 13th October, to submit to the President for approval the names of the three subjects $(3-5)$ which they may wish to select.

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

[^7]the Second class of the same subject in the Fourth. Neither the First Year Greek class nor the First German or French class cañ be taken in the Fourth Year without special permission.

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

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

Certificates of attendance on classes in Hebrew and Christian Evidences in any recegnized College will exempt each from one of the three subjects $3-5$. If the Hebrew class be one of 5 hours a week, attendance on it will exempt from two of the said subjects.
§ VIII-COURSE OF STUDY FOR DEGREE OF B. Sc.-
The following is a list of the classes which undergraduates must attend during the four years of the B. Sc. Course. Tha details of the subjects studied in these classes will be found under Courses of Instauction (§ 1).

## First Year.

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

Practical work in Betany will be presoribed for the summer following the First Year.

## Second Year.

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

Thind Year.

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

## Fourth Year.

1. The language taken as subject 1 in the Third Year.
2. Physics.

3-4. Either Advanced Mathematics and Advanced Mathematical Physics or Practical Chemistry and Practical Physics.
5. One of the following:-
a. French.
e. Organic Chemistry.
b. German.
f. Practical Chemistry.
c. History.
g. Metaphysics.
d. Political Economy.
h. Ethics.

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

No class can be taken twice during the Course.
§ IX.-ATTENDANCE.-(1.) Undergraduates are required to attend with regularity the classes of their respective years. Professors shall mark the presence or absence of students immediately before commencing the work of the class, and shall note as absent those who enter thereafter, unless satisfactory reasons be assigned. - The amount of absence as recorded in the class registers, which shall disqualify for the keeping of a Session, shall be determined by the Faculty.
(2.) Attendance on Tutorial Classes is, for the more advanced undergraduates, voluntary; but the Professors in connection with whose classes they are held, have the right of requiring the attendance of undergraduates whom they may consider to need the Tutor's help.
(3.) Undergraduates of the First Year, who may have previously attended one or more of the classes of that year and passed satisfactory examinations in the subjects of them, shall be exempted from attending those classes a second time.
§ X.-DEGREE EXAMINATIONS.-(1.) The examinations which candidates for Degrees are required to pass after matriculation, consist of (a) the Entrance Examinations, and $(b)$ the Sessional Examinations.
(2.) The Entrance Examinations + are held at the beginning of the Session in the Second, the Third, and the Fourth Years of the Course. The subjects of these Examinations in 1887-8 shall be as follows :
$\dagger$ In the event of the lengthening of the Session (See § II.) these examinations will be abolished.

## Second Year.

1. Classical History and Geography.-History of Rome to B. C. 31.-Geography of Italia, Sicilia, Gallia, Hispania.
[^8]Candidates for B. Sc. are exempted from examination in this subject ; candidates for B. L. from the geographical portion thereof.
2. English Literatire. - Macaulay's Essays on Lord Nugent's Memorials of Hampden, Boswell's Life of Johnson, Warren Hastings ; and Lay of Horatius.

## Third Year.

1. Classical History and Geography.-History of Greece to the death of Alexander.-Geography of Græcia, Asia, Africa.

Books Preseribed: Smith's Students' History of Greece ; Tozer's Primer of Classical Geography ; Ginn \& Heath's, or Schmitz's Classical Atlas.

Candidates for B. Sc. are exempted from examination in this subject ; candidates for B. L. from the geographical portion thereof.
2. English Literature.-Byron's Childe Harold (Clarendon (Press edition).

Candidates for Exhibitions and Bursaries who do not select the the department of English and History, may defer the third year entrance examination to the 4th of Jamaary.

## Fourth Year

History.-Hallam's Middle Ages, Chaps. 2, 3, and 4 ; Robertson's Charles V., Introductory Sections 1, 2, and 3.

Candidates for B. Sc. are exempted from this examination.
(3.) The Sessional Examinations are held at the end of the Session * in each of the four years of the Courses in the subjects of the classes of that year, as specified in §§vir and viII. Candidates who wish merely to pass are examined in the ordinary work of the various classes only ; candidates who wish to pass with distinction are in some classes examined in additional work also. -The distinctions awarded are of two grades-First and Seeond Class.-All students are admitted to these examinations, and certificates are issued showing the standing they attain.
(4.) Undergraduates of the First Year, who are exempted by § IX (3), from attendance on one or more classes of that year, shall be exempted also from passing the Sessional Examinations in the subjects of them.

[^9](5.) Undergraduates of the Third and Foarth Years who are exempted from attendance on one or more classes on presentation of certificates from recognized Colleges, shall beexempted from Examination in the subjects of those classes on presentation of certificates of having passed Examinations therein in the said Colleges.
(6.) An undergraduate shall not be allowed as such to enter the classes of any year, unless he has passed all the required Examinations of the previous year.
(7.) If an undergraduate absent himself fiom any University Examination, except for such cause as may be considered sufficient by the Faculty, he shall lose his Session.
(8.) If an undergraduate fail to pass in more than two subjects at any Sessional Examination he shall lose his Session. -In the case of an undergraduate taking a Session a second time the Faculty may remit attendance on classes, the examinations of which he has already passed with credit.
(9) If an undergraduate fail to pass in more than two subjects at the Sessional Examinations of the First Year, he shall be allowed to appear as a candidate at the Second Year Matriculation Examination of any subsequent Session.
(10.) If an undergraduate fail to pass in one or two subjects. at any Sessional Examination, he shall be allowed a Supplementary Examination in such subject or subjects at the beginning of any subsequent Session, on the day fixed for that purpose in the University Almanac. For fee see § xxi.
(11.) If an undergraduate fail to pass in one or more subjects of any Entrance Examination, he shall be allowed a Supplementary Examination in such subject or subjects in the same Session, on the day fixed for that purpose in the University Almanac. For fee see §xxr.
(12) If an undergraduate absent himself from any Entrance or Sessional Examination on the day appointed in the Almanac, for reasons considered sufficient by the Facalty, he shall be allowed to appear for examination on the day fixed in the Almanac for the corresponding Supplementary Examination. For fee see § xxı.
(13.) If an undergrađuate absent himself from a Supplementary Examination for reasons deemed sufficient by the Faculty, he shall be allowed to appear as a candidate at a special Examination, on a day to be appointed for that purpose by the Faculty. For fee see § xxı.
(14.) A second Supplementary Examination in the same Session, in any subject of the Sessional Examinations shall in no case be granted.
(15.) Undergraduates wishing to appear as candidates at any Examination other than Entrance and Sessional Examinations, shall be required to give notice of their intention, to the Secretary of the Faculty, at least one week before the date of such examination.
(16.) 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 commnnication with one another at the Examinations. If a student violate this rule he shall either lose his Session or suffer such penalty as the Faculty may see fit to impose.
§ XI.-DEGREES WITH HONOURS.-(1.) An undergraduate shall be allowed, during the Third and Fourth Years of his Course, to restrict his attention to a more limited range of subjects than that demanded of candidates for an ordinary degree, by entering upon one of the Honours Courses, provided he has either attained a First Class standing at the previous Sessional Examination in the subject corresponding to that of the Honours Course selected and a satisfactory standing in the other subjects of the course, or received the special permission of the Faculty.
(2) Honours Cnurses are provided in the following departments, viz., (1.) Classics, (2.) Mathematics and Physics, (3.) Mental and Moral Philosophy, (4.) Experimental Physics and Chemistry. (5.) English Literature and History. Undergraduates in Arts may become candidates in any one of the above departments ; undergraduates in Letters in any one of departments 2, 3, 4, and 5; undergraduates in Science in either of the departments 2 and 4.
(3.) A candidate for Honours in any of the above departments shall be required to attend the Advanced Classes provided in the subjects of such departments (§ 1), to make progress satisfactory to the Professors who conduct such classes, and to pass the examinations in the subjects of such departments ; and he shall be allowed to omit, from the subjects demanded of candidates for the ordinary degree, certain subjects specified below.
(4.) The examinations for Honours shall be held at the end of the Fourth Session. But a candidate for Honours may defer his examinations in the subjects of his Honours Course until a year after he has passed the Sessional Examinations in
the ordinary subjects of the fourth year ; in which case, however, such candidate shall not be entitled to his Degree until he has passed the Honours Examination.
(5.) A candidate for Honours, who attains a First, or Second Class standing at the examination for Honours, shall obtain the Degree of Bachelor with First or Second Rank Honours in such department.
(6.) A candidate for Honours, who fails to obtain them, shall receive the ordinary degree, if his examinations in the subjects of the ordinary course and in those of the department of Honours in which he has studied, are of sufficient merit.
(7.) Candidates for Honours in Classics may, in each of the third and fourth years, omit any two of the subjects of those years except Latin and Greek; and they shall not be required to pass the Entrance Examination of the Fourth Year.

They shall be examined in the following subjects :

> Latin.--Plautus: Miles Gloriosus.
> Terence: Adelphi.
> Virgil : Geergics, Books I, iv.
> Horace : Epistles, Books I., II. ; Ars Poetica. Juvenal : Satires, viI., viII., xiv.
> Cicero: De Oratore.
> Livy: Books xxı., xxir.
> Tacitus: Germania; Annals, Book II.
> Greek.-Aeschylus: Eumenides.
> Sophocles: Oedipus Rex. Aristophanes : The Knights. Homer: Odyssey, Books v., vi., viI., viII. Thucydides: Book II. Plato: Phaedo. Demosthenes: De Corona. Aristotle: Poetics.

Composition.-Latin Prose.
Philology.-Peile's Introduction to Greek and Latin Etymology. Comparative Philology by Papillon.

Literature.-Mahaffy's History of Greek Literature, the portions bearing on the authors and subjects read in the undergraduate course; Crutwell's History of Latin Literature, selected chapters; Donaldson's Theatre of the Greeks, selected portions.
(8.) Candidates for Honours in Mathematics and Physics may omit in the Third Year any two, and in the Fourth Year any three, of the subjects of those years, except Physics and Dynamics. The Dynamics class must be taken in the Third Year. They shall not be required to pass the Entrance Exam-
ination of the Fourth Year. They shall be examined in the following subjects, viz :

## MATHEMATICS.

Trigonometry. - Angular Analysis; Solution of Spherical Triangles ; Napier's Analogies; with application to Astronomical Problems.

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

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

MATHEMATICAL PHYSICS.
Selected portions of Kinematics, Dynamics of a Particle, Rigid Dynamics, Hydrodynamics, Thermodynamics, and Electrodynamics, illustrating the application of the Higher Mathematics to the study of physical problems.
(9.) Candidates for Honours in Mental and Moral Philosophy may, in each of the Third and Fourth Years, omit any two of the subjects of those years, except Metaphysics and Ethics, both of which must be taken in the Third Year. They shall not be required to pass the Entrance Examination of the Fourth Year. They shall be examined in the following subjects, viz.:

MENTAL PHILOSOPHY.
Descartes' Method and Meditations.
Locke's Essay on Human Understanding: Books II and IV.
Fraser's Selections from Berkeley.
Hume's Treatise on Human Nature, vol. I. (with Green's Introduction).

Kant's Critique of Pure Reason (Stirling's Translation).
Reid's Essays, vi.
Alison's Essays on the Principles of Taste.
Cousin's Philosophy of the Beautiful.
Mill's Logic, Book III, chaps. 8 and 9.
Hamilton's Lectures on Metaphysics and Logic.

## MORAL PHILOSOPHY.

Plato's Republic (Davies \& Vaughan's Translation).
Aristotle's Nicomachean Ethics (Peters' Translation).
Kant's Metaphysic of Ethics and Critique of Practical Reason (Abbot's Translation).

Green's Prolegomena to Ethics.
Spencer's Data of Ethics.
Sidgwick's Methods of Ethics.
A general acquaintance with the History of Philosophy will be expected.
(10.) Candidates for Honours in Experimental Physics and Chemistry may, in the Third Year, omit any one, and in the Fourth Year, any three of the subjects of those years, except Physics, Dynamics, and Organic and Practical Chemistry. They shall not be required to pass the Entrance Examinations of the Fourth Year. They shall be examined in the following subjects :

## EXPERIMENTAL PHYSICS.

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

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

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

## CHEMISTRX.

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, Organio part. Miller's Chemistry, vol. III. Roscoe \& Schorlemmer's Chemistry.

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

Books recommended for qeneral work: Macadam's Practical Chemistry. Fresenius's Qualitative Analysis, Thorpe, or Appleton. Woehler's Mineral Analysis.
(11.) Candidates for Honours in English Literature and History may, in each of the Third and Fourth Years of their course, omit any two of the subjects of those years, except History. They shall be examined on the following subjects, viz. :

## LITERATURE.

(1.) The historical development of the language and literature to the year 1400, including a minute acquaintance with Sweet's AngloSaxon Reader (exclusive of poetical selections), Sweet's First and Second

Middle English Primers, Chaucer's Prologue, Knight's Tale, and Nonne Prestes Tale (Clar. Press Ed.), and Lounsbury's History of the English Language.
(2.) Detailed History of the Elizabethan and early Stuart Literature, including a general acquaintance with the more important works of the period, and an intimate knowledge of the following :-
$>$ Spenser : Faerie Queen, Bk. II.
Marlowe : Doctor Faustus, Edward II.
Greene: Friar Bacon and Friar Bungay.
> Sidney: Apologie for Poetrie.
Hooker: Ecclesiastical Polity, Book I.
Bacon: Advancement of Learning, Select Essays.
Shakespeare : Richard III., Hamlet, Lear, Henry VIII., Two Noble Kinsman.
(3.) A general acquaintance with the genius and work of Robert Browning and a special acquaintance with the following poems:-My Last Duchess, A Woman's Last Word, Confessions, Cleon, Andrea del Sarto, The Bishop Orders his Tomb, An Epistle, A Death in the Desert, Saul, Rabbi Ben Ezra, Dis Aliter Vismum,Pisgah Sights, Abt Vogler, Caliban, Up at a Villa, Amphibian, Caliban on Setebos.

[^10]
## HISTORY.

A minute investigation of English History from A. D. 1603-1689.
Books recommended: Greene's History of the English People, vol. 3; Lingard's History of England, vols. 7-10; Hallam's Constitutional History of England, Chap. VI.-x. ; Ranke's History of England; S. R. Gardiner's Works on this Period; Clarendon's History of the Great Rebellion; Masson's Life of Milton; Carlyle's Life of Cromwell ; Forster's Life of Elliott ; Bayne's Chief Actors in the Puritan Revolution.


#### Abstract

§ XII.-SHORT COURSES OF STUDY FOR GENERAL STUDENTS. - (1.) For the benefit of students who may wish to spend but a short period of time at the University, the Time Table has been so arranged that the following combinations of classes may be made. The details of the subjects studied in these classes will be found under Courses of Instruction, ( $\S \S$ I and $\times \times x$.)


(2.) To students who attend the classes of the following courses with regularity and pass the Sessional Examinations (§x. 3) in the subjects of those courses, certificates will be issued stating the nature of the course pursued and the degree of success attained.
(3.) Two Years Course of Liberal Studies.-First Year. -Two of the three-Latin, French, German; English; Mathematics or History and Political Economy ; Inorganio Chemistry or Botany. Second Year.-Two of the threeLatin, French, German ; English Literature ; Political Economy or Logic ; Physics or Inorganic Chemistry. (The alternative subjects so far as the Time Table may permit.)
(4.) Two Years Course preparatory to study of Medicine or to Chemical work.-First Year.-French or German, English, Mathematics, Botany, Inorganic Chemistry. Second Year.-French or German, English Literature, Physics, Organic Chemistry, Practical Chemistry.
(5.) Three Years Course preparatory to the study of Engineering.-First Year.-French, German, English, Mathematics, Inorganic Chemistry. Second Year.-German, English Literature, Mathematics, Physics, Practical Chemistry. Third Year.-German, Advanced Mathematics, Physics, Dynamics, Practical Chemistry.
(6.) Two Years Course preparatory to Journalistic work.-First Year.-French, English Literature (1st and 2nd year classes), History (3rd and 4th years classes), Logic and Psychology or Political Economy. Second Year.-French, Advanced English Literature, Ethics, Political Economy or Metaphysics, Constitutional History, Constitutional Law.
(7.) Two Years Course preparatory to Entrance upon Commercial work.-First Year.-French, German, English, Mathematics, Chemistry. Second Year.-French, German, English Literature, Political Economy, Physics, Law of Contracts.
§ XIII.- PRELIMINARY (MEDICAL) EXAMINATION IN GENERAL EDUCATION.-For the convenience of students and other persons who may intend to prosecute the study of Medicine and may wish, on going abroad for that purpose, to possess certificates exempting them from the preliminary examination in general education, which is usually required by Medical Schools of good standing, examinations in the following subjects are conducted by the Faculty of Arts, and certificates are issued to those who succeed in passing them :-
(1.) English Language, including Grammar and Composition.
(2.) English History.
(3.) Modern Geography.
(4.) Lativ, including Grammar, Translation from specified authors*, and Translation of easy English sentences into Latin prose (as in Smith's Principia Latina, Part IV., Exs. 1-35t).
(5.) Elements of Mathematics, comprising (a) Arithmeticincluding Vulgar and Decimal Fractions; (b) Algebra-including Simple Equations ; (c) Geometry-including the first three books of Euclid or the subjects thereof.

[^11](6.) Elementary Mechanics of Solids and Fluids, comprising the elements of Statics, Dynamics, and Hydrostatics, as treated in Blaikie's Elements of Dynamicst (Thin, Edinburgh).
(7 and 8.) Any two of the following subjects :
(a) Greek, including Grammar, Translation from specified authors*, and Translation of easy English sentences into Greek prose.
(b) French, including Grammar, Translation from specified authors*, and Translation of easy English sentences into French.
(c) German, including Grammar, Translation from specified authors*, and Translation of easy English sentences into German.
(d) Natural Philosophy, as in Balfour Stewart's Elementary Lessons in Physicst (Macmillan \& Co.).
(e) Logic, as in Jevons' Elementary Lessons in Logic (Macmillan \& Co.).

The above examination satisfies the requirements of the Medical Faculty of the University of Edinburgh.

This examination will be held on the 5 th- 11 th October, 1887, in the College Library. They will be conducted by instructors of the Arts Faculty. Persons who wish to appear as candidates are required to give notice to the Secretary of the Senatus 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.

## § XIV.-MEDALS AND PRIZES.

(The Senate reserves to itself the right of withholding Medals and
Prizes in cases in which sufficient merit is not shewn.)
The Governor-General's Gold Medal, which is offered by His Excellency the Marquis of Lansdowne, GoverrorGeneral 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.

The Governor-General's Silver Medal, which is offered by His Excellency the Marquis of Lansdowne, GovernorGeneral of the Dominion of Canada, will be awarded to the Undergraduate standing highest among those taking Honours in Mental and Moral Philosophy, the winners of other medals being excluded. If there should be no candidate for Honours in this department, it will be given to the Undergraduate

[^12]standing next the gold medallist in some other department of Honours.

The Sir Wm. Young Gold Medal, which is offered by the Hon. Sir William Young, Ex-Chief Justice of Nova Scotia, Ex-Chairman of the Board of Governors, will be awarded to the Undergraduate standing highest among those taking Honours in the department of Mathematics and Physics, the winners of other medals being excluded.

The DeMill Gold Medal, which is provided by the Alumni Association, in memory of the late James DeMill, M.A., Professor of Rhetoric and History, will be awarded to the Undergraduate standing highest among those taking Honours in the department of English Literature and History, the winners, of other medals being excluded.

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

North British Society Bursary.-A Bursary, of the annual value of $\$ 60$, has been founded in connection with Dalhousie College by the North British Society of Halifax, to be competed for at the Sessional Examination of the Second Year's Course in Arts, and held by the successful competitor for two years, namely, during the Third and Fourth Years of the Undergraduate Course in Arts. Candidates must be Undergraduates who have completed two years of the Curriculum, and must be eligible at the proper age, to be members of the North British Society. The next competition will take place in April, 1888.

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

The Avery Prize.-A Prize of the value of $\$ 25$ is offered by Dr. J. F. Avery for competition to the Undergraduates in Arts of the Fourth Year, who are not studying for Honours. It will be awarded to the Undergraduate who stands highest at the Sessional Examinations.

The Early English Text Society's Prize, which is offered annually by that Society, and consists of several volumes
of the Society's publications, will be awarded to the Student standing highest in the subject of Early English Language and Literature at the Examinations for Honours in the department of English Literature and History.

The New Shakspere Society's Prize, which is offered annually by that Society, and consists of several volumes of the Society's publications, will be awarded to the student who stands highest in the subject of the plays of Shakespeare at the Sessional Examinations of the Second Year in English Literature.
§ XV.-MUNRO EXHIBITIONS AND BURSARIES.(1.) The following Exhibitions and Bursaries are offered by Geo. Munro, Esq., of New York, to be competed for at the beginning of the Session of the year 1887-8. viz. :

## 1. Five Junior Exhibitions,

2. Ten Junior Bursaries,
3. Five Senior Exhibitions,
4. Ten Senior Bursaries.
(2.) The Exhibitions are each of the value of $\$ 200$ per annum : the Bursaries are each of the value of $\$ 150$ per annum. Both Exhibitions and Bursaries are tenable for two years.
(3.) The Junior Exhibitions and Bursaries are offered for competition to candidates for matriculation in Arts, provided they have previously neither matriculated* at any University conferring Degrees in Arts, nor appeared as candidates for these Exhibitions and Bursaries more than once.
(4.) The Senior Exhibitions and Bursaries are offered for competition to Undergraduates entering the Third Year of the Arts Course. Candidates must have completed the Second Year of the Arts Course, either at this or at some other University ; but they must not have entered upon the Third Year. They must also have matriculated* within three years or within two years of the date of the competition, according as they may have entered upon their course as undergraduates of the First or of the Second Year, respectively.
(5.) The Junior Exhibitions and Bursaries shall be held during two years, provided the holder ( $a$ ) attend in consecutive years the classes proper to the first and second years of the Arts Course to the satisfaction of the Faculty, Greek being taken as one of the subjects of each of those years, (b) $\dagger$ pass in all the

[^13]subjects of the Sessional Examinations of the First Year, and attain a Second Class standing in at least one of them, and (c) pass either the Degree Examinations (§x), or the Supplementary Examinations of the Second Year.
(6.) 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.
(7.) The Senior Eichibitions and Bursaries shall be held during the third and fourth years of the Arts Course, provided the holder ( $a$ ) attend in consecutive years the classes proper to the third and fourth years of the Arts Course, to the satisfaction of the Faculty, (b) pass in all the subjects at the Sessional Examinations of the third year, and either obtain a Second Class standing in one of them or obtain the favorable report of a Professor on work done in one of the departments of Honours, and (c) pass either the Degree Examinations ( $\S x$ ), or the Supplementary Examinations of the Fourth Year.
(8.) The annual amounts of the above Exhibitions and Bursaries will be paid in three instalments, the first on the 14th October, the second on the first Monday after the Christmas vacation, and the third on the day of tbe 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.
(9.) Candidates are required to make application for these Exhibitions and Bursaries by means of the printed schedule inserted at the end of this Calerdar. These schedules are to be filled up by candidates and sent with the certificates mentioned therein, to the President, so as to reach him on or before September 30th, 1887.
(10.) 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.
(11.) The Faculty shall in all cases decide as to the fulfilment of the above rules and conditions.
(12.) The Examinations for Junior Exhibitions and Bursaries will be held in the College on October 5th-8th, 1887; those for Senior Exhibitions and Bursaries at the same place on October 5th-12th, 1887.
(13.) The subjects of examination for the Junior Exhibitions and Bursaries shall be as follows:

1. Latin.-1887.-Casar, Gallic War, Book I., and Ovid, Metamorphoses, Book IV., Fabb. 1, 2, 11, 12, 13, 14, 15 ; Book V., Fabb, 1, 6, 7. (Ferguson's Ovid, published by Oliver \& Boyd, Edinburgh, contains the prescribed text.)-Grammar: Accidence, Prosody, Scansion of Hexameter Verse. * Text Book: Smith's Latin Grammar. -Composition: Easy sentences to be translated into Latin Prose. * Text Books: Smith's Principia Latina, Part iv., Exs. 1-35, or Arnold's Latin Prose Composition, Exs. 1-9, 21-49.
2. Greek.-1887.-Xenophon, Anabasis, Books II. and III.Grammar: Accidence (omitting Accentuation), chief rules of Syntax. * Text Book: Smith's Greek Grammar.-Composition: Translation of simple sentences such as are found in the English-Greek Exercises in Smith's Initia Graeca, Part I.
3. Mathematics.-Arithmetic : the ordinary rules of Arithmetic, Vulgar and Decimal Fractions, Proportion and Interest.-Algebra: as far as Simple Equations and Surds, with theory of Indices.-Geometry: First, Second and Third Books of Euclid or the subjects thereof.
4. English.-Lanyuage: Grammar, Analysis, Writing from Dictation, Composition.-History and Geography: Outlines of English and Canadian History, and General Geography.

The relative values of these subjects shall be as follows: Classics, 250 ; Mathematies, 200 ; English, 200.
(14.) I. The subjects of Examination for the Senior Exhibitions and Bursaries of $1887-8$, shall be any two of the following groups:
A.-classics.

Latin : Horace, Odes, Book IV. ; Cicero, Selected Letters, (Prichard \& Bernard's Edition).-Composition: An easy English passage on a Classical subject to be turned into Latin Prose. For models see 8mith's Principia Latina, Part v.

Greek : Homer, Odyssey, Book x. ; Herodotus, Book r., §§ 95-216. -Composition: Translation of sentences as in Smith's Initia Graeca, Part 11 .

## B. --Mathematics.

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

Trigonometry: Analytical Plane; as far as and including DeMoivre's Theorem, with its application to the measurement of Circular Ares, and the solution of the equation $x n= \pm 1$. -Spherical ; as far as and including Napier's Rules for the solution of Rightangled 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 Sectiens :-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.)

[^14]The Examinations will not be confined to the text of the books mentioned, or of any others, but will include Exercises and Problems on the principles laid down in common by all standard treatises on the above subjects.
C.-ENGLISH AND history.

English.-Lounsbury's History of the English Language, (published by Henry Holt \& Co., N. Y.), to end of Part I; Spenser's Faerie Queen, Book I, (Clarendon Press Edition) ; Shakespeare's Julius Cæsar, Othello, (Rolfe's Edition, Harper Bros.) ; Milton's Areopagitica, (Clarendon Press) ; Byron's Childe Fiarold, (Clarendon Press.)

Classical History and Geography.-History of Greece to the death of Alexander. Geography of Grecia, Asia and Africa.

Text Books: Smith's Students' Greece; Tozer's Prin:er of Classical Geography.
Candidates shall be required to present themselves for examination in two of the above groups- $A, B, C$. They may select any two of these groups ; but they will not be allowed to present themselves for examination in all three.

The relative values of the three groups will be the same.
Candidates must give notice to the President, of the groups in which they intend to present themselves for Examination.
2. The subjects of Examination for the Senior Exhibitions of $1888-9$, shall be any two of the following groups :
A.-CLASSICS.

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

Greek : Herodotus, Book in.-Composition : Translation of simple passages. (For models, see Sidgwick's First Greek Writer.)
B.-Mathematics.

The subjects specified in (14) 1. of this section.
C.---ENGLISH AND history.

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

Classical History and Geography: The subjects specified in 14 (1) of this section.
§ XVI.-RESIDENCE.-All students, not being students of the Halifax Medical College, are required to report their places of residence to the President on or before the day appointed in the University Almanac.

Persons who wish to take such 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.
§ XVII.-CHURCH ATTENDANCE.-All students under twenty-one years of age, not being students of the Halifax Medical College and not residing with parents or guardians, are required to report to the President on or before the day appointed in the University Almanac, the churches they intend to make their places of worship during the Session. Intimation will be made to the various clergymen of the city, of the names and addresses of the students who have chosen their churches as places of worship.
§ XVIII.-DEGREE OF MASTER OF ARTS.-A Bachelor of Arts, of at least three year's' 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 Senate. The thesis must be handed in on or before 1st March. For fee see § xxi.
§ XIX.-ADMISSION AD EUNDEIM GRADUM.-Bachelors or Masters of Arts, who have received their degrees in course at Universities approved by the Senate, shall be admitted ad eundem gradum in this University, on producing satisfactory proof of rank and character.-For fee see $\S$ xxi.
§ XX.-ACADEMIC COSTUME.-(1.) Bachelers and Masters of Arts and Bachelors of Science of this University, shall be entitled to wear gowns, of black stuff, and houds. The distinctive part of the costume is the hood. The folluwing are the kinds of hood appointed for the parious degrees :-
B. A.-Black stuff lined with white silk and bordered with. white fur.
M. A.-Black stuff lined with crimson silk.
B. Sc.-Black stuit, with a lining of white silk, bordered with crimson silk.
B. L.-Black stuff, with a lining of white silk, bordered with light blue sirk.
(2.) Successful candidates for these degrees shall be required to appear at Convocation in the proper academic costume, to have the degrees conferred upon them. Degrees will be conferred in the absence of the candidate only by special permission of the Senate.
§ XXI.-FEES.-(1.) Fees are payable by students for Registration, for the use of the Gymnasium, for classes attended, and for certain examinations. They are payable in advance.

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

The following is a statement of the fees payable by students generally, and of the special privileges granted to undergraduates :
Registration Fee, payable annually by all students* $\$ 200$
Gymnasium Fee, payable annually by all male students attending more than one class, except registered students of the Halifax Medical College
Fee for each class attended, per Session $\dagger$ (except the Practical Chemistry Class)

600
Fee for Practical Chemistry Class, for every three months of practical work in the Laboratory.

600
Supplementary Examination Fee, payable on giving the notice required by $\S \times$. ( 15 )

200
Special Examination Fee ................................................ 200
Preliminary (Medical) Examination in general Education.... 1000
Undergraduates shall in general pay one fee of six dollars to each Professor whose classes they may attend as parts of the ordinary course; but in the case of the Professors of Classics and Mathematics fees shall be paid in both the first and the second years of the course, in the casy of the Professor of Modern Languages fees shall be paid twice be undergraduates taking either one language during more than two years or two languages for two years, and in the case of the Professor of Chemistry, a fee of $\$ 6.00$ per session shall be paid for Practical Chemistry by undergraduates taking that subject.-No fees are required for the Tutorial classes in Classics and Mathematics.-A candidate for Honours shall pay a fee of $\$ 6.00$ to each Professor whose Honour classes he may attend.

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

Fee for the B A. or B. L. or B. Sc. Diploma, which is payable by candidates before the Sessional Examinations of the Fourth Year, and will be returned in case of failure.... \$

Fee for B. A. or M. A., (ad eundem gradum)............... 1000

[^15]
## faculty of fato.

The Peesident, (ex officio).<br>Professors: Weldon, Russell,<br>Lecturers: Shannon, Thomson, Graham, Sedgewick, Payzant, Harrington.<br>Dear of the Facalty: Professor Weldon. Secretary of the Faculty: Professor Russell.

## § XXII.-COURSES OF LECTURES.

The following courses of lectures, to be given in the Session wof 1887-8, will begin on the 7th September, 1887, and end on the 17 th February, 1888.

> CONSTITUTIONAL AND INTERNATIONAL LAW.
> (George Munro Professorship.)
> Professor
> R. C. Weldon, M. A., PH. D.
> Mondays and Wedneslays, 12 . to 1 P. M.

Subjects of lectures:
The Written Code of the Constitution : Magna Carta, Petition of Right, Habeas Corpus Act, Bill of Dights, Act of Settlement. Law of Parliament. Seleet eases in Constitntional Law. British North America Act.

## Constitutional History.

Tuesdays and Thursdays, 12 M. to 1 P. M.
Subjects of lectures :
Anglo-Saxon Royalty. The Judicial System of the Anglo-Saxons. The Witenagemote. Feudalism in England. Origin and Growth of the two Houses of Parliament. Drigin and Development of Trial by

Jury. The Royal Prerogrative. 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 Rills.

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

## Conflict of Laws.

$$
\text { Thursdays, it A. M. to } 12 \mathrm{M} \text {. }
$$

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

Text Book: Dicey's Domicil:

## International Law.

$$
\text { Fridays, } 12 \mathrm{M} . \text { to } 1 \mathrm{P} . \mathrm{M} \text {. }
$$

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

Text Book : Woolsey's International Law.

## CRIMES.

Lecturer

$$
\text { Tuesdays, } 11 \text { A. M. to. } 12 \text { M. }
$$

## Subjects of lecture :

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

Text Book: Stephen's Digest of Criminal Law.

# CONTRACTS AND COMMERCIAL LAW. <br> Professor <br> $\qquad$ B. Russell, A. M. 

## Elementary Law of Contract.

Wednesdays and Fridays, 11 A.M. to 12 M.

## 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. Specialities. Statutory requirements as to validity or authentication of contracts; Statute of Frauds. Causes vitiating agreements ; mistake, fraud, duress, \&c.; contracts void on grounds of public policy, illegality, \&c. Discharge of contracts, rescission, performance, payment, release, merger, \&c. Leading cases.

Text Book: Finch's Cases.
Negotiable Instruments.
Wednesdays and Fridays, 10 to 11 A. M.
[1887-88.]
Subjects of lectures:
Formal Requisites. Consideration. Indorsement and transfer. Real and personal defenses. Over-due paper. Notice of Dishonour. Protest. Bill or note. Bonds, Debentures, \&c.

Text Book: Ames' Select Cases.

## Sales and Commercial Agency.

$$
\text { Wednesdays and Fridays, } 10 \text { A.M. to } 11 \text { A.M. }
$$

[1888-89.]
Subjects of lectures:
Capacity to buy and sell. Execated and executory contracts of sale. Statute of Erauds. 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. Commercial agency.

Text Book: Benjamin on Sales.

## REAL PROPERTY.

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

$$
\text { Mondays, } 3.30 \text { to } 4.30 \text { P. M. }
$$

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: William' Real Property, and Tudor's Leading Cases.

## CONVEYANCING.

Lecturer
Mr. Thomson, Q. C.
Mondays, 3.30 to 4.30 P. M.
Subjects of lectures :
Real Estate ; Contingent remainders; Rule in Shelley's Case ; Statutes of Uses; Springing and Shifting Uses; Executory Devises; Statute of 13 Eliz. and 27 Eliz. ; Statute of Limitations; Feoffments ; Bargain and Sale; Lease and Release; Mortgages.

## INSURANCE.

Lecturer $\qquad$ Mr. Graham, A. M., Q. C.
Tuesdays, 8 to 9 P. M.
Subjects of lectures:
Parties to and Agents for Marine Insurance ; The Policy ; Durability ; Misrepresentation; Concealment; Warranties; General and Particular Average, Total Loss; Abandonment.

Text Book: Arnould.
EQUITY JURISPRUDENCE.

Mondays and Thursdays, 4.30 to 5.30 P. M.
Subjects of lectures:
Trusts, Mortgages, Fraud, Mistake, Specific Performance of Contracts, Administration of Debts and Assets. Election, Account; Discovery, Injunction.

Text Book: Smith, H. A.

## TORTS.


Fridays, 4.30 to 5.30 P. M.
Subjects of lectures:
Definitions. Torts considered with reference to Crimes and Contracts. Deceit. Slander and Libel. Malicious Prosecution. Conspirary. 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.

## PARTNERSHIPS, AGENCY, AND COMPANIES.

Lecturer $\qquad$ Mr. Harringtox, Q. C.

Thursdays, 4.30 to 5.30 P. M.
[1887-88.]
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.
Thursdays, 4.30 to 5.30 P. M.
[1888-89.]
Subjects of lectures:
Nature of Proof, Production and Effect of Evidence, Relevancy. Instruments of Evidence.

Text Books: Greenleaf on Evidence : Judicature Act and Rules.
§ XXIII.-THE ACADEMIC YEAR.-The academic year consists of one Session. The Session of 1887-8 will begin on Tuesday, 6th September, 1887, and end on Tuesday, 28th February, 1888.
§ XXIV.-ADMISSION OF STUDENTS.--(1.) Students may enter the University by (a) furnishing satisfactory references or certificates of good moral character, (b) entering their names in the Register, (c) paying the annual Registration Fee.
(2.) Registered students may, on payment of the proper fees, (see page 18), enter any of the classes of the University.
(3.) Students who wish to obtain University Degrees must, become undergraduates. They may become undergraduates by (a) passing either one of the Matriculation Examinations or a recognized equivalent, and (b) matriculating, i.e, entering their names on the Matricula or Register of Undergraduates.
(4.) Students who are not undergraduates are known as General Students.
§ XXV.-DEGREE OF BACHELOR OF LAWS-(1.) Candidates for the Degree of LL. B. are required to pass the Matriculation Examination or a recognized equivalent, and to pass the Sessional Examinations in the subjects of the three years course of study.
(2.) Undergraduates of other Law Schools may, on producing satisfactory certificates of standing, be admitted to similar standing in this Law School if, on examination, they are found qualified to enter the classes proper to their years. But if their previous courses of study have not corresponded to the course on which they enter in this University, they may be required to take extra classes.
(3.) Graduates in Arts who have taken the classes of Constitutional History, Constitutional Law and Contracts as parts of their Arts Course, shall be allowed to graduate in two years from the date of their entering upon the Law Course, provided they take in those years all the other classes specified.
§ XXVI.-MATRICULATION EXAMINATION.-(1.) Candidates for entrance into the First Year of the Course shall be examined in the following subjects, except in cases in which certain Examinations mentioned below shall have been already passed :

Classics.-Xenophon-Anabasis, Books one and two. CiceroThe 1st and 4th Orations against Catiline. Virgil-Æneid, Books one and two. Translation from English into Latin. Latin Grammar.

Mathematics.-Arithmetic ; Geometry-Books, ono, two and three of Euclid.

English.-A paper on English Grammar, Composition.
History and Geography.-English History ; Geography, North America and Europe.

## Elements of Book-keeping.

Students may substitute French for Greek.
(2.) Persons desirous of appearing as candidates at this examination must give notice to the Dean of the Faculty on or before August 24th, 1887 ; and they shall be required to pay a fee of $\$ 5.00$ on the morning of the Examination.-The Examination will be held next Session on Tuesday, September 6 th, at 10 o'clock, A. M.
(3) Graduates and Undergraduates in Arts of any recog. nized College or University, and articled clerks or law students who have passed the preliminary law examinations in any of the Provinces of the Dominion of Canada, or in Newfoundland, shall be admitted to the standing of Undergraduates of the First Year in the Faculty of Law, without passing any examination.

## § XXVII.-COURSE OF STUDY FOR DEGREE OF Ll.B.

First Year.

| 1. Real Property. | 3. | Contracts. |  |
| :--- | :--- | :--- | :--- |
| 2. | Crimes. | 4. | Torts. |

5. Constitutional History.

Second Year.

1. Equity.
2. Evidence.
3. Sales and Commercial

Agency.
4. Constitutional Law.

## Third Year.

1. Conflict of Laws.
2. International Law.
3. Insurance.
4. Statutes affecting Real Estate and Couveyancing.
5. Partnership, Agency, Companies.
6. Negotiable Instruments.

Undergraduates are required to attend with regnlarity the elasses 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 very little advantage from the lectures. The Course having been very considerably enlarged, the Faculty apprehend that students who are doing regular office work during Session, will find it quite impossible to pass the required examinations.
§ XXVIII.-SESSIONAL EXAMINATIONS. - (1) The Sessional Examinations will begin next Session on February 20th, 1888.
(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 axcluded from the S'essional Examinations of the Session, and such other penalty shall be imposed as the Faculty may determine.
(3.) If an Undergraduate fail to pass in any subject or subjects of the Sessional Examinations, he shall be allowed a Supplementary Examination in such subject or subjects at the beginning of any subsequent Session.
(4.) Undergraduates who wish to present themselves at a Supplementary Examination, must give notice to the Dean of the Faculty on or before the first Tuesday in October.
(5.) The Supplementary Examination for the present year will begin September 6th, at 10 o'clock, A.M. Fee $\$ 5.00$ payable on the morning of the Examination.
§ XXIX.-MOOT (IOURTS.-Moot courts will be held every fortnight, and will be presided over by some member of the Faculty. Every candidate for a degree shall be required to take part in arguments at the Moot Court. The senior counsel on either side shall be required to file briefs with the Dean before noon of the day preceding that on which the case is argued. A record will be kept of the values assigned to the arguments made, and these values will be considered by the Faculty in recommending a candidate for his degree.

In addition to the Moot Courts under the supervision of the Faculty, a voluntary Moot Court has been organized by students of the First Year, presided over by young barristers or by students of the Third Year.
§ XXX.-MOCK PARLIAMENT.-The students have organized a Mock Parliament for the discussion of legal and constitutional questions. This Parliament is largely attended, and is found to be of great utility.
§ XXXI.-ACADEMIC COSTUME.-Bachelors of Laws shall be entitled to wear gowns and hoods. The gowns shall be similar to those worn by Barristers-at-law. The hoods shall be of black silk stuff with a lining of white silk bordered with gold-coloured silk.
§ XXXII.-PRIZES.-The Boak Prize: A prize of the value of $\$ 15.00$ is offered by H. W. C. Boak, Esq., Ll.B., to that student of the Second Year who, on the last day of the Sessional Examinations, hands to the Dean the best Note Book of Lectures on the Conflict of Laws.
§ XXXIII.-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.

In addition to some valuable gifts of books by Sir Adams Archibald, M. B. Daly, Esq., Hon. A. G. Blair, Q. C., Henry Pryor, D. C. L., and others, the following gifts in money have been made to the Law Library:

| Robert Sedgewick. | 6000 | ton |
| :---: | :---: | :---: |
| R. C. Weldo | 50000 | Hon. S. L. Shannon...... 12500 |
| B. Russell. | 40000 | J. G. MacGregor. . . . . . . . 10000 |
| J. Y. Payzant | 40000 | J. J. Stewart............. 10000 |
| W. Graham | 40000 | Hon. R. Boak. . . . . . . . . 10000 |
| James Thomson. | 27500 | W. J. Stairs. . . . . . . . . . 10000 |
| Sir William Young | 20000 | R. I. Hart............. . 10000 |
| Hon. J. S. D. Thom | 20000 | Doull \& Boak . . . . . . . . . . 10000 |
| H. McD. Henry |  | Hon. J. N. Ritchie...... 100 |

and subscriptions less than $\$ 100$ each, formerly acknowledged, amounting to $\$ 780$.

The Law School is further indebted to the late Sir William Young for a large gift appropriated to the printing, publishing and distribution of 2000 copies of the Inaugural Addresses delivered at the opening of the School.

During the year a valuable set of the Annual Acts of P. E. Island has been given by D. A. McKinnon, Esq., of Charlottetown.
§ XXXIV.-FEES.-The following are the fees payable by Students of the Faculty of Law. They are in all cases payable in advance.

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

Students are required to sign the University Register and pay their Class Fees on Wednedsay, September 7th, at 10 A.M., in the office of the Law School.

Registration Fee, payable by all Students.................... \$ 200
Fee for each class attended, per Session, payable by general students

1000
Fee for the classes of the First Year, payable by undergraduates 3000
Fee for the classes of the Second Year, payable by undergraduates 3000
Fee for the classes of the Third Year, payable by undergraduates 3000
Fee for Ll. B. diploma, which is payable before the final examina-
tion, and will be returned in case of failure................ 1000
Fee for the Matriculation Examination........................... 500
Fee for the Second Year Matriculation Examination .............. 1000
Fee for the Supplementary Examination......................... 500
Students of any year are permitted to attend lectures in the subjects of an earlier year without extra charge.

## Firstitutions.

## THE UNIVERSITY LIBRARY.

The General †Library consists of about 2000 volumes, selected to meet the wants especially of students of the Faculty of Arts. It has no endowment funds, and its revenue is derived from the Registration Fees of Students of the Faculty of Arts, from fees for Supplementary and Special Examinations, and from fines.

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

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

During the past year, 321 volumes, exclusive of pamphlets, calendars, etc., have been added to the Library. The following have been presented:
Encyclopædia Britannica, vols. xix.,
xx., xxi..................... by R. Sedgewick, Esq., B.A., Q.C. Sayce's Herodotus, Books i.-iii..... by A. M. Morrison, Esq. Die Gartenlaube (1864) .............. by Professor Leichti.

[^16]Schrevelii Græco-Latinum et Latino-
Græcum Lexicon ................ by Professor MacGregor,
Parkhurst's Hebrew and English Lexicon

II
Parkhurst's Greek Lexicon to New Testament
11

Gesenins, Hebre T .................
Gibb's Gesenius' Hebrew Lexicon. . . .
Hebrew Grammar...................
Moses Stuart's Course of Hebrew
Study .............................
111
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Lodge's Elementary Mechanics ..... Ueberweg, translated by T. M. Lindsay


Proceedings of the Royal Society of Canada, vols. i., ii ............
Adam Smith's Wealth of Nations...
Causes of the AfghanWar (1875)..
Pamphlets on Parliamentary Reform, published in 1831, bound in one volume
by Professor Alexander.
Dalhousie Gazette, several missing numbers
.by Professor Alexand
Blaydes' Sophocles' Ajax
$" 11$
$" 1$

Browning: Select Poems
" " "

General Sir Isaac Brock, K. B..
" "
Canniff's Settlement of Upper Canada

Clough on Mixed Languages..... by Professor Seth.
Peile's Introduction toGreek and Latin
Etymology
Cæsar, Bellum Gallicum, bk. v. (Colbeck) . . . ................ .by Macmillan \& Co., London, G. B.
Cornelius Nepos (Cooke).
Juvenal's Satires (Hardy) ............. "

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Ovid's Metamorphoses, xiii., xiv. (Simmons)
" "

Tacitus' Histories, Books i., ii., (Goodley).
" "

Latin (Cæsarian) Prose (Simpson)... " "
Latin Prose (Potts).................. "
Hints towards Latin Prose Composition (Potts)
" "
Eschylus' Prometheus Vinctus (Stephenson).
" "

Demosthenes' First Philippic(Gwatkin)
Euripedes' Medea (Verral)
" "

Differential Calculus (Edwards) ..... "" " "
Differential and Integral Calculus (Greenhill)
" "

Conic Sections (Smith)............ " "
Spherical Trigonometry, two copies, (McClelland \& Preston)
" "

Higher Trigonometry (Lock)
" 1
Elementary Trigonometry (Lock).
" "
Elementary Algebra (Hall \& Knight)
" "

Differential Equations (Forsyth) ... by Macmillan \& Co., London, G. B.
Euclid, Pt. i. (Hall \& Stevens)...... " "
Elementary Practical Physics (Stewart
\& Gee) . . . . . . . . . . . . . . . . . . . . . .
Elementary Statics (Greaves).........
Units and Physical Constants (Everett)
Chemical Arithmetic (Lupton)......
" "

Molière's L'Avare (Moriarty) .......
" Les Femmes Savantes
(Eugène-Fasnacht) .............
Molière's Le Misanthrope (Eugène-
Fasnacht . . . . . . . . . . . . . . . . . . . . .
Progressive French Course ( 3 vols.) (Eugène-Fasnacht) $\qquad$ " "
$\square$ " "
acine's Britannicus (Pellissier).... $\square$
French Readings from Roman History (Colbeck)
"

Goethe's Faust (Jane Lee) ........... " "
Schiller's Maria Stuart (Sheldon).... " "
Progressive German Course, 2 vols. (Eugène-Fasnacht)

II 11
Johnson's Lives of the Poets (Matthew
11
Arnold ..........................
" "
Our National Insitutions (Anna
Buckland)
II
11
Collections of the Nova Scotia Historical Society for 1884, -by the Society.
Proceedings and Transactions of the Nova Scotia Institute of Natural Science (1885) ; and
Proccedings and Transactions of the Nova Scotia Institute of Natural Science, vol. vi. (1884-85), -by the Institute.
Proceedings of the Royal Society of Canada, vol.iii.,-by the Society.
Canadian Economics,-by the Montreal Committee of British Association.
Summary Report of the operations of the Geological and Natural History Survey to Dec. 31st, 1885 ; and
Report of the Geological and Natural History Survey of Canada, vol. i., (1885) with accompanying maps; and
Descriptive Catalogue of a Collection of the Economic Minerals of Canada, -by the Director of the Survey.
Smithsonian Reports for 1883 and 1884 (3 volumes), -by the Institute.
Journals of the House of Commons,-by the Dominion Government.
Report of the Superintendent of Education for Manitoba,-by the Superintendent.
Census of the North-West Territories (1884-85), -by the Department of Agriculture.
Report of the Fruit-Growers' Association and International Show Society of Nova Scotia, -by the Association.
A number of pamphlets on Local Government in Ireland,-by F. B. Crofton, Esq.
Local Government in Canada,-by J. G. Bourinot.
Dalhousie Gazette, from 1867 to 1887,-by Editors.
Dalhousie Gazette, several missing numbers,-Geo. Patterson, B. A.
Preshyterian Witness, 37 volumes, -by Dr. W. B. McNutt, San Francisco.

Calendars, Registers, and similar publications from the following Corporations :-

Acadia College ;
Bryn Mawr College ;
Cornell University;
Durham University ;
Glasgow University ;
JohnHopkins University ;
L'Academie Commerciale Catholique de Montreal ;
Laval University ;
Lehigh University ;
Massachusetts Institute of Technology ;
McGill College ;
Michigan University ;
Missouri Agricultural College;
Mt. Allison College ;
Queen's University ;
St. Francis Xavier College ;
Toronto University ;
Trinity (ollege (Toronto):
University College (Bristol)
University College (Toronto).

## THE UNIVERSITY MUSEUM.

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

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

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

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

[^17]
## 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 admitced to the classes, on payment of a fee of three dollars.

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

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

| 882-3-Gold Badge. <br> Silver Badge | H. W. Rogers. W. B. Taylor. |
| :---: | :---: |
| 1883-4-Gold Badge | W. B. Taylor. |
| Silver Badge | A. W. Lewis. |
| 1884-5-Gold Badge | A. W. Lewis. |
| Silver Badge | A. M. Morrison. |
| 85-6-Gold Badge. | A. M. Morrison. |
| Silver Badge | F. J. Stewart. |
| Special Prize | J. J. Buchanan. |
| 86-7-Gold Badge . | J. J. Buchanan. |
| Silver Badge | V. G. Frazee. |

## Anibucsity Cists.

DEGREES<br>Conferred April 27 th, 1887.

## MASTERS OF ARTS.

John William McLennan, b.a., b.D..... Sydney, C. B.
'George Gedite Patterson, B.A......... New Glasgow.

## BACHELORS OF ARTS.

- James Jost Büchanan . ...................... Sydney, C. B.

William Somimerville Calkin......... . . Truro.
William Robert Campbell ................. E. Riv., St. Mary's, Pictou.
Victor Edwin Coffin ... .................. Mount Stewart, P, E. I.
Frank Harvey Coors ..... ................ Milton, Queens Co.
James Edward Creighton.................. West River, Pictou Co.
Antotnette Forbes......................... Little Harbour, Pictou Co.
Donald Fraser ........ ................... . Pictou.
Malcolm Janes McLeod . . . . . . . . . . . . . . . . Belfast, P. E. I.
'Charlotte Mary MeNeill................. . Charlottetown, P. E. I.
William Graham Putnam ................. Maitland, Hants Co.
Henry Curtis Shaw...................... . Stanhope, P. E. Island.
James Curtis Shaw ....................... Stanhope, P. E. I.
Alexander Forrester Stewart ......... Pictou.
BACHELOR OF LETTERS.
Eliza Ritchie...... . . ...................... Halifax.

## BACHELORS OF LAWS.

Titt:s James Carter. .......................... Point deBute, N. B.
.Andrew Cluney............ . . . . . . . . . . . . . Halifax.
Frederick William Hanright, b.a..... Windsor.
Charles Wilkins Lane .....................Truro.
William Alexander Lyons. . . . . . . . . . . . Halifax.
Edward Mortimer Macdonald.......... Pictou.
Donalid Alexander Mackinnon. . . . . . . . . Charlottetown, P. E. I.
Frank Arthur McCully, b.A............ . Sussex, N. B.
Henry Francis McLatchy................. Hillsbero, N. S.
Henry Wyckoff Rogers.................. . . . Amherst.
Joseph Ambrose Russell.................... Newcastle, N. B.
Walter Kendall Thomson................... Halifax.

## GENERAL PASS LIST.

(Coptaining 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: Buchanan, J. J.; Calkin, W. S. ; Campbell, W. Rir ; Coffin, V. E. ; Coops, F. H.; Creighton, J. E. ; Forbes, Antoinette ; Fraser, D. ; McLeod, M. J. ; McNeill, Charlotte M. ; Putnam, W. G. ; Shaw, H. C. ; Shaw, J. C. ; Stewart, A. F.

Third Year: Clark, D. McD. ; Fulton, W. H. ; Grant, D. K. ; Johnson, G. M. ; Macdonald, W. ; Mackay, H. M. ; McKenzie, W. J. ; McLennart, S. J.; McLeod, G. ; MacLeod, A. W. ; Matheson, J. A. ; Marrison, A. M. ; Robertson, T. R. ; Soloan, D. M. ; Stewart, F. I. ; SutherIand, J. S.

Second Year: Brown, E. N.; Fraser, A.; Fraser, J. K. G.; Frazee, V. G. ; Fulton, Ed. ; Henry, J. K. ; Howatt, C. A. ; Kennedy, J. ; Laird, Alex. ; Laird, A. G. ; McDonald, R. J.; McKay, D. O. ; Paton, V. J. ; Putnam, H. ; Smith, E. B.

First Year: Campbell, D. F. ; Chapman, A. E. ; Cogswell, G. A. ; Fisher, J. M. ; Fulton, Eben. ; Gardner, N. H. ; Grierson, R. ; Lewis, E. W. ; McCallum, H. J.; McKinnon, J. A.; Mackintosh, D. C.; McLean, J. N. ; MacLeod, F. J. ; Miller, G. ; Murray, N. F.; Rowlings, G. R. ; Schurman, G. W. ; Trefry, J. H.

For B. L. Degree.
Focrth Year: Ritchie, Eliza.

## FACULTYOFLAW.

For LL. B. Degree.
Third Year: Carter, T. J. ; Cluny, A. ; Hanright, F. W. ; Lane, C. W.; Lyons, W. A. ; McDonald, E. M. ; MacKinnon, D. A.; McCully, F. A. ; McLatchy, H. F. ; Rogers, H. W. ; Thomson, W. K. ; Russell, J. A.

Second Year: Armstrong, E. A. ; Campbell, J. R. ; Jones, H. T. ; MacDougall, J. A.; MacKay, A. A. ; Magee, E. A. ; McCready, C. A.; MeImnis, H. ; McLennan, D. ; Morrison, A.

First Year: Allison, E. P. ; Cummings, S. W. ; Dennison, H. L. ; Forsyth, G. O. ; Gray, G. P. ; McNeil, A. H. ; McLeod, L. M. ; Nicolson, C. B. ; Patterson, G. G. ; Ross, H. T. ; Tobin, T. A.

## HONOURS, MEDALS, PRIZES, HXHIBITIONS AND BURSARIES, 1886-87.

## HONOURS.

Classics.-First Rank-Shaw, J. C. Second Rank-Coops, F. H. Mathematics and Physics.-First Rank-McLeod, M. J.
Mental and Moral Philosophy.-First Rank-Creighton, J. E. ; Ritchie, Eliza. Second Rank-Buchanan, J. J.
English Literature and History. - First Rank-Coffin, Y, E.; McNeill, Charlotte M. Second Rank-Shaw, H. C.

## MEDALS.

The Governor-General's Gold Medal.-Shaw, J. C.
The Sir Wm. Young Gold Medal.-McLeod, M. J.
The Governor-General's Silver Medal.-Creighton, J. E.
The DeMill Gold Medal.-Coffin, V. E.

## SPECIAL PRIZES.

Waverley Prize.-Laird, A. G.
Avery Prize.-(Calkin, W. S. ; Stewart, A. F.)
Early English Text Society's Prize.-McNeill, Charlotte M. New Shakspeare Society's Prize.-Henry, J. K.
Boak Prize. - McCready, C. A.

## SENIOR MUNRO EXHIBITIONS.

(1) McLeod, G.
(3) Stewart, F. I.
(2) Sutherland, J. S.
(4) Mackay, H. M.
(5) Morrison, A. M.

## SENIOR IUUNRO BURSARIES.

(1) Fulton, W. H.
(2) Soloan, D. M.
(3) Clark, D. McD.
(4) Robertson, T. R.
(5) Johnson, G. M.
(6) McDonald, W.
(7) Grant, D. K.
(8) McLennan, S. J.

## JUNIOR MUNRO EXHIBITIONS.

(1) McCallum, H. J. (3) Schurman, G. W.
(2) Mackintosh, D. C. (4) Gardner, N. H.
(5) McLeod, F. J.

## JUNIOR MUNRO BURSARIES.

(1) McLean, J. N.
(2) Campbell, D. F
(3) Grierson, R.
(5) Fisher, J. M.
(6) Cogswell, G. A.
(4) Lewis, E. W.
(7) Rowlings, G. R.
(8) Fulton, Eben.
(9) Murray, N. F.

EXAMINATIONS, 1886-7.

## FACULTY OF ARTS.

## MATRICULATION EXAMINATIONS.

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

For B. A. Course.
First Year.-Campbell, D. F.; Chapman, A. E.; Cogswell, G. A. ; Fisher, J. M. ; Fraser, J. T. ; Fullerton, C. P: ; Fulton, Ehen ; Grierson, R. ; Hamilton, Bessie L. ; Lewis, E. W. ; McCallum, H. J. ; McKinnon, J. A. ; Mackintosh, D. C.; McLeaa, J. N. ; McLennan, A. K. ; McLeod. F. J. ; McMillan, J. H. ; Macrae, A. O. ; Millar, Geo. ; Murray, N. F. ; Gardner, N. H.; Rattee, E. J. Rowlings, G. R. ; Schurman, G. W. ; Trefry, J. H.

Second Year.--Brown, E. W.
For B. Sc. Course.
First Year.-Forbes, W. J.

# ENTRANCE EXAMINATIONS. 

(Names in order of merit.)

## CLASSICAL HISTORY AND GEOGRAPHY.

Third Year: Class I.-Sutherland, J. S.; McLeod, G. Class 1r.-Clark, D. McD. Passed.-Grant, D. K. ; McLemnan, S. J.; Morrison, A. M ; Robertson, T. R. ; Soloan, D. M. ; Stewart, F. I. ; Matheson, J. A.

Second Year: Class I.-Laird, A. G. ; Henry, J. K. ; Putnam, H. ; (Laird, Alex ; McKay, D. O.) Class II.-Frazee, V. G.; Howatt, C. A. ; Kennedy, J. ; Fulton, Ed. Passed.-Burkitt, R. ; Fraser, A. ; Fraser, J. K. G. ; McDonald, R. J.

## ENGLISH LITERATURE.

Third Year: Class I.-Stewart, F. I.; McLeod, G.; Sutherland, J. S. ; Soloan, D. M. Class II.-(McDonald, Wm. ; Morrison, A. M. ; Robertson, T. R.) Mackay, H. M. Pcussed.-Allisen, E. P. ; Brown, W.; Clark, D. McD. ; Fulton, W. H. ; Grant, D. K. ; McLennan, S. J. ; McLeod, A. W. ; McKenzie, W. J. ; Matheson, J. A.

Second Year: Class I.-(Laird, A. G. ; Fulton, Ed.) ; Frazee, V. G.; Laird, Alex.; (Macdonald, R. J. ; Putnam, Homer.) Class II.Henry, J. K. ; (McKay, D. O.; Fraser, J. K. G.) ; Kennedy, Jasa Passed-Burkitt, R.; Fraser, Alex. ; Paton, V.

## HISTORY.

Class I.-McNeill, Charlotte ; Shaw, Henry, C. ; Putnam, Graham ; Fraser, Donald ; Coffin, Victor ; Forbes, Nettie. Class II. -Stewart, A. F. Passed.-Calkin, W. S. ; Campbell, W. R.

## SUPPLEMENTARY EXAMINATIONS.

Third Year: Physics.-Fraser, D. ; Putnam, W. G. Classical History and Geography.-McKenzie, W. J.; Mackay, H. M.; McDonald, W. ; Brown, W.

Second Year: Geometry.-Grant, D. K. ; Allison, E. P.; McLennan, S. J. Trigonometry.-Robertson, T. R. ; Davison, J. M. Classical History and Geography.-Burns, C. B.; Paton, V. J. English Literature (Entrance Exam.)-Burns, C. B. ; Howatt, C. A.

First Year: English.-Fraser, A.

## SPECIAL EXAMINATIONS.

French.-Ritchie, Eliza. Latin and Greek.-Ritchie, Eliza. Classical History and Geography (3rd Year).-Johnson, G. M. ; Fulton, W. H. Classical History and Geography (2nd Year).Smith, E. B. ; Brown, E. N. ; McKenzie, A. English Literature (Entrance Exam., 3rd Year).-Johnson, G. M. English Literature (Entrance Exam., 2nd Year.)-Smith, E. B. ; Brown, E. N.; McKenzie, A.

## SESSIONAL EXAMINATIONS.

## CLASS LISTS.

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

## LATIN.

Fourth Year: Class I--Shaw, J. C. Cłass II-Coops, F. H. Passed-Stewart, A. F.; Putnam, G.; Calkin, W. S.; Fraser, D.; Campbell, W. R.

Third Year: Class I-None. Class II-Grant, D. K. ; Fulton, W. H. Passed-Robertson, T. R.

Second Year: Class I-Laird, A. G. ; Howatt, C. A. ; Fraser, J. K. Class II-Henry, J. K. Passel-Brown, E. N. ; McDonald, R. ; Putnam, H. ; Fulton, E. ; Frazee, V. G. ; McKay, D. O. ; Burkitt, R. ; Fraser, Alex. ; Kennedy, J. ); Paton, V. ; Laird, A. ; Smith, E. B.

First Year. - Class I-Schurman, G. W. ; McLeod, F. J. ; Lewis, E. W. Class II-Gardner, N. H. ; McCallum, H. J. PassedMackintosh, D. C. ; McLean, J. N. ; Rattee, E. J. ; (Cogswell, G. A. ; Fisher, J. M.) ; Fulton, E. ; Gratz, H. ; (Rowlings, G. R. ; McKinnon, J. A.) ; Chapman, A. E. ; McLennan, A. K. ; Trefry, J. H. ; Ritchie, Eliza ; Campbell, D. F.; Creighton, G. ; (Fraser, J. ; Murray, N. F.); Miller, G. ; Fullerton, C. P.

## GREEK.

Fourth Year.-Class I-Shaw, J. C. Class II-Fraser, D. ; Coops, F. H. ; Forbes, Antoinette. Passed-Creighton, J. E. ; Shaw, H. C.

Third Year.-Class I-None. Class II-Fulton, W. H. PassedGrant, D. K. ; McLennan, S. J.

Second Year.-Class I-Laird, A. G. Class II-Fraser, J. K.; Henry, J. K. ; Fraser, Alex. Passed-MacDonald, R.; McKay, D. O. ; Kennedy, J. ; (Putnam, H. ; Brown, E. N.) ; Stewart, A. F.; (Frazee, V. G. ; Burkett, R.) ; Fulton, Ed. ; Paton, V. ; Smith, E. B. ; (Howatt, C. A. ; Laird, Alex.)

First Year.-Cluss I-McLeod, F. J.; Schurman, G. W. Class II-Lewis, E. W. Passed-Mackintosh, D. C.; McLean, J. N.; (Gardner, N. H. ; Rattee, E. J.); Grierson, R. ; Fulton, E. ; (Rowlings, G. R. ; Campbell, D. F.) ; Fisher, J. M. ; McCallum, H. J. ; Cogswell, G. A.; Ritchie, Eliza; Chapman, A. E. ; McKinnon, J. A. ; Miller, G. ; (Murray, N. F. ; McLennan, A. K.)

## FRENCH.

Second Cuass.-Class 1--MacNeill, Charlotte; MacMillan, Janie; McCallum, H. J. Class II-Harrington, Emily B. ; Stewart, Frank J. ; Baxter, Agnes ; Shaw, James C.; McLeod, M. J.; Morrison, A. M. ; Bowser, W. J. Passed-Trefry, J. H. ; Paton, Georgie ; Creighton, Jas. E. ; Coffin, Victor ; Coops, Frank H. ; Campbell, R. W. ; Burns, C. B. ; Buchanan, J. J.

First Class.-Class I-McLeod, George ; Sutherland, J. S.; Mackay, H. M. Class II-Fulton, W. H.; Stewart, Maria L. J.; Mackintosh, Gertrude ; Fullerton, C. P. ; Soloan, David ; Peters, Ada M. ; Robertson, T. R. Passed-Brown, Wm. ; Macdonald, Wm.

GERMAN.
Third Class.-Class I-Stewart, A. F. ; Calkin, Wm. S.
Second Class.-Class I-Shaw, Henry C. Class II-Putnam, Graham; Mackintosh, Gertrude; Fraser, Donald; MacNeill, Charlotte ; Forbes, Nettie. Passed-Shaw, James C. ; Coffin, Victor.

First Class.-Class I-Logan, Herbert J.; Fulton, W. H.; Stewart, Maria L. J; Passed-Grant, D. K. ; Bowser, W. J.

## ENGLISH

Second Year: Class I.-Henry, J. K. ; Fulton, Ed. ; Frazee, V. G. ; Laird, A. Gordon. Class II.-Laird, Alex.; Brown, E. N. Passed.-Putnam, H. ; (Kennedy, Jas. ; Macdonald, R. J.) ; Fraser, J. K. G. ; (McKay, D. O. ; Smith, E. B. ;) Fraser, Alex ; Howatt, C. A. ; Paton, V. ; Leck, G. A.

First Year: Class Y.-Mackintosh, D. C. ; Stewart, Miss M. J. L. ; McLean, J. N. Class II.-Chapman, A. E. ; Murray, R. L. ; Harrington, Miss E. B. Passed.-(Cogswell, G. A.; Lewis, E. W.; Mackay, Chas. ; Macleod, F. I. ; Rattee, E. J. ;) (Fulton, Eben. ; Millar, Geo.;) Trefry, J. H. ; (Baxter, Miss A. ; McCallum, H. J. ; Schurman, G. W. ;) (Fisher, J. M. ; McGlashen, J. A. ;) Creighton, G. ; Gratz, H. G.; (Campbell, D. F. ; McKinnon, J. A. ; Murray, N. F. ;) (Forbes, W. J. ; Fraser John) ; (Gardner, N. H. ; Rowlings, G. R.)

## HISTORY.

Fourth Year.-Class 1.-Putnam, W. T. ; McNeill, C. M.; Coffin, Victor E. Class II.-Forbes, Antionette; Shaw, H. C. Passed.-Fraser, D.

Third Year: Class I.-McLeod, George ; Soloan, D. M.; (Sutherland, J. S. ; Grant, D. K.) Class II.-Fulton, W. H. ; Clark,
D. McD. ; McDonald, Wm. ; Stewart, Maria L. J. ; Robertson, T. R. Passed.-Matheson, J. A.; (McLennan, S. J.; Johnson, G. M.;) McKenzie, W. J.

## POLITICAL ECONOMY.

Class I.-Coffin, Victor E. ; Soloan, D. M. ; McNeill, Charlotte M. ; Cainpbell, W. R. ; McDonald, W. ; Stewart, Maria L. J. Class II.-Matheson, John A. ; Johnson, G. M. ; Fraser, D. ; Clark, D. MeD. ; Robertson, T R. ; Shaw, H. C. ; Forbes, Antionette. Passed.-McKenzie, W. J.

ETHICS.
Class I.-(Fraser, D. ; Stewart, A. F.) Class II.-Macleod, A. W.; Mackay, Charles. Passed.-Putnam, Graham; (Calkin, W. S. ; Crawford, J. W.;) Campbell, W. R.

## METAPHYSICS.

Class I.-McLeod, George ; Sutherland, J. S ; Macleod, A. W.; Grant, David Kenzie. Class II.-McLennan, S. J.; Johnson, George M. ; (Mackay, Charles ; McKenzie, W. J.) Passed.-Clark, D. McD.; Matheson, J. A. ; Bowser, W. J.

## LOGIC AND PSYGHOLOGY.

Class I.-Laird, A. G. ; Brown, E. N. ; Fulton, E. ; Henry, J. K.; Putnam, H. Class II.-Fraser, A.; Kennedy, J.; Laird, Alex.; Paton, V. J. ; Frazee, V. G. ; (Fraser, J. K. G. ; Mackay, C. ;) Macdonald, R. J. Passed.-Murray, R. L. ; Howatt, C. A. ; McKay, D O.; McKenzie, A.; Fraser, J.; Burkitt, R. ; McLennan, A. K.; Smith, E. B. ; Burns, C. B.

## MATHEMATICS.

Second Year : Class I.-Laird, A. G., Frazee, Prutnam, Howatt. Class 1I.-Henry, Fraser, A., Burkitt, Mackay. Passed.-Fulton, Macdonald, Paton, Fraser, J. K., Smith, Kennedy, Brown, Laird, A. Passed in Geometry.-Mackenzie.

First Year.-Class I.-Maclean, Mackintosh, McCallum, Gardner, Lewis, (McLeod, Rowlings,) (Grierson, Schurman,) Millar. Class II.- Fulton, (Chapman, Gratz,) Campbell, Murray, (Cogswell, McKinnon, Creighton. Passed.-Fisher, Trefry, Forbes, McGlashen, Byers. Passed in Geometry.-McCurdy, Rattee, Fullerton, McLennan, A. K., Fraser, J.

## PHYSICS.

Third Year: Class I.-Stewart, F. I. ; Mackay, H. M. ; Sutherland, J. S. Class II.-Robertson, T. R. ; Morrison, A. M. Passed.(Johnson, G. M. ; McLennan, S. J.) ; Brown, W. ; Ritchie, Eliza; Fulton, W. H. ; Clark, D. McD. ; (Leck, G. A. ; Matheson, J. A.) ; McKenzie, W. J.; Grant, D. K.

Fonrth Year: Class I.-Stewart, A. F. Class II.-McLeod, M. J. Passed.-Calkin, W. S.
DYNAMICS.

Class I.-Stewart, F. I. Class II.-Mackay, H. M. ; Morrison, A. M.

## INORGANIC CHEMISTRY.

Class I.-McLeod, F. J. ; Gardner, Nelson H. ; Fisher, J. M. ; McCallum, H. ; Creighton, Graham; Chapman, A. E. ; Rowlings, G. R. Class II.-Byers, D. W. ; Gratz, H. G. ; Fulton, Eben; McGlashen, John A. ; Schurman, Geo. W. ; McLean, J. N. ; Millar, George ; Campbell, D. Frank ; Forbes, W. J. ; Mackintosh, D. C. ; Rattee, E. J. : McLennan, C. P. ; Cogswell, George A. ; Lewis, E.W. ; Grierson, R. ; Stewart, Maria L. J. Passed.-McKinnon, John A.; Murray, N. F. ; Trefry, J. Hart ; Fullerton, C. P.

## ORGANIC CHEMISTRY.

Class I.—Stewart, Frank I, ; (Campbell, W. R. ; Mackay, H. M.)

## PRACTIOAL OHEMISTRY.

Class I.-(Brown, William; Morrison, A. M.) ; Coops, Frank H. Class II.-(McLeod, M. J.; Creighton, J. E. ; Campbell, W. R.) ; McLennan, S. J. ; Stewart, A. F.

PRACTICAL CHEMISTRY-ADVANCED.
Class I.-Calkin, W. S. Class II.-Putnam, Graham.

BOTANY.
Class I.-Calkin, William S.; McLennan, S. J. Class II.Putnam, Graham; Forbes, W. J.

## FACULTY OF LAW.

## 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.)

## INTERNATIONAL LAW.

Class 1.-Hanright ; McKinnon. Class II.-McDonald, Carter, Lyons. Passed.-Thompson, McLatchy, Rogers, H. W., McCully, Cluney, Lane, Russell.

CONFLICT OF LAWS.
Class 1.-Rogers, T. S., McCully, McLennan. Class II.Campbell, Gregory.

CONSTITUTIONAL LAW.
Class I.-Rogers, T. S., McKay, McCready, Buchanan, Campbell, Jones. Class II.-McLennan, Mclnnes, Armstrong. Passed.McDonald, E. M., Morrison, Russell, Magee, Gregory.

## CONSTITUTIONAL HISTORY.

Class I.-Nicholson, Patterson, Allison, McNeil, Tobin. Class II. -Robertson, Ross, McDonald, W., Soloan, Cummings. Passed.Forsyth, McLeod, Dennison.

ROMAN LAW.
Ctass I.-MeCully, McLatchy.

## INSURANCE。

Class 1.-Rogers, H. W., Macdonald, E. M., McLatchy, Thompson, McKinnon, Hanright, Carter, Lane, Cluney, Russell. Class 71.-Layons, McCully. Passed.-Gregory.

SHIPPING.
Class 1.-McDonald, E. M., McCready, Rogers, T. S., (McKay, McInnes, ) Campbell. Class II.-McKinnon, Hanright, Lyons, Rogers, H. W., Lane, Thomson. Passed.-Armstrong, Carter, Cluney, Gregory, Morrison, Whitford, Macdonald, A. J., Jones, McLennan.

## EQUITY.

Class 1.-Rogers, T. S., McKay, McCready, Jones, Armstrong. Class II.-Russell, Campbell, McLennan. Passed.-Morrison, McInnes, Gregory, McDonald, A. J., Magee.

## SALES.

Class 1.-Rogers, T. S., (Jones, McKay,) McCready, Campbell, McLennan. Class II.-McInnes. Passed.-Armstrong, Gregory, Magee, Morrison.

## OONTRACTS.

Class I.-McNeil, Patterson, Nicholson, Ross, Cummings. Class II.-Dennison, Forsyth, McLeod, Allison, Tobin, Buchanan. Passed. -Gray, Gregory.

## REAL PROPERTY.

Class 1.-Patterson, Forsyth, Tobin, Cummings, Ross, McNeil, McLeod, Nicholson, Dennison, Allison. Class II.-Gray. Passed.Ritchie, Stevens.

TORTS.
Class I.-McNeil, Patterson, Cummings, Ross, Nicholson. Class. II.-Allison, McLeod, Forsyth. Perssed.-Dennison, Gray, Gregory, Tobin.

## EVIDENCE.

Closs I.-Mackay, Campbell, McLennan, Jones, Rogers, T. S. 2 McInnes, Magee, McCready. Class II.-Macdonald, E. M., Morrison, Armstrong. Passed.-McLeod, Whitford.

## GENFEAI IIST

OF
MEDALS, PRIZES, EXHIBITIONS, \&c. 1879-86.*

THE GOVERNOR-GENERAL'S GOLD MEDAL.
1880, Crowell, E. 1881, Creelman, H. G. 1882, Trueman, J. S. 1883, Bell, J. A. 1884, McLeod, J. P. 1885, Aiton W. 1886, Robinson, A.

THE GOVERNOR-GENERAL'S SILVER MEDAL.
1880, Fraser, W. M. 1881, not awarded. 1882, not awarded. 1883, Macdonald, J. A. 1884, Adams, H. S. 1885, Langille, R. M. 1886, Mackay, N. F.

## THE SIR WILLIAM YOUNG GOLD MEDAL.

1882, Campbell, G. M. 1883, Reid, A. G. 1884, Murray, D. A. 1885, Mackenzie, A. S. 1886, Morton, S. A.

THE DeMILL GOLD MEDAL.
1885, Gammell, I.
THE MACKENZIE GOLD MEDAL。
1886, Mackay, E.
THE NORTH BRITISH SOCIETY BURSARY.
1880, Campbell, G. M. 1882, McLeod, J. P. 1884, Mackay, N. F. 1886, Mackay, H. M.

## THE AVERY PRIZE.

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

## THE WAVERLEY PRIZE.

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

## THE ST. ANDREW'S CHURCH PRIZE.

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

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## THE YOUNG ELOCUTION PRIZES.

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

## THE ALUMNI PRIZES.

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

## THE NEW SHAKSPERE SOCIETY'S PRIZE.

1884, Macknight, Catherine K. 1885, Sutherland, J. S. 1886, McLeod, G.

THE EARLY ENGLISH TEXT SOCIETY'S PRIZE.
1885, Gammell, I. 1886, Coffin, F. J.

## THE JACK HERBARIUM PRIZE.

1884, Campbell, G. G.

## THE BOAK PRIZE.

1886, McCully, F. A.

## UNIVERSITY PRIZES.

FACULTY OF ARTS.
Classics : Fourth Year ; 1879, McLean, I. M. 1880, Thomson, A. E. 1881, Sedgewick, J. A. 1882, Trueman, J. S. 1883, Bell, J. A. 1884, McLeod, J. P. 1885, Aiton, W. 1886, Robinson, A. Third Year ; 1879, Thomson, A. E. 1880, Murray, H. 1881, Trueman, J. S. 1882, Bell, J. A. 1883, McLeod, J. P. 1884, Aiton, W. 1885, Robinson, A. 1886, Latin; Shaw, J. C. Greek; Forbes, Antoinette. Second Year ; 1879, (1) Murray, H. (2) Trueman, J. S. 1880, Mellish, H. 1881, Bell, J. A. 1882, McLeod, J. P. 1883, Gammell, I. 1884, Robinson, A. 1885, Shaw, J. C. 1886, McLeod, G. First Year ; 1879, Campbell, G. M. 1880, (1) Bell, J. A. (2) Macdonald, J. A. 1881, (1) McLeod, J. P. (2) Adams, H. S. 1882, (1) Gammell, I. (2) Aiton, W., and McLeod, J. M. 1883, Mackay, E. 1884, Latin, Shaw, J. C. ; Greek, Fraser, D. 1885, (1) MoLeod, G.; (2) Grant, D. K. 1886, Laird, A. G.

Hebrew: 1882, Carson, G. S. 1883, McLennan, J. W. 1884, Campbell, A., (New Glasgow). 1885, Tuffts, W. M. 1886, Calder, J.
Freitcin : Fourth Year ; 1879, Cameron, C. S. 1880, Mahon, A. W. 1881, Stewart, T. 1882, Mellish, H. 1883, Smith, H. M. Third Year ; 1879, Mahon, A. W. 1880, Murray, H. 1881, Mellish, H. 1882, Smith, H. M. 1883, Adams, H. S.-Third Class ; 1885, Mackenzie, A. S. 1886, Nicholson, A. Second Class ; 1884, Turner, D. F. D. 1886, Allison, M. G. First Class ; 1884, Mackenzie, A. S. 1885, Coffin, F. J. 1886, McLeod, M. J.

German: 1880, Creelman, H. G. 1881, Reid, A. G. Thirird Class ; 1886, Cornelius, Louise A. Second Class; 1884, Saunders, Maria, F. 1885, Newcombe, Margaret F. 1886, Macknight, Catherine K. First Class; 1884, Aiton, W. 1885, Cahan, C. H. 1886, Shaw, H. C.

Rhetoric: 1879, Fowler, G. W. 1880, Bell, J. A. 1881, McLeod, J. P. 1882, McLeod, J. M.

English Language and Literature: 1883, (Larkin, F. H. and Ritchie, Eliza). First Year; 1884, MacNeill, Charlotte M. 1885, McLeod, G. 1886, Henry, J. K. Second Year ; 1885, Sutherland, J. S. 1856, McLeod, G.
History: 1879, Dickie, A.; Constitutional History, Mahon, A. W. 1880, Crowell, E. 1882, Crowe, W. 1883, McLennan, J. W. Fourth Year ; 1884, McLeod, J. P. 1885, Gammell, I. 1886, Macrae, A. W. Third Year ; 1884, Gammell, I. 1885, Smith, J. F. 1886, Shaw, H. C.

Political Economy: 1883, Bell, J. A. 1884, Turner, D. F. D. 1885, Newcombe, Margaret F. 1886, Allison, M. G.
Ethics and Political Economy : 1879, Cameron, C. S. 1880, Dustan J. F. 1881, Stewart, T. 1882, Carson, G. S.

Ethics: 1883, McLennan, J. W. 1884, McDonald, D. 1885, Langille, R. M.

Metaphysics: 1879, (1) Mahon, A. W., (2) Crowell, E. 1880, Murray, H. 1881, (1) Fraser, W. M., B. Sc., (2) Campbell, G. M. 1882, Taylor, W. P. 1883, McLeod, J. P. 1884, Ritchie, Eliza. 1885, Cahan, C. H. 1886, Creighton, J. E.
Logic and Psychology: 1879, Murray, H. 1880, Mahon, A. W. 1881, McLennan, J. W. 1882, McLeod, J. P. 1883, (Gammell, I. and Mackenzie, A. S.) 1884, Cal an, C. H. 18855, Sutherland, J. S. 1886, MuLeod, G.

Mathenatics: Second Year; 1879, (1) Murray, H., (2) Creelman, H. G. 1880, Campbell,' G. M. 1881, Reid, A. G. 1882, Murray, D. A. 1883, Gammell, I. 1884, Stewart, D. 1885, (1) Morrison, A. M., (2) McLeod, M. J. 1886, Stewart, F. I. First Year ; 1879, (1) Campbell, (夭. M., (2) Carson, G. S. 1880, (1) Murray, D. A., (2) Reid, A. G. 1881, (1) McLeod, J. P. (2) Elliott, H. 1882, Calkin, Lillie B. 1883, Mackay, E. 1884, MacNeill, Charlotte M. 1885, (1) Stewart, F. I., (2) Brown W. 1886, Frazee, V. G.
Phystcs: 1879, Dickie, A. 1880, Creelman, H. G. 1881, Carson, G. S1882, MacGregor, T. S. ; Math. Phys., Reid, A. G. 1883, Murray, D. A. 1884, MacKenzie, A. S. 1885, Fourth Year, Mackay, E. Third Year, Morton, S. A. 1886, Macleod, M. J.
Astronomy : 1881, Creelman, H. G. 1882, Campbelı, G. M. 1883, Reid, A. G. 1884, Murray, D. A.
Chemistry: 1879, Murray, H. 1880, Campbell, G. M. 1881, (Organic) Reid, A. G.; (Inorganic) Dickie, H. 1882, (Organic) Smith, H. M. ; (Inorganic) McLeod. J. P. 1883, (Organic) Campbell, G. G. ; (Inorganic) (Gammell, I. and Newcombe, Margaret F.) 1884, (Organic) Smith, H. M.; (Inorganic), 2nd year, Robinson, A. ; 1st year, Morrison, A. M. 1885, (Organic) Macrae, A. W.; (Inorganic) Stewart, F, I.; (Practical) Robinson, G. E. 1880, (Inorganic) (Frazee, V. G. and Laird, A. G.) ; (Organic) McLeod, M. J.

Geology : (Junior) 1881, Cameron, A. G. (Senior) 1882, Cameron, A. G.

Zoology : 1881, Moren, J. A. 1885, Campbell, G. G.
otany: 1882, Smith, H. M. 1883, Trueman, H. 1886, Symonds, F. A.

## FACULTY OF LAW.

Constitutional History : 1884, Carter, W. D. 1885, Mellish, H. 1886, Buchanan, J. J.
Constitutional Law: Morse, C. 1885, Chisholm, J. 1886, Henry, W. A.

International Law : 1885, Ives, W. B. 1886, Chisholm, J. A.
Conflict of Laws: 1884, Morse, C. 1885, Milliken, A. E. 1886, McDonald, E. M.
Roman Law : 1885, Ives, W. B. 1886, Carter, W. D.
Evidence: 1884, Sedgewick, J. A. 1885, Carter, W. D. 1886, Rogers, H. W.
Equity : 1884, Sedgewick, J. A. 1885, Thompson, S. R. 1886, McDonald, E. M.
Real Estate: 1884, Wells, W. W. 1885, McCully, F.
Real Property : 1885, (McCully, F. ; Mellish, H. ; Thomson, W. K.) 1886, Campbell, J. R.
Estates less than Freehold : 1886, Campbell, J. R.
Commercial Law : 1884, Mooney, P. C. C. ; 1886, Thomson, W. K.
Contracts : 1884, Wells, W. W. 1885, Mellish, H. 1886, McInnes, H.
Sales: 1885, Carter, W. D.
Bills and Notes: 1885, Carter, W. D.
Insurance: 1885, Boak, H. W. C. 1886, Henry, W. A.
Crimes and Torts : 1884, Carter, W. D.
Torts: 1885, Hanright, F. W. 1886, McCready, C. A.
Crimes : 1885, Mellish, H. 1886, Ford, E. L.

## PROFESSORS' SCHOLARSHIPS.

1879-In Arts: (1) Bell, J. A., Halifax High School ; (2) Moren, J. A., do. ; (3) Macdonald, J. A., do. In Science : Reid, A. G., Halifax High School.
1880-In Arts : (1) Adams, H. S., Halifax High School ; (2) Pitblado J., private study. In Science: Smith, H. M., private study.
(Discontinued 1880.)

## THE MUNRO EXHIBITIONS.

## [The names are in order of merit.]

Senior-1883: Mackenzie, A. S. ; Gammell, I. ; Tufts, W. M. 1884 : Robinson, A.; Cahan, C. H. ; Mackay, E. ; Mackay, N. F. ; Lewis, A. W. 1885, Creighton, J. E.; Shaw, J. C.; Shaw, H. C. ; MacNeill, Charlotte M. ; Buchanan, J. J. 1886, Creighton, J. E.; Shaw, J. C.; Shaw, H. C.; MacNeill, Charlotte M. ; Buchanan, J. J.
Junror-1881: Gammell, I.; Aiton, W.; Fitzpatrick, H. H. K.; McLeod, J. M. 1882 : Mackay, E. ; Cahan, C. H. ; Calder, J. ; Mackay, N F.; Robinson, A. 1883 : Buchanan, J. J.; MacNeill, Charlotte M.; Forbes, Antoinette ; Creighton, J. E. 1884: MacLeod, G.; Mackenzie, J. W.; Mackay, H. M. ; McDonald, W. ; Soloan, D. M. 1885 Laird, A. G.; Fulton, E. ; Frazee, V. G. ; Henry, J. K. ; Putnam, H. 1886 : Laird, A. G. ; Fulton, E. ; Frazee, V. G. ; Henry, J. K. ; Putnam, H.

## THE MUNRO BURSARIES.

[The names are in order of merit.]
Senior-1882: McLeod, J. P.; Murray, D. A.; Adams, H. S.; Jones, F. 1883: Newcombe, Margaret F.; Fitzpatrick, H. H. K. ; Thompson, A. W. ; Robinson, G. E. ; Martin, K. J. ; Aiton, W.; Langille, R. M. 1884 : Macrae, A. W.; Cotfin,
F. J. ; Calder, J. ; Stewart, D. ; Nicholson, A. ; Morton, S. A. 1885 : Coops, F. H. ; Forbes, Antoinette ; Fraser, D. 1886 : Forbes Antoinette ; Fraser, D ; Coops, F. H.

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

## CERTIFICATE OF MERIT.

## [The names are arranged alphabetically.]

First Class: Fourth Year ; 1879, Cameron, C. S. ; McLean, I. M. 1881, Creelman, H. G. 1882, Mellish, H. ; Trueman, J. S. 1883: Bell, J. A. ; McLennan, J. W. Third Year ; 1880, Blanchard, C. W.; Creelman, H. G. ; Murray, H. 1881, Campbell, G. M. ; Trueman, J. S. 1882, Bell, J. A. ; Reid, A. G. 1883, Adams, H. S. ; McLeod, J. P. ; Murray, D. A. Second Year ; 1879, Murray, H. 1880, Campbell, G. M.; Mellish, H. 1881, Bell, J. A. ; Reid, A, G. 1882, Adams, H. S. ; McLeod, J. P. ; Murray, D. A. 1883, Gammell, I.; Martin, K. J.; Mackenzie, A. S.; Robinson, G. E. First Year ; 1879, Campbell, G. M. ; Carson, G. S. 1880, Bell, J. A.; MacDonald, J. A. ; Moren, J. A. ; Murray, D. A.; Reid, A. G.; 1881, Adams, H. S. ; Elliott, H. ; McLeod, J. P. 1882, Aiton, W. ; Calkin, Lillie B. ; Coffin, F. J. ; Gammell, I. ; Kempton, W. F. ; Martin, K. J. ; Mackenzie, A. S. ; McLeod, J. M. ; Pitblado, I. ; Robinson, G. E.; Tuffts, W. M. 1853, Cahan, C. H. ; Mackay, E. ; Mackay, N. F. ; Robinson, A.

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

## GRADUATES OF THE UNIVERSITY.

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

Graduates are requested to notify the President of changes of address.
$\not{ }^{8}$ Adams, H. S., Jesuits' College, Montreal. B. A., 1884
$+{ }^{1}$ Aiton, W., Sussex, N. B ..... B. A., 1885
Allan, Rev. John M., Richmond, Halifax, B. A., 1873; M. A., 1876
Allison, Matthew G, Windsor, N. S. ..... B. A., 1886
Annand, Rev. Joseph, New Hebrides... B. A., 1869 ; M. A., 1872Archibald, Rev. F. W., M.A., B.D., Ph.D., St. Thomas, Ont.,B. A., 1877.Archibald, Rev. W. P., Cavendish, P.E.I., B.A., 1873; M. A, 1878
Bayne, Prof H. A., Ph.D., F.R.S.C., (obit.) ..... B. A., 1869 ;M. A., 1872.
Bayne, Rev. E. S., Middle Musquodoboit. ..... B. A., 1871
$+{ }^{2}$ Bell, F. H., Halifax ..... B. A., 1876
$+{ }^{2}$ Bell, J. A., Halifax ..... B. A., 1883
Bennett, A. W., Hopewell, N. B ..... LL. B., 1885
Bethune, J. L., Baddeck, C. B ..... M. D. C. M., 1875
Blanchard, C. W., Winnipeg. ..... B. A., 1880
Boak, H. W. C., Halifax ..... LL. B., 1885
Bruce, Rev. W. T., M.D., Valley Station, Col. Co. ..... B. A., 1872
Bryden, Rev. W. C., Tatamagouche ..... B. A., 1873
${ }^{6}$ Buchanan, Jas. J., Sydney, C. B ..... B. A., 1887
Burgess, Rev. J. C., San Francisco ..... B. A., 1867
Cahan, Chas. H., Hebron, N. S ..... B. A., 1886
Cairns, Rev. J. A., M.A., Upper Musquodoboit ..... B. A., 1878
Calder, John, West Bay, C. B. ..... B. A., 1886
Calkin, Wm. S., Truro ..... B. A., 1887
Cameron, A. G., Newtown, Guysboro' ..... B.Sc., 1882
${ }^{4}$ Cameron, C. S., Halifax. ..... B. A., 1879
$\ddagger$ Cameron, Rev J. H., Bass River, N. B ..... B. A., 1878
Cameron, William, Merigomish, N. S. ..... B. A., 1873
Cameron, Rev. J. J., Shakespere, Ont., B. A., 1869 ; ..... M. A., 1871
Campbell, Alex. J., Truro, N. S ..... B. A., 1886
Campbell, Geo. G., Truro ..... B. Sc., 1885

[^19]a § ${ }^{8}$ Campbell, Geo. M., Truro ..... B. A., 1882
Campbell, D. A., Halifax M. D., C. M., ..... 1874
Campbell, Wm. R., E. River, St. Mary's, Pictou Co. ..... B. A., 1887
7 Carmichael, J. M., New Glasgow ..... B. A., 1872
Carr, Rev. A. F., Alberton, P. E. I. ... B. A., 1868 ; ..... M.A., 1871
Carson, Rev. G. S., Pictou, N. S ..... B. A., 1882
Carter, Titus James, Point de Bute, N. B ..... LL. B., 1887
Carter, Wm. D., Richibucto, N. B LL. B., 1886
Chambers, F B., Truro ..... B. A., 1879
Chambers, R. E., Truro ..... B. A., 1877
Chase, Rev. J. H., Onslow B. A., 1886 ; М.А., ..... 1869
Chisholm, Don., Antigonish .M. D., C. M., ..... 1874
Chisholm, Jos. A., Antigonish, N. S ..... LL. B., 1886
Christie, Rev. T. M., (obit.) ..... B. A., 1868
Cluney, Andrew, Halifax ..... LL. B., 1887
${ }^{4}$ Coffin, Fulton J., Mt. Stewart, P. E. I. ..... B. A., 1886
Coffin, F. S., Mt. Stewart, P. E. I. ..... B. A., 1885

* ${ }^{3}$ Coffin, Victor E., Mt. Stewart, P. E. I ..... B. A., 1887
${ }^{2}$ Coops, Frank H., Milton, Queens Co ..... B. A., 1887
Costley, Alfred, Halifax ..... B. A., 1881
Cox, Robinson, Stewiacke ..... M. D., C. M., 1875
Creelman, Rev. D. F., (obit.,) ..... B. A., 1873 ; M.A., 1880
$+{ }^{8}$ Creelman, H. G., B. Sc., Vans Dunlop Scholar, E'dinburgh Univ.,B. A., 1881.
Creighton, J. G. A., Montreal ..... B. A., 1868
Creighton, H. S., Dartmouth ..... B. A., 1880
$\ddagger{ }^{5}$ Creighton, Jas. E., West River, Pictou Co. ..... B. A., 1887
Crowe, Walter, Sydney, C. B ..... LL. B., 1886
$+{ }^{4}$ Crowell, Rev. Edwin, Yarmouth ..... B. A., 1880
Cruikshank, Rev. W., B. D., Montreal B. A., 1872
Davidson, J. F., Pinos Altos, Grant Co., New Mexico. ..... B. A., 1852
DeWolf, G. H., Tintern, England M. D., C. M., ..... 1872
Dickie, Alfred, Upper Stewiacke ..... B. A., 1879 ; М.А., 1883
Dickie, Henry, Upper Stewiacke B. A., 1883
Dill, Edmund M., Centre Rawdon, Hants Co ..... B. A., 1884
Doull, W. S., Halifax B.A., 1874 ; ..... LL.B., 1885
Duff, Kenneth, Lunenburg ..... B. A., 1873
Emmerson, R. R. J., Bedford ..... B. A., 1879
${ }^{6}$ Fitzpatrick, H. H. K., Scotsburn, Pictou Co ..... B. A., 1885

[^20]Fitzpatrick, Rev. James, Saltsprings ..... B. A., 1875
Forbes, Antionette, Little Harbor, Pictou Co ..... B. A., 1987
Forrest, James, Halifax B. A., 1868 ; ..... M.A., 1872
Fraser, D. C., New Glasgow ..... B. A., 1872
Fraser, Rev. D. S., Mahone Bay B. A., 1874
Fraser, Donald, Pictou ..... B. A., 1877
$\ddagger$ Fraser, W. M., Halifax ..... B. A., 1883
Fraser, W. R., Pictou. ..... B. A., 1882
Fulton, G. H., M. D., C. M.* ${ }^{8}$ Gammell, I., PictouB. A., 1885

+ George, Rev. J. L., M. A., Dartmouth ..... B. A., 1878
Grant, W. R., (obit.) B. A., 1877
Gunn, Rev. Adam, Kennetcook ..... B. A., 1872
Hamilton, H. H., Pictou ..... B. A., 1877
Hanright, Fred. W., B. A., Windsor. ..... LL. B., 1887
Henry, Wm. A., Halifax, N. S ..... LL. B., 1886
${ }^{2}$ Herdman, Rev. J. C., B. D., Calgary, N. W.T ..... B. A., 1874 ;
M. A., 1878.
Herdman, W. C., Pictou ..... B. A., 1874 ; M. A., 1881
Herdman, A. IV., Pictou ..... B. A., 1877
Hiltz, C. W., (obit.) ..... M. D., C. M., 1862
Hunter, John, California ..... B. A., 1873
Ives, W. B., New Glasgow, N. S ..... LL. B., 1885
Jennison, Hedley V., Walton, N. S ..... LL. B, 1885
Jones, Frank, Digby ..... B. A., 1884
+ Jordan, Rev. L. H., B. D., Montreal..B. A., 1875 ; M.A., ..... 1878
Kinsman, F. S., M. D., Centreville ..... B. A., 1880
Knowles, J. H., Milton ..... B. A., 1882
Laird, G. A., Manitoba ..... B. A., 1877
Landells, R., Halifax ..... B. A., 1882
Lane, Chas. W., Pictou ..... LL. B., 1887
${ }^{6}$ Langille, R. M., River John, Pictou Co ..... B. A., 1885
LeNoir, M. U., Halifax, N. S ..... LL. B., 1885
Lewis, Abner W., Central Onslow, N. S ..... B. A., 1886
Lindsay, A. W. H., M. B., C. M., Halifax ..... B. A. 1870 ;
M. D., C. M., 1875.
Lippincott, Aubrey, M. D., Pittsburg, Pa ..... B. A., 1867
Locke, R. T., Lockeport ..... B. A., 1885
Logan, Rev. Richmond, California....B. A., 1877 ; ..... M.A., 1880
Logan, Melville, Halifax ..... B. A., 1873
Lyons, Wm. Alex., Halifax. LL. B., 1887
Mason, Rev. W. A., New London, P. E. I. ..... B. A., 1877

[^21]McColl, A., New Glasgow, N. S B. Sc., 1883
McCully, Frank A., B. A., Sussex, N. B. ..... LL. B., 1887
McCurdy, S. T., New Glasgow B. A., 1877
McDonald, J. H., (obit.). B. A., 1867 ; М.А., 1870
McDonald, Donald, Cape North, Cape Breton. ..... B. A., 1884
Macdonald, C. D., Pictou ..... B. A., 1873
Macdonald, Ed. M., Pictou ..... LL. B., 1887
Macdonald, W. M., Halifax. ..... B. A., 1881
$\ddagger^{8}$ Macdonald, J. A., Halifax ..... LL. B., 1886
McDowell, Isaac, (obit.). ..... B. A., 1876
McGregor, Rev. Daniel, Amherst. ..... B. A., 1874
MacGregor, Prof. J. G., D.Sc., Halifax. . B. A., 1871 ; M.A., ..... 1874
${ }^{8}$ MacGregor, T. S., So. Ryegate, Vermont, U. S. A..B. A., 1883${ }^{8}$ McKay, A. H., B.Sc., Pictou.B. A., 1873
McKay, Rev. Kenneth, Richmond, N. B. ..... B. A., 1868
© ${ }^{9}$ Mackay, Ebenezer, New Glasgow, N. S ..... B. A., 1886
$\ddagger{ }^{9}$ Mackay, Neil F., West River, Pictou Co., N. S. ..... B. A., 1886
McKeen, Rev. J. A:, Hamilton, Bermuda. ..... B. A., 1873
$\S^{8}$ Mackenzie, A. S., Munro Tutor, Dalhousie College. ..... B. A., 1885
$>$ McKenzie, Hugh, Truro. ..... B. A., 1872 ; M.A., 1875
McKenzie, Prof. J. J., Ph.D., (obit.) .B. A., 1869 ; ..... M.A., 1872
McKenzie, Rev. James, Pugwash ..... B. A., 1878
McKenzie, Rev. J. W., East St. Peter's, P. E. I. ..... B. A., 1882
Mackinnon, Don. Alex., Charlottetown, P. E. I. . ..... LL.B., 1887
$\ddagger$ McKittrick, Burgess, Sydney, C. B .....  B. A., 1877
McLatchy, Henry F., Hillsboro, N. B ..... LL. B., 1887
${ }^{2}$ McLean, I. M., M. D., Wallace. ..... B. A., 1879
McLean, Rev. J. A., Barrington. ..... B. A., 1876
McLennan, J. W., B.D., Sydney, C. B., B. A., 1883 ; ..... M.A., 1887
McLeod, Rev. A. W., Ph.D., Vale, Pictou Co ..... B. A., 1875 ;
M. A., 1878.
McLeod, Rev. J. W., (obit.) B. А., 1876 ; М.А., 1880
McLeod, Don., Strathalbyn, P. E. I. ..... B. A., 1874
McLeod, J. M., Valleyfield, P. E. I. ..... B. A., 1885
$b+{ }^{1}$ McLeod, J. P., Valleyfield, P. E. I ..... B. A., 1884
§ ${ }^{7}$ McLeod, Malcolm J., Belfast, P. E. I. ..... B. A., 1887
McMillan, Finlay, Sheet Harbour, N. S. ..... C. M., 1872
$\ddagger$ McMillan, Rev. G. W., Malpeque, P. E. I. ..... B. A , 1875
McNaughton, Rev. Samuel, Preston, G.B., B.A , 1867 ; M.A., 1870

[^22]${ }^{3} \mathrm{McNeil}$, Charlotte M., Charlottetown, P. E. I....... B. A., 1887
Macrae, Alex. W., St. John, N. B B. A., 1886
McRae, William, (obit.) ..... M. D., C. M., 1872
${ }^{8}$ Martin, K. J., Charlottetown, P. E. I ..... B. A., 1885
Mellish, H., Pictou ..... B. A., 1882
Millar, Rev. E. D., Lunenburg. ..... B. A., 1869
Miller, J. J., Halifax. ..... B.Sc., 1885
Milliken, Albert E., Moncton, N. B ..... LL. B., 1886
Mooney, P. C. C., Halifax ..... LL. B., 1885
Moore, Edmund, Chatham ..... M. D., C. M., 1872
Morse, C., Shelburne, N. S. ..... LL. B., 1885
Morton, Joseph H., M. D., Shelburne ..... B. A., 1876
§ ${ }^{7}$ Morton, Silvanus A., Milton, Queens Co., N. S... ..... B. A., 1886
Muir, W. H., L. R. C. P \& S., Edin., Truro . .M. D., ..... C. M., 1875
Munro, Rev. John, Antigonish, N. S. ..... B. A., 1876
Munro, G. W., 17-27 Vandewater St., New York. ..... B. A., 1878
Murray, J. S., North Sydney, C. B B. A., 1877
a § ${ }^{8}$ Murray, D. A., Truro ..... B. A., 1884
Newcombe, E. L., LL. B., Halifax.... B. A., 1878 ; M.A., ..... 1881
${ }^{4}$ Newcombe, Margaret F., Kentville . ..... B. A., 1885
${ }^{8}$ Nicholson, Alfred, Southport, P. E. I ..... B. A., 1886
${ }^{6}$ Oxley, J. M.. LL. B., Ottawa. ..... B. A., 1874
Patterson, G. G., New Glasgow ..... B. A., 1882 ; М.A., 1887
Pitblado, Colin, Minneapolis ..... B. A., 1876
Pollok, A. W., (obit.) ..... B. A., 1872
Putnam, Wm. G., Maitland ..... B. A., 1887
§ ${ }^{7}$ Reid, A. G., Edinburgh University ..... B.Sc., 1883
${ }^{5}$ Ritchie, Eliza, Halifax ..... B. L., 1887
Robert, Cassimir, Arichat, C. B M. D.,Robertson, Henry McN., Barrington, N. SLL. B., 1886
$+{ }^{1}$ Robinson, Alex., Sussex, N. B. ..... B. A., 1886
${ }^{8}$ Robinson, G. E., Charlottetown, P. E. I ..... B. A., 1885
Robinson, Rev. J. M., Spring Hill ..... B. A., 1873
Rogers, Rev. Anderson, Yarmouth ..... B. A., 1878
Rogers, Henry W., Amherst ..... LL. B., 1887
Ross, Alexander, Dalhousie, N. B ..... B. A., 1867
Ross, Rev. William, Prince William, N. B. ..... B. A., 1873
Russell, Rev. A. G., Oyster Bay, L. I., N. Y ..... B. A., 1871
Russell, Joseph A., Neweastle, N. B ..... LL. B., 1887

[^23]Scott, Rev. Ephraim, New Glasgow.... B. A., 1872 ; M.A., ..... 1875
Scott, Rev. Prof. H. McD., B. D., Chicago ..... B. A., 1870
Scott, J. McD., (obit.) ..... B. A., 1877
Sedgewick, J. A., Halifax B. A., 1881 ; LL. B., 1885
Sedgewick, Robert, Q. C., Halifax ..... B. A., 1867
${ }^{4}$ Shaw, Henry C., Stanhope, P. E. I. ..... B. A., 1887
$+{ }^{1}$ Shaw, James C., Stanhope, P. E. I. ..... B. A., 1887
Shaw, Robert, (obit.) ..... B. A., 1866
Simpson, Rev. Isaac, LaHave ..... B. A., 1868
Smith, Rev. D. H., Truro B. A., 1867 ; ..... M.A., 1871
Smith, Rev. Edwin, Stewiacke ..... B. A., 1867
Smith, H. McN., Edinburgh University ..... B. Sc., 1884
${ }^{4}$ Smith, Jas. F., Halifax, N. S. ..... B. A., 1886
Spencer, Rev. W. H., Georgetown, P. E. I ..... B. A., 1881
Stewart, Alex. F., Pictou ..... B. A., 1877
${ }^{8}$ Stewart, Annie A., Pictou ..... B.Sc., 1886
${ }^{7}$ Stewart, Dugald, Upper Musquodoboit, N. S ..... B. A., 1886
$\ddagger{ }^{8}$ Stewart, J. McG., Pictou ..... B. A., 1876
Stewart, Thomas, B. D., Pictou ..... B. A., 1882
Stramberg, H. H., New Westminster, B. C. ..... B. A., 1875
Sutherland, Rev. J. M., Virden, Man. ..... B. A., 1869
Sutherland, Robert, (obit.). ..... M. D., C. M., 1872
Taylor, W. B., Halifax ..... B. A., 1884
${ }^{4}$ Thompson, A. W., Durham, Pictou Co ..... B. A., 1885
Thompson, Stanley R., Oxford, N. S ..... LL. B., 1886
Thomson, A. E., Edinburgh University ..... B. A., 1880
Thomson, Walter K., Halifax ..... LL. B., 1887
Thorburn, W, M., Madras ..... B. A., 1880
Torey, E. J., Windsor. ..... B. A., 1882
Troop, Arthur G., A.B., Dartmouth, N. S ..... LL. B., 1886
Trueman, A. I., St. John, N. B. B. A., 1872 ; ..... M.A., 1878
$b+{ }^{2}$ Trueman, J. S., Johns Hopkins Univ., Baltimore ..... B. A., 1882
Tuffts, W. M., Halifax ..... B. A., 1885
Turner, D. F. D., London, G. B ..... B. A., 1884
$+^{8}$ Waddell, Prof, John, Ph.D., D.S'c., Kingston, Ont. ..... B. A., 1877
7 Wallace, Rev. John ..... B. A., 1870
Wallace, W. B., Halifax ..... LL. B., 1885
Walsh, Wm. W., Halifax ..... LL. B., 1886
Wells, Wm. W., Point de Bute, N. B ..... LL. B., 1886
Whitman, Alfred, Halifax B.A., 1878 ; LL. B., 1885

[^24]
## UNDERGRADUATES, 1886-7.

## INARTS.

## FOURTH YEAR.

| Buchanan, James Jost . . . . . . . . . . S Sydney, C. B.Calkin, William Sommerville. . . . Truro. |  |
| :---: | :---: |
|  |  |
| Campbell, William Robert. . . . . . . . . East River, St. Mary's, Pictou Co, |  |
| Coffin, Victor Edwin.... . . . . . . . . . Mt. Stewart, P. E. 1. |  |
| Coops, Frank Harvey. . . . . . . . . . . . Milton, Queens Co. |  |
| Creighton, James Edwin........... West River, Pictou Co. |  |
| Forbes, Antoinette. . . . . . . . . . . . . . . Little Harbour, Pictou Co. |  |
| Fraser, Donald |  |
| McLeod, Malcolm James . . . . . . . . . . Elden, Belfast, P. E. I. |  |
| McNeill, Charlotte Mary . . . . . . . . . Charlottetown, P. E. 5. |  |
| Putnam, William Graham.......... Maitland, Hants Co. |  |
| Shaw, Henry Curtis...... . . . . . . . . Stanhope, P. E. I. |  |
| Shaw, James Curtis. . . . . . . . . . . . . . Stanhope, P. E. I. |  |
| Stewart, Alexander Forrester $\qquad$ Picto THIRD YEAR. |  |
|  |  |
| Brown, William................... Merigomish, Pictou Co. |  |
| Clark, Daniel McDonald. . . . . . . . . . Durham, Pictou Co. |  |
| Fulton, Willard Hill............... 85 Cunard St., Halifax. |  |
| Grant, David Kenzie........ ...... Riverton, Pictou Co. |  |
| Johnson, George Millar. . . . . . . . . . Pembroke, Upper Stewiacke. |  |
| Macdonald, William. . . . . . . . . . . . . Pictou. |  |
| Mackay, Henry Martyn. . . . . . . . . . . Plainfield, Pictou Co. |  |
| McKenzie, William J . . . . . . . . . . . . West Bay, |  |
| McLennan, Samuel John........... Sydney, C. B. |  |
| McLeod, George. . . . . . . . . . . . . . . . Murray River, P. E. I. |  |
| MacLeod, Ambrose Watts. . . . . . . . . Dunstaffrage, P. E. I. |  |
| Matheson, John Alexander. . . . . . . 48 Creighton St., Halifax. |  |
| Morrison, Alexander McLeachy. ... . Dartmouth. |  |
| Robertson, Thomas Reginald.... . . Annapolis. |  |
| Soloan, David Mathew . . . . . . . . . . . Windsor. |  |
| Stewart, Frank Ingram. . . . . . . . . . . Charlottetown, P. E. I. Sutherland, John Sanders.... . . . . . St. James, Charlotte Co., N. B. |  |
|  |  |
| SECOND YEAR. |  |
| Brown, Ernest Nicholson. . . . . . . . . Lower Newcastle, N. B. |  |
| Burkett, Robert James............. Athenry Co., Galway, Ireland |  |
| Burns, Clement Bancroft..... ..... 18 Kent St., Halifax. |  |
| Fraser, Alexander. . . . . . . . . . . . . . West River Sta., Pictou C'o. |  |
| Fraser, John Keir Geddie.... ...... Alberton, P. E. I. |  |
| Frazee, Victor Gladstone........... Dartmouth. |  |
| Fulton, Edward | Lower Stewiacke, Cul. Co, |


| Henry, Joseph Kay | benacadie. |
| :---: | :---: |
| Howatt, Cornelius Alfred. | Summerside, P. E. I. |
| Kennedy, James. | Port Philip. |
| Laird, Alexander | Little Harbour, Pictou. |
| Laird, Arthur Gordon | Charlottetown, P. E. I |
| McDonald, Robert Jame | Hopewell, N. S. |
| McKay, Duncan Oliver. | Scotsburn, Pictou Co. |
| McKenzie, Alexander. | Baddeck, C. B. |
| Paten, Vincent John. | 264 Gottingen St., Halifax. |
| Putnam, Homer | Lower Onslow, Col. Co. |
| Smith, Edmund Botterell |  |

## FIRST YEAR.

Campbell, Donald Frank ...........E. R. St. Mary's, Pictou Co.
Chapman, Adolphus Engene...... .. .Salisbury, N. B.
Cogswell, George Alfred............. Port Williams, Kings Co.
Fisher, James Mitchell............... Lower Stewiacke.
Fraser, John. . . . . . . . . . . . . . . . . . . . . Big Bras d'Or, C. B.
Fullerton, Chas. Percy . . . . . . . . . . . . . Amherst.
Fulton, Eben. . . . . . . . . . . . . . . . . . . . . Middle Stewiacke, Col. Co.
Gardner, Nelson Howard. .......... . . Brooklyn, Queens Co.
Grierson, Robert. . . . . . . . . . . . . . . . 51 Charles St., Halifax.
Lewis, Ernest William . . . . . . . . . . . . . Moncton, N. B.
McCallum, Hammond Johnson..... Harrington, P. E. I.
McKinnon, John Archibald.......... Cow Bay, C. B.
Mackintosh, David Charles......... . Springville, Pictou Co.
McLean, John N. . . . . . . . . . . . . . . . Glenbard, Antigonish.
McLennan, Alexander Kenneth..... Middle River, C. B.
MacLeod, Frederick Joseph. ......... Charlottetown Royalty, P. E. I.
Miller, Geo.............................. Tatamagouche.
Murray, Norman Frederick. ......... Truro.
Rattee, Edward Joseph. . . . . . . . . Chatham, N. B.
Rowlings, Geo. Row................ Musquodoboit Harbour, N. S.
Schurman, Geo. Wellington ......... Freetown, P. E. I.
Trefry, James Hartley. . . . . . . . . . . . . . Barrington Passage.

## IN LETTERS.

## FOURIH YEAR.

Ritchie, Eliza. . . . . . . . . . . . . . . . . . . Belmont, Halifax.

## INSCIENCH.

FIRST YEAR.
Forbes, Walter John.
. 49 Queen St., Halifax.


## GENERAL STUDENTS, 1886-87.

| 1 N | ARTS. |
| :---: | :---: |
| Angwin, James Wilmot. . | Dartmouth. |
| Baxter, Agnes S.. | .2 Gas Lané, Halifax. |
| Boak, Louise | . . Morris St., Halifax. |
| Bowser, William J | .Kingston, Kent Co., N. B. |
| Burns, Agnes | . 18 Kent St., Halifax. |
| Burns, Edith H. | do. do. |
| Byers, David Walter. | . New Annan, Colchester Co. |
| Coleman, Lila H | . 190 Pleasant St. |
| Crawford, John W. | Riversdale, Lunenburg Co. |
| Creighton, Graham | . West River, Pictou. |
| Davison, Ada | . Charles St., Halifax. |
| Dickie, Harry Stuart | . Canard, Kings Co. |
| Fraser, Simon Alexan | . Nine Mile River, Hants Co. |
| Gallichan, Lillie. | . 152 Brunswick St., Halifax. |
| Gratz, Humphrey G | Waasis Station, N. B. |
| Harrington, E. B | Halifax. |
| Harris, Clara M | Halifax. |
| Harvey, Priscilla | . 43 Victoria Road, Halifax. |
| Hyde, Charles Her | Truro. |
| James, Saidie Mab | . Dartmouth. |
| Landells, R., B. | . Charles St., Halifax. |
| Leck, George A | . Musquodoboit. |
| Lewis, Abner W., B. A | . Central Onslow, Colchester Co. |
| Liechti, Minna | .Halifax. |
| Logan, J. Herbert | .. Gottingen St., Halifax. |
| Logan, M., B. A. | do. do. |
| McCurdy, James Farquhar | . Camp Hill, Robie St., Halifax. |
| McGlashen, John A | .New Glasgow. |
| McGregor, Jam | Halifax. |
| MacGregor, Isabella | 130 Gottingen St., Halifax. |
| MacGregor, Lottie G | do. do. |
| MacGregor, Mary Cameron. | do. do. |
| Mackay, Charles. | Halifax. |
| McKay, Norman E., M. D. | 107 Gottingen St., Halifax. |
| Mackintosh, Gertie. | . 37 Tower Road, Halifax. |
| Macknight, Catherine K | Dartmouth. |
| Maclean, Margaret J. | Thorndean, Halifax. |
| McLennan, Charles Prescott. | Halifax. |
| MacMillan, Jeanie. | Elmsdale. |
| Morrison, William Chisholm. | .Halifax. |
| Morrow, Laura M. | Pleasant St., Halifax. |
| Murray, Robert L | .North Sydney. |
| Oxley, Affie M | 5 Fawson St., Halifax. |
| Paton, Georgina | . Gottingen St., Halifax. |


| Perot, Ellen H | uth Park St., Halifax. |
| :---: | :---: |
| Peters, Ada M | Halifax. |
| Puttner, A. H. | Halifax. |
| Ritchie, Mary Wolcott. | Belmont, Halifax. |
| Scott, Lillie M. ... | . 50 Inglis St., Halifax |
| Shannon, Edward Grafton. | .Spring Garden Road, Halifax. |
| Stewart, Mary Louisa Jessie | Pictou. |
| Thompson, A. S. | Halifax. |
| Thomson, James Will | Willow Park, Halifax |
| Troop, Mrs. Henry. | Halifax. |
| Whidden, Georgina R | 71 Morris St., Halifax. |


| Bell, John Albert, A. B. | fax. |
| :---: | :---: |
| Buchanan, James Jost. . . | Sydney, C. B. |
| Gregory, Charles Ernest. | Antigonishe. |
| Macdonald, William | Pictou. |
| Macdonald, Archibald Joh | Lismore. |
| Macdougall, John Archibal | Christmas Island. |
| Murray, Daniel Alexander. | Truro. |
| Robertson, Thomas Reginald | Annapolis. |
| Soloan, David Matthew | Windsor. |
| Whitford, Joseph Arthu | Bridgewater. |

SUMMARY.

FACULTY OF ARTS.
Undergraduates in Arts ..... 71
Undergraduates in Letters ..... 1
Undergraduates in Science ..... 1
General Students. ..... 55
Students, Arts Faculty ..... 128FACULTY OF LAW.
Undergraduates ..... 36
General Students ..... 10
Students, Law Faculty ..... 46
Students, Arts and Law Faculties ..... 174
Deduct, studying in both Faculties. ..... 4
Total ..... 170

## THE ALUMNI ASSOCIATION.

(Incorporated 1876.)

## EXTRACT FROM THE LAAWS.

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.

## OFEICERS:



## MUNRO EXHIBITIONS AND BURSARIES.

Candidates for these Exhibitions and Bursaries, must fill up this Schedule, so far as it may be applicable to their case, and send it to the Principal. The letter containing it should be registered at the post office, addresssd: "The President, Dalhousie College, Halifax, N. S.," and sent so as to reach him on or before September 30th, 1887.

Candidates for Junior Exhibitions and Bursaries, and Candidates for Senior Exhibitions and Bursaries who are not undergraduates of this University, must send with this Schedule certificates of good moral character, signed by clergymen or other persons occupying public official positions.

Candidates for Senior Exhibitions and Bursaries, who are not already undergraduates of this University, must send also the certificates required by $\S$ rv. 5 ; page 30 .
(1.) Is it for a Senicr or for a Junior Exhibition (or Bursary) that you are a candidate?
(2.) Have you ever matriculated in Arts at a University?
(3.) If so, at what University?
(4.) And at what date?
(5.) How many academic years have you spent as an undergraduate in Arts at a University or at Universities?
(6.) At what University or Universities were they spent?

## 

(7.) Give the dates.

(8.) Have you ever before competed for the Exhibitions and Bursaries for which you are now a candidate?
$\sqrt{\frac{3}{2}}$
(9.) If so, when ?
(10.) Name the High Schools or Academies attended by you, giving years of attendance at each.
(11.) If a candidate for Senior Exhibitions and Bursaries, in what groups of subjects do you wish to be examined?

Parent's or Guardian's name and address.

Candidate's present address

Signature in full


Date


## APPENDIX.

## EXAIINATON PAPPRS, 1880-87.

MATRICULATION<br>AND<br>JUNIOR MUNRO EXHIBITIONS AND BURSARIES.



## LATIN.


CASAR: Gallic War, Book vi. OVID : Metamorphoses, Books IV., V., Selected Fables.

Time: Three Hours.
N. B.-Candidates for Matriculation only will take either Part I. or Part II. and Part III. Candidates for Exhibitions and Bursaries will take Parts I., II., III.
-
I.
A. Translate:

Basilus ut imperatum est facit. Celeriter contraque omnium opinionem confecto itinere multos in agris inopinantes deprehendit; eorum indicio ad ipsum Ambiorigem contendit, quo in loco cum paucis equitibus esse dicebatur. Multum quum in omnibus rebus tum in re militari potest fortuna. Nam sicut magno accidit casu, ut in ipsum incautum etiam atque imparatum incideret, priusque ejus adventus ab omnibus videretur, quam fama ac nuntius afferretur, sic magnae fuit fortunae omni militari instrumento, quod circum se habebat, erepto, redis equisque comprehensis, ipsum effugere mortem. Sed hoc quoque factum est, quod aedificio circumdato silva (ut sunt fere domicilia Gallorum, qui vitandi aestus causa plerumque silvarum atque fluminum petant propinquitates) comites familiaresque ejus angusto in loco
paulisper equitum nostrorum vim sustinuerunt. His pugnantibus illum in equum quidam ex suis intulit: fugientem silvae texerunt. Sic et ad subeundum periculum et ad vitandum multum fortuna valuit.

1. "Nam sicut magno accidit casu." Analyze the sentence thus beginning, so as to show the connection of clauses, and parse afferretur and videretur, accounting for mood and giving chief parts.
2. "Vitandi aestus causa," " magnae fuit fortunae," "His pugnantibus" : account for cases, and express the meaning of vitandi aestus causa in various ways.
3. Simul ab Cneio Pompeio petit, quoniam ipse ad urbem cum imperio reipublicae causa remaneret, quos ex Cisalpina Gallia consulis sacramento rogavisset, ad signa convenire, et ad se proficisci juberet. Translate, and write explanatory notes; remaneret and rogavisset : account for mood and tense.
4. What does Cæsar tell us about the Druids ?
5. Draw a map of Gallia, showing its chief divisions and rivers, with the ancient and modern names of the latter.

## II.

B. Translate :

Tum verò totis Bacchi memorabile Thebis Numen erat; magnasque novi matertera vires Narrat ubique Dei ; de totque sororibus expers Una doloris erat, nisi quem fecêre sorores. Adspicit hanc, natis thalamoque Athamantis habentem Sublimes animos, et alumno numine, June, Nec tulit, et secum : Potuit de pellice natus Vertere Mæonios pelayoque immergere nantas, Et laceranda suæ nati dare viscera matri, Et triplices operire nuvis Minyeïdas alis: Nil poterit Juno nisi inultos flere dolores? Ac super ostendit. Cur non stimuletur, eatque Per cognata suis exempla furoribus Ino?

1. $(a)$
"De totque sororibus expers
Una doloris erat, nisi quem fecêre sorores."
(b) "Vertere Maconios pelagoque immergere nautas."
(c) "Et triplices operire novis Minyeidas alis."

Tell the stories.
2. (a) "Thebis,"" doloris," "natis," "pelago, "alis";
(b) "Flere," " agam," "valeat," " eat" : account for cases and moods.
3. (a) Hac pro parte sacer frustra pius et nova conjux Cum genetrice favent, ululatuque atria complent.
(b) Utinam modo dicere possem Carmina digna Deae !
(c) Est medium Cyanes et Pisaeae Arethusae, Quod coït angustis inclusum cornibus, aequor.
Translate and point out any unusual constructions.-If possem (b) were changed to possim, what wonld be the difference of meaning?
4. Et qua Bacchiadæ, bimari gens orta Corintho, Inter inaequales posuerunt meenia portus.
Write a geographical note, fully explaining these lines.

## III.

1. Decline throughout:

Itinere, loco, vim (A)-pelago, viscera, Ino (B).
2. Some words form the gen. sing. in-ius ; some adjectives form the abl. sing, in $i$ only ; some want the comparative only.
3. (a) Write in Latin words : 245 A . U. C. (b) Express by Roman letters: 20,000.
4. Parse, giving chief parts :

Accidit, intulit, texerunt, (A)-operire, ostendit, (B)-remeve, refer, genitas, induruit.
5. Mark the quantity of syllables in the following words, and distinguish them from others similarly spelt but of a different meaning : alis, leges, ora, oblitus, levi, dicant, maxime, solis, latus, Penthea, occidit, facies, mora.
6. Scan vss. $11,12,13$ (B).
C. Translate into Latin :-The soldiers constructed a moat twenty feet wide and ten feet deep.-Cæsar pitches his camp three miles from that of the Helvetians, and on the following day has an interview with their leader-Tarquinius, having summoned his sons, sent them from Rome to the oracle at Delphi.- In 586, Aemilius, whose father had been killed forty-eight years before in the battle of Cannae, was made consul a second time, and sent against the Macedonians.

## GREEK.

Examiner
John Johnson, M. A.

## XENOPHON : ANABASIS, Books I, II.

N. B.-Candidates for Matriculation only will take Part I. or Part II. and Part III., omitting C.

Thme : Three Hours.

## I.

## A. Translate:














1. (a.) $\dot{\omega} \sigma \pi \varepsilon \rho \pi a ́ \lambda \iota \nu ~ \tau o ̀ v ~ \sigma \tau o ́ \lambda \partial \nu ~ K i ́ v \rho o v ~ \mu \grave{\eta} \pi o t o v \mu \varepsilon ́ v o v: ~$

Different explanations of these passages have been given.
2. (a.) $\lambda \varepsilon \gamma^{\prime} \tau \omega$ takes different constructions with it in the extract. (b.) Note the change in the form of expression in Sec. 16.
3. Account for the cases of the following words and write their nom. and gen. in full in sing. and plural: $\dot{\varepsilon} \mu о \grave{\imath}, a ̉ \nu \delta \rho \grave{,} \dot{\varphi}, \tau \rho \iota \dot{\eta} \rho \varepsilon \sigma \iota$, ảкоขтоs.
4. Parse, giving chief parts:
$\varepsilon ँ \lambda \eta \sigma \theta \varepsilon, \pi \varepsilon i \sigma о \mu a \iota$, $\varepsilon i \delta \tilde{\eta} \tau \varepsilon$, óкขаí $\nu, \lambda a \theta \varepsilon \tau \nu$.
5. In what different ways does Xenophon express" a river that is a plethron in width "?
6. A map showing the route taken by Cyrus.

## II.

B. Translate :













1. Explain the meaning of the last sentence.
 structions are combined in this sentence.
 $\gamma \varepsilon \nu \varepsilon ์ \sigma \theta \alpha \iota \kappa$ к. т. $\lambda$.
(a) What is the government of the infinitives in this passage? (b) What difference would the reading $\tau o ̀$ (instead of $\tau 0 \tilde{v}$ ) make in the construction?
2. Account for the cases of the following words and give their nom. and gen. in full in both sing. and plural :
$\dot{\alpha} \pi \delta \rho \omega \nu, \dot{\varepsilon} \xi \partial े \nu, \tau о \dot{\tau} \tau$, , ô $\sigma a$.
3. Parse, giving chief parts:

4. How does Xenophon indicate different parts of the day, such as, " at daybreak," \&c. ?

## III.

1. Decline (a) in the singular: Baaidev́s, vaũs.

$$
\text { (b) in the plural : } \phi \dot{v} \lambda a \xi, \pi \dot{\sigma} \lambda \iota s .
$$

 доva, $\mu \dot{\varepsilon} \gamma a \varsigma, ~ \mu \varepsilon i o v \varsigma, ~ \tau а \chi \vartheta ์ . ~$
3. Write in Greek words : $17 ; 70 ; 700 ; 56,000$.
4. Form 1 sing. imperf. indic. (contracted forms) of oikée, aiťáo $\mu a t$, $\delta \iota \alpha \beta a i v \omega, \pi \varepsilon \rho \iota \mu \varepsilon ́ v \omega, \sigma v \lambda \lambda a \mu \beta a ́ v \circ \mu \alpha \iota, \dot{a} \pi a \gamma \gamma \dot{\lambda} \lambda \lambda \omega, \kappa \alpha A \varepsilon \dot{v} \delta \omega$.
5. Write the 1 aor. infinitive in all voices of : $\pi o \ell \varepsilon \in, \lambda \varepsilon i ́ \pi \omega, \sigma \tau \varepsilon \lambda \lambda \lambda$, ¿єт $\eta \mu$.
6. Give the perf. indic. passive in all persons and numbers of : $\gamma \rho a ́ \phi \omega . \phi a i v \omega_{0}$
7. Write the modal conjugation of:
(a.) aor. act. of : $\delta i \delta \omega \mu$.
(b.) perf. pass. of : $\sigma \tau \rho \varepsilon ́ \phi \omega$.
(c.) 1 aor. pass. of : $\lambda \hat{v} \omega$.
C. Translate into Greek: The great King remained there three days. -The soldiers fear their general.-Children, love your parents. The citizens admire the two poets.-The Grecian army crossed the river and encamped in a fine park full of trees and various animals.-Cyrus promised to give each soldier a daric and a half instead of a daric per month.

## FRENCH.

Examiner
J. Liechit, M. A.

## (Higher Matriculation Examination, Medical Faculty.)

## Time : Three Hours.

Translate:-Charles XII.-Copenhague intimidée envoya aussitôt des députés au roi pour le supplier de ne point bombarder la ville. Il les reçut à cheval, à la tête de son régiment des gardes: les députés se mirent à genoux devant lui; il fit payer à la ville quatre cent mille risdales, aves ordre de faire voiturer au camp toutes sortes de provisions, qu'il promit de faire payer fidèlement. On lui apporta des vivres, parce qu'il fallait obéir; mais on ne s'attendait guère que des vainqueurs daignassent payer; ceux qui les apportèrent furent bien étonnés d'être payés généreusement et sans délai par les moindres soldats de l'armée. Il régnait depius longtemps dans les troupes suédoises une discipline qui n’avait pas seu contribué à leur victoire: le jeune roi en augmenta encore la sévérité. Un soldat n'eât pas osé refuser le payement de ce qu'il achetait, encore moins aller en maraude, pas mềme sortir du camp. fl voulut de plus que dans une victoire ses troupes ne dépouillassent les morts qu’après eu avoir eu la permission ; et il parvint aisément à faire observer cette loi. On faisait toujours dans son camp la prière deux fois par jour, à sept heures du matin, et à quatre heures du soir : il ne manqua jamais d'y assister, et de donner à ses soldats l'exemple de la piété, quı fait toujours impression sur les hommes quand ils n'y soupçonnent pas de l'hypocrisie. Son camp,
mieux policé que Copenhague, eut tout en abondance; Ies paysans: aimaient mieux vendre leurs denrées aux Suédois, leurs ennemis, qu'aux Danois, qui ne les payaient pas si bien : les bourgeois de la ville furent même obligés de venir plus d'une fois chercher au camp du roì de Suède des provisions qui manquaient dans leurs marchés.

1. Parse, and give primitive tenses of : envoya, mirent, ft, fallait ${ }_{*}$ daignassent, furent, aller, parvint, voulut.
2. Il voulut de plus. Illustrate the difference between : plus de and plus que. Turn into French: Charles had only eight thousand men when he appeared before the Russian camp of eighty thousand soldiers. He lost his only son three weeks ago. Not a single man escaped.
3. Pas même sortir du camp. Explain the ellipsis contained in this sentence, and write it down in full, and in logical order. Change the adjec. clause in the sent. : son eamp mieux police que Copenhague, etc., into a relative clause, and parse, mieux.
4. Write down the present Indic., the Future, and the present Subjunct. of aller; translate: I am going to write a French letter. When has he gone away. He went to England last week. Shey went on foot to Windsor. Go and tell them to be ready in an hour. Is he going for the doctor?
5. Intransitive verbs may govern objects with the preposit. $\grave{a}$ and de; by what pronouns respectively may such objects be expressed? In the sent.: il parvint aisément à faire observer cette loi, give a pronominal form to the object. Translate: Have you answered his letter? I have answered it. Are you speaking of the weather? We are speaking of it.
6. Le jeune roi en augmenta . . . ; qu'après en avoir eu . . . Parse $\epsilon n$ in these two sent., and mention the term for which it stands in each of the clauses. Show by a few examples that en may perform the part of a preposit. and of a partit. art. Can you distinguish the difference between: Je traverserai l'océan dans une semaine, and Je traverserai l'océan en une semaine.
7. How would the substitution of avant for devant in the sent: les députés se mirent à genoux devant lui, affect its meaning? Write this same sent. in the interrog. form.
8. Quatre cent mille, and quatre cent milles. Comment upon these two terms. Write an ex. with mil, and prove that cent may be written with an $s$. Give the equivalents of: Two miles; two thousand ; thousands ; a thousand miles ; eighteen hundred eighty-six.
9. How do you translate the word time in the following phrases : Several times. It is time to go. I have no time to read. You are behind time. He spent a pleasant time in the country.
10. Il parvint aisement. How are adverbs formed from adjectives; give instances. Form the advs. of: profond, lent, gentil, traitre, impuni, bref, fou, long. Translate and explain the position of the $a d v$. in the sents. : You have spoken well. I have seen him yesterday.

Translate into French :-Charles XII. set out on his first campaign on the 8th May in the year seventeen hundred. He left Stockholm never to return. The most dangerous of the three powerful princes who conspired his ruin was Peter the Great. On the first of October he appeared with an army of 80,000 men before Narva, which city was almost without any fortifications, and the baron de Hoorn, whocommanded there, had less than a thousand regular troops ; yet this countless army had been unable to reduce it in ten weeks.

## ENGLISH

## ENGLISH LANGUAGE.

Examiner...................W. J. Alexander, Ph. D.
Time: Three Hours.
(Candidates for Bursaries will answer all questions ; Candidates for Matriculation the first five, and any one of the remainder.)

1. Write out and punctuate the passage dictated. (From Fielding.)
2. Analyse the passage dictated as far as "praiseworthy."
3. Parse the words in italics in the following sentences: She cannot but grieve for him. Have it your own way. He kept us waiting an hour. His house is a great deal better built.
4. Give plural of hoof, colloquy, zero, cargo. Give past tense and perfect participle of burst, seethe, sing, spin, bid.
5. Comment on and, if necessary, correct the following sentences :
(a) I fear all hope is gone; I will be drowned and nobody shall help me.
(b) The subject of the Rev. Dr. -_'s lecture this evening is "From whence to whither."
(c) Though a historian, he was unable to write a history.
6. Define accurately and give the derivation of trite, obvious, romance, layman. socialist, surgeon, sauce, epicure, manual (noun), heathen.
7. Combine each of the following groups into one complex sentence :
(a) Children sometimes talk in this way. No one else does so. These are young children. They have accordingly not grown familiar with the language. They cannot, in consequence, make or understand longer combinations of words.
(b) Both the cardinal and the king suffered anxiety on account of the advocates of the New Learning. There was an outburst against heresy. These advocates of the New Learning might be involved. This anxiety is remarkably shown in one instance. The cardinal and king extended protection to Latimer. He was subsequently to be famous as a popular preacher. In that capacity he was to eelipse even Colet.
8. Express, as accurately as possible, in simple prose the substance of the following lines :-

It was not by vile loitering in ease,
That Greece obtained the brighter palm of art;
That soft yet ardent Athens learned to please,
To keen the wit, and to sublime the heart,
In all supreme! complete in every part!
It was not thence majestic Rome arose,
And oer the nations shook her conquering dart:
For sluggard's brow the laurel never grows ;
Renown is not the child of indolent Repose.

## ENGLISH AND CANADIAN HISTORY AND GEOGRAPHY.

Examiner.............................President Forrest.
Time: Three Hours.
(Candidates for Matriculation only may omit any three questions in each section.)

## ENGLISH HISTORY.

1. Give a brief account of the Anglo-Saxon system of government.
2. What were the chief constitutional changes made in the reign of Edward I. ?
3. Write a brief account of the rise of Lollardism.
4. What was the foreign policy of Henry VII. ?
5. What right had Henry VII. to the throne of England? James I.? George I. ?
6. What effect had the Revolution on the English Constitution ?
7. What were the terms of the union between England and Scotland ?
8. What territory did England acquire or lose during the reign of the Georges? Of Victoria?

## CANADIAN HISTORY.

1. Write an account of Daniel Kirkts expeditions against the French settlements.
2. What was the result of Sir William Alexander's attempts to colonize Nova Scotia?
3. Proposed treaty of free-trade and perpetual peace between French and English colonies in 1648 failed. What was the cause?
4. Who was Paul Mascarene?
5. What was the condition of Canada when it came into the possession of England?
6. What were the provisions of the Quebec Act of 1774? How was it viewed in England? In the Colonies?
7. Describe the early settlement of New Brunswick. Prince Edward Island.
8. When was responsible government established in Canada? New Brunswick? Nova Scotia?

## GEOGRAPHY.

1. Explain what is meant by latitude and longitude.
2. Give as precisely as you can the latitude and longitude of the following places: Ottawa, Charlottetown, St. John, Halifax, New York, London, Rome, Calcutta, Melbourne.
3. If you go round the world on the same parallel of latitude as Halifax what countries and bodies of water would you cross?
4. What are the chief products of Jamaica? Peru? Alaska ? Denmark? Persia?
5. What is the population of Brazil? Australia? Egypt? Spain? Switzerland?
6. In what direction is New York from Chicago? Hamilton from Toronto? St. John from Yarmouth, N. S.? Bermuda from Cuba? Berlin from Paris?
7. Bound Belgium, Bulgaria, India, California, Ontario, Cape Breton.
8. Locate Delhi, Canton, Auckland, Munich, Pisa, Lyons, Tiflis, Cincinnati, Summerside, Bridgewater, Woodstock, N. B.

MATHEMATICS.
Examiner................................... Macdonald, M. A. GEOMETRY, ARITHMETIC, AND ALGEBRA.
(MATRICULATION.)
Time: Three Hours.
N. B.-Candidates for matriculation in Arts will omit part two of question six, and questions eleven, twelve and thirteen. Candidates for matriculation in Medicine, (Higher Examination), omit questions seven and nine; (Lower Examination), omit questions nine, ten, eleven, twelve and thirteen.

1. Divide 0564 by $14 \cdot 1$ and give reasons for the position of the decimal point in your answer.
2. The true discount on $\$ 1235.68 \frac{1}{2}$ for 210 days is $\$ 31.18 \frac{1}{2}$; find the rate per cent.
3. Multiply $a+2 b-3 c$ by $a-3 b+2 c$; and find the square of

$$
x^{-2}-3 x^{-1} y^{-1}+\frac{1}{3} y .
$$

4. Find the single fraction equivalent to

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

5. Simplify $7 \sqrt[3]{54}+3 \sqrt[3]{16}+\sqrt[3]{432}$; and prove,

$$
\frac{\sqrt{a-2 x}+\sqrt{a+2 x}}{1+\frac{a}{\sqrt{a^{2}-4 x^{2}}}}=\sqrt{a-2 x} .
$$

6. Solve the following equations:-

$$
\begin{aligned}
& \text { (1) } \frac{7}{x-1}=\frac{6 x+1}{x+1}-\frac{3\left(1+2 x^{2}\right)}{x^{2}-1} \text {; } \\
& \text { (2) } \left.\frac{1}{x}+\frac{1}{y}=\frac{1}{12}\right\} \\
& \left.\frac{7}{x}-\frac{5}{y}=\frac{11}{60}\right\}
\end{aligned}
$$

7. If two triangles have two sides of the one equal to two sides of the other, each to each, but the base of the one greater than the base of the other; the angle contained by the sides of that which has the greater base, shall be greater than the angle contained by the sides equal to them, of the other.
8. The straight lines which join the extremities of two equal and parallel straight lines towards the same parts, are also themselves equal and parallel.
9. If a straight line be divided into two equal parts and also into two unequal parts, the rectangle contained by the unequal parts, together with the square on the line between the points of section, is equal to the square on half the line.
10. Divide a given straight line into two parts, so that the rectangle contained by the whole and one of the parts may be equal to the square on the other part.
11. If a straight line touch a circle, and from the point of contact a straight line be drawn at right angles to the touching line, the centre of the circle shall be in that line.
12. In a circle, the angle in a semi-circle is a right angle; but the angle in a segment greater than a semi-circle is less than a right angle; and the angle in a segment less than a semi-circle is greater than a right angle.
13. TP, TQ, are the two tangents drawn to a circle from the point T. Find the centre C, and join CP, CT, CQ. Point out and prove any properties of the resulting figure.

## GEOMETRY.

## (EXHIBITIONS AND BURSARIES.)

Time: Three Hours.

[^25]1. Distinguish between Euclidian "Postulates" and "Axioms."
2. If two triangles have two sides of the one equal to two sides of the other, each to each, but the base of the one greater than the base of the other; the angle contained by the sides of that which has the greater base, shall be greater than the angle contained by the sides equal to them, of the other.
3. Draw a parallelogram and its diagonals, and establish by proof the relations of equality or inequality, in which the four small triangles stand to one another.
4. If a straight line be divided into two parts, the squares on the whole line, and on one of the parts, are equal to twice the rectangle contained by the whole and that part, together with the square on the other part.
5. Hence give a Geometrical proof of the algebraic proposition, $a^{2}+b^{2}>2 a b, a$ and $b$ being unequal lines: and express the proposition in words.
6. If two chords in a circle bisect one another, their intersection is the centre: prove this, without going beyond the first proposition of Euclid's Elements, Book III.
7. Angles in the same segment of a cirele are equal to one another.
8. If through a fixed point, within or without a circle, chords be drawn, the rectangle of their segments is invariable.
9. DB is the diameter of a semi-circle, and $\mathrm{BF}, \mathrm{DG}$, chords intersecting in $P$. Shew that the circles passing through $B, G, P$, and. $\mathrm{P}, \mathrm{F}, \mathrm{D}$, cut the base in the same point: also that

$$
\mathrm{BF} . \mathrm{BP}+\mathrm{DG} . \mathrm{DP}=\mathrm{BD}^{2} .
$$

10. Two half-dollar coins, lying flat in the corner of a rectangular box, are so moved about, as to touch each other and also the sides of the box. Find the locus of the point where they touch each other.

## ARITHMETIC AND ALGEBRA.

## (EXHIBITIONS AND BURSARIES.)

Time: Three Hours.

1. If $3 \mathrm{~A}=5 \mathrm{~B}$, and $7 \mathrm{~B}=9 \mathrm{C}$, and $13 \mathrm{C}=14 \mathrm{D}$, and $35 \mathrm{D}=52 \mathrm{E}$ : how many $A=100 E$ ?
2. Divide $x^{y}-y^{x}$ by $x^{y}-y^{\frac{x}{5}}:$ and if $a^{m^{n}}\left(a^{m}\right)^{n}$, find $m$ in terms of $n$.
3. Reduce to simplest form, $\frac{(a c-b d)^{2}+(a d+b c)^{2}}{c^{2}+d^{2}}-a^{2}$, and

$$
\left(\frac{x y^{3}}{4 a^{2}}\right)^{\frac{1}{2}}+\frac{\sqrt{x^{3} y-4 x^{2} y^{2}+4 x y^{8}}}{4 a}
$$

4. Shew that, $(a+b)^{2}+(a+c)^{2}+(a+d)^{2}+(b+c)^{2}+(b+d)^{2}+(c+d)^{2}=$ $(a+b+c+d)^{2}+2\left(a^{2}+b^{2}+c^{2}+d^{2}\right)$.
5. Solve the equations, $\frac{5 x^{2}+x-3}{5 x-4}=\frac{7 x^{2}-3 x-9}{7 x-10}$, and

$$
\sqrt{x}+\sqrt{x-4}=\frac{8}{\sqrt{x-4}}
$$

6. Solve the simultaneous equations, $x y=a(x+y), x z=b(x+z)$,

$$
y z=c(y+z)
$$

7. A warehouse will bold 24 boxes and 20 bales; and 6 boxes and 14 bales will half fill it. Find how many of each kind it will hold.
8. Shew that, in the common process for finding "Greatest Common Measure" or "Highest Common Factor," the measure so found is the greatest.
9. Shew that, if $x^{2}+a x+b$ and $x^{2}+a, x+b$, have a Common Measure, $x+p$, their Least Common Multiple is

$$
(x+p)(x+\alpha-p)(x+a,-p)
$$

10. Simplify the expressions, $\left(a^{1+\frac{q}{p}}\right) \frac{p}{p+q}+\sqrt[p]{\frac{a^{2 p}}{\left(a^{-1}\right)^{-p}}}$, and

$$
\left(a^{\frac{20}{3}} b^{8} c^{4} \sqrt[3]{a^{11} b^{9} c}\right)^{\frac{1}{7}}
$$

# ELEMENTARY MECHANICS OF SOLIDS AND FLUIDS. 

Examiner.................................... G. MAcGREGor, D.Sc.

## (Higher Matriculation Examination, Fnculty of Medicine.)

Time : Threr Hours.
N. B.-Answer only ten questions.

1. Enunciate and prove the proposition called the Polygon of Velocities.
2. A stone is thrown vertically upwards with a velocity of 90 feet per second. Find its velocity at the end of the 4 thl second, and its positions at the end of the 3 rd and 12 th seconds respectively.
3. When is force said to do work on a body? How is the work done measured ? Define the foot-pound, and find the work done by a man who lifts 120 lbs . through a height of 20 yards.
4. Two masses, $m$ and M , are acted upon for the same time, by forces of 20 and 25 units respectively, and the same velocities are produced. Find $m$ if M is 10 lbs .
5. Find the resultant of two forces acting on a particle, whose magnitudes are 10 and 12 respectively and whose directions are inclined at an angle of $60^{\circ}$.
6. A shell, initially at rest, bursts into two fragments whose masses are 12 and 20 pounds. The first moves off with a velocity of 25 ft . per second. Find the velocity of the second.
7. Shew that if three forces acting on a particle are in equilibrium, and if their directions are represented by the sides of a triangle taken in order, their magnitudes also are represented by those sides respectively.
8. Find the centre of Inertia (or of gravity) of a uniform, thin triangular plate.
9. Shew that the algebraic sum of the moments of two parallel forces about any point in their plane is equal to the moment of their resultant about the same point.
10. Describe the common Balance; and show that the mass of a body may be determined by means of it.
11. The height of a smooth inclined plane is 3 ft . and its length 5 ft . Find what force acting up the plane will keep a body of 20 lbs . mass, in equilibrium on it.
12. Shew that the pressures, at all points in a horizontal plane, of a heavy fluid, are the same.
13. The pressure on the surface of a lake is equal to the weight of 14.5 lbs . per square inch. Find the pressure at a point 20 ft . below the surface. Find also the pressure on a horizontal surface of 2 sq . ft. area at that depth. (A cubic foot of water weighs 1000 oz .)
14. Find the specific gravity of a body weighing 15 oz . in air and 11.5 oz . in water.
15. Describe the structure of the Mercury Barometer ; and shew how to use it to determine which of two hills is the higher.

## NATURAL PHIIOSOPHY.

Examiner........ . ..........................J. G. MacGregor, D.Sc.
(Higher Matriculation Examination, Faculty of Medicine.)

> Time: Three Hours.
N. B.-Answer only ten questions.

1. Describe the ordinary Air Pump ; and shew how by means of it the pressure of the air in a vessel may be reduced.
2. State and explain the Law of the Conservation of Energy. Illustrate it by reference to the motion of the Pendulum, and the phenomena of the galvanic circuit.
3. Show how a sound is propagated through the air?
4. Describe the motion of a plate or of a string, which is giving out a musical note, explaining nodal lines or nodal points, respectively.
5. What are the "fixed points" of the Mercurial Theomometer, and how are they determined?
6. What is the linear co-efficient of expansion of a substance? Find the length at $20^{\circ} \mathrm{C}$ of a bar of brass, whose length at $0^{\circ} \mathrm{C}$ is 2 ft ., the linear co-efficient of expansion being 0.00018 .
7. Two lbs. of water at $25^{\circ} \mathrm{C}$ are mixed with 3 lbs . of mercury at $120^{\circ} \mathrm{C}$. Find the temperature of the mixture. (The specific heat of mercury is 0.033 .)
8. Explain mechanical equivalent of heat ; and describe one method of determining it.
9. Give the laws of the reflection of light; and show how an image of an object is formed by a plane niirror.
10. Describe the effect of passing a ray of white light through a prism; and shew how the prism may be used to analyse any ray of light.
11. How would you shew by experiment that "like electricities repel and unlike attract."
12. Describe the Torsion Balance and show how to use it to prove that the attraction of two electrified bodies is inversely proportional to the square of the distance between them.
13. Describe any form of electrical machine, explaining its action.
14. Describe the effect of an electric current on a magnet hanging in its neighbourhood, and the structure of the Galvanometer.
15. Describe fully the apparatus by which you would decompose water by the aid of the electrical current.

## SENIOR MUNRO EXHIBITIONS AND BURSARTES.

## A.-CLASSICS.

## LATIN.

Examiner John Johnson, M. A.

HORACE: Odes, Book IV. CICERO: Select Letters.
Time: Three Hours.

## I.

Translate :
Tlle non inclusus equo Minervae
Sacra mentito male feriatos
Troas et laetam Priami choreis Falleret aulam ;
Sed palam captis gravis, heu nefas heu,
Nescios fari pueros Achivis
Ureret flammis, etiam latentem Matris in alvo,
Ni tuis victus Venerisque gratae
Vocibus divum pater annuisset
Rebus Aeneae potiere ductos Alite muros.
Doctor Argivae fidicen Thaliae,
Phoebe, qui Xantho lavis amne crines,
Dauniae defende decus Camoenae, Levis Agyieu.
Spiritum Phoebus mihi, Phoebus artem
Carminis nomenque dedit poëtae.
Virginum primae puerique claris
Patribus orti,
Deliae tutela deae fugaces
Lyncas et cervos cohibentis arcu, Lesbium servate pedem meique

Pollicis ictum,
Rite Latonae puerum canentes, Rite crescentem face Noctilucam, Prosperam frugum celeremque pronos

Volvere menses.
Nupta jam dices : Ego dis amicum,
Saeculo festas referente luces, Reddidi carmen, docilis modorum

Vatis Horati.

1. Note any Greek forms of words or Greek constructions in the extract.
2. (a) "Doctor Argivae fidicen Thaliae."
(b) "Dauniae defende decus Camoenae, Levis Agyieu."
(c) "Lesbium servate pedem meique Pollicis ictum."
(d) "Saeculo festas referente luces."

Write explanatory notes. Mark the quantity of syllables in futicen and compare it with similar compouids.
3. Quote other passages from this book referrin to Horace as as poet.
4. (a) Janum Quirini clusit.
(b) Major Neronum mox grave proelium Commisit.
(c) Quid debeas, o Roma, Neronibus, Testis Metaurum flumen.
Write historical notes on these passages.
5. (a) Decline in the sing. : ope, sěcuris, pulvere, choreis :
(b) Decline in the pl. : nix, pinus, vice, Scythes.
(c) Parse, giving chief parts: evaganti, eliciet, mereberis, spargier.
6. Scan the following lines and name the system to which each belongs:
(a) Ostendet Capitolio.-
(b) Vernisque jam nimbis remotis.-
(c) Cuncta festinat manus; huc et illuc.

## B. Translate :

Mirabar, quid esset, quod tu mibi litteras mittere intermisisses : indicavit mihi Pansa meus Epicureurn te esse factum. O castra praeclara ! quid tu fecisses, si te Tarentum et non Samarobrivam misissem? jam tum mihi non placebas, cum idem tuebare, quod Zeius familiaris meus. Sed quonam modo jus civile defendes, cum omnia tua causa facias, non civium? Ubi porro illa erit formula fiduciae UT inter bonos bene agier oportet? Quis enim est, qui facit nihil nisi sua causa? Quod jus statues communi dividundo, cum commune nihil possit esse apud eos, qui omnia voluptate sua metiuntur? Quo modo autem tibi placebit Jovem lapidem jrare, cum scias Jovem iratum esse nemini posse? Quid fiet porro poupulo Ulubrano, si tu statueris,
 fero ; sin Pansae adsentari commodum est, ignosco. Modo scribe aliquando ad nos, quid agas et a nobis quid fieri aut curari velis.

1. "O castra praeclara!" Quote other examples of military terms thus used.
2. "Quid tu fecisses, si te Tarentum et non Samarobrivam misissem ?" Explain the meaning. Give the modern name of Samarobriva.
3. "Quis enim est, qui facit nihil nisi sua causa ?" Show that you understand the use of the mood of facit.
4. (a) "JOVEM LAPIDEM jurare"; (b) "Quid fiet porro populo Ulubrano". Write explanatory notes and account for cases.
5. Ad eum postridie mane vadebam, cum haee scripsi.-

Mancipia venibant Saturnalibus tertiis. Cum haee scribebam, in tribunali res erat ad HS. cxx.
(a) Translate these sentences, changing the Latin epistolary forms into the usual English forms. (b) Give the date in our calendar nominally corresponding to Saturnalibus tertiis. (c) Write in full HS. cxx. and give the value in English money. Explain the symbol HS.
6. Quote some proverbs from these letters.

## III.

C. Translate into Latin: When the Persian fleet had been conquered at Salamis, and Xerxes had returned to Asia, Mardonius sent Alexander, King of Macedon, to Athens, to persuade the Athenians to become the allies of the Persians. Let them consider (said he) what they had already endured in the war carried on with Xerxes. Their temples and houses had been burnt, their lands ravaged; they had nothing of their country left but the island of Salamis and the ships. On the contrary, if they joined the King, what advantages would they have? Their temples and dwellings restored, they, as free allies of the King, would carry on war with their ancient enemies the Spartans. But the Athenians answered him that the Greeks used one language, as springing from a common stock; that they had common temples and common sacrifices; and therefore it did not become the Athenians to betray them.

## GREEK.

Examiner. John Johnson, M. A.

HOMER: Odyssey, Book x. HERODOTUS: Book i, §§ 95-216.
Time: Three Hours.
I.
A. Translate:
 of $\gamma$ áp here. Describe í $\sigma \tau o \nu$.

 write notes on the parsing of àve $\varphi$ and $\lambda i \pi^{\prime}$, the meanings of $\chi$ pá $\omega$, and the derivation of $\dot{\varepsilon} \pi \eta \varepsilon \tau a \nu o ̀ \nu$.
3. Write the Epic forms (a) of the gen. sing. of :--oĩos, Teıperias,

4. Parse the following words, giving chief parts of verbs and nom.
 $\dot{\varepsilon} \delta \mu \varepsilon \nu a \iota(\mathrm{~A})-\kappa \cup \kappa \varepsilon \tilde{\omega}, \delta \tilde{\omega}, \gamma \circ \dot{\nu} \omega \nu \nu, \gamma \dot{\omega} \omega \nu, \dot{\varepsilon} \pi a \iota \nu \tilde{\eta} \varsigma, \pi \dot{\rho} \rho \iota \varepsilon \varsigma$.
5. Several words in the Extract (A) have cognate forms in Latin or in English or in both.
6. Give the substance of the tenth book of the Odyssey.

## II.

B. Translate :
















 áраípŋто.

(b) $\dot{\omega} \varsigma \lambda \dot{\varepsilon} \gamma \varepsilon \tau a \ell \dot{\cup} \pi \grave{\partial} \tau \bar{\omega} \nu \kappa . \tau . \lambda$. Note the irregular construction of the sentence.
(c) тò кápтa is translated in two ways.
 By whom was it afterwards taken?
 àvaß̈̈val $\dot{\eta}$ тvpavvis.


Translate these clauses and point out peculiarities of phrase or construction.
3. Give the Attic words or forms used for:
 đֹ่uTó.
4. Parse, giving chief parts of verbs, and nom. and gen. sing. ins full of declinable words :
 غ̇тетáxaтo, àpaípŋтo.
5. Why were the subjects treated of in Book I, $\S \S 95-215$ included by Herodotus in his "History"?

## III,

1. Form short sentences to illustrate the cases governed by the following words:
 ка́ $\lambda \lambda \iota v$.
2. Show by examples the meanings of $\kappa a \tau a$ with different cases.
3. How may a purpose be variously expressed?
C. Translate into Greek, writing the accents: In the reign of Croesus the following events took place in Media.-Lady, on arriving in the city I both saw and heard what I would I had not seen or heard. - Since, therefore, I am unable to persuade you not to expose the infant, act as follows.-Dont you think that this law would have given to the stronger the property of the weaker. - The more a man practises, the better he sings.

## B.-MATHEMATICS.

$\qquad$

## ALGEBRA AND TRIGONOMETRY.

## Time: Three Hours.

N. B. -Not more than eight questions to be attempted.

1. Solve the simultaneous equations $x^{2}+y^{2}+z^{2}=50$ )

$$
\left.\begin{array}{l}
x+y+z=12 \\
x(y+z)=27
\end{array}\right\}
$$

2. Illustrate the statement that two homogeneous quantities, though each indefinitely small, may have to each other a definite ratio.
3. There are three sets of things, $p$ of the first, $q$ of the second, $r$ of the third. Find the number of combinations possible, where 1 of the first, 2 of the second, and 3 of the third are taken.
4. Yearly payments being supposed, in what number of years will an annual investment, £A, amount to the sum that would yield annually the interest £A to its possessor.
5. If the number $m$ be prime to the number $a$, then $a, 2 a, 3 a, \ldots$ ( $m-1$ ) $a$ when divided by $m$ give different remainders.
6. If $d, d_{l}, d_{/ /}$are the diameters of the escribed circles of the triangle ABC, shew that $d d_{1}+d d_{11}+d_{1} d_{11}=(a+b+c)^{2}$ : and express this result in words.
7. When $\sin x$ and $\cos x$ are expanded in ascending powers of $x$, the former must contain only odd powers, the latter only even powers, of $x$. Prove this and specify the other Trigonometrical Functions of which the same is true.
8. Find by the aid of DeMoivre's formulae an expression for $\tan (A+B+\& c$.$) in terms of \tan A, \tan B$, \&c.
9. Shew from the Exponential expressions for $\cos x$ and $\sin x$, that

$$
\begin{aligned}
& \varepsilon \\
& \varepsilon \sqrt{-1} \\
&=-1 ; 1-\frac{\pi^{2}}{1.2 .3 .}+\frac{\pi^{4}}{1.2 .3 .4 .5 .}-\& c .=0 ; \text { and } \\
& \frac{\pi^{2}}{1.2}-\frac{\pi^{4}}{1.2 .3 .4}+\frac{\pi^{6}}{1.2 \ldots .6}-\& c .=2
\end{aligned}
$$

## GEOMETRY AND TRIGONOMETRY.

## Time: Three Hours.

N. B. - Not more than eight questions to be attempted.

1. Give Geometrical meanings, when possible, to the following expressions, $a, b, c$, \&c., being lines :

$$
\frac{a b}{c}, \frac{a^{2} b}{c}, \frac{a^{3} b}{c}, \frac{a^{3} b^{3}}{c^{2}}, \frac{a^{4} b^{4}}{c^{4}}, \frac{b^{2} c^{3} d^{4}}{a^{7}}
$$

2. If P and $\mathrm{P}_{/}$be the perimeters of similar rectilineal figures, the figures are to one another as $\mathrm{P}^{2}: \mathrm{P}_{/}{ }^{2}$.
3. The exnression for the area of a circle being known, divide a circle into $n$ equal parts, by means of circumferences concentric with it.
4. If a straight line is perpendicular to a plane, every plane passing through it is perpendicular to the same plane.
5. $A A$, is the majnr axis of an ellipse, $S$ and $S$, the corresponding foci, and $\cap \mathrm{D}$, the distance between the directrices along the axis $\mathrm{A}_{A_{1}}$. Prove from the definition of the ellipse, C being the centre, $\mathrm{C} \mathrm{A}^{2}=\mathrm{CD} . \mathrm{CS}$.
6. A given radius spins round a fixed centre $O$ from the initial position OA, and in the variable sector, AOB , a circle is always inscribed : prove that the locus of its centre is a parabola : and find its focus and directrix.
7. The centres of 3 equal grooved wheels (radius $r$ ) are at the angles of an equilateral triancle whose side is $a$. Find the length of a string which just wraps round them externally. (Make no allowance for the groove.)
8. At a station A in a level nlain, the angle of elevation of a noint C , above the nlain and hearing due East, was $a^{\circ}$ : and, after walking $l$ yards in a straight line till C bore N. E., the ohserver found its angle of elevation to be $\beta^{\circ}$. Shew how the height of C above the plain can be found.
9. Two straight lines of given length intersect one another and their extremitits are joined so as to form a trapezium. Shew that, if the angle of their intersection remain constant, the area of the trapezium is constant.

## C.-ENGLISH AND HISTORY.

## ENGLISH LITERATURE.

Scott's Lady of the Lake, Redgauntlet; Spenser's Faery
Queene, Bk. I.; Milton's Comus, Areopagitica;
Lounsbury's English Language, Рt. I.
Examiner.
W. J. Alexander, Ph. D.

Time: Three Hours.

(Only three of the questions numbered 2, 3, 4, 5, 6, are to be answered.)

1. Give a concise outline of the Lady of the Lake.

2 Contrast the characters of Alan Fairford and Darsie Latimer.
3. Contrast Redgauntlet with a novel by any other author with which you may be acquainted, pointing out Scott's characteristics.
4. Describe the general condition of society depicted in Redqauntlot. Enumerate any special advantages such a state of society affords for the exercise of Scott's special powers as a novelist.
5. Describe the character of the Pretender as presented in Redgauntiet.
6. What are the respective advantages of writing a novel in the ordinary form, and in the form of a series of letters. Illustrate your remarks from Redgauntlet.
7. What are the plan and purpose of the Faery Queene as revealed in the introductory letter to Raleigh ?
8. Write full notes on the meaning, etymology, \&c., of the italicized words in the following passages:

Scourge the Inxome aire so sore. Rerdoubter battaile ready to darrayn. Did pour into his leman's lap. To weet what mister wight was so dismayed. The Redcrosse knight was slain with Paynim knife. And in his hand bis portesse still he bare.
9. Quote one or two passages from Comus.
10. Give an account of the first performance of Comus.
11. Give a synopsis of the evils which, according to Milton in the Arcopagitica, would follow the trammeling of the liberty of the press.
12. Give a history of the influence of Norman French on the English language from the Conquest to the general adoption of English by all classes.

## CLASSICAL HISTORY AND GEOGRAPHY.

Examiner . . . . . . . . . . . . . . . . . . . . . . . . . . . Joun Johnson, M. A.
Time: Three Hours.

1. Point out the differences between the colonies of Greece, Rome, and England ( $a$ ) in the method of formation, and $(b)$ in their connection with the place from which the colonists came. (c) Describe the colonies founded by Pericles. (d) Give some of the Greek technical terms connected with colonization.
2. A short account of Anaxagoras and his system of philosophy compared with the systems of his predecessors.
3. A history of the revolution at Athens during the Peloponnesian War, or, a history of the Social War.
4. The circumstances in detail that caused Demosthenes to deliver his first great speech on public affairs.
5. Describe Alexander's acts from July 332 B. C. to the following spring.
6. A map of Attica. showing the position of its mountains, rivers and famous places. Show the relative positions of Athens and its harbours.
7. Describe the situation of the following places, and if they were famous, state briefly the reason. Give the modern names, if used :Ithome, Granicus, Pylos, Calaureia, Cynoscephalæ, Latmos, Ancyra.

## ENTRANCE EXAMINATIONS.

## CLASSICAL HISTORY AND GEOGRAPHY.

Evaminer
John Johnson, M. A.

## SECOND YEAR. <br> Time: Three Hours.

1. Describe the origin of the plehs at Rome and the steps whereby it raised itself to an equality with the Patrician class before the law.
2. Give an account of the cause and course of the first non-Italian war Rome engaged in.
3. The invasion of Roman territory by Teutones and Cimbrians.
4. An outline of Sulla's career in the East.
5. The prosecution of Verres, and the change shortly afterwards made in the constitution of Sulla.
6. The reforms made and intended by Julius Caesar.
7. A map of Sicily, showing promontories, mountains, and towns, with both ancient and modern names.
8. Describe the geographical position of the rivers of Italy, giving their ancient and modern names.

## THIRD YEAR.

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

## ENGLISH LITERATURE.

SECOND YEAR.
Macaulay's Essays on Milton, Boswell's Life of Johnson, and Lord Clive; Lay of Horatius.

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

Time: Two Hours.

1. "We shall proceed to notice some of the peculiarities which distinguished him from his contemporaries. And, for that purpose, it is necessary to take a short survey of the parties into which the political world was at that time divided." Reproduce the short survey, and the enumeration of the peculiarities which distinguished Milton from his contemporaries.
2. Describe the condition of literary men when Johnson came to London.
3. Give an outline of the main events of Clive's career.
4. Quote one of the finer passages of Horatius (about 6 stanzas.)
5. Set down concisely what points you have noted with regard to (a) the structure of the sentence, (b) of the paragraph, (c) the use of figures, (d) vocabulary in Macaulay.

## THIRD YEAR.

The paper in this subject consisted of the first six questions of that set in the same subject at the Senior Bursary,Examination. See p. xx.

## HISTORY.

Examiner............................... . President Forrest.

## FOURTH YEAR.

1. "During the twelfth and thirteenth centuries the commerce of Europe was almost entirely in the hands of the $\qquad$ ." Fill in blank and write notes.
2. What was the social condition of Europe at the beginning of the fifteenth century as compared with that of the fourth century?
3. Give a brief account of the policy of Louis XI. and the influence he exercised on France.
4. "Many things concurred to undermine gradually the power of the feudal aristocracy in France." Explain.
5. "Henry's wrath fell on Wolsey." What was the cause of it?
6. "Scotland, torn by factions and with a babe for a Queen, seemed to be at Henry's feet, and the King seized the opportunity of completing his father's work by a union of the realms." Explain.
7. Why did Philip of Spain prefer Elizabeth to Mary Stuart as a claimant of the English throne?

## SESSIONAL EXAMINATIONS.

## FACULTY OF ARTS.

## GREEK.

Examiner John Johnson, M. A.

FIRST YEAR.

## LUCIAN: De Somnio, Timon, Concilium Deorum. <br> Time : Three Hours.

## I.

A. Translate: De Somnio, $\S \S 1,2$, beginning Toīs $\pi \lambda \varepsilon i ́ \sigma \tau o \iota \varsigma ~ o i ̄ v$


1. Show the connection of the clauses in Section 1, supplying any finite verb or verbs that may be understood.
2. à $\lambda \lambda$ ov тoivvv ä $\lambda \lambda \eta \nu \dot{\varepsilon} \pi a u v o \bar{v} \tau \tau o g . ~ W r i t e ~ i n ~ L a t i n . ~$

Tढ̃v ßavavocuv тoítav. Write the plural of these throughout in combination, and give the derivation of $\beta a v a v \sigma \omega v$.
3. Account for case or mood of $\pi$ óvov, тò $\pi \rho \hat{̈ т o v, ~} \dot{\varepsilon} \chi \varepsilon \iota v, \tau \eta \lambda \iota \kappa 0 \bar{\tau} \tau o s$,

4. Give the meaning and derivation of $\pi \rho о о i \mu \iota a, ~ \mu \varepsilon \iota \rho а к \iota o ́ d \eta, ~ \varepsilon \dot{v \pi} \pi о т-$



B. Translate : Timon, $\$ 50$.

1. a. ai ßovàaì àuф́́терає.
b. Ті́ $\mu \omega v$. . . Koivттєús.

d. $\pi$ рòs 'A $\chi a \rho v e ́ a s . ~$

Write short explanatory notes.
 тعi.\&ị äpuatı. Account for the different cases.
3. What is the force of $\pi \dot{\alpha} \lambda a \iota$ and the present tense, and of $\varepsilon i \zeta$ after a verb of "rest"?
4. The Extract contains the preamble of the decree; write (in Greek as far as possible) the formal parts of the decree itself.
5. Tell what is known of Lucian's life.

## II.

1. Give the meaning, gender, nom. gen. and voc. sing. of :

2. The forms in the other degrees corresponding to:

3. Give (a) the modal conjugation of the 1 aor. pass. of : $\kappa \lambda i v \omega$, $\kappa \varepsilon \lambda \varepsilon \dot{\varepsilon} v$, äфь $\tau \mu$, , and (b) the perf. inf. pass. of : $\sigma v \dot{\rho} \rho \dot{\rho} i \pi \tau \omega, \dot{\varepsilon} \kappa \kappa \rho i v \omega, \sigma v \lambda \lambda a \mu$ $\beta a ́ v \omega, \dot{a} \nu \circ \rho \theta \sigma \omega$, aī $\chi \dot{v} \nu \omega$.
4. What verbs and classes of verbs take the Attic Future? Write the plural (in all persons) of one verb of each class.
5. Give a list of the Greek verbs that regularly take two accusatives.
6. A connection, more or less close, exists between the Internal Object and its verb. Illustrate by as many examples as you think necessary.
7. Parse, giving chief parts : दัvvé $\sigma \tau \omega \sigma a v, \pi a \rho a \delta o \theta \eta \sigma \sigma ́ \mu \varepsilon v o \varsigma, \dot{\alpha} \pi \alpha \lambda \lambda a \tau \tau-$


## (Additional for First or Second Class.)

## XENOPHON: Cyropaedia, Book I.

Time: Three Hours.
I.
A. Translate : Cyr. I. 2, $\S \S 6,7$, ending кaì $\pi a \tau \rho i \delta a$ кaì фídovs.
 clause seem to break? How is the construction explained?
2. кaì ả $\lambda \lambda \omega v$ oìv d $\begin{array}{r}\text { g } \\ \text { eikós. Write this in full and account for all }\end{array}$ the cases. $\delta \iota \kappa \alpha ́ \zeta \omega$ takes different cases in the Extract.
 каі̀ тоӥтоv. Write this in Latin.
4. What different accounts have we of the birth and death of Cyrus ?
B. Translate: Cyr. I. 6, §§ 17, 18, beginning $\Delta \varepsilon \imath \imath ~ \gamma a ̀ \rho . ~$

1. $\dot{a} \pi^{\prime} \dot{\varepsilon} \lambda a \chi i \sigma \tau \omega \nu \delta \dot{\rho} \mu \dot{\omega} \mu \varepsilon \nu a$ has been explained in different ways.
2. $\lambda \dot{\varepsilon} \gamma \varepsilon \iota \zeta \sigma \dot{v}, \dot{\varepsilon} \phi \eta, \bar{\omega} \pi a ́ \tau \varepsilon \rho$ $\qquad$ .où $\begin{gathered} \\ \nu \\ \text { ópeえos } \\ \text { eivat. What is }\end{gathered}$ unusual in the construction of this sentence?
3. a. Tó $\gamma \varepsilon \mu \varepsilon \lambda \varepsilon \tau a ̄ \sigma \vartheta a \iota ~ ह ै \kappa a \sigma \tau a$.
 Account for cases and moods.

4. Give the derivation of:


## II.

1. Resolve the following words :

2. Decline, marking accents, (a) in the sing. Zev́s, خaүढs.
(b) in the plur. $\pi \tilde{a} s$, ovs.
3. What adjectives (a) are found in the second declension only?
(b) have iotepos as their comparative ending?
4. The perf. subj. mid. is, with some exceptions, formed periphrastically. Account for the irregular formation and give the exceptions. Where and when is this form found in the indicative?
5. What participles have the accent on the final syllable? Distinguish by accent or otherwise the meanings of : оккоь, $\pi a \iota \delta \varepsilon v \sigma a u, \varepsilon \iota \varsigma, \tau \rho \iota \beta \omega$, $\beta \iota o v s, i \delta o v, \dot{a} \xi \zeta \omega \nu, \pi o \iota \varepsilon$.
6. Write sentences to show the uses of the article when joined to adjectives.
7. Classify the adjectives that govern the genitive and give two examples of each class.
C. Translate into Greek: Three times a year he offered sacrifices to the gods.-He remained five days at Plataea, which is seventy furlongs from Thebes.-It is the proof of a great general to conquer the enemy in the field, but of a greater to make a good use of victory. The fleet and the army arrived at Naupactus, the former by cruising along the coast, the latter by marching across the mountains.-About sunset the general led back his soldiers by the quickest way to the camp, and they went to their tents.

## SECOND YEAR.

HOMER; Odyssex, Book IX. Xenophon ; Hellenica, Book II.

## A. Translate: Ody. IX., vv. 125-141.

 $\varepsilon \quad \varepsilon \eta \nu$ been given?
(b.) $\dot{\varepsilon} \pi \varepsilon \grave{\imath} \mu \dot{\lambda} \lambda a \pi i a \rho \rho \dot{v} \pi$, ō̄$\delta a s$. Translate this clause also with the reading $\hat{v} \pi^{\prime}$, and explain the syntax of both.
2. $\dot{a} \lambda \lambda \lambda^{\prime} \dot{\varepsilon} \pi \epsilon \kappa \varepsilon ́ \lambda \sigma a v \tau a s ~ \mu \varepsilon i v a c . ~ A c c o u n t ~ f o r ~ c a s e ~ a n d ~ m o o d . ~$
3. Write the forms or words used in Attic prose for: K $v \kappa \lambda \omega \bar{\omega} \pi \varepsilon \sigma \sigma \varepsilon$,
 ӑ $\mu \varepsilon \varepsilon$.
4. Give examples of any unusual terminations of person and mood found in Od. IX.
5. Parse the following, giving also nom. and gen. sing. of nounforms and the chief parts of verb-forms: $\pi \dot{a} \rho a, ~ a j \mu \bar{q} \varepsilon v$, ovi $\delta a \varsigma, \chi \rho \varepsilon \omega$, $\dot{\varepsilon} \pi \iota \pi \nu \varepsilon \dot{\prime} \sigma \omega \sigma \tau \nu, \kappa \rho a \tau o ́ s,(\mathrm{~A})-\dot{\varepsilon} \theta \eta \varepsilon \dot{v} \mu \varepsilon \sigma \theta a$, $\varepsilon \dot{\iota} \mu \varepsilon v, \tau \tilde{\eta}$.
6. Scan the last three verses of the Extract. Explain any unusual quantities.
7. State briefly the arguments brought forward to show that the Iliad and Odyssey were written by different authors.
B. Translate: Hell. II. 3. $\S \S 41,42$, beginning Oúdè रà $\begin{gathered}\text { tov̀ç } \Lambda a \kappa \varepsilon-~\end{gathered}$ ঠaцuovíoos éópar.
 vov $\tau \vec{\omega} \lambda \mu \bar{\varphi} \pi t \varepsilon \varepsilon_{\sigma} \sigma v \tau a \varsigma$. The form of the condition and of the consequence requires explanation, and a change in the verb of the former has therefore been suggested. Account for the cases.
 ment in the direct form.
3. Classify (a) the optatives, (b) the participles in the Extract.
4. Write explanatory notes on the following:
a. ỉ Пápaios.





 غivau ঠпрократíav.
Explain some peculiarities of construction in these phrases.
6. Give one example of each of the ways of expressing a wish.
7. When is the combination $\mu \grave{\eta}$ ov̀ used ?
8. Parse, giving the nom. and gen. sing. of noun-forms and principal parts of verb-forms:
$\pi \varepsilon \nu \varepsilon ́ \sigma \tau a \varsigma, \sigma \nu \lambda \lambda \varepsilon \gamma \tilde{\omega} \sigma v, \pi а \rho а \nu \varepsilon \nu о \mu \not{\kappa} \kappa \varepsilon \sigma \alpha \nu, \varepsilon i \omega v, \dot{\varepsilon} \xi a \lambda \varepsilon i \phi \omega$.

## (Additional for First and Second Class.)

## DEMOSTHENES : Olynthiacs.

Thme: Three Hours.
A. Translate: Olyn. I §§ 26-28.
 construction.

3. Write in outline the conditional sentences of the Extract (one of each kind) and point out wherein any may differ from the usual form.
 scribe the situation of these places.

## B. Translate :












1. Point out instances of attraction in this Extract.
2. $\Lambda a \kappa \varepsilon \delta a \iota \mu o v i \omega \nu ~ \mu \grave{\varepsilon} \nu \dot{a} \pi о \lambda \omega \lambda \delta \sigma \omega \nu$. What event is referred to ?
 phrases. When is áv used with the indicative? What is the rule for the position of $\dot{a} \nu$ ?
C. Translate into Greek: May I never be worse off than I am at present!-When the Lacedaemonians invaded Attica, the Athenians did not come forth from the city, though they saw a great part of their territory ravaged.-The more I have done for you, the less grateful you are, I am ashamed to say. -I asked him distinctly, how many soldiers, he thought, the allies would send me, but he was at a loss what to say and so gave me no answer.

## THIRD AND FOURTH YEARS.

DEMOSTHENES : Philtppics I., III. EURIPIDES: Medea.
Time: Three Hours.
A. Translate :













 тои́т $\omega v$ ह̇кєïva.

1. $\mathfrak{a} \lambda \lambda \lambda a ̀ ~ \tau o \tilde{v} \tau o ~ \mu \varepsilon े v ~ \dot{v} \mu \pi ̃ v, ~ \mu \tilde{a} \lambda \lambda o \nu ~ \delta \grave{\varepsilon} \kappa . \tau . \lambda$. (a) Write the main clauses of this sentence. (b) What answers to тoṽтo $\mu \varepsilon े v$ ? (c) Account for
 à $\rho \chi$ оvб८?
 are different negatives used ? What difference is made by the $\hat{a} v$ in the last phrase?
 т.рибì к. т. $\lambda$. Account for the cases.


2. Name the $\Lambda$ eıtovpyiau at Athens and give as full an account as you can of any one of them.
B. Translate:
 от $\bar{́} \psi a q a ~ \lambda \varepsilon v \kappa \grave{\eta} \nu ~ \varepsilon ̌ \mu \pi a \lambda \iota \nu ~ \pi a \rho \eta i \delta a ~$


IA. $\vartheta a ́ \rho \sigma \varepsilon \iota ~ v v \nu \cdot ~ \varepsilon v ้ ~ \gamma a ̀ \rho ~ \tau \omega ̃ v \delta \varepsilon ~ \vartheta \eta \sigma o \mu a \iota ~ \pi \varepsilon ́ \rho \iota . ~ 926$




 931

 غ่ $\pi \varepsilon \hat{\iota}$ тขрávvors $\gamma \tilde{\eta} \varsigma \mu^{\prime} \dot{a} \pi о \sigma \tau \varepsilon i \lambda \lambda a \iota ~ \delta о \kappa \varepsilon і ̈, ~$
 $\mu \hat{\eta} \tau^{\prime} \dot{\varepsilon} \mu \pi о \delta \grave{v} v$ бо亢̀ $\mu \dot{\eta} \tau \varepsilon$ коьра́voţ $\chi \vartheta$ Эоvòs

 $\pi a \tilde{\delta} \delta \varepsilon \varsigma \delta^{\prime}$ ö $\pi \omega \varsigma$ ãv $\varepsilon \varepsilon \kappa \tau \rho a \phi \tilde{\omega} \sigma \iota \quad \sigma \eta \eta^{2} \chi \varepsilon \hat{\prime}$,


3. Vss. 926-931. A different order of these lines bas been suggested; why?
 this sentence in outline.
 and explained in different ways.
(b.) оэंк oí ' àv $\varepsilon \dot{\iota} \pi \varepsilon i \sigma \alpha \iota \mu \iota$. Explain clearly the syntax.
 $\pi a \ddot{\delta} \delta a \varsigma ~ \tau \varepsilon \kappa v \circ \tilde{\sigma} \sigma a \iota, \theta \tilde{\eta} \lambda v \delta^{\prime}$ òкк єivaı $\gamma \varepsilon ́ v o s$. Explain the use of $\chi \rho \tilde{\eta} v$ in such passages as this.
4. Show, in a tabular form, the feet admissible in tragic Iambic trimeters, and scan the first three verses of the Extract.
5. What classes of verbs take supplementary participles? Give one example of each.
6. Write the last line of Extract B in oratio obliqua after (a) $\dot{\varepsilon} \lambda \varepsilon \xi \varepsilon$ ö $\tau \iota$, (b) $\dot{\varepsilon} \phi \eta$.
7. Express in Greek : He said with a smile.-To suffer ill-treat-ment.-To consider the best method of doing. - What do you mean by going away?-I fear this may happen. -They did not hinder me from coming.

## THIRD AND FOURTH YEARSS.

## (Additional for First and Second Class.)

Time: One Hour and a Half,

I. Translate into accentuated Greek: Be well assared of this, Athenians, that there are only three forms of gevernment among men, namely, despotism, oligarchy, democracy. Now despotisms and oligarchies are governed according to the pleasure of their rulers and democratic communities by the established laws. Let no one among you then be ignorant of this, but let each citizen recognize clearly that whenever he enters a court of justice to try a charge of violating the constitution, on that day he is about to give his vote on his own freedom of speech; on which account the lawgivers set this provision foremost in the oath of the jurymen :-"I will wote according to the laws"; assuredly well aware that whenever the laws are upheld, the democracy also is preserved. You ought therefore to bear this constantly in mind and to detest those who propose unconstitutional measures, and to believe that no crime of this description is insignificant.

## (Additional for First Class only.)

## 2. Translate this "unseen" passage :










## EZ AMTITONHE.






$\kappa а ́ \kappa \iota \sigma т о \varsigma ~ \varepsilon i ้ \nu a \iota ~ v \tilde{v} v ~ \tau \varepsilon ~ \kappa а i ̀ ~ \pi a ́ \lambda a \iota ~ \delta о к \varepsilon \tilde{\imath}$.
oṽ $\tau^{\prime} \hat{a} \nu \sigma \omega \omega \pi \eta \sigma \alpha \iota \mu \iota \tau \eta े \nu$ ä $\tau \eta \nu \dot{\delta} \rho \omega ̃ \nu$
-Dem., De Falsa Leg., §§ 274-277.

## LATIN.

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

## FIRST YEAR.

Cicero: Pro Lege Manilia. VIrGil: Aeneid, Book VI.
Time : Three Hours.

## I.

A. Translate:

Utinam, Quirites, virorum fortium atque innocentium copiam tantam haberetis, ut haec vobis deliberatio difficilis esset, quemnam potissimum tantis rebus ac tanto bello praeficiendum putaretis! nunc vero cum sit unus Cn. Pompeius, qui non modo eorum hominam, qui nume sunt, gloriam, sed etiam antiquitatis memoriam virtute superarit, quae res est quae cujusquam animum in hac causa dubium facere possit? Ego enim sic existimo, in summo imperatore quattuor has res inesse oportere : scientiam rei militaris, virtutem, auctoritatem, felicitatem. Quis igitur hoc homine scientior umquam aut fuit aut esse debuit? qui e ludo atque pueritiae disciplinis, bello maximo atque acerrimis hostibus, ad patris exercitum atque in militiae disciplinam profectus est; qui extrema pueritia miles in exercitu fuit summi imperatoris, ineunte adulescentia maximi ipse exercitus imperator; qui saepius cum hoste conflixit quam quisquam cum inimico concertavit, plura bella gessit quam ceteri legerunt, plures provincias confecit quam alii concupiverunt.

1. Illustrate from this passage the uses of the subjunctive mood.
2. Testorque omnes deos, et eos maxime qui huic loco temploque praesident. Give some account of huic loco temploque.
3. (a) Cicero mentions several distinctions bestowed on Pompey contrary to precedent. (b) What public revenues does he refer to? How were they collected?
4. The chief events in Cicero's life up to date of this speech.
B. Translate:

In medio ramos annosaque bracchia pandit
Ulmus opaca, ingens, quam sedem Somnia vulgo
Vana tenere ferunt, foliisque sub omnibus haerent.
Multaque practerea variarum monstra ferarum
Centauri in foribus stabulant Scyllaeque biformes

Et centumgeminus Briareus ac belua Lernae,
Horrenduin stridens, flammisque armata Chimaera,
Gorgones Harpyiaeque et forma tricorporis umbrae.
Corripit hic subita trepidus formiđine ferrum
Aeneas, strictamque aciem venientibus offert,
$\mathrm{Et}, \mathrm{ni}$ docta comes tenuis sine corpore vitas
Admoneat volitare cava sub imagine formae,
Irruat, et frustra ferro diverberet umbras.
Hinc via, Tartarei quae fert Acherontis ad undas.
Turbidus hic coeno vastaque voragine gurges
Aestuat atque omnem Cocyto eructat arenam.
Portitor has horrendus aquas et flumina servat
Terribili squalore Charon, cui plurima mento
Canities inculta jacet, stant lumina flamma,
Sordidus ex humeris nodo dependet amictus.

1. "Quam sedem Somnia . . . foliisque sub omnibus haerent." What is the subject of haerent? How would the sentence be written in prose?
2. "Et ni docta comes . . . . . diverberet umbras." Account for moods and tenses. What tense is regularly employed in sentences of this kind? Quote another passage from this Book, in which the same tense is similarly used.
3. (a) "Scyllaeque biformes," (b) "belua Lernae," (c)"flam" misque armata Chimaera," (d) "forma tricorporis umbra." Write explanatory notes.
4. Give the rule for the case of : formidine, coeno, voragine, Cocyto, cui, mento, flamma, nodo.
5. Scan-marking quantity of each syllable-vss. 283, 287, 289.

## II.

1. Give the gender, and nom. and gen. sing., and note any pec iliarities in declension or otherwise, of :-Foribus, requies, epulis, cha ss, reliquias, Pergama, aëra.
2. How are frequentatives formed? Give examples.
3. Form sentences to illustrate the different meanings of : con venio, credo, impero, caveo, nescio quis.
4. Distinguish aliquis, quis, quidam, quisquam ; nunquam non, non nunquam; scio quod quaeris, scio quid quaeras.
5. What changes (a) of Mood (b) of Pronouns take place in transferring a speech from the Direct to the Indirect form ?

## C. Translate :

The corpse of Alexander was transferred from Babylon, the chief city of Assyria, to Alexandria, a city of Egypt. - The friend, whose arrival I expected three days before, has come to-day, and, if he sees Pompey, will return again after ten days.-Cæsar, having taken the city, gave it up to the soldiers to plunder. -Tell me whether thou hast been at my house or at Cicero's.-Fabius said that he was much too old to have-the-command-of armies ; that he had no longer that vigour which was requisite for the conducting of a war ; and that there was no want of persons at Rome worthy of being entrusted with the business.

# (Additional for First or Second Class.) <br> CICERO : Pro Milone. 

Time: Three Hours.
I.

## A. Translate:

Videte, judices, quantae res his testimoniis sint confectae. Primum certe liberatur Milo non eo consilio profectus esse ut insidiaretur in via Clodio; quippe, si ille obvius ei futurus omnino non erat. Deindenon enim video cur non meum quoque agam negotium-scitis, judices, fuisse qui in hac rogatione suadenda dicerent Milonis manu caedem esse factam, consilio vero majoris alicujus: me videlicet latronem ac sicarium abjecti homines et perditi describebant. Jacent suis testibus, qui Clodium negant eo die Romam, nisi de Cyro audisset, fuisse rediturum. Respiravi, liberatus sum; non vereor ne, quod ne suspicari quidem potuerim, videar id cogitasse. Nunc persequar cetera. Nam occurrit illud : 'igitur ne Clodius quidem de insidiis cogitavit, quoniam fuit in Albano mansurus :' si quidem exiturus ad caedem e villa non fuisset. Video enim illum qui dicatur de Cyri morte nuntiasse non id nuntiasse, sed Milonem appropinquare : nam quid de Cyro nuntiaret, quem Clodius Roma proficiscens reliquerat morientem? Una fui, testamentum simul obsignavi cum Clodio; testamentum autem palam fecerat et illum heredem et me scripserat: quem pridie hora tertia animam efflantem reliquisset, eum mortuum postridie hora decima denique ei nuntiabatur?

1. "Primum certe liberatur Milo non eo consilio profectus esse." What is remarkable in the form of this sentence?
2. "Nam quid de Cyro nuntiaret quem Clodius . . reliquerat morientem?"-"Quem . . . efflantem reliquisset, eum mortuum postridie . . . ei nuntiabatur ?" Account for the difference of moods muntiaret, nuntiabatur, reliquerat, reliquisset.
3. "In hac rogatione suadenda." State the rule for the use of suadenda in this construction, and show whether it is here broken or not.
4. Nec vobis tam hanc salutarem in judicando literam quam illam tristem dedisset. Give a full explanation.
5. a. d. xiII. Kal. Feb. Write this out in full; explain the construction and give the date that nominally (why not, really?) corresponds with it in our Calendar.

## B. Translate :

Utinam di immortales fecissent (pace tua, patria, dixerim ; metuo enim ne scelerate dicam in te quod pro Milone dicam pie) utinam P. Clodius non modo viveret, sed etiam praetor consul dictator esset potius quam hoc spectaculum viderem. O di immortales! fortem et a vobis, judices, conservandum virum! 'Minime, minime,' inquit: 'immo vero poenas ille debitas luerit; nos subeamus, si ita necesse est, non debitas.' Hicine vir patriae natus usquam nisi in patria morietur aut, si forte, pro patria? Hujus vos animi monumenta retinebitis; corporis in Italia nullum sepulcrum esse patiemini? Hunc sua quisquam sententia ex hac urbe expellet, quem omes urbes expulsum a vobis ad se vocabunt? O terram illam beatam quae hunc virum exceperit; hanc ingratam, si ejecerit; miseram, si amiserit! Sed finis sit: neque enim prae lacrimis jam loqui possum; et hic se lacrimis defendi vetat. Vos oro obtestorque, judices, ut in sententiis ferendis quod sentietis id audeatis. Vestram virtutem justitiam fidem, mihi credite, is maxime probabit, qui in judicibus legendis optimum et sapientissimum et fortissimum quemque elegit.

1. "Utinam di immortales fecissent."-"utinam P. Clodius non modo viveret." Account for difference of tenses.
2. "qui in judicibus legendis." Write notes about this trial on (a) judices, (b) the president of the court, (c) the law constituting the court, $(d)$ the proceedings at the trial, (e) the verdict, ( $f$ ) the result.
3. Quamobrem uteretur eadem confessione T. Anius, qua Ahala, qua Nasica, qua Opimius, qua Marius, qua nosmet ipsi. Write short historical notes.
4. Give a brief account of Cicero's life between the passing of the Manilian Law and Milo's trial.

## II.

1. What nouns form the acc. sing. in -im only ?
2. What adjectives want the comparative only?
3. Translate and turn into oratio obliqua:
(Address of the Helvetian ambassadors to Cossar.)
Si pacem populus Romanus cum Helvetiis faciet, in eam partem ibunt atque ibi crunt Helvetii, ubi tu eos constitueris atque esse volueris : sin bello persequi perseverabis, reminiscitor et veteris incommodi populi Romani et pristinae virtutis Helvetiorum.
4. Write sentences to illustrate the various uses of qui with the subjunctive mood.
5. Arrange the following lines as Hexameter verses, marking quantities:
a. Ingentes caedis Rutulae acervos spectabit.-
b. Tum supera convexa adspectans breviter precatur.-
c. Aliena arva jugo premere atque praedas avertere.

## SECOND YEAR.

HORACE: Odes, Book I. LIVY: Book I.
A. Translate:

Time: Thrre Hours.

Natis in usum laetitiae scyphis Pugnare Thracum est : tollite barbarum Morem, verecundumque Bacchum Sanguineis prohibete rixis !
Vino et lucernis Medus acinaces
Immane quantum discrepat: impium Lenite clamorem, sodales,

Et cubito remanete presso !
Vultis severi me quoque sumere
Partem Falerni? Dicat Opuntiae Frater Megillae quo beatus Vulnere, qua pereat sagitta.
Cessat voluntas? Non alia bibam
Mercede. Quae te cunque domat Venus Non erubescendis adurit
Ignibus ingenuoque semper

Amore peccas. Quidquid habes age
Depone tutis auribus. - Ah miser, Quanta laborabas Charybdi,

Digne puer meliore flamma!
Quae saga, quis te solvere Thessalis
Magus venenis, quis poterit deus? Vix illigatum te triformi
Pegasus expediet Chimaera.

## 1. "Vino et lucernis Medus acinaces Immane quantum discrepat !"

Explain the syntax. Give phrases similar to immane quacentum in Greek. Several verbs of similar meaning have the same construction as discrepat in Horace.
2. "Erubescendis"-"laborabas." What is peculiar in the use of these forms? What reading has been suggested for the latter?
3. $a$.
"dicat Opuntiae Frater Megillae."
b. "Quanta laborabas Charybdi."
c. "Pegasus expediet Chimaera."

Write explanatory notes on the words in italics.
4. (a) Write the nom., gen. and acc. sing. of : acinaces, cubito, Charybdi. (b) Note peculiarities of declension in: verbenas, jecur, Seras, Orpheo. (c) Parse, giving chief parts: prominet, moderere, densentur, modulate.
5. Sean the second stanza.
6. Give the dates of Horace's birth and death in Latin. Write his name in full. Where was he born and where buried? What references does he make to himself in the First Book of the Odes?

## B. Translate :

Inclyta justitia religioque ea tempestate Numae Pompili erat. Curibus Sabinis habitabat, consultissimus vir, ut in illa quisquam esse aetate poterat, omnis divini atque humani juris. Auctorem doctrinae ejus, quia non exstat alins, falso Samium Pythagoram edunt, quem Servio Tullio regnante Romae centum amplius post annos in ultima Italiae ora circa Metapontum Heracleamque et Crotona juvenum aemulantium studia coetus habuisse constat. Ex quibus locis, etsi ejusdem aetatis fuisset, qua fama in Sabinos aut quo linguae commercio quemquam ad cupiditatem discendi excivisset? Quove praesidio unus per tot gentes dissonas sermone moribusque pervenisset ? Suopte igitur ingenio temperatum animum virtutibus fuisse opinor magis, instructumque non tam peregrinis artibus quam disciplina tetrica ao tristi veterum Sabinorum, qua genere nullum quondam incorruptius fuit.

1. "qua fama in Sabinos, etc." How is this phrase explained? Translate and explain another reading quae fama.
2. "centum amplius post annos." Account for the construction.
3. Write the following passage in oratio obliqua: Namque Proculus Julius . . . . "Romulus," inquit, "parens urbis hujus, prima hodierna luce coelo repente delapsus se mihi obviam dedit. Cum perfusus horrore venerabundus adstitissem, petens precibus, ut contra intueri fas esset: 'abi, nuntia,' inquit, 'Romanis, coelestes ita velle, ut Roma caput orbis terrarum sit: proinde rem militarem colant.' "
4. a. Effusos egerat Romanos toto quantum foro spatium est.
b. Jupiter pater . . . uti tu signa nobis certa adclarassis inter eos fines, quos feci.
c. Id ubi dixisset, hastam in fines eorum emittebat.

Give such explanations of syntax and forms of words as you think necessary.
5. What references does Livy make in the First Book to customs, events, persons, \&c., of his own time?
6. Why is Livy's account of the Regal period considered nonhistorical? Can you explain the origin of any of the stories related in this book?
C. Translate into Latin: It was a mark of Napoleon's genius that in the early spring he determined to invade Italy and reach Augusta, that he might surprise the Austrians. who at that time held the northern part of the land. To gain his object, he had to cross the Alps, which are always covered with snow, so that no one can pass them without very great difficulty. But the general ordered his troops to march over the top of a pass where there was still snow lying, and exhorted them not to be less brave than the men of former times. It was of great importance to the French to descend quickly into the plains, because they knew that while the inhabitants were mot expecting them they would easily conquer them.

## (Additional for First and Second Class.)

HORACE, Odes II, III.

Time : Three Hours.

## A. Translate:

Motum ex Metello consule civicum
Bellique causas et vitia et modos Ludumque Fortunae gravesque Principum amicitias et arma Nondum expiatis uncta cruoribus, Periculosae plenum opus aleae, Tractas et incedis per ignes Suppositos cineri doloso. Paullum severae Musa tragoediae
Desit theatris: mox ubi publicas Res ordinaris grande munus

Cecropio repetes cothurno,
Insigne maestis praesidium reis
Et consulenti, Pollio, curiae, Cui laurus aeternos honores Delmatico peperit triumpho.
Jam nunc minaci marmure cornuum
Perstringis aures, jam litui strepunt, Jam fulgor armorum fugaces

Terret equos equitumque vultus:
Audire magnos jam videor duces
Non indecoro pulvere sordidos, Et cuncta terrarum subacta

Praeter atrocem animum Catonis.
B. Translate :

Martiis caelebs quid agam Kalendis,
Quid velint flores et acerra thuris
Plena miraris, positusque carbo in Caespite vivo,
Docte sermones utriusque linguae?
Voveram dulces epulas et album
Libero eaprum prope funeratus Arboris ictu.
Hic dies anno redeunte festus
Corticem adstrictum pice dimovebit Amphorae fumum bibere institutae Consule Tullo.
Sume, Maecenas, cyathos amici
Sospitis centum et vigiles lucernas
Perfer in lucem ; procul omnis esto Clamor et ira.
Mitte civiles super urbe curas : Occidit Daci Cotisonis agmen, Medus infestus sibi luctuosis Dissidet armis,
Servit Hispanae vetus hostis orae Cantaber sera domitus catena ; Jam Scythae laxo meditantur arcu Cedere campis.
Neglegens ne qua populus laboret Parce privatus nimium cavere:
Dona praesentis cape laetus horae et Linque severa.

1. Write historical or explanatory notes on :
a. "Motum ex Metello consule civicum."
b. " mox ubi publicas

Res ordinaris grande munus Cecropio repetes cothurno."
c. "Et cuncta terrarum subacta Praeter atrocem animum Catonis."
2. In the last stanza of B., parce and parte are read: translate accordingly.
3. Point out poetical or Greek constructions (a) in the Extracts, and (b) in the following sentences, and give the usual forms:
a. damnatusque longi

Sisyphus Aeolides laboris.
b. Desine mollium

Tandem querelarum.
c. Uxor invicti Jovis esse nescis.
4. Horace in these books mentions incidents in his own life: quote the Latin so far as you can.
5. Arrange the following lines as lyric verses, naming the metre of each :
a. Pecuniae ad se cuncta ducentis-
b. Signa militiae tuae late feret-
c. Amor pugnae atque dapis egit.

## THIRD AND FOURTH YEARS.

Horace: Select Satires. TaCITUS : Annals, Book I.

Time: Thrbe Hours.

A. Translate:

Si nusquam es forte vocatus
Ad coenam, laudas securum olus ac, velut usquam
Vinotus eas, ita te felicem dicis amasque
Quod nusquam tibi sit potandum. Jusserit ad se
Maecenas serum sub lumina prima venire Convivam: 'Nemon oleum fert ocius? Eequis Audit?' cum magno blateras clamore fugisque. Mulvius et scurrae tibi non referenda precati Discedunt. Etenim fateor me, dixerit ille, Duci ventre levem, nasum nidore supinor, Imbecillus, iners, si quid vis adde popino. Tu, cum sis quod ego et fortassis nequior, ultro Insectere velut melior verbisque decoris Obvolvas vitium? Quid, si me stultior ipso Quingentis empto drachmis deprenderis? Aufer Me vultu terrere; manum stomachumque teneto, Dum quae Crispini docuit me janitor edo.
Non sum moechus, ais. Neque ego hercule fur ubi vasa
Praetereo sapiens argentea : tolle periclum, Jam vaga prosiliet frenis natura remotis.
Tune mihi dominus, rerum imperiis hominumque
Tot tantisque minor, quem ter vindicta quaterque
Imposita haud unquam misera formidine privet?
1.

> " ac, velut usquam

Vinctus eas, ita te felicem dicis."
This passage admits of two translations, according to punctuation.
2.
"quem ter vindicta quaterque
Imposita haud unquam misera formidine privet?"
Write a full description of the custom referred to. How else could the same object be effected?
3. Account for the mood of: sit, jusserit, dixerit, obvolvas, terrere, privet.
4. Parse, giving chief parts of verbs and nom. and gen. (in the same number) of nouns : olus, potandum, supinor, popino, insectere, deprenderis, èdo, drachmis, frenis.
5. Write such notes as you think necessary on the following passages :
a. Decies centena dedisses

Huic parco pancis contento, quinque diebus Nil erat in loculis.
b. Atque alii, quorum comoedia prisca virorum est.
c. Unum ex selectis judicibus objiciebat.

## B. Translate :

Immotum adversus eos sermones fixumque Tiberio fuit, non omitere caput rerum, neque se remque publicam in casum dare. Multa quippe et diversa angebant, validior per Germaniam exercitus, propior apud Pannoniam; ille Galliarum opibus subnixus, hic Italiæ imminens : quos igitur anteferret? ac, ne postpositi contumelia incen-
derentur. At per filios pariter adiri, majestate salva, cui major e longinquo reverentia. Simul adolescentibus excusatum quædam ad patrem rejicere, resistentesque Germanico aut Druso posse a se mitigari vel infringi: quod aliud subsidium, si imperatorem sprevissent? Ceterum nt jam jamque iturus, legit comites, conquisivit impedimenta, adornavit naves : mox hiemem aut negotia varie causatus primo prudentes, dein vulgum, diutissime provincias fefellit.

1. Supply words that have been omitted for shortness' sake in this passage.
2. a. "Validior . . exercitus." Explain the construction.
b. "Quos igitur anteferret?" Why imperf. subj.?
3. Turn what is written in oratio obliqua into the other form.
4. a. Jamque (cespes) pectori usque accreverat.
b. Elatumque (ferrum) deferebat in pectas, ni proximi prensam dextram vi attinuissent.
c. At Germanicus, quamquam contracto exercitu et parata in defectores ultione, præmittit literas ad Cæcinam.
d. Nox per diversa inquies, cum barbari . . . truci sonore subjecta vallium ac resultantes saltus complerent.
Note peculiarities of style in these sentences.
5. Write explanatory notes on the following:
a. Achaiam ac Macedoniam onera deprecantes levari in praesens proconsulari imperio tradique Cæsari placuit.
b. . . . ad portas, quarum decumana maxime petebatur.
6. a. An account of the title assumed by Augustus as ruler, and the advantages gained thereby.
b. The ordo equester and its deterioration under the Emperors.

## C. Translate into Latin :

Having drawn up his forces in line of battle, the general called together his lieutenant-generals, colonels and captains and urged them to remember the causes of the war, that they might fight the more bravely. The enemy (he said) had begun the war relying on the influence which was in the name of Parliament, and that if they were to be believed, they were not carrying on war with the King but only freeing him from his body of advisers, most worthless men, and what could be a greater lie than that? Others, on the contrary, blamed the King's own acts. But putting aside what he had done before, let them think over his late conduct. He had made almost all the concessions to Parliament that they had asked for : he had only said that he would not give them the military command, for if that were taken away, he thought his royal power was taken away along with it.

## (Additional for First Class.)

## Time: One Hour and a Half.

## A. Translate this " unseen" passage :

Eodem anno crebris populi flagitationibus, immodestiam publicanorum arguentis, dubitavit Nero, an cuncta vectigalia omitti juberet, idque pulcherrimum donum generi mortalium daret. Sed impetum ejus, multum prius laudata magnitudine animi, attinuere senatores, dissolutionem imperii docendo, si fructus quibus res publica sustineretur deminuerentur : quippe sublatis portoriis sequens (esse), ut tributorum
abolitio expostularetur. Plerasque vectigalium societates a consulibus et tribunis plebis constitutas acri etiam populi Romani tum libertate; reliqua mox ita provisa, ut ratio quæstuum et necessitas erogationum inter se congruerent. Temperandas plane publicanorum cupidines, ne per tot annos sine querela tolerata novis acerbitatibus ad invidiam verterent. Ergo edixit princeps ut leges cujusque publici, occultæ ad id tempus, proscriberentur; omissas petitiones non ultra annum resumerent; Romæ prætor, per provincias, qui pro prætore aut consule essent, jura adversus publicanos extra ordinem redderent; militibus immunitas servaretur; nisi in iis quæ veno exercerent; aliaque admodum æqua, quæ brevi servata, dein frustra habita sunt. Manet tamen abolitio quadragesimæ quinquagesimæque, et quæ alia exactionibus illicitis nomina publicani invenerant. Temperata apud transmarinas provincias frumenti subvectio; et ne censibus negotiatorum naves ascriberentur tributumque pro illis penderent, constitutum.

## 1. Distinguish census and professio.

2. What data have we for ascertaining the population of Rome in the time of Augustus? Show the method of using any one of them and the result reached.
3. Describe the daily occupations of a Roman noble at Rome.

## FRENCH.

Examiner
Professor J. Liechti, M. A.

## FIRST FRENCH CLASS.

Time: Three Hours.

## I.*

A. Translate:-Molière: Le Bourgeois Gentilhomme.-M. Jour-dain.-Holà ! Monsieur le Philosophe, vous arrivez tout à propos avec votre Philosophie. Venez un peu mettre la paix entre ces personnesci. Le Maître de Philosophie.-Qu'est ce donc? Qu'y a-t-il, messieurs ? M. Jourd.- Hls se sont mis en colère pour la préférence de leurs professions, jusqu'à se dire des injures et en vouloir venir aux mains. Le Maître de Phil.- Eh quoi ! messieurs, faut-il s'emporter de la sorte ? Et n'avez vous point lu le docte traité que Sénèque a composé de la colère? y a-t-il rien de plus honteux que cette passion, qui fait d'un homme une bête féroce? et la raison ne doit-elle pas être maîtresse de tous nos mouvements? Le Maître à Danser.-Comment, monsieur ! Il vient nous dire des injures à tous deux, en méprisant la danse, que j'exerce, et la musique, dont il fait profession! Le Maître de Phil.Un homme sage est au-dessus de toutes les injures qu'on lui peut dire ; et la qrande réponse qu'on doit faire aux outrages, c'est la modération et la patience. Le Maître d'Armes.-Ils ont tous deux l'andace de vouloir comparer Jeurs professions à la mienne ! Le Maître de Phil.-Faut-il que cela vous émeuve? Ce n'est pas de vaine gloire et de condition que les hommes doivent disputer entre eux ; et ce qui nous distingue parfaitement les uns des autres, c'est la sagesse et la vertu.

1. Qu' $y$ a-t-il? Parse the words $q u$ ' and $i l$, and give short exs. in illustration of the idiomatic use made of il $y$ a. Translate: How long have these strangers been in the city? They have been here a fortnight.

[^26]2. Faut-il s'emporter? Faut-il que cela vous emeuve? Write these two clauses so that emporter appears in the subjunct., and emeuve in the infinit, mood. Give a personal form to the same clauses, by substituting devoir for faut. Write the conditional of falloir, and mention its English equivalent.
3. Qu'on lui pert dire. Comment on the position of the pronoun lui. Translate: Tell ( 2 d pers. pl.) me the truth. Do not tell it to me. In what case may the dative and the accusative be united before the verb? Take for exs. : I recommend him to you, and I recommend you to him.
4. Go, the master said, and prepare all that is necessary. Translate this sentence and explain why its French construction differs from the English. Write down three sents. in illustration of other points of difference between the two languages.
B. Translate :-M. Jourdain.-Croyez-vous que l'habit m'aille bien? Le Maître Tailleur.-Belle demande! Je défie un peintre avec son pinceau de vous faire rien de plus juste. J'ai chez moi un garẹon qui, pour monter une rhingrave, est le plus grand génie du monde; et un autre qui, pour assembler un pourpoint, est le héros de notre temps. M. Jourd. (regardant l'habit du tailleur).-Ah! Ah! Monsieur le tailleur, voilà de mon étoffe du dernier habit que vous m'avez fait! Je la reconnais bien. Le Maître Taill.--C'est que l'étoffe me sembla si belle, que j'en ai voulu lever un habit pour moi. M. Jourd.-Oui ; mais il ne fallait pas le lever avec le mien. M. Jourdain.-Qui est donc tout ce monde-là, s'il vous plait? Madame Jourdain. - Tout ce monde-là est un monde qui a raison, et qui est plus sage que vous. Pour moi, je suis scandalisée de la vie que vous menez. Je ne sais plus ce que c'est que notre maison : on dirait qu'il est céans carême-prenant tous les jours; et dès le matin, de peur d'y manquer, on y entend des vacarmes de violons et de chanteurs dont tout le voisinage se trouve incommodé. Nicole.-Madame parle bien, Je ne saurais plus voir mon ménage propre avec cet atti ail de gens que vous faites venir chez vous. Ils ont des pieds qui vont chercher de la boue dans tous les quartiers de la ville pour l'apporter ici ; et la pauvre Françoise est presque sur les dents à frotter les planchers que vos biaux maîtres viennent crotter régulièrement tous les jours.

1. Croyez-vous que l'habit m'aille bien. Parse the two words in italics. Give the French of: Go (2d pers. s.) home: Go there. What means aller in the following expressions, translate: Il y va de la vie. Cela va sans dire. Laissez-moi aller. Allez-vous à pied? Allons-nousen! Allons donc! Distinguish between : Un homme de bien. Bien des hommes. De bien grands services. Bien de grands services.
2. J'en ai voulu lever. En may be used : as partitive article, as the pronom. object of certain verbs, as person. pronoun, and as prepos. Write an ex. for each case. Distinguish between : J'écrirai ceci en trois heures ; J'écrirai ceci dans trois heures ; and J'écrirai ceci à trois. heures. Conjugate the pres. indicat. of lever, and the interrog. form of the pres. indicat. of se lever.
3. De peur d'y manquer. What form does this sentence assume if you substitute for de peur de, the conjunction de peur que?, and what particle does this conj. require before the verb? Translate: You will not succeed, unless (à moins que) you study diligently. Write the imperf. subjunct. of manquer.
+C. Unseen translation.- La Rochefoucauld.-La parfaite valeur et la poltronnerie complète sont deux extrémités où l'on arrive

[^27]rarement. L'espace qui est entre elles est vaste, et contient toutes les autres espèces de courage. Il n'y a pas moins de différence entre elles qu'entre les visages et les humeurs. Il y a des hommes qui s'exposent volontiers au commencement d'une action, et qui se relâchent et se rebutent aisément par sa durée. Il y en a qui sont contents quand ils ont satisfait à l'honneur du monde, et qui font fort peu de chose audelà. On en voit qui ne sont pas toujours également maîtres de leur peur. Il s'en trouve à qui l'habitude des moindres périls affermit le courage et les prépare à s'exposer à de plus grands. La parfaite valeur est de faire sans témoins ce qu'on serait capable de faire devant tout le monde.

## II.

1. Briefly explain the use in French of the following signs : '; ' ; ^; ". Distinguish between : dès and des ; où and ou ; tâcher and tacher ; oui and oui ; dé and de ; between le souris and la souris ; le page and la page; les lieux and les lieues; les bals and les baux.
2. Parse and give the primitive tenses of: (A) arrivez, mis, doit, exerce ; (B) fallait, est, entend, viennent. Write down the 1st pers. sing. and plural of the pres. indicat. of preferer, jeter and nager.
3. Which are the idiomatic tenses formed with devoir? Translate: He ought to go abroad. We should have commenced earlier. Construe the same sentences with the impers. verb falloir instead of devoir. Write a sentence, each, with venir de and venir à.
4. When do you render whose by dont, and when by à qui and de qui? Illustrate each case with a short ex. What form does whose assume in the sent. : The lady, to whose son I am writing (ecris), has invited me.
5. Distinguish between the verbs savoir, connaitre and pouvoir. Write three sentences in illustration.
6. In how many different ways may the English passive be rendered in French? Give exs. of each. Translate : The matter has not been thought of yet.

Translate into French :-The Queen will be sixty-eight years old in May next. It is still cold. Tell me what you are thinking of. Not all, that is fashionable, is pretty. What causes this heat? Have you answered this letter? I have not yet answered it. Whatever you do, do it well. I long to go to the country. It is late. He is late. The mail is overdue. To-day is the 11th of April, 1887. Molière, whose works we are reading, is called the French Shakspeare. Various most useful institutions, that are spoken of, will be established during the year.

## SECOND FRENCH CLASS.

Time : Threr Hours.

## I.*

A. Traduisez :-Molière : L'Avare.-Cléante.-Oui, j'aime. Mais avant que d'aller plus loin, je sais que je dépends d'un père et que le nom de fils me soumet à ses volontés ; que nous ne devons point engager notre foi sans le consentement de ceux dont nous tenons le jour ; que le ciel les a faits les maitres de nos voeux, et qu'il nous est enjoint de n'en disposer que par leur conduite ; que, n'étant prévenus d'aucune folle ardeur, ils sont en état de se tromper bien moins que nous, et de voir beaucoup mieux ce qui nous est propre ; qu'il en faut plutôt croire

[^28]les lumières de leur prudence que l'aveuglement de notre passion, et que l'emportement de la jeunesse nous entraîne le plus souvent dans des précipices fâcheux. . . La F'leche.-Mon maître, votre fils, m'a donné ordre de l'attendre. Harpagon. - Va t'en l'attendre dans la rue, et ne sois point dans ma maison, planté tout droit comme un piquet, à observer ce quise passe et faire ton profit de tout. Je ne veux point avoir sans cesse devant moi un espion de mes affaires, un traître dont les yeux maudits assiégent toutes mes actions, dévorant ce que je possède, et furettent de tous côtés pour voir s'il n'y a rien à voler. La Flèche.-Comment diantre voulez-vous qu'on fasse pour vous voler? Etes-vous un homme volable, quand vous renfermez toutes choses, et faites sentinelle jour et nuit? Harpagon.-Je veux renfermer ce que bon me semble, et faire sentinelle comme il me plait. Ne voilà pas de mes mouchards, qui prennent garde à ce qu'on fait? ¡Bas àpart.) Je tremble qu'il n'ait soupçonné quelque chose de mon argent. (Haut.) Ne serais-tu point homme à aller faire courir le bruit que j'ai chez moi de l'argent caché ?
+1. Mais avant que d'aller plus loin. Eaites l'analyse des deux termes analogues : avant que et avant que de. A quel mode doit om mettre le verbe qui suit avant que ; écrivez un ex. à l'appui. Par quel autre mot remplacez-vous avant que dans le second membre d'une phrase? Traduisez comme ex. : Before you do this and before you commit such an injustice, I want you to reflect upon what you are about to do.
2. Le ciel les a fuits. Expliquez l'accord du part. passé faits dans cette phrase. Montrez par deux exs. que le part. passé du verbe faire est invariable dans certains cas. Pourquoi?
3. Je tremble qu'il n'ait soupçonne. Expliquezl'emploi du subjonctif et de la negation ne dans cette phrase. Traduisez: I am afraid he will succeed. I am afraid he will not succeed. I am not afraid that he will succeed. Pourquoi la construction est-elle différente dans chacune de ces trois phrases?
4. Expliquez la règle concernant le mot quelque, selon qu'il est suivi d'un substantif, d'un verbe, ou d'un adjectif ou adverbe, et citez un exemple de chaque cas. Traduisez: He has been forty edd years in this country.

## B. Traduisez:-Racine: Athalie.

Josubeth. -Un poignard à la main, l'implacable Athalie Au carnage animait ses barbares seldats, Et poursuivait le cours de ses assassinats. Joas, laissé pour mort, frappa soudain ma vue: Je me figure encor sa nourrice éperdue, Qui devant les bourreaux s’était jetée en vain, Et, faible, le tenait renversé sur son sein, Je le pris tout sanglant. En baignant son visage,
Mes pleurs du sentiment lui rendirent l'usage; Et, soit frayeur encore, ou pour me caresser, De ses bras innocents je me sentis presser. Grand Dieu, que mon amour ne lui soit peint funeste ! Du fidèle David c'est le précieux reste : Nourri dans ta maison, en l'amour de ta loi, Il ne conuaît encor d"autre père que toi. Sur le point d'attaquer une reine homicide, A l'aspect du péril si ma foi s'intimide, Si la chair et le sang, se troublant aujourd'hui, Ont trop de part aux pleurs que je répands pour lui, Conserve l'béritier de tes saintes promesses,
Et ne punis que moi de toutes mes faiblesses !
+1. Je me sentis presser. Si Racine ê̂t écrit: "Je me suis sentiepresser," le participe passé sentie aurait-il été correct ou non? Donnez en la raison. Traduisez: Young and without experience, I allowed myself to be (se laisser) led by a husband whom I loved. I have allowed (laisser) them (fem.) to go home.
+2. Que mon amour ne lui soit. Pourquoi le verbe de cette phrase se trouve-t-il au subjonctif? La phrase suivante est incorrecte; corrigez-la et faites les explications nécessaires: Si vous le rencontrez et qu'il vous retient, remettez-lui ce billet. Comment rendez-vous le mot que dans les phrases: Que de monde dans la rue! Que ne le faites-vous! Que voulez-vous que je fasse? Que non! Où que vous soyez. Pas que je sache. A qui puis-je le dire $q u$ ' à vous seul. Qub on m'apporte les lettres.
3. Donnez, en prose française, le récit que fait Josabeth dans les onze premiers vers de l'extrait B .
4. Indiquez la distinction entre les mots quoique et quoi que. Quel mode est-ce qu'ils gouvernent? Prenez comme exs. : However that may be. Although that orator speaks much, he does not speak well. Whatever you may do, act gentlemanly.

## II.

+1. Etablissez, par quelques exs., la différence entre le participe present et l'culjectif verbal. Ecrivez le part. présent et l'adject verbal femin. (s'il y en a), et le part. passé de chacun des verbes: va, fasse, veux, plait, pris, nourris, repands, deviendra, exercer, soit, résidât, convainquis.
2. Indiquez la distinction entre les mots : fabriquant et fabricant, président et présidant; negligeant et négligent. Traduisez: More than half the earth is inhabited by animals, living and dying without knowing it. His success is to be attributed to his having studied diligently.
+3 . Quand se sert-on de la construction inversive? citez au moins quatre exemples. Le physicien arrache tous ses secrets à la nature. Cette phrase est-elle correcte; pourquoi? Traduisez: Time and money spent on education (that educ. costs) are always well employed.
4. Liberty, like the sun, carries everywhere life, light and heat. Neither time nor misfortune ought to efface from our heart the recollection of a friend. To read too much and to read too little are two faults. Expliquez l'accord du verb dans ces phrases.
5. Je me souviens avoir dit cela. Il tombèrent de gros flocons de neige. C'est à vous à qui je parle. L'homme doit obéir et respecter les lois. Qu'y a-t-il à dire à l'égard de la construction de ces phrases.
6. Quel est l'accord du part. passé, précédé de le peu de? Prenez pour exs. : What little (le peu de) good conduct that young man has shown, has won (mérité) him your confidence. The loss of the patient is attributable to the little knowledge the physician has shewn.

Translate into French :-William Pitt.-The situation which Pitt occupied at the close of the reign of George II. was the most enviable ever occupied by any public man in English history : he had conciliated the king; he domineered over the House of Commons; he was adored by the people; he was admired by all Europe. He was the first Englishman of his time, and he had made England the first country in the world.

[^29] omitted.

## (Additional for a First Class.)

Traduisez:-Molière: Le Misanthrope.
Alceste.- L'amour que je sens pour cette jeune veuve Ne ferme point mes yeux aux défauts qu'on lui trouve ; Et je suis, quelque ardeur qu'elle m'ait pu donner,
 Mais avec tout cela, quoi que je puisse faire, Je confesse mon faible; elle a l'art de me plaire: J'ai beau voir ses défauts, et j'ai beau l'en blâmer, En dépit qu'on en ait, elle se fait aimer ; Sa grâce est la plus forte; et sans doute ma flaume De ces vices du temps pourra purger son âme.
Clitandre--Timante encor, madame, est un bon caractère.
Oélimène.--C'est de la tête aux pieds un homme tout mystère, Qui vous jette, en passant, un coup d'oeil égaré, Et, sans aucune affaire, est toujours affairé. Tout ce qu'il vous débite en grimaces abonde ; A force de façons, il assomase le monde; Sans cesse il a tout bas, pour rompre l'entretien, Un secret à vous dire, et ce secret n'est rien; De la moindre vétille il fait une merveille, Et, jusques au bonjour, il dit tout à l'oreille.

1. Donnez le résumé (en français) des scènes du Misanthrope, que vous avez lues.
2. Faites le pertrait du caractère d'Alceste et de celui de Célimène.
3. Dans quel but Moliêre a-t-il écrit les comédies l'Avare et le Misanthrope?

# THIRD FRENCH CLASS。 

## Tine: Three Hours.

## I.

Traduisez:-Corneille : Horace (tragédie).
Le Vieil Horace.-Loin de blầmer les pleurs que je vous vois répandre, Je crois faire beaucoup de m'en pouvoir défendre, Et céderais peut-être à de si rudes coups Si je prenais ici même intérêt que vous: Non qu'Albe par son choix m'ait fait hair vos frères, Tous trois me sont encor des personnes bien chères; Mais enfin l'amitié n'est pas du mềme rang, Et n'a point les effets de l'amour ni du sang? Je ne sens point pour eux la douleur qui tourmente Sabine comme soeur, Camille comme amante: Je puis les regarder comme nos ennemis, Et donne sans regret mes souhaits à mes fils. Ils sont, grâces aux dieux, dignes de leur patrie; Acun étonnement n'a leur gloire flétrie; Et j'ai vu leur honneur croître de la moitié, Quand ils ont des deux camps refusé la pitié. Si par quelque faiblesse ils l'avaient mendiée. Si leur haute vertu ne l'eût rêpudiée, Ma main bientêt sur eux m'eât vengé hautemer't De l'affront que m'êt fait ce mol consentement.

1. M'ait fait hier. Expliquez l'emploi du subjonct ait. Dans qrael cas, le verbe, dépendant d'une proposition interrogative, se met-il
à l'indicatíf? Traduisez comme ex. : Do you forget that God hears you and sees you, and that He can read the most hidden recesses of your heart?
2. Vous avez bien peur que je ne change d'avis. Le verbe d'une proposition subordonnée est tantôt précédé de ne, tantôt il rejette cette nêgation, tantót on emploie ne . . pas au lieu de ne. Donnez-en vos raisons et écrivez des exs. à l'appui.
3. Phrases idjomatiques : Il a du bien. Je vous veax du bien. Grand bien vous fasse. Cela vient bien. Cet arbre vient bien. Il faut prendre la chose en bien.Nul bien sans peine. Eh bien! soit. Il n'a pour tout bien que son savoir. I will have nothing to do with it. I have done with him. We camot do without money. Done. Dolend me your book. He is doing well. That won't do. The work is done.
B. Molière :-Les femmes sarartes.

Ariste.-Allez, c'est se moquer. Votre femme, entre nows, Est, par vos lâchetés, souveraine sur vous.
Son pouvoir n'est fondé que sur votre faiblesse; C'est de vous qu'elle prend le titre de maîtresse ; Vous-mểme à ses hauteurs vous vous abandonnez, Et vous faites mener, en bête, par le nez. Quoi! vous ne pouvez pas, veyant comme on vous nomme, Vous résoudre une fois à vouloir être un homme, A faire condescendre une femme à vos voeux, Et prendre assez de coeur pour dire un Je le veux ! Vous laisserez, sans honte, immoler votre fille Aux folles visions qui tiennent la famille, Et de tout votre bien revêtir un nigaud, Pour six mots de latin qu'il leur fait sonner hant ; Un pédant qu'á tous coups votre femme apostrophe Du nom de bel esprit et de grand philosophe, D'homme qu'en vers galants jamais on n'égala Et qui n'est, comme on sait, rien moins que tont cela ! Allez, encore un coup, c est une moquerie, Et votre lâcheté mérite qu'on en rie.

1. C'est se moquer. De tout votre bien. Sonner haut. A tous coups. Faites l'analyse de ces termes. Indiquez la nuanee entre: parler haut et parler hautement ; parler bas et parler bassemeent ; entre: Il vint me parler ; il vint pour mee parler ; il vesait de me parler ; il vient à me parler ; il en vint à me parler.
2. Qu'on en rie. Faites l'analyse de tous les mots de cette phrase. Montrez par un ex. que $y$ est employé comme régime pronominal de certains verbes. Traduisez : I am delighted with it. Yoa may laugh at me I shall not complain of it. What do they think of it. Do think of it. Donnez les etyma de en, dont, beaucourp, maint.
3. Faites le portrait (en francais) des personnages suivants des "Femmes Savantes": Herriette, Bélise et Aviste

## II.

1. Great as his misfortune is, I know one whose misfortane is: greater by far. Wallenstein silently, but not inactively, awaited the hour of revenge. Traduisez ces phrases et dites quelle est l'etymologiede bonheur et de malheur. Montrez que I'etymologie populaire (bona hora, mala hora) est incorrecte.
2. Quelle différence faites-vous entre; le forêt et la forêt ; le somme et la somms; le critique et la eritique; le satire et la satives

Expliquez cette dpparente anomalie de deux genres par l'étymologie et la dérivation de ces mots.
3. Formez des nomina agentis de blanchir, fournir, polir, courir, couvrir. Nommez les principaux subst. feminins devant lesquels l'adject. grand reste au masculin. Montrez que l'emploi de l'apostrophe dans ces mots tire son origine de l'ignorance des grammairiens.
4. Expliquez les phrases: Je le tiens; j'y tiens ; je tiens à lui que cela soit. Ce mot m'a êchappé. Ce mot m'est échappé. Il a échappé à la prison. Il s'est échappé de la prison. Montrez par des exs. l'emploi de : changer de, changer pour, changer contre et changer en.
5. Quel est l'accord du participe passé suivi d'un infinitif. Citez quelques exemples à l'appni.
6. Classifiez les oeurres de Molière et de Racine, et mettez ces deux poètes en parallèle.

Traduisez:-There are several modes of acting powerfully upon public assemblies. The speaker may address himself, either to their logic, by the vigour and conclusiveness of his reasonings; or to their wit, by the vivacity and piquancy of his expressions, allusions, and repartees ; or to their hearts, by the emotions of sensibility ; or to their passions, by vehemence of invective ; or to their imagination, by the splendour of rhetorical figures. But most frequently it is by means of figures of imagery, that eloquence produces its greatest effects.Berryer, after Mirabeau, the greatest of French orators, affected especially the figurative style, in the various outpourings of his eloquence.

## (Additional for First Class.)

Traduisez:-Molière : Le Tartufe.
Orgon.-Ah! si vous aviez vu comme j'en fis rencontre,
Vous auriez pris pour lui l'amitié que je montre.
Chaque jour à l'église il venait, d'un air doux,
Tout vis-à-vis de moi se mettre à deux genoux.
Il attirait les yeux de l'assemblée entière
Par l'ardeur dont au ciel il poussait sa prière ;
Il faisait des soupirs, de grands élancements,
Et baisait humblement la terre à tous moments :
Et lorsque je sortais, il me devançait vite
Pour m'aller, à la porte, offrir de l'eau bénite.
Instruit par son garẹon, qui dans tout l'imitait, Et de son indigence, et de ce qu'il était,
Je lui faisais des dons; mais, avec modestie, Il me voulait toujouss en rendre une partie. C'est trop, me disait-il, e'est trop de la moitie ; Je ne mérite pas de vous faire pitié.
Et quand je refusais de vouloir le reprendre, Aux pauvres, à mes yeux, il allait le répandre.
Enfin le ciel chez moi me le fit retirer,
Et depuis ce temps-là tout semble y prospérer.

1. De l'eau bénite. Quand se sert-on du participe béni? citez un exemple. Expliquez la différence idiomatique et grammaticale entre: absous et absolu: dissous et dissolu, et donnez le feminin de ces quatre mots.
2. Racontez en prose française ce que dit Orgon à son frère dans les vers ci-dessus, et faites l'examen du premier acte du Tartufe.

## GERMAN.

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

## FIRST GERMAN CLASS.

Time: Three Hours.

## I.

A. Translate:-Uhland "Des Süngers Fluch."

Schon stehn die beiden Sänger im hohen Säulensaal, Und auf dem Throne sitzen der König und sein Gemahl; Der König furchtbar prächtig wie blut'ger Nordlichtschein, Die Königin süss und milde, als blickte Vollmond drein.

Da schlug der Greis die Saiten, er schlug sie wundervoll, Dass reicher, immer reicher der Klang zum Ohre schwoll, Dann strömte himmlisch helle des Jünglings Stimme vor, Des Alten Sang dazwischen wie dumpfer Geisterchor.

Jacobs:-Erzählung :- So dachte auch mein wackerer Wirth im Engadinthal. Und als ich mich bei Tages Anbruch zur Abreise anschickte, fasste er meine Hand mit den Worten: "Warum wollt ihr schon wieder von dannen ziehn? Weilet bei mir und seid willkommen. So freundlichen Worten zu widerstehen vermocht' ich nicht. Ich blieb eine ganze Woche hier, durchzog am Tage die Gegend umher, und ward jeden Abend bei der Rückkehr mit gleicher Herzlichkeit aufgenommen. Nach Verlauf dieser Zeit, als ich ernstlich Abschied hahm, drückte mir der Alte die Hand und sagte: "Es wäre mir ganz incht, wenn ihr es euch länger bei mir gefallen lassen wolltet; denn rer seht, dass ihr uns nicht lästig seid."

1. Der König furchtbar prächtig. Die Königin süss und milde. Illustrate the agreement of adjs. used: (a) attributively; (b) predicatively. Comment on the inflection of the adjs. in the examples in italics. Distinguish between: Ein schön geschriebener Brief and Ein schöner geschriebener Brief. Wir haben ein neu bemaltes Haus, aber kein neues, bemaltes Haùs gekauft.
2. Und als ich mich . . . . Worten. Give reasons for the position of the verb anschickte, and of the subject er. Parse anschickte. Write in German: And Peter went out and wept. Why is the logical order of words not interfered with in this clause? Explain as fully as you can.
3. Mein wackerer Wirth. Write the same with the adj. in the comparative. Mention some comparative degrees that have no positive. Give the degrees of comparison of near, soon, willingly, many. Aufgenommen. Parse this verb, and account for the prefix ge. When is ge dropped? Give instances.
B. Schiller:-Wilhelm Tell.

Stauffacher.-Wer solch ein Herz an seinen Busen drückt, Der kann für Herd und Hof mit Freuden fechten, Und keines Königs Heermacht fürchtet er. Nach Uri fahr' ich stelinden Fusses gleich. Dort lebt ein Gastfreund mir, Herr Walther Fürst, Der über diese Zeiten denkt, wie ich.

> Auch find' ich dort den edlen Bannerherrn Von Attinghaus-obgleich von hohem Stamm, Liebt er das Volk und ehrt die alten Sitten. Mit ihnen Beiden pfleg' ich Raths, wie man
> Der Landesfeinde muthig sich erwehrt. Leb wohl-und weil ich fern bin, führe du Mit klagem Sinn das Regiment des HausesDem Pilger, der zum Gotteshause wallt, Dem frommen Mönch, der für sein Kloster sammelt, Gib reichlich und entlass ihn wohlgepflegt. Stauffachers Haus verbirgt sich nicht. Zu äusserst Am offnen Heerweg steht's, ein wirthlich Dach Für alle Wanderer, die des Weges fahren.

1. Write down in the ordinary Prose construction, the dependent and principal clauses, contained in the first three lines of B. Parse and decline wer and der, and explain why solch is uninflected.
2. Explain the ellipsis in : Obgleich von hohem Stamm. Parse obgleich, and mention how such words affect the construction.
3. Der . . . denkt, wie ich. Write the primitive tenses of denkt, and mention all other verbs of this class. Distinguish between : Er starb als ein Verbrecher and Er starb wie ein Verbrecher. Translate : My hands are as cold as ice,-colder than ice. He died (as) a young man.
C. Schiller :-Der Pomp eines Königs umgab Wallenstein in dieser Einsamkeit und schien dem Urtheilsspruche seiner Erniedrigung Hohn zu sprechen. Sechs Pforten führten zu dem Palaste, den er in Prag bewohnte, und hundert Häuser mussten niedergerissen werden, um dem Schlosshofe Raum zu machen. Aehnliche Paläste wurden auf seinen übrigen zahlreichen Gütern erbaut. Cavaliere aus den edelsten Häusern wetteiferten um die Ehre, ihn zu bedienen, und man sah kaiserliche Kammerherren den goldenen Schlüssel zurückgeben, um bei Wallenstein eben dieses Amt zu bekleiden.

Goethe: "Reineke Fuchs."-
Reineke hatte die Worte gehört, doch fürchtet' er klüglich, Andre möchten noch neben dem Boten im Hinterhalt liegen. Als er sich aber versichert, der Bär sei einzeln gekommen, Ging er listig hinaus und sagte: " Werthester Oheim, Seid willkommen! Verzeiht mir ; ich habe Vesper gelesen, Darum liess ich euch warten. Ich dank' euch, dass ihr gekommen; Denn es nutzt mir gewiss bei Hofe, so darf ich es hoffen.

1. Give reasons for using the particle $z u$ before the infinits. sprechen and machen, and for omitting it before werden and zurü̈ckgel en (C.). I have too much to do. Pray, shut the door. Translate these sents., and point out the character of $z u$ in them.
2. Wurden auf seinen . . . Guitern erhaut (C.). What change would occur in this clause, if you were to substitute waren for wurden? Parse these two words, and translate: The house is built-is being built - is to be built - is about to be built - has been built.
3. Ihn zu bedienen. What kind of verbs are formed with the prefix be, and what is its force? Mention instances. Verbrechen, zerbrechen, erbrechen. Illustrate the difference in the meaning of these verbs by an ex. with each. What influence have ver, zer and er upon the verb?

## II.

1. Als er sich aber versichert . . . gekommen (C Goethe). Complete this sentence. Comment on the position of aber, and illustrate the difference in the use of aber, allein and sondern.
2. Fully account for hinaus in the clause: Ging er listig hinaus. Write this sent. in a subordinate form ; how is hinaus affected by this change? Why cannot heraus be connected with ging?
3. Decline in the 4 cases sing. and plural : Ein freundliches Wort. Mention the two plural forms of Wort, and illustrate their meaning.
4. Classify, and parse the following verbs : vermocht', aufgenommen (A) ; erwehrt, verbirgt (B) ; umgab, niedergerissen (C) ; widersprach, anvertrauen, wäre.
5. The infinitive of certain verbs is used instead of the past part. When? Write an ex., and mention all the verbs of this class. What place do you assign to nicht in a sent. ? Give a few illustrations.

Translate : The ancient Germans were kind, hospitable, sincere and brave. All is not gold that glitters. Nothing is great that is not good. Knowledge is not acquired without labour. Not a single person was in the room, The Queen's Jubilee will be celebrated in June. The German Emperor Wilhelm was ninety years old on the 22nd of March, 1887. His Prime Minister, Prince Bismarck, is the greatest living statesman. Cleanthes being asked: "Who is the richest?" replied: "He who is poorest in desires."

## SECOND GERMAN CLASS.

Time: Thres Hours.

## I.

A. Translate: Schiller:-Wilhelm Tell. II. Act.
K. Hunn.-Ich war zu Rheinfeld, an des Kaisers Pfalz, Wider der Vögte harten Druck zu klagen, Den Brief zu holen unsrer alten Freiheit, Den jeder neue König sonst bestätigt. Die Boten vieler Städte fand ich dort, Vom schwäbischen Lande und vom Lauf des Rheins, Die all' erhielten ihre Pergamente
Und kehrten frendig wieder in ihr Land. Mich, euren Boten, wies, man an die Räthe, Und die entliessen mich mit leerem Trost:
"Der Kaiser habe diesmal keine Zeit ;
"Er würde sonst einmal wohl an uns denken.

- Und als ich traurig durch die Säle ging

Der Königsburg, da sah ich Herzog Hansen
In einem Erker weinend steh'n, um ihn
Die edeln Herrn von Wart und Tegerfeld, Die riefen mir und sagten : "Helft euch selbst!
" Gerechtigkeit erw artet nicht vom König.
"Beraubt er nicht des eignen Bruders Kind
"Und hinterhalt ihm sein gerechtes Erbe?

* 1. Wider der Vöyte . . . zu klagen. Upon what is the infinit. with $z u$ dependent in this clanse? Illustrate the various cases in which this mood requires $z u$ before it. Explain exceptional cases, taking for

[^30]exs. : It is better to suffer wrong than to do wrong. Studying is profitable. He was heard crying : fire !
2. Klagen. What change does the prefix be operate in such verbs ? Write an exs. Do all verbs with this prefix govern the same case ? Translate: He met his friends, and explained to them his views. Give the Prose equivalent of wider in the 2 d line, and shew by an ex. in what other form wider may be used.
3. State your reasons for the difference in the mood of the verbs. habe, würde and helft, erwartet in the 11, 12, 17 and 18th lines. The, subjunctive appears either as a Conditional, a Potential, or an Optative mood. Write an ex. for each.
B. Goethe: Egmont.-Buyck.-Auf einmal kam's wie vom Himmel herunter, von der Mündung des Flusses, bav, bau! immer mit Kanonen in die Franzosen drein. Es waren Engländer, die unter dem Admiral Malin von ungefähr von Dünkirchen her vorbeifuhren. Zwar viel halfen sie uns nicht; sie konnten nur mit den kleinsten Schiffen herbei, und das nicht nah genug; schossen auch wohl unter uns-Es that doch gut! Es brach die Wälschen und hob unsern Muth. Da ging's! Rick ! rack! herüber, hinüber! Alles todt geschlagen, alles ins Wasser gesprengt. Und die Kerle ersoffen, wie sie das Wasser schmeckten ; und was wir Holländer waren, gerad hintendrein. Uns, die wir beidlebig sind, ward erst wohl im Wasser wie den Fröschen ; und immer die Feinde im Fluss zusammengehauen, weggeschossen wie die Enten. Was nun noch durchbrach, schlugen euch awf der Flucht die Bauerweiber mit Hacken und Mistgabeln todt. Musste doch die wälsche Majestät gleich das Pfötchen reichen und Friede machen. Und den Frieden seid ihr uns schuldig, dem grossen Egmont schuldig.

1. Point out, and fully explain, three elliptical clauses in the above passage. Give the original German of the trope: das Pfötchen reichen, and comment on the terms : bav, bau; gerad hintendrein ; beidlebig.
2. Schlugen euch auf der Flucht. What peculiar use is made of euch in this clause ; when may this form be used, and what does it intimate? Give another similar ex. The English possess. pron. is not always used in German ; translate : I wash my hands. She cast herself at his feet.
3. Musste doch. Illustrate the use of doch: (a) as an expletive; (b) as a conjunction. Mention other words that may perform the part of expletives, and write short sents. In what case is the adverb so employed as a conjunction? Take for exs. : Although he has bought a new house, he does not yet live in it. If man could read the Future, he would live and act differently.

## C. Schiller.-Wilhelm Tell. III. Act.

Rudenz.-Ihr könntet euch entchliessen, hier zu leben, In meinem Vaterlande mein zu sein? O Bertha, all mein Sehnen in die Weite, Was war es, als ein Streben nur nach euch ? Euch sucht' ich einzig auf dem Weg des Ruhms, Und all mein Ehrgeiz war nur meine Liebe. Könnt ihr mit mir euch in dies stille Thal Einschliessen und der Erde Glanz entsagenO, dann ist meines Strebens Ziel gefunden ; Dann mag der Strom der wildbewegten Welt An's sichere Ufer dieser Berge schlagenDann mögen diese Felsen um uns her Die undurehdringlich feste Mauer breiten, Und dies verschloss'ne sel'ge Thal allein Zum Himmel offen und gelichtet sein !

1. Meines Strebens Ziel. An improper use of the Genitive may be avoided by substituting a preposition. Distinguish between : Der Hass des Feindes and der Hass gegen den Feind ; Gehorsam der Eltern and Gehorsam gegen die Eltern. Illustrate all the cases, in which von takes the place of the Genitive.
2. The greatest among the poets. A crowd of men went down with the ill-fated steamer, A number of honest men were turned out of office. Translate these sents., and state why the partitive Genit. is differently rendered in each ex.
3. Describe, in German Prose, the scene between Rudenz and Bertha in the III. Act.

## II.

1. Classify, and give the primitive tenses of: hinterhält (A.); vorbeifuhren, durchbrach (B) ; entschliessen (C); unterworfen, auferlegt, errungen (Additional). Note down the English equivalents of the reflexiva: sich müle stehen; sich krank arbeiten, sich ausser Athem laufen, and translate: The story, he read, was so amusing, he (has) nearly killed himself with laughing over it.
2. Illustrate by exs. the three modes of constructing dependent sentences, and explain the position of the verb (inflected and uninflected parts), the subordinate clause : (a) preceding, (b) following the principal clause.
3. The Queen, who is boloved by all her subjects, will celehrate her Jubilee this summer. Write this sent. so as to change the relative clause into an attributive clause. There is elliptical abreviation in the sentence : Ein reicher Mann, ist er doch nichts weniger als freigebig. Restore it to its primitive form.
4. Als and as; denn and then; wenn and when. Write a sentence with each of these German and English conjunctions, shewing that these words (in pairs) are not identical.

Translate :-Portia.-Tarry a little Jew:-there is something else. This bond doth give thee here no jot of blood; the words expressly are, a pound of flesh: take thou thy pound of flesh; but in the cutting of it, if thou dost shed one drop of Christian blood, thy lands and goods are, by the laws of Venice, confiscated unto the State of Venice.

Egmont:-Buyck.-Ask their leave, forsooth! In our province we sing just what we please. That's because Count Egmont is our stadtholder, who does not trouble himself about such matters. Throughout the whole of Flanders, anybody sings them that chooses.

## (Additional for a First Class.)

Translate :-Schiller : In dem Reiche erfolgte jetzt eine augenblickliche Stille, und ein flüchtiges Band der Eintracht schien die getrennten $G$ ieder wieder in einen Reichskörper zu verknüpfen, dass auch das Ge ühl für die gemeinschaftliche Wohlfahrt auf eine Zeit lang iu ückkam. Aber die Trennung hatte das innerste Wesen getroffen, und die erste Harmonie wieder herzustellen, war vorbei. So genau der Friede die Rechtsgränzen beider Theile bestimmt zu haben schien, so ungleichen Auslegungen blieb er nichtsdestoweniger unterworfen. Mitten in ihrem hitzigsten Kampfe hatte er den streitenden Parteien Stillstand auferlegt, er hatte den Feuerbrand zugedeckt, nicht gelöscht, und unbefriedigte Ansprüche blieben auf beiden Seiten zurïck. Die

Katholischen glaubten zu viel verloren, die Evangelischen zu wenig errungen zu haben ; beide halfen sich damit, den Frieden, den sie jetzt noch nicht zu verletzen wagten, nach ihren Absichten zu erklären.

1. Streitenden (Parteien.) Can this participle be used in a predicative sense? Translate: The parties are contending. The English present or past part. active has to be paraphrased in German-Give illustrations.

## THIRD GERMAN CLASS.

Time: Three Hours.

## I.

## A. Translate : Schiller : Maria Stuart.

Maria.--Es kann der Britte gegen den Schotten nicht
Gerecht sein, ist ein uralt Wort-drum ist Herkömmlich seit der Väter grauer Zeit, Dass vor Gericht kein Britte gegen den Schotten, Kein Schotte gegen jenen zeugen darf. Die Noth gab dieses seltsame Gesetz; Ein tiefer Sinn wohnt in den alten Bräuchen, Man muss sie ehren, Mylord - die Natur Warf diese beiden feur'gen Völkerschaften Auf dieses Brett im Ocean; ungleich Vertheilte sie's und hiess sie darum kämpfen Der Tweede schmales Bette trennt allein Die heft'gen Geister ; oft vermischte sich Das Blut der Kämpfenden in ihren Wellen. Die Hand am Schwerte, schauen sie sich drohend Von beiden Ufern an seit tausend Jahren. Kein Feind bedränget Engelland, dem nicht Der Schotte sich zum Helfer zugesellte; Kein Bürgerkrieg entzündet Schottlands Städte, Zu dem der Britte nicht den Zunder trug.
Und nicht erlöschen wird der Hass, bis endlich
Ein Parlament sie brüderlich vereint,
Ein Seepter waltet durch die ganze Insel.

1. Die Hand am Schwerte . . . drohend an. Comment on the construction of this clause, and write it in its original form. Various elliptical abbreviations of adject. and adverb. clauses occur in German; illustrate by taking for exs. : As I was of one mind with him, I followed his advice. Although he is a wealthy man, yet he contributes nothing to educational institutions.
2. Und hiess . . . kämpfen. The infinitive is usually accompanied by a certain particle; why is it omitted here? Show by an ex. that this mood governs the same case it requires as a verb, and account for an exceptional case in the clause: The reading of good books improves the mind and the heart. Write in German: To speak a foreign language well, requires a great deal of study and practice.
3. In order to express a purpose emphatically certain words are connected with the infinit. Ex. : He was waited upon for the purpose of soliciting a handsome subscription of him. A number of adjects., when accomp'd by certain adverbs are foll'd by the infinit. with $z u$. Write down three exs.
B. Lessing:-Minna von Barnhelm. - Das Fräulein. Eine Vernunft, eine Nothwendigkeit, die Ihnen mich zu vergessen befiehlt?
--Ich bin eine grosse Liebhaberin von Vernunft, ich habe sehr viel Ehrerbietung fuir die Nothwendigkeit.-Aber lassen Sie doch hören, wie vernünftig diese Vernunft, wie nothwendig diese Nothwendigkeit ist.-v. Tellheim. Wohl denn, so hören Sie, mein Fräulein.--Sie nennen mich Tellheim ; der Name trifft ein.-Aber Sie meinen, ich sei der Tellheim, den Sie in Threm Vaterlande gekannt haben, der blühende Mann, voller Ansprïche, voller Ruhmbegierde; der seines ganzen Körpers, seiner ganzen Seele mächtig war; vor dem die Schranken der Ehre und des Glücks eröffinet standen; der Ihres Herzens und Ihrer Hand, wenn er schon ihrer noch nicht würdig war, täglich würdiger zu werden hoffen durfte.-Dieser Tellheim bin ich eben so wenig,--als ich mein Vater bin. Beide sind gewesen.-Ich bin Tellheim, der verabschiedete, der an seiner Ehre gekränkte, der Krüppel, der Bettler.-Jenem, mein Fr ulein, versprachen Sie sich : wollen Sie diesem Wort halten ?-Das Fräulein. Das klingt sehr tragisch !-Doch, mein Herr, bis fich jenen wieder finde,-in die Tellheims bin ich nun einmal vernarrt,-dieser wird mir schon aus der Noth helfen müssen.
4. Aber lassen Sie doch hören. In what respects does this sent. differ in its construction from its English equivalent? The English but answers to three adversative conjunctions, different in character? Give the original meaning of each, and shew by exs. how they affect a previous statement. Distinguish between: Er allein hat den Brief geschrieben, Allein er hat den Brief geschriehen and Er hat den Brief allein geschrieben.
5. Wohl denn: Distinguish between dann and denn, giving exs. The conj. denn is used as an adverb in a certain case. When? Take for ex : Why should you not do it, pray? Demonstrative adv., such as : daran, davon, etc., may be follow'd by clauses of two different forms?- translate for exs. : I did net think of hurting his feelings. I did not think my words would hurt his feelings.
6. Form two enlarged compound sents. : (a) by co-ordination, the sents. with accessory clauses to be connected, each, by some adverbial conjunct.; (b) by subordination, the dependent clauses being in themselves compound.

## II.

1. What are the essential parts of a German Periode? When is a Periode said to be zweigliedrig, and when vicrgliedrig?
2. Which of the two following passages fulfils the conditions necessary to form a co-ordinating zweigliedrige Periode, and in what particulars is the other defective: (a) Obgleich Jedermann von Freundschaft spricht, so kennen und üben sie doch nur sehr Wenige. (b) Die Welt is so leer, wenn man nur Berge, Flüsse und Städte darin denkt ; aber hier und da Jemand zu wissen, der mit uns übereinstimmt, das macht uns dieses Erdenrund zu einem bewohnten Garten.
3. Connect the foll'g sentences, so as to form a co-ordinating (adversative) fünfgliedrige Periode: Drei Freunde hat der Mensch in dieser Welt. Wie betragen sie sich in der Stunde des Todes. Das Geld, sein bester Freund verlässt ihn zuerst. Es geht nicht mit ihm. Seine Verwandten und Freunde begleiten ihn bis zur Thüre des Grabes. Sie kehren wieder in ihre Häuser. Der dritte sind seine guten Werke Sie begleiten ihn bis zum Throne des Richters. Sie gehen voran, sprechen für ihn, finden Barmherzigkeit und Gnade.
4. Je erhabener das Ziel ist, nach welchem wir streben ; je mehr umfassend der Kreis, worin wir uns üben: desto höher steigt unser Muth, desto reiner wird unser Selbstvertrauen, desto unabhängiger von der Meinung der Welt. Analyse this period, and mention the class to which it belongs.
5. Describe succinctly, in ferman, the three characters in Lessing's "Minna von Barnhelm": der Wirth, das Fräulein and von Tellheim.

Uebersetzen ins Deutsche :-No prospect can be more pleasing to a people, than order without coercion (Zuang), than the sight of a condition where everything is in its place, where every ona does what he should, where every one has what is due to him, where each enjoys what he possesses,-where all are acting together, freely, willingly, energetically for the welfare of the whole.

## (Additional for a First Class.)

Translate:-Schiller: Wallenstein's Tod.
Wailenstein.-Schnell fertig ist die Jugend mit dem Wort,
Das schwer sich handhabt, wie des Messers Schneide;
Aus ihrem heissen Kopfe nimmt sie keck
Der Dinge Mass, die nur sich selber richten.
Gleich heisst ihr alles schädlich oder würdig,
Bös oder gut-und was die Einbildung
Phantastisch schleppt in diesen dunkeln Namen,
Das bürdet sie den Sachen auf und Wesen.
Eng ist die Welt, und das Gehirn ist weit.
Leicht bei einander wohnen die Gedanken,
Doch hart im Raume stossen sich die Sachen ;
Wo Eines Platz nimmt, muss das Andre ruicken,
Wer nicht vertrieben sein will, muss vertreiben;
Da herrscht der Streit, und nur die Stärke siegt.
Max.-Sieh'! Alles - alles wollt' ich dir verdanken,
Das Loos der Seligen wollt' ich empfangen
Aus deiner väterlichen Hand. Du hast's
Zerstört ; doch daran liegt dir nichts. Gleichgültig
Trittst du das Glück der Deinen in den Staub, Der Gott, dem du dienst, ist kein Gott der Gnade. Wie das gemüthlos blinde Element,
Das furchtbare, mit dem kein Bund zu schliessen, Folgst du des Herzens wildem Trieb allein.
Weh denen, die auf dich vertraun !

1. What prompts Wallenstein to use this language? Give a brief account of the scene in which these words occur.

> ENGLISH LANGUAGE AND LITERATURE.

Examiner....... ......................... W. J. Alexander, Ph. D.
FIRST YEAR.
Hime: Three Hours.
(The whole paper will be regarded as a test of the candidate's ability to handle the language, and marks assigned accordingly.)

1. Write and punctuate the passage read.
2. Express accurately and clearly in simple prose the followiug lines:

Proceed, illustrious youth, And Virtue guard thee to the throne of Truth ! Yet should thy soul indulge the gen'rous heat, Till captive Science yields her last retreat;

Should Reason guide thee with her brightest ray, And pour on misty doubt resistless day; Should no false kindness lure to loose delight, Nor praise relax, nor difficulty fright; Should tempting Novelty thy cell refrain, And Sloth effuse her opiate fumes in vain; Should Beauty blunt on fops her fatal dart, Nor claim the trinmph of a letter'd heart; Should no Disease thy torpid veins invade, Nor Melancholy's phantoms haunt thy shade ; Yet hope not life from grief or danger free Nor think the doom of man reversed for thee.
3. Name the poem from which each of the following passages is taken :-
(a) Creation's heir, the world, the world is mine !
(b) All human things are subject to decay.
(c) See nations slowly wise, and meanly just To buried merit raise the tardy bust.
(d) Pride in their port, defiance in their eye, I see the lords of human kind pass by.
(e) The short and simple annals of the poor.
$(f) \quad O$ blest retirement, friend of life's decline!
(g) Fate never wounds more deep the gen'rous heart Than when a blockhead's insult points the dart.
(h) New forms arise, and different views engage, Superfluous lags the vet'ran on the stage.
(i) 0 thoughtless mortals, ever blind to fate, Too soon dejected, and too soon elate.
(j) Charms strike the sight, but merit wins the soul.
4. Define accurately clinch, bias, tympany, sequacious, Lydian measures, fretted, Hydaspis, sedge, titillating, termagant, doughty virago, indurated, sedulous.
5. Give concisely and definitely the differences between the diction of prose and of poetry, illustrating in as far as possible by quotations and examples.
6. Write a life of Dryden.
7. With regard to the Rape of the Lock give the date, occasion, nature of the poem, its merits, its linitations.

## (Additional for First Class.)

Goldsmith's Select Essays; Johnson's Lives of Pope, Addison, and Gray; Dryden's Stanzas on Oliver Cromwell, Astraea Redux, Annus Mirabilis, Absalom<br>and Achitophel.

Time: Two Hours.
8. Reproduce Johnson's parallel between Dryden and Pope.
9. Give date and occasion of each of the four poems of Dryden, and a brief critical account of each.
10. Reproduce, in as far as possible in Goldsmith's style, any one of his Essays.
11. Compare Addison and Goldsmith as Essay writers ; or
Quote one of the finer passages (consisting of about 10 lines) from each of the following poems: Absalom and Achitophel, Annus Mirabilis, Deserted Village, The Elegy.

## SECOND YEAR.

Richard III., As You Like It, Hamiet; Paradise Lost (Bks IX-XII), Paradise Regained, Samson Agonistes.

Time: Three Hours.

1. Write a life of Milton, with dates of his chief works.
2. Give a critical analysis of Samson Agonistes.
3. Describe the character of Richard III.
4. Point out the resemblances and differences in the character of Jacques and Hamlet.
5. Discuss the question of Hamlet's madness,
or
Quote six of the finer passages of Hamlet, each of not less than 5 consecutive lines.
6. Analyse the character of Polonius.
7. Annotate fully seven passages in each of the following three groups :-

He is franked up to fatting. Mounting barbed steeds. Smothered it within my panting bulk. Spoke like a tall man. Dissemble not your hatred, swear your love. His outward show, which seldom or never jumpeth with the heart. Like the formal vice, Iniquity. On that ground I'll make a holy descant. So thrive I in my enterprise and dangerous success of bloody war. Fill me a bowl of wine, give me a watch (Richard III.)

Had as lief. Is but a quintain. A gallant cartle-axe upon my thigh. As he lay along under an oak. So is all nature in love mortal in folly. Thy conceit is nearer death than thy powers. What, for a counter, would I do but good? The lean and slippered pantaloon. The fair, the chaste, and unexpressive she. You must borrow me Gargantua's mouth then. (As You Like It.)

It out-herods Herod. We will both our judgments join in censure of his seeming. An anchor's cheer in prison be my scope. Why do you go about to recover the wind of me. The hey-day of the blood is tame. Goodness growing to a plurisy. Her virgin crants. Drink up eisil. Assays of bias. Tickle o' the Sere. (Hamlet.)

## (Additional for First Class.)

## King John, Twelfth Night, Macbeth, The Tempest.

Time : Two Hours and a Half.
8. Contrast the two plays Richard III and King John.
9. What are the merits of Twelfth Night?
10. Describe the character of Lady Macbeth.
11. Compare Rosalind, Viola and Miranda.
12. Accurately paraphrase the following passages:-
(a) It is religion that doth make vows kept;

But thou hast sworn against religion,
By which thou swear'st against the thing thou swear'st,
And mak'st an oath the surety for thy truth
Against an oath : the truth thou art unsure
To swear, swears only not to be forsworn;
Else what a mockery should it be to swe ar !
But thou dost swear only to be forsworn ;
And most forsworn, to keep what thou dost swear.
(K. John III, 1.)
(b)

O that I served that lady,
And might not be delivered to the world, Till I had made my own occasion mellow, What my estate is.

> (Twelfth Night I, 2.)
(c) My thoughts, whose murther yet is but fantastical, Shakes so my single state of man that function Is smother'd in surmise.
(Macbeth I, 2.)
(d)

To be the same in thine own act and valour As thou art in desire? Wouldst thou have that Which thou esteem'st the ornament of life, And liye a coward in thine own esteem, Letting ' I dare not' wait upon 'I would,' Like the poor cat in the adage.
(Macbeth I, 7.)
(e)

## For several virtues

Have I lik'd several women, never any
With so full soul but some defect in her Did quarrel with the noblest grace she owed, Aud put it to the foil; but you, O you, So perfect and so peerless, are created Of every creature's best!
(Tempest III, 1.)

## HISTORY.

 THIRD YEAR.

## Time : Three Hours.

1. Explain the attitude of the following Roman Emperors to Christianity : Diocletian, Galerius, Constantine, Julian, Jovian.
2. "Ater remaining a short time at Constantinople the two Emperors set out for the Illyrian provinces, and in the neighborhood of Naissus they executed the solemn and final division of the Roman Empire." Give names and date.
3. "During the twelve years following the final division of the Empire the energies of the two Emperors were taxed in four great theatres of war." Briefly describe.
4. Give a list of the different races which obtained supremacy in Italy, in order, with dates. In France. In Spain.
5. "They (the Tartars) are divided into four great races called respectively." Gives names and localities.
6. Give an account of the Sack of Rome by the Vandals.
7. Give a brief account of the conquest of Spain by the Saracens.
8. What was the political condition of Germany at the close of the 15 th century.
9. The Diet of Worms was called in 1521 to consider the real grievances of the Empire. What were they?
10. Give an account of the Peasants: War.
11. Compare and contrast the social and political condition of England, France, and Germany in the first half of the l6th eentury.
12. Write a short article on the Normans, giving supposed origin, / conquests, colonization, influence on various countries of Enrope.

## FOURTH YEAR.

Time: Thrre Hours.

1. Write brief notes on the condition of the leading countries of Europe at the opening of the Thirty Years' War.
2. "In Bohemia in 1609 the Estates extorted from Rudolph the Royal Charter." What were its terms?
3. "The Bohemians had to resist in 1618, under every disadvantage, the attack which they had done nothing to meet in 1817. Explain.
4. Give an account of the attempted murder of the two Regents and the Secretary in Bohemia in 1618.
5. On the 28th of August, 1619, Ferdinand was chosen Emperor. Give an account of his election.
6. How was Frederick supported as King of Bohemia by the Protestant princes?
7. What was the agreement of Mühlhausen of 1620 ?
8. When Fercinand succeeded in driving Frederick from Bohemia what led him to carry the war into the Palatinate? How were the German princes affected by this?
9. When was the league of Heilbronn signed ? What States formed the league?
10. What events led to the fall of Sweden and the growth of Russian power, 1697-1718.
11. Trace the leading events of American history from 1765-1776.
12. What was the social and commercial condition of France during the reign of Louis XIV.?
13. Give an outline of French history from 1789-1794 with dates of leading events.
14. What are the most prominent events in European history from 1815 to the present time ?

## POLITICAI ECONOMY.

Examiner..................................Prestdent Forrest.

Tme : Threr Hours.

1. Define Political Economy, Rent, Wages, Profit.
2. Mill says, "There can be no such thing as a general rise in values." Explain.
3. How can we make a comparison between the value of a barrel of flour in the reign of Henry VIII. and its value at the present time?
4. "Nothing in Political Economy can be of more importance than to ascertain the law of this increase of production." Explain.
5. On what principles of political economy can you justify a free national system of education?
6. What limit should there be to the policy of executing useful public works by means of loans raised by the Government?
7. Supposing it could be proved that the P. E. Island Subway would never pay as a commercial enterprise, could there be any justification of the Dominion Government building it?
8. What is Fourierism? St. Simonism?
9. State as accurately as you can Henry George's theory of land tenure, and criticize or defend it.
10. What is the Metayer system of land tenure, the Cottier system? What system prevails in Ireland, in Nova Scotia ?
11. Trade unions aim at receiving a larger part of the profits of production for labour. Supposing they receive more than their legitimate share what will the ultimate effect be upon the business of the community and upon the labouring classes ?
12. Should the law of bequest be limited, and how ? Give Mill's views and criticize or defend.
13. If forgers became so expert that the Government and banks were compelled to abandon the use of paper money and use instead gold and silver coin, what effect would it have on the finances of the country?
14. Write a short article on the taxation of mortgages.

## ETHICS.

Examiner Professor Seth.

Adril 13 Th, 10 A. M. to 1 P. M.

1. Describe the scope and method of Ethics, and its relation to Psychology.
2. What do Intuitionalists mean by (a) the self-evidence, (b) the absoluteness of moral laws? How do they answer the objection that moral laws conflict in practice? Compare the Utilitarian position on this question.
3. Describe precisely the nature of Conscience according to the Intuitional Theory ; and compare Bain's account of its growth.
4. State and estimate the Hedonistic view of the ethical End ; and critically examine the transition from Egoistic to Altruistic Hedonism.
5. Is the distinction of quality in pleasures consistent with the fundamental position of Hedonism? Explain the grounds of your answer.
6. State briefly the Libertarian Solution of the problem of the Will, and examine its adequacy.
7. Sketch the ethical teaching of Socrates, and indicate his relation to the Socratic Schools.
8. Give Plato's account of the Cardinal Virtues in relation to his triple division of human nature.
9. State and explain Aristotle's definition of the End of life.

## METAPHYSICS.

Examiner
Professor Seth.
APRIL 15TH, 3 то 6 P. M.

1. Describe the task of Philosophy as (a) Ontology ; (b) Epistemology. Distinguish the latter from Psychology.
2. Compare the views of Descartes and Locke with regard to Mind and Matter and their mutual relation.
3. With what amont of justice may Locke be called a Sensationalist? Combare his tcaching in Books II. and IV. of the Essay.
4. Give Locke's distinction between the Primary and Secondary Qualities of Matter, with Berkeley's criticism, and your own view as to its validity.
5. How does Berkeley construe (a) the Substantiality, (b) the Causality of the material world ?
6. Give Berkeley's account of Space, comparing it with Hume's and Kant's.
7. Explain and estimate Berkeley's view that the Esse of sensible things is Percipi.
8. How, and with what right, does Hume extend Berkeley's teaching?
9. Indicate briefly the general lesson as to the interpretation of Experience, drawn by Kant from the development of modern philosophy in Locke, Berkeley, and Hume.

## LOGIC AND PSYCHOLOGY.

Examiner
Prof. Lyall, Ll.d.

## PSYCHOLOGY.

Tuesday, 11th Jandary, 1887.
FROM 3 O'JLOCK TO 5.30 .

1. On what ground would you vindicate the intuitive action of Mind, against the Empirical view, which derives all our ideas from Fxperience? Mention the intuitions, and justify the Intuition of Uniformity.
2. Show why a mental identification and judgment are the same. What is the co-relate of identification? Trace the other laws of mind to these two, and show how all thought takes place within, or by virtue of, these laws.
3. Give some account of the Practical Processes, with examples of their action.
4. How may memory be regarded? What practical uses may this view subserve? To what single law may the laws of Association be reduced ?
5. What is the grand peculiarity in Imagination? Find Sir William Hamilton's Reproductive and Representative Faculties among these. In what respects is Imagination, in its higher function, or exercise, different from the Representative faculty ?
6. To what does Sir Wm. Hamilton's Regulative Faculty correspond in our view of mind?

Wednesday, 12 th January, 1887.
FROM 3 O'CLOCK TO 5.30 .

1. On what principles of classification have the Emotions hitherto been regarded? How have we proposed to regard, and classify, them?
2. What is meant by the Elevated Emotions? Give some particular account of these states, and find the Asthetic Emotion among them. What is Adoration?
3. What considerations may be urged in favour of the Association theory of Beauty? Whose theory is this? What other view has been taken? What are the sensible qualities, according to Burke, in which the Beautiful and Sublime respectively may be said to consist? Show how this view is reconcilable with the Association theory, in fact supposes it.
"Beauty," says Cousin, is expression: Art is the seeking after Expression." What is Cousin's enumeration of the Arts accordingly. How do we propose to classify them, at once retaining Cousin's principle of arrangement, and introducing a true ground of classification as such ?

## LOGIC.

Friday, 15 th April, from 10 A. M. till 1 P. M.

1. From what different points of view may Logic be regarded, and how, accordingly, has it been divided?
2. Distinguish been Pure Logic and Modified Logic-between Stoicheiology, or the Doctrine of Elements, and Methodology, or the Doctrine of Method.
3. Under what two quantities may Concepts be censidered, and what two kinds of reasoning, in Hamilton's account of the process, are based upon this distinction?
4. How does Mill regard the process of Reasoning, and how may Dr. Brown's view of Reasoning be said to correspond with this? Distinguish this view of the process from true Reasoning.
5. Give Sir Wm. Hamilton's definition of Reasoning, and show wherein it is defective. How do we propose to supplement it?
6. What are the rules of the Extensive Syllogism? What those of the Intensive? How do they differ, and why?
7. What do you understand by the Moods and Figures of the Syllogism? Explain the purport and uses of the 2nd and 3rd Figures particularly.
8. Give a scheme of the Fallacies, showing the relation of the Formal Fullacies to the rules of the extensive syllogism-and how the Material Fallacies may be brought under the one class of "Quaternio terminorum," and "Ambiguous Middle. What Fallacies may be considered not only as Extra dictionem, but as Extra Logical?
9. Give the Laws of Definition and Division. Give those of Probation, and specify the Fallacies more incident to an extended argument.
$\qquad$
GEOMETRY-FIRST YEAR.

$$
\text { APRIL 18. }-10 \text { A. M. TO } 1 \text { Р. M. }
$$

1. If a straight line be divided internally so that the rectangle of its two parts may be equal to a given square, there is, in order that the problem be possible, a limit to the magnitude of the square : but if divided externally there is no limit. Shew why.
2. The sum of the squares of two sides of a triangle is equal to twice the sum of the squares of half the other side and of the corresponding median. Prove.
3. One circle cannot touch another either internally or externally n more points than one.
4. The angle in a segment of a circle greater than a semi-circle is less than a right angle : and the angle in a segment less than a semicircle is greater than a right angle. Either prove this in the Euclidian method, or deduce it from a previous proposition and the principle of "continuity."
5. If a point be taken without a circle and from it any secant be drawn, the rectangle of the secant and its external segment is equal to the difference of the squares of two constant lines. Name them and prove the proposition.
6. Describe a triangle about a circle equiangular to a given triangle.
7. Give the construction necessary to find a triangle each of whose angles at the base is double the vertical angle : and add the proof as far as that the base of the triangle you have constructed is a tangent to one of the circles you have drawn.
8. If the sides about the angles of two triangles are proportionals, the triangles must be equiangular.
9. Find a mean proportional between two given lines.
10. Find the magnitude in Degrees of an angle of a regular polygon of $n$ sides, and show from your formula that the greater the number of sides, the greater is the angle.
11. Shew that the greatest line drawn through the intersection of two circles, and terminated by their circumferences is that which is parallel to the line joining their centres.
12. Describe a circle to touch a given straight line in a given point, and also touch another circle. (Two solutions.)
13. $A B$ is divided in any point $C$, and on $A B, A C, C B$, semicircles are described towards the same parts, and CP is drawn at right angles to AB , meeting the outer circle in P, and PA, PB cut the inner circles in $R$ and $Q$ : prove the following properties (1) RQ is a tangent to the inner circle: (2) PC and RQ bisect each other: (3) if AB and $R Q$ meet in $T, A T . T B=R T . T Q$.

GEOMETRY AND MENSURATION-SECOND YEAR.

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\text { Aprit } 18 .-10 \mathrm{~A}, \mathrm{M} . \text { то } 1 \mathrm{f} . \mathrm{m} .
$$

1. Explain "duplicate ratio" and prove that, "similar trangles are to one another in the duplicate ratio of their homologous sides."
2. If four straight lines be proportionals, the similar rectilineal figures descriked on them shall also be proportionals.
3. In equal circles, sectors have the same ratio which the arcs on which they stand have to one another.
4. Show that the ratio of the distance of a point from the focus of a parabola to its distance from the directrix is equal to, less than, or
greater than unity, according as the point is on, within or without the parabola, the point being in the plane of the parabola.
5. The locus of the feet of perpendiculars on tangents of a parabola, drawn from the focus is the tangent at the vertex.
6. The chord of contact of two tangents to a parabola drawn from any point, is bisected by the diameter passing through that point.
7. If $\mathrm{P}(\mathrm{A} \mathrm{B} \mathrm{CD})$ be a pencil, A BCD beins any line cutting it, and if RQ, drawn through $C$ parallel to PA, meeting PD and PB in $R$ and Q , is bisected in C : then the pencil is Harmonic.
8. Define a pole and polar with respect to a circle : and prove a proposition regarding them that you think remarkable.
9. A circle is inscribed in a triangle. Use a fundamental proposition in the theory of transversals to prove that the straight lines joining the angles of the triangle with the points of contact, pass through the same point.
10. Given two circles that intersect, and a third exterior to both : find the point from which the six tangents drawn to the circles are equal to one another.
11. A right cone of lead, the diameter of whose base is 6 inches and height 4 inches, is cast afresh into another right cone whose base is only 4 inches in diameter : find the height.
12. The longer of the parallel sides of a trapezoid is 20 feet, the distance between them is 5 feet, the perpendicular let fall on the longer of the parallel sides, from the point of intersection of the other two sides produced is 25 feet : find the area of the trapezoid.

## ALGEBRA.-FIRST YEAR.

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\text { APRIL 18. }-3 \text { то } 6 \text { Р. M. }
$$

1. Shew that $\sqrt{n}=a+\sqrt{m}$ is impossible, $\sqrt{m}$ and $\sqrt{n}$ being true and different surds : and prove $\frac{m\left(x+m+\sqrt{x^{2}-m^{2}}\right)}{x+m-\sqrt{x^{2}-m^{2}}}=x+\sqrt{x^{2}-m^{2}}$.
2. Describe the method of solving a group of, say, three equations, containing three unknown quantities of the form, $a x+b y+c z=d$ : and write the values of $x, y, z$, in "determinant" form.
3. Solve the equation $x^{2 n}+a x^{n}=b$. Is the solution complete? Describe also the methods of solving the following groups of equations :
(1) $\left.\begin{array}{rl}a x+b y & =c \\ a, x^{2}+b, y^{2} & =c 1^{2}\end{array}\right\}$
(2) $\left.\begin{array}{rl}a x^{2}+b y^{2} & =c x y \\ a, x^{2}+b, y^{2} & =d\end{array}\right\}$
(3) $\left.\begin{array}{r}x-y=a \\ x^{n} y^{n}=d\end{array}\right\}$
4. A farmer went to market and sold a number of pigs and oxen : the pigs at $\$ 12$ apiece, the oxen at $\$ 75$. It is certain that he sold more than one pig and that he had not 50 oxen to dispose of: further, he received $\$ 771$ for his sales. Find the number of each kind of animals in the groups he sold.
5. Sum the Geometrical Series, $a, a r, a r^{2}, \& c$. to $n$ terms ; and find the limit of the sum of the series, when $r<1$. Illustrate what is meant by "the limit of the sum," and shew that $a^{1} a^{3}, a^{5} \ldots \ldots$. $a^{3 n-1}=a^{n^{2}}$.
6. The $(2 n+1)^{\text {th }}$ term of an Arithmetical Series is $p$, and the $(2 m+1)^{\text {th }}$ is $q$ : find the $(m+n)^{\text {th }}$ : and work the corresponding problem when the series is Geometrical.
7. Shew that the Quadratic equation, $a x^{2}+b x+c=0$ will have one root, two real unequal roots, or two imaginary roots according as $b^{2}=4 a c$, greater than it or less.
8. Sum $n$ terms of the series, $1.4+2.5+3.6+\& c$.
9. Standing on the seashore, with the eye 6 feet above sea-level, an observer watched the disappearance of a vessel's topmast which was known to be 96 feet above the water-line. Shew that the vessel is about 15 miles distant from him, at the instant of disappearance.
10. Prove that, there being $n$ quantities, $a, b, c, \ldots \ldots . k$,

$$
\frac{a+b+c+\ldots \ldots \ldots+k}{n}>(a b c \ldots \ldots k)^{\frac{1}{n}}
$$

11. Given $x^{3}+p x^{2}+q x+r=0$, and its ronts $a, b, c$. Prove $a^{2}+b^{2}+c^{2}=p^{2}-2 q$ : and generalize the statement for any equation.
12. Given $x^{4}-6 x^{3}+5 x^{2}+14 x-4=0$. Shew that there is one positive root between 0 and 1 , one between 3 and 3.5 , and one negative root between -2 and -1 .

TRIGONOMETRY AND ALGEBRA.-SECOND YEAR.

April 18.-3 то 6 р. м.

1. Shew that all angles that have the same sine and cosine, must differ by some multiple of $2 \pi$, and prove that $\tan \theta=\tan (n \pi+\theta)$.
2. Given $\sin (x+y)=\sin x \cos y+\cos x \sin y$, deduce the formulae for $\sin (x-y)$ and $\cos (x-y)$.
3. Prove $\cot ^{2} \theta \rightarrow \cos ^{2} \theta=\cot ^{2} \theta \cos ^{2} \theta$; and $\sin (\mathrm{A}+30)+\sin (\mathrm{A}+150)$ $=\cos \mathrm{A}$.
4. Shew the area of a triangle $=\frac{1}{2}$ be $\sin \mathrm{A}=\frac{1}{2} a b \sin \mathrm{C}=\& \mathrm{c} .=$

$$
\frac{a^{2} \sin \mathrm{~B} \sin \mathrm{C}}{2 \sin \mathrm{~A}}
$$

5. Write the expression for the area of a triangle in terms of the sides $a, b, c$, and deduce the area of the isosceles triangle when $b=a$.
6. Shew that the perimeter of the regular polygon of $n$ sides described about a circle, is to the perimeter of the regular polygon of $n$ sides inscribed in the same circle as 1 is to $\cos \frac{\pi}{n}$; and deduce from this and your knowledge of Geometry the ratio of their areas.
7. Prove that the distance between the centres of the inscribed circle of a triangle ABC and the escribed one that touches the

$$
\text { side } a=a \sec \frac{A}{2}
$$

8. A man is walking along a straight level road towards a tower right in front of him. He observes the angle of elevation of the top of the tower to be $a^{\circ}$ and, after walking $d$ yards, the angle of elevation is $\beta^{\circ}$. Find the height of the tower and state the logarithmic equation for its calculation.
9. There is a company of 3 sergeants, 5 corporals, 15 private soldiers. How many different guards can be set, consisting of 1 sergeant, 2 corporals, and 5 privates?
10. If $n$ factors $(x+a),(x+b),(x+c), \ldots \ldots \ldots(x+k)$, be multiplied together, express the law of the coefficients of the descending powers of $x$. This law is employed in the partial proof of an important theorem.
11. Given a table of logarithms to a base $a$, shew with proof how a similar table to a base $b$ could be derived from them.
12. Shew that any number whatever can be reduced to the form, $2^{m}+2^{n}+2^{p}+\& c$., where $m, n, p$, \&c. are in a descending order of magnitude, and mention any curious application of the fact.

## ADDITIONAL MATHEMATICS.-SECOND YEAR.

$$
\text { APRIL 20. }-3 \text { то } 6 \text { P. M. }
$$

1. If a solid angle be contained by any number of plane angles, these shall be together less than four right angles.
2. State and prove the fundamental property with respect to sine and cosine of any angles, on which Demoivre's Theorem is based; and hence prove the first case of the theorem.
3. Write the expansion of $\varepsilon$, and deduce, by the appropriate substitutions, the exponential values for $\sin x$ and $\cos x$.
4. If $x+y \sqrt{-1}=\log (a+b \sqrt{-1})$, prove ${ }^{\prime}$

$$
\tan y=\frac{b}{a}, \text { and } x=\log \sqrt{a^{2}+b^{2}}
$$

5. A, B , C , D, are consecutive angles of a regular polygon of $n$ sides, side $x a$. Join AC and BD , intersecting in P . Prove that P and all points similarly found lie in the circumference of a circle concentric with the polygon, and whose radius $=a \cot \frac{2 \pi}{n}$.
6. At a station, A, the angle of elevation of an object in a horizontal plane and bearing due N . is $a^{\circ}$. Insurmountable obstacles prevent the ohserver from measuring a base line either towards or straight back from the object. He therefore measures either $l$ feet S. W. from A, or $l$ feet S. E. from A ; and finds the angle of elevation
of the object at the end of either of these distances to be $\beta \circ$. Shew how the height and distances of the object are found.
7. A and B throw 3 dice alternately, A having first throw. There is a stake of $m$ dollars ; and the condition is, that he who first throws as many as two faces the same, wins. Find in what proportion they ought to contribute to the stake that their expectations may be equal.
8. A person borrows a sum of money at a yearly interest of $m$ per cent; and pays it by annual instalments, paid at the end of the year, of the first year's interest together with an $n^{\text {th }}$ part of the sum borrowed. Shew that the money will be repaid in the number of years denoted by $\frac{\log (1+n r)}{\log (1+r)}$, where $r=\frac{m}{100}$.

## PHYSICS.

Elxaminer ... ...............................J. G. MacGregor, D. Sc.

## THIRD YEAR CLASS.

Apirl $18 \mathrm{TH}, 10 \mathrm{~A} . \mathrm{M} .-1$ P. M.

N. B.-Questions marked with an asterisk have the higher values.
A.-Three of the following :

1. Define mean speed, instantaneous speed, mean velocity, instantaneous velocity.-Shew how to resolve a given velocity into two components in given directions.
*2. Shew that the acceleration of a point moving with uniform speed in a circle is directed towards the centre, and is equal to the quotient of the square of the speed by the radius of the circle.
2. Enunciate the three Laws of Motion and give explanatory comments.
*4 Define work done, foot-pound, Potential Energy.-Enunciate and prove the law of the Conservation of Energy for a single particle.
${ }^{*} 5$. Shew how to determine the resultant of two forces acting in opposite directions at different points of a rigid body.

## B. - Seven of the following :

6. What is meant by the pressure at a point of a fluid ?-Prove that at all points of any horizontal surface in a heavy fluid, which is at rest, the pressures are the same.
*7. What are the fundamental hypotheses of the Kinetic theory of gases ?-Shew that Boyle's Law may be dcduced from them.
7. Describe the Mercury Thermometer.-Shew what precautions must be taken in making thermometers, that their indications may be comparable.
8. A body is slowly heated from a very low temperature to a very high one. Describe the changes it undergoes, pointing out what becomes of the heat supplied.
*10. How has heat been shown to be a form of energy ?
9. I give you a piece of iron on a glass handle. How will you determine whether or not it is ( $a$ ) magnetized, ( $b$ ) electrified ?
*12. Pieces of iron and bismuth are introduced into magnetic fields. What changes do they produce in the lines of force of these fields?-Hence show that they must possess the properties in virtue of which they are called paramagnetic and diamagnetic respectively.
10. How would you shew by experiment the relation between the quantity of an inducing charge and the quantity of the total induced charge ?
*14. Given the law of the direction of the force exerted by a current on a magnetic pole in its neighbourhood, find the law of the mutual attraction or repulsion of wires though which currents are flowing.
*15. Explain how it is that the pitch of a note from a flute is changed by opening or closing apertures in its side.
*16. Explain the formation of an image in a plane mirror.-Shew that a straight line in the object is straight also in the image.

# FOURTH YEAR CLASS. 

APRIL 18TR, 10 A. M. -1 P. M.
N. B.-Answer only ten questions. Those with an asterisk have the higher values.

1. Prove that the total pressure on the surface of a body immersed in a heavy liquid is equal to the weight of a column of the liquid whose section is the area of the surface, and whose length is the depth of the centre of mass of the surface beneath the free surface of the liquid, the pressure at the free surface being zero.
*2. Account for the elevation or depression of a liquid in a capillary tube ; and shew that it is inversely proportional to the diameter of the tube.
*3. Shew that it may be deduced from the Kinetic theory of gases, that if two gases are at the same temperature and pressure the number of molecules per unit of volume is the same.
2. State the laws of variation of (a) the pressure of a gas with its volume at constant temperature; $(b)$ the pressure with temperature at constant volume, and (c) the volume with temperature at constant pressure ; and shew how you would verify any one of these laws by experiment.
*5. How has heat been shown to be a form of energy ?
3. Define latent heat of fusion. Shew how you would determine it in any case by experiment.
*7. A divergent pencil of rays is incident directly on a convex spherical mirror. Find the relation between the radius of the mirror and the distances from it of conjugate force.
4. To an observer whose eye is vertically above an object at the bottom of a pool of water, the object appears to be $a$ feet beneath the surface. Find the real depth, the index of refraction of the water being $\mu$.
*9. A small object is placed on the principal axis of a convex lens. Determine the character of the image, and draw a diagram shewing the course of the rays by which it is produced (a) when the object is between the principal focus and the lens, and (b) when it is beyond the principal focus.
5. The deviation produced by a prism in a ray which is in a plane perpendicular to the edge of the prism is in all cases away from the edge.
6. Describe the structure of the ordinary spectroscope, explaining the use of its various parts.
7. Define and illustrate by diagrams, altitude and azimuth, right ascension and declination, and celestial latitude and longitude.
8. What evidence is there to show that the diurnal motion of the stars is due to the rotation of the earth.
*14. By what observations is the path of the sun in the celestial sphere determined? By what additional observations may the form and dimensions of his path in space be determined?
9. How is it proved that elements such as sodium, iron, \&c., exist in the sun.

## DYNAMICS.

APRIL $18 \mathrm{TH}, 3-6$ P. M.
N. B.-Ansiver only ten questions. Those with an asterisk have the higher values.

1. Given the displacement of a point $Q$ relative to a point $P$, and that of $P$ relative to a point $O$, find that of $Q$ relative to 0 .
2. Define mean curvature, and curvature at a point.- Show that the curvature of a circle is measured by the reciprocal of the radius.
3. Shew that the normal component of the acceleration of a moving point is equal to the quotient of the square of its speed by the radius of curvature of the path.
*4. A point is moving with uniform speed $v$ in a circle of radius $r$. Shew that its angular velocity about a point in the circumference is $\frac{v}{2 r}$.
4. Obtain an expression for the range of a projectile on an inclined plane; and show that, with an initial velocity of given magnitude, the same range may in general be attained by two paths.
*6. Shew that two component simple harmonic motions of the same period give as resultant, in general, elliptic harmonic motion.
*7. Shew that if a rigid body with one point fixed undergo two successive finite rotations, there is one line in the body whose initial and final positions in space are the same.
*8. The unit of acceleration being 6 ft .-sec. units, find ( $a$ ) the unit of mass, when the derived unit of force is equal to the weight of 20 lbs . ; and (b) the unit of force when the derived unit of mass is a mass of 20 lbs .
*9. A particle of mass $m$, attached by an inextensible string of length $l$ to a fixed point, moves in a vertical plane through the fixed point in a circle of radius $l$. Shew that the smallest value which the velocity of the particle at the highest point of the circle can have is $\sqrt{l g}$, and that when it has this value, the greatest value of the tension in the string is 6 mg .
*10. A string has its ends fixed at A and B. Another string is knotted to it at $C$ and supports a body of weight $W$. The inclinations of CA and $C B$ to the horizon are $\theta$ and $\phi$ respectively. Find the tensions in $C A$ and $C B$ when there is equilibrium.
*11. Prove that the rate of change of angular momentum of a system about a given axis is equal to the algebraic sum of the moments of the external forces about that axis. - Adapt this result to the case of a rigid body moveable about a fixed axis.
5. Given the moment of inertia of a rectangle about an axis through its centre of figure normal to its plane, find that of an isosceles triangle about an axis through its vertex normal to its plane.
*13. A uniform rod rests with one end pressing against the inner surface of a fixed smooth hemispherical bowl, whose rim is horizontal, and with the other projecting beyond the rim. It is inclined $30^{\circ}$ to the horizon. Find its length in terms of the radius of the bowl.

## (Additional for First Class.)

APRIL $22 \mathrm{ND}, 10 \mathrm{~A}, \mathrm{M}-12 \mathrm{M}$.

1. Show that if a body is subjected to a homogeneous strain, there are two sets of parallel planes which remain undistorted after thestrain.
2. Prove that the amount of a shear is equal to the excess of the ratio of the shear above its reciprocal; and that if the shear is indefinitely small, its amount is equal to twice the greatest principal elongation.
3. The direction and intensity of the stress at a point of a body across any three planes through the point being given, shew how to determine the stress across any other plane through the same point.
4. Show that the strain produced in a homogeneous isotropic body by a simple longitudinal stress consists of a uniform dilatation together with two distortions, and determine their amounts. Determine also the linear elongation in the direction of the stress.

## CHEMISTRY.

Examiner Prowessor Lawsón.

## INORGANIC CHEMISTRY.

Time: Three Hours.

1. Give a precise verbal explanation of the meaning of four of the following Chemical Equations:
(1.) $\mathrm{Cu}+2 \mathrm{H}_{2} \mathrm{SO}_{4}=\mathrm{CuSO}+2 \mathrm{H}_{2} \mathrm{O}+\mathrm{SO}_{2}$.
(2.) $\mathrm{SO}_{2}+2 \mathrm{H} \mathrm{NO}_{3}=\mathrm{H}_{2} \mathrm{SO}_{4}+2 \mathrm{NO}_{2}$.
(3.) $\mathrm{MnO}_{2}+4 \mathrm{HCl}=2 \mathrm{H}_{2} \mathrm{O}+\mathrm{MnCl}_{2}+\mathrm{Cl}_{2}$.
(4.) $2 \mathrm{NaCl}+\mathrm{H}_{2} \mathrm{SO}_{4}=\mathrm{Na}_{2} \mathrm{SO}_{4}+2 \mathrm{HCl}$.
(5.) $3 \mathrm{KOH}+4 \mathrm{P}+3 \mathrm{H}_{2} \mathrm{O}=3 \mathrm{~K} \mathrm{H}_{2} \mathrm{PO}_{2}+\mathrm{PH}_{3}$.
(6.) $\mathrm{NaNO} \mathrm{NO}_{3}+\mathrm{H}_{2} \mathrm{SO}_{4}=\mathrm{NaH} \mathrm{SO} 4+\mathrm{H} \mathrm{NO}_{3}$.
2. What is meant by A.finity as distinguished from Cohesion? Explain fully, with examples. "The capacity of combination which resides in the atoms is called Atomicity. Atomicity is the relative equivalence of the atoms." Explain this fully, with examples.
3. What does Atmospheric Air principally consist of? In what proportions, and in what chemical state, are its constituents? Describe severally, with respect to their chemical chraacters or constitution, the $t^{\text {hree }}$ principal gases forming, or found in, the Air.
4. In what manner may the composition of Water be determined? What is its composition, and what are the weights and volumes of its constituents? Give a careful description of Hydrogen, its discovery, mode of preparation, chemical and physical characters, and method of condensation.
5. In what forms does Sulphur occur in nature? Arrange the principal Metallic Sulphides into groups according to solubility, and indicate the principle upon which is founded the general method of testing for and separating Metals in solution.
6. Modes of occurrence of Iron in nature, and changes which its Compounds undergo spontaneously in the soil and in water. What are the principal Ores of Iron? their chemical composition? Describe the chemical changes that take place in the processes of roasting and reduction in the blast furnace.
7. What are Salts, and how are they formed? Explain the action of Hydracids and Oxacids upon Bases, and show, by equations, the chemical changes that result. What is meant by (1) a Neutral Salt, (2) an Acid Salt, (3) a Basic Salt? Give examples of hydrated or crystallized salts that exhibit characteristic colours, and explain upon what constituent of the salt the colour depends.
8. In what state does Potassium exist most abundantly in nature? What is the source of the compound of Potash that is found in soils? ln what form does it exist in the plant? and in the ash of the plant? Upon what does the solubility or insolubility of Calcium Phosphates depend?
(Five questions only to be answered. All are of equal value.)

## ORGANIC CHEMISTRY.

## Time: Three Hours.

1. In what way may the Atomicity of the Element Carbon be certainly determined? Describe the Mode of Generation, and the Structure, of Organic Molecules, as exemplified in Methane, and the Chlorine Compounds derived from it by substitution. In what way may more complicated Organic Molecules, containing several carbon atoms, be produced?
2. What is the special object of Elementary Analysis of organic bodies? Give process for, or method of, determining the amounts of Carbon, Hydrogen and Oxygen respectively, with any necessary calculations.
3. Compare the Saturated Hydrocarbon, the Simple Ether, the Monatomic Alcohol, the Aldelyde, the Fatty Acid, and the Compound Ether, with respect to their Chemical Constitution.
4. Describe fully the process for preparing Chloroform, explaining reactions. What is the Chemical Constitution of Chloroform, and what are its Physical and Chemical characters or properties? In what way may its presence be detected in cases of poisoning?
5. What is a Carbohydrate? Give examples. Where, and how, are the Carbohydrates formed, and from what inorganic compounds? What subsequent changes do they undergo under action of heat, acids, \&c.?
6. Describe the process of Alcoholic Fermentation, noticing particularly the nature of the substances liable directly or indirectly to this process, and the chemical changes involved. Detail fully the physical and chemical characters of Ethyl Alcohol.
7. Describe the process of Saponification. What is the chemical constitution or nature of an Animal Fat? of Soap? of Glycerine ? of Nitroglycerine? of Oleomargarine? Oleine? Palmitine?
8. What is the essential distinction between the Fatty Series of organic compounds and the Aromatic Series? Describe Benzole with respect specially to the theory of its constitution. What is the action of Chlorine and Bromine upon it? What is Aniline?

The first question to be answered, and any four of the others, (five in all). All are of equal value.

## PRACTICAL CHEMISTRY-ADVANCED COURSE.

## Time: Four Hours.

1. The solution A contains two (2) Acids and five (5) Bases. Separate them so as to ascertain definitely what they are, and write out results. Should you fail to determine with certainty any Base or Acid supposed to be present, state what you consider to be the probable cause of failure. [The Bases were $\mathrm{HgO}, \mathrm{CdO}, \mathrm{MnO}, \mathrm{BaO}$, $\mathrm{K}_{2} \mathrm{O}$. The Acids $\mathrm{HCl}, \mathrm{HNO}{ }_{3}$.]
2. Mineral Water Sample No. 1. Determine whether it contains $\mathrm{Cl}, \mathrm{Br}, \mathrm{I}$. [The Water Samples were artificially prepared from Distilled Water, with known amounts of impurity.]
3. Find specific gravity of Well Water, No. 2.
$f$
4. Ascertain presence or absence of $\mathrm{Pb}, \mathrm{Fe}, \mathrm{Ca}$, in samples of Tank Water marked Nos. 4, 5, 6.
5. Determine amount of Solid Residue in sample of Lake Water No. 3, and proportions organic and inorganic.

Either the first question only to be taken,-or the whole of the rest of the paper.

PRACTICAL CHEMISTRY,-ELEMENTARY COURSE.
Trme: Four Hours.

1. Find Acid and Base in each of the Salts numbered $\frac{x,}{1} \frac{x}{2}$ \&c., and, in any case of failure or uncertainty, point out probable or possible cause.
[The samples of Salts given out included all the ordinary or important Salts, consisting of Bases and Acids usually tested for in a Practical Course. The standing of the respective Candidates was determined from the number of accurate determinations made of Bases and Acids, -corresponding deductions being allowed for errors.]

## BOTANY.

## Time: Three Hours.

1. In what sense is the Cell to be regarded as the unit in Vegetable Anatomy? What is essential to its vital activity? Describe the Cell Wall, its markings, modifications in consistency (mucilaginous, \&c.). What Carbohydrates are dissolved in the cell sap?
2. Point out the principal Modifications of cells in form and structure, (1) of the fundamental or parenchymatous system; (2) of the fibro-vascular system ; (3) sieve or cribrose cells; (4) latex cells.
3. Describe the structure of the Stem, with special regard to the arrangement of its tissue elements, and mode of growth.
4. Describe Protoplasm, as regards its chemical and physical characters, its movements, relations to temperature, and moisture, "continuity."
5. Describe the Leaf, with respect to its several parts, its structure, as regards the layers of tissue-elements, and its functions.
6. Process of Reproduction in (1) Seminiferous Plants; (2) Sporiferous Plants.
7. Give an outline of the Natural System of Classification of the Vegetable Kingdom.
8. Distinguish comparatively, by structural characters the following Natural Orders:-Ranunculacee, Nymphaeacese, Cruciferce, Leguminosce, Rosacece.

Five questions only to be answerti. All are of equal value.

## EXAMINATIONS FOR HONOURS.

## I.-HONOURS IN CLASSICS.

Examiner
John Johnson, M.A.

## I.

PLAUTU3: Trinumnus. TERENCE: Heautontimorumenos.
VIRGIL : Georgics, Books i., iv. HORACE: Epistles, Ars Poetica.
A. Translate : Trin. II. 4, vv. 128-145.

1. Explain any (a) forms, (b) phrases, (c) allusions that need notice in this passage.
2. Translate and write explanatory notes on the following:
a. Ubi mortuos sis, ita sis ut nomen cluet.
b. Cena hac annonast sine sacris hereditas.
c. Cave sis tibi ne bubuli cottabi crebri crepent.
3. Quote some Greek words used in a Latin form in this play.
B. Translate: Heauton. III. 2, vv. 38-50.
4. Supply ellipses and explain syntax where necessary in this passage.
5. a. Qui nuper fecit servo currenti in via. Decesse populum. Distinguish this from the ordinary construction of facio.
b. Sed quid crepuerunt fores Hinc a me? quisnam egreditur? huc concessero.
Translate and write a note on crepuerunt fores, giving the opposite phrase and the Greek equivalents. Explain the tense of concessero.
c. (Chremes) : Sustulisti (puellam). Syrus : Sic est factum, domina, ergo herus damno auctus est.
Translate and explain this as it stands and with the various corrections, (1) ego for ergo, (2) minor for domina, (3) domine for domina.
6. The Prologue classifies this play and contrasts it with others. The Didascalia notes the time and occasion of its performance.
7. Quote some proverbs from this play.
C. Translate : a. Georg. I., vv. 71-77.
b. Georg. IV., vv. 281-294.
8. a. Arcadii memoranda inventa magistri.
b. Pellaei gens fortunata Canopi.

Explain the allusions.
2. What difficulties are found in the second Extract?
3. a. Namque sub Oebaliæ nemini me turribus altis.
b. Aut Athon, aut Rhodopen, aut alta Ceraunia telo.

Write geographical notes.
4. Haec super arvorum cultu pecorumque canebam Et super arboribus, Cæsar dum magnus ad altum Fulminat Euphraten bello.
Explain the combination of tenses. What historical events are mentioned in the First Georgic ?
D. Translate : Hor. Ars Poet., vv. 46-62.

1. In the last sentence Bentley reads, Ut silvis folia privos, etc. Translate accordingly.
2. 

Licuit semperque licebit
Signatum præsente nota producere nomen.
Horace availed himself of this privilege. Give also examples of poetical constructions used by him.
3.

Si de quincunxe remota est
Uncia, quid superat?
Name the divisions of the as.
4. Quote Horace's description of himselt.

## II.

JUVENAL: Satires VII., VIII., XIV. CICERO: De Oratore,
Books I., II. LIVY : Bоoкs XXI., XXII. TACITUS :
Germania, Annals, Book II.
Time: Three Hours.
A. Translate: Juv. VII. vv. 105-123.

1. a. Parte alia solum russati pone Lacernae.
b. Consedere Duces : surgis tu pallidus Ajax.
c. Si contigit aureus unus.
d. Inde cadunt partes ex foedere pragmaticorum.

Write explanatory notes.
2. $a$.

Si nemo tribunal
Vendit Acersecomes.
b. Planipedes audit Fabios.
c. vitem posce libello.

Translate and explain.
3. What is the subject of the eighth Satire, and how is it illustrated?
B. Translate : Cic. De orat.
a. I. 56 § § $237,238$.
b. II. $57 \S 233$ beginning "Ego, vero," inquit ille.
c. II. 62 § 253 .

1. Write such notes as you think necessary on the above Extracts,
2. $a$. Ut totum illud UTI LINGUA NUNCUPASSIT non in XII. tabulis, quas tu omnibus bibliothecis anteponis, sed in magistri carmine scriptum videretur.
b. Vere enim etiam illud dicitur, perverse dicere homines perverse dicendo facillime consequi.
c. Ex hoc genere est illa Risciana imitatio senis : "tibi ego, Antipho, has sero ; senium cum audio."
Translate and write explanatory notes.
3. What account does Cicero give of the origin of the art of memory ?
C. Translate : Liv. (a) XXI. 5. Et ex altera parte ripae vis ingens equitum in flumen immissa, mediqque alveo haudquaquam pari certamine concursum, quippe ubi pedes instabilis ac vix vado fidens vel ab inermi equite, equo temere acto, perverti posset, eques corpore armisque liber, equo vel per medios gurgites stabili, cominus eminusque rem generet.
(b.) XXII. 17, to excessere.
4. a. sero nunc (patriam) desideratis, diminuti capite.
b. si, mediusfidius, ipse in nos mitis Hannibal contra naturam suam esse velit.
c. postquam pro eo, ut ipsi ex alieno agro raperent agerentque, suas terras sedem belli esse. . . . . (Galli) videre.
d. et lectisternium Caere . . . . imperatum.
e. ver sacrum.

Write notes on the words in italics.
2. What previous historians does Livy mention in these Books? How may the resemblance and difference between his history of the second Punic war and that of another be accounted for?
D. Translate : $\alpha$. Tac. Ger., ch. 26.
b. Tac. Ann. II., ch. 59.

1. a. The first statement in Germ. 26 is remarkable, if compared with a previous statement of the historian. Why was it made? Another statement in this chapter is illustrated by our own tongue.
b. What is the subject of servatur ?
c. Instead of in vices, some editors read in vicos; translate also accordingly.
2. The characteristics of Tacitus' style have been arranged under three heads : give as many examples as you can of any one of them.

## III.

AESCHYLUS : Agambunon. SOPHOCLES: Edipus Coloneus. ARISTOPHANES : The Clocds. HOMER: Odyssey, Books v.-viII.

## Time: Threb Hours.

A. Translate: a. Agam. vv. 160-177, beginning Zev̀s, ö $\sigma \tau \iota \varsigma \pi \tau^{2}$ ह̇のтìv.
b. Agam. vv. 1594-1602, beginning $\tau a ̀ ~ \mu \varepsilon ̀ \nu ~ \pi o \delta \gamma i ́ p \eta$.
 is variously explained and translated.-Who are referred to in the
 both.
 objection to this punctuation? Translate with à $\sigma \mu a$ in preceding clause. - $\dot{\alpha} \mu \pi i \pi \tau \varepsilon \iota \delta^{\prime} \dot{a} \pi \grave{o} \sigma \phi a \gamma \bar{\eta} s \dot{\varepsilon} \mu \tilde{\omega} v$; translate this and the other
 the readings $\dot{a} \rho \tilde{a}$ and $\dot{a} \rho \dot{\rho} v$.
3. Quote some references in this play to the customs, etc., of Aeschylus' days.
B. Translate: $a$. Oed. Col. vv. 555-568.
b. Oed. Col. vv. 1670-1676.

1. Explain clearly the use of $\dot{\omega} \varsigma \check{\omega} \sigma \pi \varepsilon \rho$ in vv. 561-562.-Two constructions are combined in the last sentence.-Distinguish the use of $\tau v \gamma \chi a ́ v \omega$ with different participles.

i $\delta \partial \nu \tau \varepsilon \kappa \alpha \grave{\imath} \pi a \theta 0 \hat{v} \sigma \alpha$. This sentence is variously translated.-ov̉ tò $\mu \varepsilon ́ v$, à $\lambda 20$ đ $\grave{\varepsilon} \mu \eta$. Explain the construction and aceount for the different negatives.
2. Scan vv. 1670-1676.
C. Translate : $a$. Nub. 930-940.
b. Nub. 949-954.


 Translate, and explain $\pi \rho v \tau \alpha v \varepsilon i$ '. Give the Latin equivalent.

Explain.
c. $\quad \tau \bar{\varphi} \gamma \grave{\alpha} \rho{ }^{\circ} \mu \nu v \tau^{\prime} ; \hat{\eta}$

Translate and explain these words, and note unusual constructions,
D. Translate: $a$. Odys. VII. 104-110.
b. Odys. VIII. 372-379.
3. a. What is the meaning of VII. 107 ?-Parse $\varepsilon \chi v \tilde{\eta} \sigma \sigma a \iota$ and translate the other reading iocòv $\tau \varepsilon \chi \nu \eta ँ \sigma \alpha u$.
b. ${ }^{a} \nu^{\prime} i \theta i v$ is translated in two ways. Parse $i \theta \dot{v}$.
4. Parse the following words, which are found in the prescribed books :
$\dot{\varepsilon} \kappa i \rho v a, ~ o i \sigma \varepsilon ́ \tau \omega, \pi \varepsilon ф \rho a \delta \varepsilon ́ \mu \varepsilon v, \chi \dot{v} \tau o, \dot{\varepsilon}^{\varepsilon} \eta \eta \lambda a ́ \delta a \tau^{\prime}$.

## IV.

THUCYDIDES: Book пı. PLATO : Phedo. DEMOSTHENES : De Corona.

Time: Three Hours.
A. Translate : Thucyd. II. $a$. ch. 49, beginning $\tau a ̀$ d'čv $\tau \grave{\varrho} \varsigma$, ending à $\pi \varepsilon \phi \theta \varepsilon i \rho \rho \nu \tau 0$.
b. ch. 87 , beginning $\check{\text { ఢ゙vé } \beta \eta \text {, ending }}$ какоѝs $\gamma \varepsilon v \varepsilon ́ \sigma \theta a l$.

1. Ch. 49. Explain the different readings, $\gamma \nu \mu \nu o ́ v, \gamma v \mu \nu o i .-A c c o u n t$


2. Ch. 87. The construction of the clause ov̉dè díкаиоv........... $\dot{a} \mu \beta \lambda i v \varepsilon \sigma \theta a \iota$ has been variously explained.

 which word do you connect $\hat{a} v$ ? State your reasons.
B. Translate: Phædo, ch. 58, beginning $\pi \varepsilon ́ \pi \varepsilon \iota \sigma \mu a \iota ~ \tau o i v v \nu, ~ e n d i n g ~$ عis $\tau a ̀ ~ \kappa o ̄ ̃ \lambda a ~ \tau \eta ̆ s ~ \gamma \tilde{\eta} s$.
3. What is irregular in the construction of the first sentence? How
 हiऽ â そvveppvqnéval: account for mood.


 connection of words in the clauses $\tau \circ \tilde{v} \mu \grave{v} \nu \ldots . . . i \pi \varepsilon \rho \varepsilon$ र́ $\chi o v$.


 $\gamma^{\prime}$ '́ove.

Translate and explain the references.
4. Illustrate by examples the use of $\pi \rho^{\prime} i v$.










Translate these passages and explain constructions where necessary.
2. Quote some proverbial sayings from this speech.
3. How was any particular day of any year indicated at Athens?

## V.

Latin Prose Composition: Classical Philology.
Thme: Threm Hours.

## A. Translate into Latin :

It will seem strange to some that Cicero, when he had certain information of Catiline's treason, instead of seizing him in the city, not only suffered but urged his escape and forced him as it were to begin the war. But there was good reason for what he did, as he frequently intimates in his speeches; he had many enemies among the nobility and Catiline many secret friends: and though he was perfectly informed of the whole progress and extent of the plot, yet the proofs not being ready to lay before the public, Catiline's dissimulation still prevailed and persuaded great numbers of his innocence; so that, if he had imprisoned and punished him at this time as he deserved, the whole faction were prepared to raise a clamour against him by representing his administration as a tyranny and the plot as a forgery contrived to support it. Whereas by driving Catiline into rebellion, he made all men see the reality of their danger.

## B. Max Mulleris Science of Language, Vol. I., Chaps. 1-7.

1. Every Science is said to pass through three stages. How does Mr. Müller illustrate this statement in the case of Language ?
2. What Leibnitz did for the science of language.
3. What is meant by a Family of Languages? Show by a chart the relation our own tongue bears to others of the same family. A simple test will prove that some ancient languages of this family cannot have been derived one from another.
4. M. Müller mentions two striking instances of the advantages gained by a knowledge of Sanscrit and Comparative Grammar.
5. Trace to their originals : age, sir, mx'am, fee, quittance, sister, did, its.

## C. Peile's Introduotion to Greek and Latin Etymology.

1. Name the chief verbal stem-suffixes and give examples in Latin and Greek.
2. Trace the derivatives from the root DHU in Greek, Latin and English.
3. Give the root of each of the following words and other derivatives therefrom in different languages :
ward, cunning, oै $\chi o s$, gratus, (to) don.
4. Show the changes the Digamma has undergone in Greek, giving several examples of each change.
5. What are the laws of accentuation in Latin? Why are they supposed to have been different in earlier times? Give examples in support of the theory.

## VI.

Mahaffy's History of Greek Classical Literature.-Crutwell's History of Roman Literature. - Donaldson's

Theatre of the Greeks.

## Time : Three Hours.

A. 1. What evidence have we to fix the earliest date for the common use of writing among the Greeks?
2. What is Lachman's theory of the origin of the Iliad? Show the inconsistency of character in one of the heroes of the Iliad. How may this inconsistency be explained ?
3. Mention the Cyclic writers and their works. Horace contrasts them with Homer.
4. The chief facts in the life of Sophocles. Some passages in his plays may have been suggested by Herodotus. From what sources were his plots taken? Why may more obvious sources have been neglected? What story is connected with the Oedipus Coloneus?
5. What does Thucydides tell us about himself? How may the speeches in his History be classified? What objections have been taken to their style? Is the apology usually made for him valid?
B. 1. Describe Fescenninae. Different derivations of the name have been offered. What does Horace say about them? Where is a refined specimen to be found?
2. Distinguish the two divisions of Latin Comedy and name the chief writers in each. Where were plays at first performed? How did the Roman theatres differ from the Grecian? When and by whom was the first permanent theatre built at Rome?
3. Compare Roman Satire with suggested originals in Greek, showing resemblances and differences. Quote any references to its origin that you may have met in your Latin authors. Name the chief writers of Satire and describe briefly their different styles.
4. What artistic blemishes have been pointed out in the Ecloques? What were Virgil's models in the Georgics? What Latin works on the same subject preceded the Georgics? Why was the episode in the latter part of the Fourth Georgic introduced?
5. How was "the state of letters at Rome ripe for the production of a work like Livy's"? Point out merits and demerits of his History?
C. The origin of Comedy and the derivation of its name.
2. The different Dionysia at Athens. The time and circumstances of their celebration.
3. Point out the differences between a representation of tragedy in Athens and in modern times, as regards (a) place, (b) time, (c) audience.
4. Describe the preparations for bringing out a play at Athens.
5. Name the parts of a Greek Tragedy. Account for the differences between the two elements in it.

## II.-HONOURS IN MATHEMATICS AND PHYSICS.

## MATHEMATICS.

Examiner
C. Macdonald, M. A.

## I.

## TRIGONOMETRY AND ANALYTICAL GEOMETRY.

APRIL 13. -10 A. M.

1. The earth being supposed a sphere, $R$ its radius, $h$ the height of a mountain, $\theta$ the dip of the horizon, prove $h=2 R \sin ^{2} \frac{\theta}{2} \sec \theta$.
2. Join the centres $P, Q, R$, of the circles escribed to the triangle ABC , and find expressions for the angles, area, and radius of the inscribed circle of, PQR.
3. If $\tan \theta=\frac{b}{a}$, prove

$$
(a+b \sqrt{-1})^{m}+(a-b \sqrt{-1})^{m}=2 \cos m \theta\left(a^{2}+b^{2}\right)^{\frac{m}{2}}
$$

4. In the formula, $a^{2}=h^{2}+c^{2}-2 b c \cos \mathrm{~A}$, write $x+x^{-1}$ for $2 \cos \mathrm{~A}$, and deduce $\log _{\varepsilon} a-\log _{\varepsilon} c=$ a series in cosines of multiples of A .
5. Sum the series, $1+\frac{1}{1} \sin x+\frac{1}{1.2} \sin 2 x+\frac{1}{1.2 .3} \sin 3 x+\& c . a d$ inf. Also, knowing that $\tan x+\frac{1}{2} \tan \frac{x}{2}+\frac{1}{2^{2}} \tan \frac{x}{2^{2}}+\& \mathrm{c} .=\frac{1}{x}-2 \cot 2 x$, sum $\sec ^{2} x+\frac{1}{2^{2}} \sec ^{2} \frac{x}{2}+\frac{1}{2^{4}} \sec ^{2} 2^{x}+\& c$. ad inf. and $\log _{\varepsilon} \cos \theta+\log _{\varepsilon} \cos \frac{\theta}{2}+\log _{\varepsilon} \cos \frac{\theta}{2^{2}}+$ \&c. ad inf.
6. Resolve $x^{2 n}-1=0$ into its factors, and prove by suitable transformations \&c. $n^{\frac{1}{2}}=2^{n-1} \sin \frac{\pi}{2 n} \sin \frac{2 \pi}{2 n} \ldots \ldots \ldots \ldots \sin \frac{(n-1) \pi}{2 n}$, giving also the similar factorials in terms of the cosines.
7. Find the condition that the equation $a x^{2}+b x y+c y^{2}=0$, may represent two real lines at right angles.
8. Given $a x+b y+c=0$, and $a, x+b y+c_{1}=0$, prove that the bisectors of the angles at which they cut are

$$
\frac{a x+b y+c}{\sqrt{a^{2}+b^{2}}}= \pm \frac{a_{1} x+b_{1} y+c_{1}}{\sqrt{a_{1}^{2}+b_{1}^{2}}}
$$

Explain the double sign and translate into trilinear coördinates.
9. If the axes are inclined at angle $\omega$, and the lines, $y=m x+c$ and $y=m_{l} x+c_{l}$ make angles $\theta$ and $\theta_{l}$ with the axis of $x$, prove

$$
\tan \left(\theta-\theta_{i}\right)=\frac{\left(m-m_{i}\right) \sin \omega}{1+\left(m+m_{i}\right) \cos \omega+m m_{l}} .
$$

10. Find the polar equation to a circle ; deduce from it Euc. III. 36 ; and that the locus of the middle points of chords that pass thro' a fixed point is a circle.
11. $x^{2}-2 a x+y^{2}+2 b y=0$ is the equation to a circle : find the equations to the three tangents at the points where the circle cuts the axes.
12. $l a+m \beta+n \gamma=0\}$ Shew how ta find the angle between $\left.l_{,} \alpha+m_{,} \beta+n_{i} \gamma=0\right\}$ these lines.

## II.

## ANALYTICAL GEOMETRY AND DIFFERENTIAL CALCULUS.

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APRIL 19.-3 P. M.
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1. Transform the Equation of the Ellipse or Hyperbola from principal to any conjugate axes, determining the relation of the new axes to the quadrants marked out by the former.
2. If tangents be drawn to a central conic from any point, the line joining the point with the centre bisects the chord of contact. Also, adapt this proposition to the case of the parabola.

3, Solve, for $y$, the general equation, $a x^{2}+b x y+c y^{2}+d x+e y$ $+f=0$. Illustrate by a figure the salient features of your solution : and determine the cases in which the equation represents two straight lines.
4. Prove that if parallel chords be drawn in a parabola, cutting the principal diameter at points $h$ and $h$, from the vertex, the rectangles of their segments are to one another as $h: h_{l}$.
5. From any point in a straight line, tangents are drawn to two circles. Prove that the locus of the intersection of their chords of contact is a hyperbola.
6. A circle cuts a rectangular hyperbola. Shew that the coördinates of the middle point of the line joining their centres are respectively the arithmetic means of the similar coördinates of the four points of seetion.
7. If $a=0, \beta=0, \gamma=0$, be the equations to the sides of a triangle, shew that the circumscribing circle is represented by $\beta \gamma \sin \mathrm{A}+$ $\gamma a \sin \mathrm{~B}+a \beta \sin \mathrm{C}=0$.
8. Interpret the equation, $\alpha \beta=k \gamma,^{2}$ shewing among other things that the locus cannot cut the $\alpha$ and $\beta$ lines.
9. Explain and illustrate what is sometimes called the "Failure of Taylor's Theorem."
10. Write and prove the tests for Maxima and Minima of Functions of a single variable.
11. Draw a tangent to an ellipse, so that with the axes it may contain the least triangle. Does the function you have to differentiate yield you on inspection any other property?
III.

## DIFFERENTIAL AND INTEGRAL CALCULUS.

## APRIL 21.-10 A. M.

1. Distinguish between the partial and total differential coefficients of $u=f(x, y, z \ldots \ldots)$ : and if $u=f(x, y, z)$, prove

$$
d u=\left(\frac{d u}{d x}\right) d x+\left(\frac{d u}{d y}\right) d y+\left(\frac{d u}{d z}\right) d z .
$$

2. If $u=f(x, y, z)$, and $y$ and $z$ be also functions of $x$, find $\frac{d^{2} u}{d x^{2}}$.
3. Two curves, $y=f(x)$ and $y=\phi(x)$ have a contact of the $n^{\text {th }}$ order. Shew analytically the relations that subsist between successive differential ceefficients. Prove also that in the conic sections, Radius of curvature $\propto$ (normal) ${ }^{3}$.
4. Draw the curves, $r=a \cos 3 \theta$, and $r=a \cos 2 \theta$, and find the area of one loop of the former.
5. Consider and draw the curve $x y^{2}=x^{3}-a^{3}$, finding its asymptotes, if any, and volume of revolution round the axis of $x$, from $x=a$ to $x=h$.
6. Explain the "intrinsic equation" of a curve, and find the intrinsic equation either of the semi-cubical parabola $y^{3}=\frac{27}{8} a x^{2}$, or the catenary $y+c=\frac{c}{2}\left(\begin{array}{l}\frac{x}{c} \\ \varepsilon\end{array}-\frac{x}{\varepsilon}\right)$.
7. Shew, $n$ being a positive whole number, how to integrate any two of the following, viz : $-\frac{1}{x^{n}\left(x^{2}+a^{2}\right)}, x^{n} \log (1+x)$, and $\frac{x^{n}}{\sqrt{x^{2}+2 a x}}$ also integrate any two of the following, viz :-

$$
x^{2}(\log x)^{2} d x, \sin ^{8} \theta \cos ^{3} \theta d \theta, \frac{\sin ^{2} \theta d \theta}{(1+\cos \theta)^{2}} .
$$

8. Find the expression for the length of an Elliptical or Hyperbolic are, and indicate the method by which the integration can be approximated.
9. Obtain the expression for the attraction of a circular disc of radius $a$, on a particle in the line perpendicular to the plane of the dise thro' its centre and at the distance $d ; \phi(r)$ being the law of force : and find its definite value, when the law of force is, "the inverse cube of the distance."
10. Find the centre of mass (gravity) of a paraboloid of revolution whose density at every point is proportional to the abscissa of the generating parabola for the point.
11. Shew that if $\mathbf{M} d x+N d y=0$ does not satisfy the test of integrability, and if one integrating factor can be found, any number of such factors can also be found.
12. Integrate either of the equations

$$
\frac{d y}{d x}+\left(\frac{1-2 x}{x^{2}}\right) y=1, \text { or } x+x\left(\frac{d y}{d x}\right)^{2}=1
$$

## MATHEMATICAL PHYSICS.

Examiner
J. G. MacGregor, D. Sc.

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\text { APRLL } 15 \mathrm{TH} .-10 \text { A. M. }-1 \text { р. м. }
$$

N. B.-Answer only ten questions. Those with an asterisk have the higher values.
*(1.) Sbew that the curvature at the point, $x, y$ of the path of a particle moving in a plane is

$$
\frac{d^{2} y}{d x^{2}} /\left(1+\left(\frac{d y}{d x}\right)^{2}\right)^{\frac{3}{2}}
$$

-If the path is a parabola find the radius of curvature at the vertex.
(2.) Find the component accelerations of a point moving in a plane curve, in directions normal to the path, and to the radius vector from a fixed point in the plane of motion respectively.

* (3.) Write down, in terms both of Cartesian and of Polar coordinates, the equations of motion of a point moving under a central acceleration; and determine the motion in the case of an acceleration which is directly proportional to the distance of the moving point from the centre.
* (4.) A body is subjected to a simple shear. Shew that its amount is equal to the difference of its greatest and least principal ratios, and that the planes of no distortion are equally inclined to the greatest and least principal axes. Shew also that if the shear is indefinitely small, its amount is equal to twice the greatest principal elongation, and the planes of no distortion are inclined at angles of $45^{\circ}$ to the above axes.
* (5.) Show that the attraction of a uniform circular disc on a particle of mass, $m$, situated on its axis is equal to $2 \pi m \rho(1-\cos \alpha)$, $\rho$ being the surface density of the disc, and $a$ the angle subtended by its radius at the particle.
* (8.) Ubtain LaPlace's equation $\left(\frac{d^{2} V}{d x^{2}}+\frac{d^{2} V}{d y^{2}}+\frac{d^{2} V}{d z^{2}}=0\right)$, and apply it to prove that the attraction of an infinite plate of uniform thickness and density, at points outside the plate, is independent of their distance from it,--Find also the attraction at internal points.
(7.) Shew that the rate of change of angular momentum of a system of particles, acted upon by any forces, about axes through the centre of mass is the same as if that point were fixed.
* (8.) Obtain the equations of motion of a rigid body about a fixed axis, and apply them to determine the motion of the physical pendulum through small angles.
(9.) Obtain the equations of motion of a fluid in the form given them by Euler, and give other equations necessary to determine the motion of the fluid.
* (10.) A smooth uniform cylindrical tube is bent so that its two straight portions are at right angles to one another, one portion being vertical and the other horizontal. A valve at the right angle being closed the vertical portion of the tube is filled with a heavy liquid. Determine the motion after the opening of the valve.
(11.) Shew that the equilibrium of a fluid subjected to the action of conservative forces only is always possible ; and find expressions for the pressure at any point of a heavy incompressible liquid, and of a heavy gas which follows Boyle's Law, when they are in equilibrium.
(12.) Obtain an analytical expression for the First Law of Thermodynamics.
(13.) Shew that the pressure of a perfect gas is equal to the mechanical equivalent of its latent heat of dilatation.


## III.-HONOURS IN MENTAL AND MORAL PHILOSOPHY. <br> PSYCHOLOGY.

Examiner
Professor Lyall, LL.D.
Friday, 15 th April, from 10 A. M. tild 1 P. M.

1. What do you understand by the Berkeleyan theory of Matter ? How much further does Hume, on independent grounds, carry the Berkleyan doctrine? How may both systems of philosophising admit of being answered from a purely psychological stand-point?
2. How do the extremes of materialism and idealism seem to meet in Hume's system, and so with Mill's account of Matter and Mind, professing as he does a purely sensationalist philosophy?
3. For what end were the faculties of knowledge given us? Are we entitled to call in question their information, or to regard their dicta otherwise than as valid and reliable?
4. What theories have been advanced on the subject of Perception? In what respect does Sir William Hamilton's doctrine of
"Immediate Perception" differ from all previous views held on the subject? On what grounds does he maintain his doctrine, and wherein does he seem inconsistent with himself in its maintenance?
5. Distinguish between what Sir Wm. Hamilton calls "Natural Dualism," on the one hand, and "Hpyothetical Dualism " or "Cosmothetic Idealism," on the other. How far may he be said to commit himself to a system of "Cosmothetic Idealism?"
6. Give some account of the doctrines of Realism, Nominalism, and Conceptualism, respectively. Show how an intelligent Realism may be maintained, as distinguished from the Realism of the Schools, the one traceable to Plato's famous theory of Ideas, the other to a perversion of that theory. What are the more recent phases of this question? How does Evolutionism touch the question?

## LOGIC.

Examiner .Professor Lyall, LL.D.

Saturday, 16 th April, from $10 \mathrm{~A} . \mathrm{M}$. to 1 P. M.

1. What has Logic been defined to be the science of? What is meant by the Laws of Thought as thought ? State the fundamental Laws of Thought, and how they correspond with the Laws of Mind psychologically regarded.
2. How does a Concept difter from a Percept? What accordingly, is the relation of Concepts to Reasonings, and of Judgments to both? What are the constituents parts of a Proposition? How may propositions be illatively converted?
3. What do we hold to be the true theory of Reasoning? and how is "Inductive Reasoning" a misnomer? Specify the different steps of the Inductive process, and show what parts alone are reasoning, and therefore essentially deductive.
4. Illustrate the process by examples, and show the place which experiment has in it.
5. A generalization is the conclusion from what major premiss, having what for the minor?
6. This, that, and the other magnet attract iron : What premiss is that in the generalization-"All magnets attract Iron." Mercury, Venus, Mars, revolve in eliptical orbits round the sun. Include that in a generalizing syllogism.

## ETHICS.

Greek Moral Ideals and Institutions: Plato's Republic : Aristotle's Ethics.

Examiner Professor Schurman.

March 31 st . -10 A . m. -1 p. m.

1. Sketch the leading motives or principles by whfch the Greeks were influenced to goodness.
2. What is the ethical significance of $\dot{v} \beta \rho \iota \varsigma$ ? How is it related to the national sense of moderation? And where do both appear in Aristotle's Ethics?
3. What, according to Plato's Republic, is the function of ס<кalooivŋ? Why should it have been more to the Greeks than "justice" is to us?
4. Give Aristotle's deduction of the ãv $\theta \rho \dot{\rho} \pi \tau \nu \nu v$ ả $\gamma a \theta 00 v$. Explain the terms used in the definition of it.
5. How does Aristotle conceive the relation of virtue to pleasure?
6. Reproduce Aristotle's account of the $\mu \varepsilon \gamma a \lambda \sigma \psi v \chi o s$.
7. (a) "The virtues come neither by nature nor against nature." How then?
(b) "This is the end or aim of virtue." What?
(c) "These are the motives of every act and of every man?" What?

## METAPHYSICS.

Examiner ${ }^{`}$ Professor Seth.

APRIL 19TH,-10 A. M. -1 P. M.

1. Discuss the significance of Descartes' Cogito ergo Sum, and compare it with Kant's "Synthetic Unity of Apperception."
2. Give Locke's account of the Reality of Knowlege ; consider its consistency with his fundamental position as to the nature of Knowledge ; and compare it with the views of Berkeley and Hume on the same question.
3. Compare the teaching of Locke, Berkeley, Hume, and Kant on Causality.
4. Compare the accounts given by Berkeley, Hume and Kant respectively of the Permanence or Continuity of the material world.
5. Compare and contrast the views of Hume and Kant as to the source of Necessity in Knowledge.
6. Expound Kant's doctrine of Schematism, showing the need for such a doctrine from the Kantian point of view, and estimating its permanent value.

## ETHICS (MODERN) AND METAPHYSICS.

## Examiner <br> Professor Seth.

Time : Four Hours.

1. State briefly and compare the views of Butler and Adam Smith $a^{s}$ to the nature of moral distinctions, and of our recognition of them.
2. State and discuss Kant's solution of the problem of Freedom.
3. How does Spencer "rationalize" Utilitarianism? Discuss the adequacy of the resulting ethical theory.
4. Compare the views of Mill and Kant as to the ethical significance of Pleasure, and indicate what you consider to be the true view.
5. Write a short essay on the following subject:-" Modern Sensationalism and Kant's attitude towards it."

## IV.-HONOURS IN ENGLISH LITERATURE AND HISTORY.

## ENGLISH LITERATURE.

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

## April 11th- 10 A. M. to 1 P. M.

1. Give principal parts of bycgan, thyncan, hâtan, fléon, stígan biddan. Give present tense of mugan motan, libban. Decline thes, fiéond, twegen, toth. Account for mutation plurals.
2. Give a history of the conflict between the weak and strong conjugations.
3. Give the broad classes under which the main changes in pronunciation between Anglo-Saxon and Modern English fall, citing examples of each class.
4. Re-write in Modern English :-
(a) Eft thá théodréd biscop scéawode his béc, hé siththan behréowsode mid géomrunga thæt hé swá réthne dóm sette tháem ungesáeligum théofum, and hit besárgode áefre oth his lífes ende, and thá léode baed georne thæt híe him mid fæsten fullice thríe dagas, biddende thone Elmihtigan thæt he him árian scolde.
(b) He yal and hupte and drouy aye and makede grislich bere,

He nolde for al his biyete that he hadde icome there.
Mid his tonge he snytte hire nose' and tungede hire sore
For hit was with-inne the nyyte• he ne miyte iseo nomore
The schrewe was glad and blithe ynoug ' tho he was out of his honde
He fley and gradde be the lifte that me hurde into al the londe.
(c)

And utewit mani barntem
Did he sacclesli o lijf.
(d) Ther is wop and grindinge of teth, ther me geth uram chele in to greate hete of vere, and buothe ontholyinde.
(e) Bidders and Beggers faste about eoden Til hecr Bagges and heore Balies' weren bratful i-crommet ; Feyneden hem for heore fonde fouyten atte ale.
5. Write notes on the following phrases from Chaucer :
(a) They fillen gruf (b) at the sonne upriste (c) his nekke lith to wedde. (d) He was a janglere and a golyardeys. (e) He rood upon a rouncey $(f)$ pleyen on a robe $(g)$ Of yeddynges he bar utterly the pris ( $h$ ) a pulled hen ( $i$ ) the yonge sonne hath in the Ram his halfe cours i-ronne. ( $j$ ) His herbergh, and his mone, his lodemenage. ( $k$ ) For al day meteth men at unset stevene.
6. Describe the various literary influences under which Chaucer worked. In what does Chaucer's excellence as a poet consist? Contrast the management of the story and the characterization in the Knight's Tale and Two Noble Kinsmen.
7. State the characteristics of the Northern dialect.

## II.

## APRIL 14TH, 3 то 6 P. M.

1. State concisely and definitely the argument in favour of a divided authorship of Henry VIII.
2. Describe Opheli2, also any female character from a comedy of Shakespeare's Second Period.
3. Give a critical analysis of King Lear.
4. Discuss the question of text in the case either of Richard III. or of Hamlet.
5. Give brief notices of dramatic writers who began to write subsequent to the accession of James I.
6. With regard to eight of the following passages, give the play, the speaker, and the circumstances :
(a) The moon shines bright. In such a night as this

When the sweet wind did gently kiss the trees And they did make no noise,-in such a night Troilus methinks mounted the Trojan walls And sighed his soul toward the Grecian tents Where Cressid lay that night.
(b) There's such divinity doth hedge a king That treason can but peep to what it would, Acts little of his will.
(c) To gild refined gold, to paint the lily, To throw a perfume on the violet.

At his heels
Leashed in like hounds, should famine, sword and fire Crouch for employment.
(e)

Ye gods, it doth amaze me
A man of such a feeble temper should
So get the start of the majestic world And bear the palm alone.
(v゙) Thou seest we are not all alone unhappy : This wide and universal theatre
Presents more woeful pageants than the scene Wherein we play in.
(g) For nature crescent does not grow alone In thews and bulk, but, as the temple waxes, The inward service of the mind and soul Grows wide withal.
(h) Unaccommodated man is no more but such a poor, bare, forked animal as thou art.
(i)

Nothing in his life
Became him like the leaving it; he died
As one that had been studied in his death To throw away the dearest thing he owed As 't were a careless trifle.
( $j$ ) The weariest and most loathetl worldly life That age, ache, penary, and imprisonmen't Can lay on nature, is a paradise To what we fear of death.
( $k$ ) But earthlier happy is the rose distilled Than that which, withering on the virgin thorn, Grows, lives, and dies in single blessedness.
(l) Canst thou not minister to a mind diseased, Pluck from the memory a rooted sorrow ?
( $m$ ) If ever you have looked on better days, If ever been where bells have knolled to church, If ever sat at any good man's feast, If ever from your eyelids wiped a tear, And know what 't is to pity and be pitied, Let gentleness my strong enforcement be.
7. What peculiarities characterize Elizabethan literature in general as compared with the Iiterature of the 19th century ?

## III.

APRII 19TH, 3-6 P. M.

1. Annotate the words underlined in the following passages:-That vile torpodo, Gaveston. I have the Jesses that will pull you down. Dear shalt you both abide this rioteus deed. (Edward II.) To patient judgments we aupeal our plaud. Well seen in minerats. Thirty meals a-day and the bevers-a small trifle to suffice nature. (Faustus.) And sore he doubts of Bacon's cabalism. Maids, when they come to see the fair, count not to make a cope for dearth of hay. A veney, man! fair Margaret craves as much. $\langle F . B$. and $F$. B. $)$ Well mote ye thee. Might not be found a franker franion drad for his derring do. For what art thou that makest thyself his dayes-man. And from their sweaty coursers did avale. Did order all the achates in seemly wise. Whilst they were young, Cassibelane their eme. ( $F$. Queen.)
2. Give a brief outline of the main facts pertaining to the development of poetry proper from the beginning of the period to Donne.
3. Describe the novel of the time. Who were the chief novel writers?
4. In considering the Discredits of Learning, Bacon (in the Advancement) finds that some arise from Errors and Vanities in the studies themselves. some from Peccant Humours. Give the subdivisions under each of these heads, explain what is meant by them, and enlarge on those which seem peculiarly characteristic of Bacon's own way of thinking, or of the time.
5. Describe the peculiarities of Wordsworth, Tennyson, and Browning as exhibited in Michael, Oenone and Caliban respectively.
6. Assign each of the following passages to its author :-
(a) Thee therefore with His light about thy feet, Thee with his message ringing in thy ears, Thee shall thy brother man, the Lord from Heaven, Born of a village girl, carpenter's son, Wonderful, Prince of peace, the mighty God, Count the more base idelater of the two.

The wroth sea waves are edged
With foam, white as the bitten lip of Hate, When in the solitary waste, strange groups Of young volcanoes come up, Cyclops-like, Staring together with their eyes on flame.

Thro' all the tract of years
Wearing the white flower of a blameless life Before a thousand peering littlenesses In that fierce light which beats upon a throne.
(d) The point of one white star is quivering still Deep in the orange light of widening morn Beyond the purple mountains: through a chasm Of wind-divided mist the darker lake Reflects it. Now it wanes; it gleams again As the waves fade, and as the burning threads Of woven clouds unravel in pale air.
'Tis lost! and through yon peaks of cloud-like snow The roseate sunlight quivers.
(e) The world is too much with us; late and soon Getting and spending, we lay waste our powers.
$(J) \quad$ Saturn and Love their long repose Shall burst, more bright and good Than all who fell, than one who rose, Than many unsubdued
Not gold, not blood, their altar dowers But votive tears and symbol flowers.
(g) For a breeze of morning moves, And the plant of Love is on high,
Beginning to faint in the light that she loves On a bed of daffodil sky,
To faint in the light of the sun that she loves To faint in his light, and to die.
(h) Leave to the nightingale her shady wood; A privacy of glorious light is thine;
Whence thou dost pour upon the world a flood Of harmony, with instinct more divine.
Type of the wise who soar, but never roam ;
True to the kindred points of Heaven and Home!
(i) Therefore to whom turn I but to Thee, the ineffable Name?

Builder and maker, thou, of houses not made with hands! What, have fear of change from thee who art ever the same?
Doubt that thy power can fill the mind, that thy power expands?
There shall never be one lost grod! What was, shall live as before ;
The evil is null, is nought, is silence implying sound :
What was good, shall be good, with, for evil, so much good more;
On earth the broken arcs : in the heaven, a perfect round.
(j) Pleased rather with some soft ideal scene, The work of Fancy, or some happy tone Of meditation, slipping in between The beauty coming and the beauty gone.
(k) Ah, but a man's reach should exceed his grasp, Or what is heaven for?

## All the past

Melts mist like into this bright hour, and this Is morn to more, and all the rich to come Reels, as the golden Autumn woodland reels Athwart the smoke of burning weeds.
( $m$ ) Awake him not! surely he takes his fill Of deep and liquid rest, forgetful of all ill.
( $n$ ) Engagh of Science and of Art;
Close up these barren leaves :
Come forth, and bring with you a heart
That watches and receives.

## ENGLISH HISTORY,



## I.

## Time : Three Hours.

1. Hallam informs us that James began his reign with an enormous outrage on the civil rights of the men who signed ihe Millenary Petition. What was it and what opinion did the Judges give concerning it?
2. In the proclamation calling the first Parliament James committed an infringement of those privileges which the House of Commons had steadily and successfally asserted in the last reign.
3. Give the substance of the speeches of chief baron Flemming and baron Clark in the Bates' case as contained in Hallam.
4. What is the substance of Hallam s criticism of Clarendon?
5. March 8th, 1689, Sir John Elliot and others are sent to the Tower. They sue for Habeas Corpus. Give pleadings and decision of judges. Wherein did they differ from those in the case of Daniel and others in 1627.
6. Give views of Hallam regarding the trial and exeuction of Laud. Give wiews of Hallam regarding the trial and execution of Charles I.
7. Write an account of the impeachment of Clarendon.
8. Give an account of the new House of Lords of 1657.
9. "The change in the councils of Parliament brought on the Treaty of Newport." Explain.
10. "When in 1660 the Restoration was determined upon great, difficulties presented themselves." State a few of them.

1I. What were the terms of the Corporation of 1661 ?
12. In I681 Fitzharis was impeached by the Commons Hallam says: "Though the impeachment of Fitzharis was in itself ai mere work of temporary faction, it brought into discussion a considerable: question in our Constitutional Law." Explain.

## II.

## Time : Three Fours

1. When James ascended the English throne he appointed a number of Scots to Privy Council and important offices. Who were most prominent of these ?
2. After Hampton Court Conference new collection of eeclesiastical laws issued. Give most prominent points in these
3. Show differences between Ranke and Longard in account of Gunpowder Plot.
4. Ranke draws striking contrasts between Elizabeth and James. Give a few of them.
5. In 1610 Lord Treasurer Cecil submitted a comprehensive scheme to Parliament for radical cure of finarcial difficulties. Explain.
6. In the first years of his reign in England James exercised no deep influence. Why?
7. June 19th, 1625, Laud preached before King. Gardiner gives: account of sermon. Give leading points and theory of government set forth in it.
8. Write brief article on Petition of Right. Causes which led to it. What it demanded. Action of king regarding it. Discussions in Parliament. Resalts flowing from it.
9. Was tonnage and poundage included in the Petition of Right. Give Gardiner's account of discussion which arose on this point.
10. "In Scotland the Pacification of Berwick had not only not led to peace but had stirred up yet more violent dissensions." Explain.
11. Give substance of Clarendon's diseription of eharacter of Cromwell.
12. Give Green's view of influence of Puritanism on England.
13. Green discusses enforcement of Aet of Uniformity, 1662. Give his views.
14. "The definite establishment of the Royal Society 1662 marks the opening of a great age of scientific discovery in England." Explaia,

III.<br>Time : Three Hours.

1. On coming to the throne James endeavoured to satisfy the Netherlands without offending Spain. What expedient did he adopt?
2. 1604. Negotiations for treaty of peace with Spain. Explain difficulties and results.
1. What influence did the policy of James "exercise on Spain and Netherlands?
2. "There appeared to be almost a match between Catholic and Protestant princes to decide which party should bear off the pearl, the Princess Elizabeth." Explain.
3. "The question of the future marriage of Henry. Frederick, Prince of Wales, was treated in a kindred spirit though not exactly in the same way." (as that of Elizabeth). Explain.
4. What were the relations between England and Russia during the reign of James I. ? England and the Turks?
5. In the summer of 1622 English troops held the Palatinate. What was the policy of James ? What complications arose?
6. 1626. "To Germany the Alliance with England had at that time brought no good." Explain.
1. "Thus was the peace concluded at Susa, April 1st, 1629." Who were the contracting pdrties? What were the terms?
2. 1629. Charles sent one of his ablest diplomatists, Thomas Roe, to Hamburg. What was the object of his mission?
1. What share had England in the events of the Thirty Years' War from 1630-36?
2. "The relations between England and France (1637-39) determined the general course of European policy." Explain.
3. "The effect of Dunbar was at once seen in the attitude of the continental powers." Explain.
4. Give a brief account of Cromwell's foreign policy.

## SESSIONAL EXAMINATIONS.

## FACULTY OF LAW.

## CONSTITUTIONAL HISTORY OF ENGLAND.

Examiner
Professor Weldon.

## FIRST YEAR.

## Thme: Three Hours.

1. Contrast the Constitution and Powers of the Witanagemote with those of the House of Lords.
2. Write an account of the history of the judicial powers of the Privy Council from the time of the organization of the Court of King's Bench to the present day.
3. Describe the writ of Writ of Attainment. Account for its disuse.
4. Trace the growth in powers of the House of Commons during the reigns of the fourth, fifth and sixth Henry.
5. Write short notes on :
(a) Qualification of blood and property of candidates for the English House of Commons.
(b) Simon DeMontfort.
6. Give evidences and causes of the servility of Henry Eighth's Parliament?
7. What were the provisions of the Petition of Right?
8. Discuss Bates' case. (Impositions.)
9. Tive the history of English Legislation upon the duration of Parliaments? Is the present English parliamentary term too long?
10. Septennial Act, section 6, excluded the salaried advisers of the Crown from Parliament. Discuss the policy of that legislation.
11. Give account of the Reform Bills of 1832, 1867, 1885.
12. What effect has the demise of the Crown upon the duration of a parliament, in England, Canada, New Brunswick?

## INTERNATIONAL LAW



## THIRD YEAR.

## Time: Three Hours.

1. What are the principal sources of International Law? Name the principal writers on the subject in what you conceive to be the order of their importance.
2. Compare generally the scope of the ancient Jus Gentium with that of the modern International Law. To whom is the latter phrase due and what was apparently the object of its introduction? Is International Law, law, properly so-called? How do its sanctions compare with those of municipal law?
3. Fitate the rule of International Law as to rights and obligations of allies and principals in war, and deduce the consequences thereof.
4. What are the rights accorded by international usage to aliens as distinct from particular statutes of municipal law and as distinct from the rights of citizens or subjects of a state.

Give some account of the recent treaties by which the conditions of voluntary expatriation are determined
5. Trace the office of Consul as known to International Law from its earliest constitution to the present time. Compare the position of Consul with that of Ambassador.
6. "A war duly declared and officially recognized is not merely a contest between the governments of the hostile states, on the contrary, its first effect is to place every individual of the one state in legal hostility to every individual of the other, and these individuals retain the legal character of enemies, in whatever country they may be found." State the main consequences deducible from this doctrine, with the limitations to which they have in some cases been subjected.
7. "Free ships make free goods." Explain and comment on this maxim.
8. Present an argument for the British side of the Alabama dispute.
9. Give a brief account of the dispute between England and the United States on the Fishery Question. What is the latest phase of the dispute? Argue for the contention of the United States.
10. Sketch the history of the practice followed by England and by the United States respectively on the subject of the extradition of criminals. What is the actual state of the law in both countries?

TORTS.
FIRST YEAR.
Time: Two Hours.
Examiner John Y. Payzant, A. M.

1. Quote the legal maxims respecting the elements of a tort. What qualifications of these maxims in connection with some branches of the law of torts can you mention?
2. State shortly the grounds of the judgment in Pasly v. Freeman, and the points of the dissenting judgment.
3. What different kinds of implied misrepresentation can you name?
4. On what ground, independent of statute, is a defendant liable for having infringed a plaintiff's trade mark?

Describe briefly the current of judicial decision on this subject.
5. A. falsely and publicly charges $B$. with drunkenness-drunkenness being an offence punishable according to the law of the land by imprisonment. B. suffers no damage from the charge. Is A. liable in an action for slander?
(b) B. is a sea captain in the employ of a shipping firm. A. with a view of injuring B. in the estimation of his employers, falsely tells them that $B$. is guilty of gross licentiousness while trading at foreign ports. B. is reprimanded but not discharged from his office. Is A. liable?
(c) A. swears to an affidavit falsely charging $B$. with arson and procures a warrant from a magistrate for his arrest. Is A. liable to an action for libel ?
6. A. sells liquor under a license ; his neighbor B., being desirous of ridding the neighborhood of what he considers an evil, quietly induces C., from whom A. has purchased a quantity of liquor, not to deliver it to him. Has A. any right of action against B ?
7. (a) What is the difference between trespass to personal property and conversion? (b) What was decided in Fouldes v. Willougby? (c) On what ground is a bare possession, without title, sufficient to support an actien for a conversion?
8. What is the law as to the necessity of a demand and refusal before bringing an action for conversion of plaintiff's goods?
9. Illustrate and explain the doctrine of Causation in the law of negligence.
10. A. is the owner of a line of busses. B. is one of his drivers. C. another servant of A, while driving A.'s wife in his private carriage is run into and injured by B. through his careless driving. Has C. a good cause of action against $\mathbf{A}$, for the injury received ?

## CONFLICT OF LAWS.

Examiner
Professor Weldona

SECOND YEAR.<br>Time: One and Onk Half Hours.

(Give reasons.)

1. What is meant by a foreign marriage ? When has the English court jurisdiction to dissolve a foreign marriage?

When will the English court recognize a foreign divorce?
What is the authority of the Canadian Parliament and of the Provincial Legislature respectively on the matter of divorce legislation ?
2. What law determines whether one dies fntestate or not?

What law is applied to interpret a will?
Is the domiciliary administrator of a foreign will entitled as of right to administer the personal estate situate in New Brunswick? What is the practice?
3. "Capacity to contract is determined by the law of the domicile." Discuss this dictum fully. Does it apply to contracts of marriage ?
4. A French S. S. Co., contracts in Halifax to carry a passenger from Halifax to Havre. English and French laws conflict as to the liability of the Company for damage to passenger's luggage which fell into the dock at Halifax.

Which law determines the liability of the Company?
(b) Would you give a different answer if the accident had happened in the French dock?
(c) Would you give a different answer if the facts were as in the first case-except that the Company was English.
5. When will foreign delicts be held to be torts in this country ?

Discuss Phillips v. Eyre.
6. Action in Halifax on French Bill. Endorsee v. Endorser. Notice of dishonor too late by tex fori, in good time by French law. Which law will determine plaintiff's right?

## INSURANCE.

Examiner Mr. Graham, Q. C.

## THIRD YEAR.

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TIME: TWO HOURS.
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1. Must a contract of Marine Insurance be in writing? Describe the nature of the slip. Is the delivery of the policy essential to the completion of the contract. State the case of Xenos v. Wickham, or the point of it as to delivery.
2. Explain fully the difference hetween a voyage policy and a time policy, including the legal consequences resulting from the difference.
3. What is the difference between an actual and a constructive total loss? What circumstances will justify a notice of abandonment?
4. State generally what risks are covered by the term "perils of the sea." Is a loss by fire included? A policy mentions among the risks insured against "perils of the sea, men-of war, fire, enemies, pirates, rovers, etc., and all other perils, losses, and misfortunes that shall come," etc. Does it cover a loss occasioned-
(a) By an explosion of steam ky the bursting of a marine boiler.
(b) By rats gnawing holes in the ship's bottom rendering her unfit for sea.
(c) By rats gnawing through a leaden pipe and letting in water which sinks the ship.
(d) By worms.
5. What losses are covered by the term "barratry of the master and mariners."
6. Explain the terms, general average, particular average, valued policy, wager policy, causa proxima, deviation, jettison, and the expressions "lost or not lost," "interest or no interest." What is the law as to wager policies?
7. What are the implied warranties in a contract of marine insurance?
8. What is the object and seope of the suing and laboring clause.
9. A policy of marine insurance contains the following memorandum :
(1) Corn, fish, salt, fruit, flour and seed are warranted free from average unless general, or the ship be stranded.
(2) Sugar, tobacco, hemp, flax, hides, and skins are warranted free from average under 5 per cent.
(3) And all other goods, also the ship and freight are warranted free of average under 3 per cent, unless general or the ship be stranded.

Explain and comment upon the above memorandum. By what name is it generally known?

CONSTITUTIONAL LATV.
Examiner............................................. Professor Weldon. SECOND YEAR.

Time: Three Hours.
(Give reasons in all cases.)

1. How far are English Statutes in force in the Colony of Nova Scotia? Answer at length and give illustrations. Give the substance of the Colonial Laws Validity Act, Imp., 1865.
2. What is the origin of the Common Law of England.
3. 22 Geo. III., C 75, Imp. provides for the removal of a judge of a Superior Court in a British Colony.

Has S. 99 of B. N. A. Act touching the same matter virtually repealed the former Act?
4. Is the commission of the Governor-General cancelled by the demise of the Crown? Are Governors' acts after demise of Crown, but before notice of such, valid?
5. State the provisions of the B. N. A. Act as to Canadian Disallowance of Provincial Laws.

Is the federal power of disallowance to be exercised by the Governor-General, independently of his minister? Give the opinion of Lord Granville in 1869 and an account of the correspondence between Lord Carnarvon and Hon. Edward Blake on this question in 1876.
6. What are the uses of a Second Chamber in a Federal Union. Illustrate by reference to the American, Canadian, and German Confederations.
7. Point out the more striking differences between the Canadian and American Constitutions, which differences it is important for the Canadian reader of American constitutional cases to bear in mind. Answer fully.
8. Argue at length for or against the constitutionality of the Liquor License Act, 1886, N. S. Give the substance of the three Privy Council decisions on the powers of Province and Dominion respectively in respect to legislation aflecting the sale of intoxicating liquors.
9. State the provisions of the Canadian Constitution as to the taxing power. Are the following taxes imposed by the Province constitutional?
(a) 10 cents on each exhibit filed with the Prothonotary-to go to Library of Barristers' Society, 1867.
(b) $\$ 100$ on each Fire Insurance Company doing business in Halifax in addition to taxes on land and personal property ;-said tax paid at same time and in same way as other taxes.
(c) Tax on income of Dominion officials alone; other incomes not being taxed.
(d) General income tax.
10. State as fully as time permits the law as to incorporating Companies as drawn from the text of the B. N. A. Act, the law reports, and the opinions of the Ministers of Justice.
11. Is a provincial act empowering the Attorney-General to appoint officers to conduct criminal prosecutions in Nova Scotia intra vires?

## REAL PROPERTY.

Examiner....................Mr. S. L. Shannon, Q. C.
FIRST YEAR.
Time: Three Hours.

1. What words are essential to an Estate in Fee Simple? Does this rule prevail in case of a Devise?
2. A conveyance of land is made to A. for life with remainder to his heirs in fee. What estate will A. take? Give the authonity for your answer.
3. Does the possession of the land by the owner of real property give him necessarily the right to everything beneath the surface ?
4. What are the incidents of an estate for life? When will a life tenant be liable for voluntary and when for permissive waste?
5. Under what circumstarices and in what way can a married woman be deprived of her dower in her husband's estate?
6. Give the distinction between joint tenancy and tenancy in common? Is joint tenancy entirely abolished in Nova Scotia?
7. Define a Contingent Remainder. Give an example of such an estate.
8. What is the chief distinction between an estate for life and an estate for years?

Is a tenant for years entitled for estovers? Give the reasons for your answer.
9. A lease is made by A. to B for a year certain. B. remains on the prop rty after the year, and the landlord receives a quarter's rent from him at the end of the first quarter after the termination of the year. What are the existing relations of the parties under these circumstances, and what will be required to terminate those relations?
10. What covenants run with the land? What is the leading case on this subject?
11. What is the usual mode by which the landlord is able to obtain rent in arrear from his tenant? When, where, and how must he exercise this right?
12. What goods of the tenant are absolutely privileged from distress, and what conditionally? What is the leading case on this subject?
13. What fixtures only can a tenant remove at the termination of his tenancy, and when must they be removed? Give the leading case on this subject.
14. A. and B. own lands on either side of a navigable stream above tide water. What are the rights of the riparian proprietors, and what the rights of the public to the stream, and to the land covered by the water?
15. What was decided in the case of Angus v. Dalton as to lateral support?

## SEIIPPING.

Examiner........................................................

## THIRD YEAR.

Time: Two Hours.

1. What is the legal meaning of the expression "British Ship?" What peculiar rights have British ships as such, at the present day?
2. By whom are registrars of shipping appointed in Canada?
3. What are the principal statutory provisions as to unseaworthy ships?
4. Describe shortly the use of the Certificate of Sale.
5. What is the relation of trusts and other equitable rights in shipping to the Registry laws
6. State some of the provisions by which the common law liability of ship owners as carriers have been cut down by statute.
7. How is liability for repairs and necessaries determined? What has ownership of the ship to do with the question ?
8. What ars "necessaries ?"
9. What provisions are there for the settlement of disputes between part owners as to the employment of the ship?
10. What is the maritime lien? Mention some of the matters which give rise to it, and point out the difference between it and the ordinary lien.

## CONTRACTS.

Examiner ............................ Professor Russell.

## FIRST YEAR.

## TIME: THREE HoURS.

1. State the limitations to the principle established by Hochster v. DeLatour, (renunciation of contract by one of the parties before the time for performance arrives).
2. Where infancy is pleaded in an action for goods sold and plaintiff replies that the goods where necessaries, how does the fact that the infant was already adequately supplied with the kind of goods in question, although plaintiff was unaware of it, affect the liability of the defendant?
3. Comment on the provision of the Statute of Frauds that "no action shall be brought whereby to charge any person upon any special promise to answer for the debt, default, or miscarriage of another person unless," \&c.
4. A. offers by letter to sell certain goods to B. at a stipulated price and agrees to keep the offer open for a week. Before the expiration of the week B. inquires by letter if a lower price will not be accepted. A. declines to accept the lower price. A. on the last day of the week telegraphs B . revoking the offer. B. on the same day at a later hour, but before receiving A.'s telegram, accepts it. Can B. hold A. to his offer? Would the result be the same if the whole correspondence had taken place by letter? Discuss the question.
5. What are contracts uberrimae fidei? In what respect do they differ from other contracts? What kinds of contract are embraced in the class?
6. (a) A. sells to B. a ship known to both and called the "Peerleso." At the time of the sale both parties are ignorant of the fact that the ship has become a total wreck. Can A. hold B. to the bargain ?
(b) In the case supposed B. has given A. his promissory note for the price which $A$. has endorsed before maturity to $C$. for value. Can C. sue B. on the note?
(c) Instead of a promissory note B. has given A. a written promise to pay the money which A. has assigned to C. for value. Can C. compel B. to pay it ?
7. (a) A, in Halifax contracts to sell B. goods to be smuggled into the United States, knowing the purpose for which they are bought. Can he recover the price in our courts?
(b) A., a United States citizen in Boston, contracts to sell B., a fellow citizen, goods to be smuggled into Halifax, knowing the purpose for which they are bought. Can A. recover the price in the courts of this province?
(c) In what cases will our courts refuse to enforce a contract made abroad with a view of evading our custom's duties?
8. Discuss on principle and on authority Prof. Langdell's opinion that "forbearing to prosecute a claim at law is a good consideration for a promise if the claim be well founded, but not otherwise."
9. How do you determine when a sum stipulated to be forfeited for breach of a contract, and stated in the contract to be liquidated damages, is merely a penalty.
10. Distinguish between a condition and a warranty in a contract for the sale of goods. What are the remedies for breach of condition and breach of warranty respectively? What do you mean by warranty ex post facto? What is the true definition of a warranty? In what senses is the term improperly used ? Comment on the language of Parke, B., in Ollive v. Booker: "It appears to me that it is a warranty and not a representation that the vessel had sailed three weeks. It is therefore a condition precedent."

## SALES.

Examiner ............................ . Professor Russell.

## SECOND YEAR.

Time: Three Hours.

1. Distinguish between a sale of a thing having a potential existence and an agreement to sell a thing to be afterwards acquired. What is the effect of such an agreement at law and in equity? A. assigns to $B$. absolutely all the goods in his shop and all goods to be brought on the premises and added to his stock in trade. Goods are brought to the premises and added to the stock in trade. C. purchases the goods without notice of the assignment. Can B. set up the assignment against C. ? Would the answer be the same if the assignment were in trust to secure a debt and filed under the Bills of Sales Act.
2. State the rules as to the application of the Statute of Frands to sales of fruetus naturales and fructus industriales respectively. Criticize Marshall v. Green (sale of growing timber). How do you determine whether a contract is for the sale of goods or for work and labor only. What is the latest leading case.
3. Distinguish between "acceptance" which will satisfy the Statute of Frauds and acceptance which will preclude the purchaser from objecting that the goods do not answer the order. Trace the fluctuations of opinion on the point and criticize Mr. Benjamin's treatment of the subject. Name the latest case.
4. "If a case should arise on a verbal contract where the buyer accepts the goods tendered conditionally and afterwards rightly rejects them as not according to contract I think it still consistent with the decisions as well as with principle to say that the Statute of Frauds would be well pleaced to an action brought by the sellers." Campbell. Discuss this view.
5. Distinguish between a sale of goods and an executory agreement to sell. What circumstances will prevent the passing of the property on a sale of specific goods. In the case of a specific lot of goods sold for a price per pound or per yard, where nothing remains to be done but to weigh or measure the goods is Lord Blackburv's rule philosophical. Has it ever been questioned?
6. What rule has been adopted as to the passing of property in a ship built under a contract providing for payment in instalments at specified stages in the progress of the work. Is the rule confined to shipbuildine contracts?
7. What is meant by reservation of a jus disponendi? How is it effected? In whom is the risk of loss where this right is reserved?
8. Where goods are to be delivered in instalments and the vendee after taking some of the instalments, declines to take the next following instalnent, by what principle do you determine whether the vendor is discharged from any further obligation to deliver ?
9. What is the rule as to implied warranty against latent defects in a sale of goods.

A carriage builder supplied a pole for plaintiff's carriage which broke when plaintiff was driving. In an action for damages the jury found that the poll was not reasonably fit for the carriage, but that the defendant was not guilty of any negligence. Plaintiff recovered damages for breach of an implied warranty. Discuss this case.
10. Under what circumstances has a defendant been held to be estopped from contending that the property in goods sold from a larger bulk did not pass to the purchaser, because of their not having been separated from the bulk. Criticize Knights v. Whiffen.
11. On the sale of goods by a manufacturer who is not otherwise a dealer in them there is in the absence of any usage in the particular trade or as regards the particular goods to supply goods of other makers an implied contract that the goods shall be those of the manufacturer's own make. Johnson v. Raylton. Criticize this case.
12. "In cases where the vendor retains possession in the changed character of bailee for the buyer there is a clear distinction between such a delivery as would suffice under the Statute of Frauds, and a delivery sufficient to divest the vendor's lien." Explain this distinction. Give your own opinion as to its validity, with your reasons for it.

EQUITY.
Examiner...........................Mr. Sedgewick, Q. C.
SECOND YEAR.
Time: Threr Hours.

1. (a) What common law jurisdiction had the Chancellor? (b) Discuss shortly the origin of his equitable jurisdiction, its machinery, and the principle, equity acts in personam. (c) What are the limits to his jurisdiction in respect to foreign lands? (d) Discuss the ground of his right to restrain proceedings at law. (e) Describe the conflict that determined this right.
2. (a) Define the following: (1) vivum vadium; (2) morturm vadium; (3) Welsh morgtage; (4) A modern mortgage (Littleton's definition). (b) Treat historically of the equity of redemption. (c) $h$

Give cases illustrating the principle, once a mortgage always a mortgage. (d) The equity of Redemption is an estate : Explain. (Casborne v. Scarfe.) (e) A husband and wife join in mortgaging the latter's estate of inheritance for the husband's benefit: What are her rights upon the administration of her husband's estate? ( $f$ ) Distinguish between a mortgage and a pledge.
3. (a) To what extent is a trust deed for the benefit of creditors revocable? (b) State how any of the following provisions may affect such a deed under the Statute 13 Elizabeth, Cap. 5 : (1) Preferences, (2) the release of the debtor as a condition to participation in the trust estate, (3) a reservation for the debtors benefit, (4) giving the assignee power to carry on business. (c) When the limit prescribed by the deed for its execution has expired under what circumstances may a creditor be allowed to execute it, and what conduct will deprive him of any of its benefits?
4. (a) What is necessary to constitute a complete gift of (1) lands; (2) chattels; (3) bank stcck. (b) When there has been an imperfect legal assignment to a volunteer and he seeks to have a trust in his favor declared how will such claim be treated? Explain fully. (c) A, without consideration, covenants to pay a certain sum to B in trust for B.'s children. What (if any) rights have the children?
5. (a) Discuss the question of a trustee's discretion as to the investment of trust funds. (b) To what extent is one trustee liable for the acts or default of his co-trustee? (Townley v. Sherborne)? (c) There is a difference between a receipt given by executors and one given by trustees? Explain. (d) What is the general rule as to a trustee's remuneration? Give exceptions. What modifiations of this rule exist in America?
6. (a) In what respect and towards whom are the directors of a corporation trustees? (b) When they wrongfully deal with the corporate property, who must in general be plaintiff? Explain the reason and shew circumstances allowing such action to be brought in the name of another plaintiff. (c) When the managers of a public charity or trust violate their trust, how and by whom is redress obtained?
7. (a) Mistake of law may be a ground for equitable relief. Discuss this statement. (b) What circumstances must concur to found relief by reason of a unilateral mistake? (c) State the rules which regulate the rectification of marriage settlements. (Legg v. Goldwire.) (d) State the principle upon which the defective execution of powers is relieved against.
8. (a) Distinguish between Accident and Mistake. (b) Give instances when there is a remedy at law on the ground of accident. (c) Shew its inadequacy. (d) How has this relief been enlarged by statute, (lost instruments) ? (e) Illustrate the relief afforded by equity.
9. (a) Equity will relieve against penalties and forfeitures. When will this relief be given, stating its limitations? (b) A person contracts to pay a certain sum as "liquidated damages" in case of breach. What principles are applicable to such a stipulation?
10. (a) Shew how the remedy of specific performance is an improvement upon the common law remedy. (b) State shortly the rules by which the court is guided in granting or refusing this relief. (c) When may this relief be given in relation to land, there being no written agreement? (d) When, in relation to personal property?

## EVIDENCE.

> Examiner . . . . . . . . . . . . . . . . . Mr. Harrington, Q.C.

SECOND YEAR.
Time: Three Hours.
Students are expected, in all cases, to give their reasons for their answers.

1. A policy of insurance insured a vessel "from the East Indian Islands to Halifax." She sailed from the island of A. upon the insured voyage. The island of A. was known geographically as an African Island, being so laid down upon maps and works on Geography. A loss ensued for which an action was brought on the policy. The insured offered evidence to prove that the island of A. was known in the trade, at the port where the policy was issued, as one of the East India Islands. The insurer on his part offered evidence to prove that by a verbal agreement, entered into at the time of making the policy, the island of $A$. was not to be regarded as one of the islands from which the vessel might sail. The judge rejected both these pieces of evidence. Give your opinion.
2. Under what circumstances is evidence of character regarded as relevant.

State in what sense the word "character" is to be understood in this connection, with regard to the latitude allowed in any given case, in proving the person to be bad.
3. A party was indicted for obtaining money under false pretences. After proof that he had in fact received the money, the following classes of evidence were offered :
(a) Evidence that he had formerly obtained money under false pretences.
(b) Evidence that he had formerly stolen money.
(c) Evidence that he was known as a house burner.

What should the judge do in those cases?
4. State the rule which fixes what portion of a statement of a deceased person, a part only of which is against his interest, is receivable in evidence. Give an illustration of a case in which the portion not against interest is admissible, and of one in which it is not.
5. On the trial of an action involving a genealogical question, what statements of deceased persons, related by blood to the person whose pedigree is in question, are receivable.

Illustrate your answer by one or two cases.
6. On the approach of a trial you find that a writing which you wish to put in evidence has been handed to your adversary, and that he has handed it to a third person who is a stranger to the suit. On enquiry of the stranger you find that he has lost it. What steps should you take to enable yourself to prove the document by secondary evidence?
7. Give the rule as to the right to begin in the following cases :
(a) An action for libel, in which the publication of the libel is admitted by defendant.
(b) An action for breach of a bond which names a sum as a penalty in case of breach, and in which the breach is admitted.
(c) An action on a promissory note, in which the making of the note is admitted, but the plea sets up a release under seal.
8. Three persons joined in committing a crime. One of them was indicted and upon the trial one of his accomplices swore to the fact of the prisoner having committed the crime. The third gave evidence tending to corroborate the story of the first witness. What would be proper instructions for the judge to give the jury?
9. State the principles under which the declarations of agents are receivable to bind his principal, distinguishing between cases in which the principal would be bound and those in which he would not.
10. Upon the trial of an action brought for injury alleged to have been caused to the plaintiff by the negligence of the defendant, a railway company, the judge received the following evidence, on behalf of the plaintiff.
(a) Two statements of plaintiff as to the cause of the accident the one made by him while he was being carried from the track where the accident happened - the other made by him the following day in conversation with a friend on the same subject.
(b) The statement of a stranger (who saw the accident but who was not called as a witness,) made immediately before the accident, in which statement such stranger declared that the driver of the engine was acting with great carelessness.
(c). The statement of the plaintiff as to the effect of the accident upon him and of the extent of the injuries received. In your opinion should these statements have been received? Give the reasons in each case for the view you hold.

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[^0]:    \# The Tutor will also be in the Library two or three times a week, from 3 to 5 p. m., when he may be consulted by students with reference to their studies.

    * Students seeking a Frrst or Second Class at the Sessional Examinations are examined in this additional subject. Such students are also required to show special accuracy in grammar.

[^1]:    * Students seeking a First or Second Class at the Sessional Examinations are examined in this additional subject. Such students are also required to shew special accuracy in grammar.
    † An " unseen" passage will be set for translation to students seeking a First Class in these years.
    $\ddagger$ The Tutor will also be in the Library two or three times a week, from 3 to 5 p. m., when he may be consulted by students with reference to their studies.

[^2]:    † An "unseen" passage will be set for translation to students seeking a First Class in these years.

    * Students seeking a First or Second Class at the Sessional Examinations are examined in this additional subject. Such students are also required to shew special accuracy in Grammar.

[^3]:    * Candidates for First Class will be examined in these additional works, which will not be read in elass.

[^4]:    * See footnote § X, 2.
    $\dagger$ The registration ticket of the Halifax Medical College will be accepted as a certificate of good moral character.

[^5]:    1 and 2. Two of the following: Latin, Greek, French German, Botany. (Candidates for B. A must pass in Latin; if they are to take Greek as one of the subjects of the Second Year, they must also pass in Greek ; if not they may select Greek, or French, or German. -

[^6]:    * The "ordinary" subjects are those not marked with an asterisk in \& I.

[^7]:    * So far as the provisions of the Time Table permit.

[^8]:    Books Prescribed: Liddell's Students' History of Rome; Tozer's Primer of Classical Geography ; Ginn \& Heath's, or Schmitz's Classical Atlas.

[^9]:    ${ }^{*}$ In the subject of Psychology the examination is held at about the middle of the :Session.

[^10]:    Books recommended; Morley's First Sketch of English Literature, Clarendon Press, and Arber Editions of Elizabethan works. Seleotions from Browning, First and Second Series.

[^11]:    * The books prescribed for October, 1887, are the same as those recommended for the First Year Matriculation Examination (§ V.).
    + These books are mentioned to show the extent of knowledge expected. Othex books may of course be used by candidates.

[^12]:    * The books p.escribed for October, 1887, are the same as those recommended for the First Year Matriculation Examination (\$ V.).
    $\dagger$ These books are mentioned to show the extent of knowledge expected. Other books may of course be used by candidates.

[^13]:    * Matriculation consists in entering the name upon the Register of a University as an undergraduate, not in the mere passing of a Matriculation Examination.
    $\dagger$ For the purposes of condition (b), Geometry and Algebra shail be reckoned as separate subjects.

[^14]:    * These Text Books are mentioned to indicate in a general way the extent of knowledge required.

[^15]:    * Undergraduates who matriculated previously to 1884 , shall pay a fee of $\$ 1.00$ annually.
    + The English Classes of the First and Second Years, and the History and Physics Classes of the Third and Fourth Years, though extending over two sessions shall for the purpose of this rule be considered single classes. The Latin and Greek Classes of any one year shall also be considered one class.

[^16]:    + The Legislative Library and the Citizens' Free Library being open to the public on the fulfilment of certain conditions, may also be used by Students.

[^17]:    * 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.

[^18]:    * For medalists of former years see list of Graduates. For prizes, \&c., of former years see Calendar of 1881-82.

[^19]:    ${ }^{1}$ Graduated with First Rank Honours in Classics.
    ${ }^{2}$ Graduated with Second Rank Honours in Classics.
    ${ }^{4}$ Graduated with Second Rank Honours in English Literature and History.
    ${ }^{6}$ Graduated with Second Rank Honours in Mental and Moral Philosophy.
    ${ }^{8}$ Graduated with Second Rank Honours in Mathematics and Physics.
    $\dagger$ Governor-General's Gold Medalist.
    $\ddagger$ Governor-General's Silver Medalist.

[^20]:    ${ }^{2}$ Graduated with Second Rank Honours in Classics.
    ${ }^{8}$ Graduated with First Rank Honours in English Literature and History.
    4 Graduated with Second Rank Honours in English Literature and History.
    ${ }^{5}$ Graduated with First Rank Honours in Mental and Moral Philosophy.
    ${ }^{6}$ Graduated with Second Rank Honours in Mental and Moral Philosophy.
    ${ }^{8}$ Graduated with Second Rank Honours in Mathematics and Physics.
    $\dagger$ Governor-General's Gold Medalist.
    ! Governor-General's Silver Medalist.

    * DeMill Gold Medalist.
    § Sir Wm. Young Gold Medalist.
    a Munro Tutor in Mathematics, 1883-5.

[^21]:    ${ }^{2}$ Graduated with Second Rank Honours in Classics.
    ${ }^{3}$ Graduated with First Rank Honours in English Literature and History.
    ${ }^{6}$ Graduated with Second Rank Honours in Mental and Moral Philosophy.
    $\dagger$ Governor-General's Gold Medalist.
    $\ddagger$ Governor-General's Silver Medalist.

    * Demill Gold Medalist.

[^22]:    ${ }^{1}$ Graduated with First Rank Honours in Classics.
    ${ }^{2}$ Graduated with Second Rank Honours in Classics.
    ${ }^{7}$ Graduated with First Rank Honours in Mathematies and Physics.
    ${ }^{8}$ Graduated with Second Rank Honours in Mathematics and Physics.
    ${ }^{9}$ Graduated with First Rank Honours in Experimental Physics and Chemistry.
    $\dagger$ Governor-General's Gold Medalist.
    $\ddagger$ Governor-General's Silver Medalist.
    § Sir Wm. Young Gold Medalist.

    - ${ }^{-1}$ Mackenzie Gold Medalist.
    b Munro Tutor in Classics, 1885-7.

[^23]:    ${ }^{1}$ Graduated with First Rank Honours in Classics.
    ${ }^{8}$ Graduated with First Rank Honours in English Literature and History.
    4 Graduated with Second Rank Honours in English Literature and History.
    ${ }^{5}$ Graduated with First Rank Honours in Mental and Moral Philosophy.
    ${ }^{6}$ Graduated with Second Rank Honours in Mental and Moral Philosophy.
    ${ }^{7}$ Graduated with First Rank Honours in Mathematics and Physics.
    ${ }^{8}$ Graduated with Second Rank Honours in Mathematics and Physics.
    † Governor-General's Gold Medalist.
    § Sir Wm. Young Gold Medalist.
    a Munro Tutor in Mathematics, 1885-7.

[^24]:    ${ }^{1}$ Graduated with First Rank Honours in Classics.
    ${ }^{2}$ Graduated with Second Rank Honours in Classics.
    ${ }^{4}$ Graduated with Second Rank Honours in English Literature and History,
    ${ }^{7}$ Graduated with First Rank Honours in Mathematics and Physics.
    ${ }^{8}$ Graduated with Second Rank Honours in Mathematics and Physics.
    $\dagger$ Governor-General's Gold Medalist.
    $\ddagger$ Governor-General's Silver Medalist.
    b Munro Tutor in Classics, 1883-5.

[^25]:    * If you have not used Euclid's Elements in preparing for this examination, state what text-book you have used.

[^26]:    * French sentences, to be given in illustration of peculiarities of construction, must be accompanied by the English version.

[^27]:    $\dagger$ Optional.-Five points will be allowed for a correct rendition.
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[^28]:    * French sentences, given in illustration of rules, must be translated into English.

[^29]:    $\dagger$ Only 10 of the first 14 questions are to be answered; those marked $\dagger$ cannot be

[^30]:    * Candidates seeking second or pass rank, may omit questions: 3 (A.); 1 (B.); 3 (C.).

