## CALENDAR

## DALHOUSIE COLLEGE AND UNIVERSITY,

HATIFAX, NOVA SCOTIA, 1879-80.


EIATIFAX:
Printed for the University by Nova Scotia Printing Co. 1879.

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# Resolution of the Governors of Dalhousie College in re Proposed Endowment of Additional Chair by GEORGE MUNRO, Esq., New York. 

"The Governors desire to place on permanent record their high sense of the munificence of $\mathrm{M}_{\mathrm{r}}$. George Munro in undertaking to provide the sum required to found an additional Chair in Dalhousie College, with an endowment of $\$ 2000$ per annum. Mr. Munro's liberality is on a scale that is without parallel in the Educational History, not of Nova Scotia alone, but of the Dominion of Canada; and his action in giving the patronage of the Chair to the Governors, instead of availing himself of the privilege secured to him by Statute of nominating a Professor, enhances their sense of indebtedness, while it further illustrates his unselfishness and public spirit. Previously, the College enjoyed the advantage of only occasional and temporary Lectureships in Physics. The Governors therefore propose to found a Chair of Physics with the new Endowment, a Chair which in view of the rapid advances of Modern Science, is indispensable to the equipment of any University, and the imperfect provision hitherto made for which has been a serious drawback to the efficiency of Dalhousie.-To connect the donor's name for all time with the benefits conferred by him, to keep his memory in grateful remembrance by the successive generations of Students who shall attend our Academic Halls, especially by those devoting themselves to the study of the Physical Sciences, the Governors propose that this new Chair shall be known as "The George Munro Chair of Physics." They trust that his countrymen may be influenced by an example so grandly set; and that although few may be able to compete with him as far as the magnitude of the gift is concerned, many may be animated by his spirit. They heartily thank him for coming to their help in the work of building up a great unsectarian Educational Centre in Nova Scotia; for seeking the good of his native land by so generously providing for the quickening of its intellectual life; and for the free, unsolicited, and unostentatious manner in which he has made his contribution to what must be regarded by all as an Institution essential to the true and permanent welfare of the Maritime Provinces, and especially of the City of Halifax."

## DONATIONS.

## ENDOWMENT FUND.

Hon. Sir William Young ..... $\$ 1,000$
Hon. Robert Boak ..... $\$ 1,000$W. J. Stairs ......................... 1,000
Hon. Stayley Brown. ..... 1,000 ..... 500Adam Burns500
1,000
John P. Mott ..... 1,000
Hon. Jeremiah Northup ..... 5001,000William P. West .................. 1,000
Thos, A. Ritchie ................ $\mathbf{1 , 0 0 0}$
George Lawson ..... 500
Alex. McLeod ..... 500
D. C. Fraser ..... 100
SCIENTIFIC APPARATUS.


## LIBRARY.

The friends of the late Dr. McKenzie have placed at the disposal of the College the scientific library of our lamented Professor. The following is a list of the works comprised in this handsome donation:

German and French Works.
Advances in Physical Science, 30 vols. Gehlen's Dictionary of Physics, 21 vls. Lubke's History of Art.
Weber's Electrodynamics.
Schloemilch's Compendium of Higher Analysis.
Serret's hand book of Advanced Algebra.
Gorup-Besanez-Inorganic Chemistry. Fresenius-Quantitative Analysis.
Schloemilch-Book of Mathematical Exercises.
Durège-Elliptic Functions.
Frick-Physical Manipulations.
Kulp-Practical Physics.
Zeuner-Mechanical Theory of Heat.
Kirchhof-Mathematical Physics,
Riemann-Gravity.
Helmholtz-Sound.
Besant-Hydrodynamics.
Leunis-Natural History.
Culman -Graphical Statistics.
Wilde-History of Optics.
Wiedemann-Galvanism, 3 vols.
Hesse-Analytical Mechanics.
Lommel-Bessel's Functions.
Beer-Electrostatics.
Briot-Mechanical Theory of Heat.
Riemann-Differential Equations.
Dirichlet on Potential.
Balzer on Determinates.
Weisbach-Engineering.
Mascart-Static Electricity.
Riess-Frictional Electricity, 3 vols.
Neumann-Electric Forces.
Kahl-Mathematical Exercises.

- Meyer's-Modern Theory of Chemistry.
Sachs-Botany.
Jacobi-Dynamies, 2 vols.
Schrön-Interpolation Tables.
" Logarithms to Sever. Places.
Bunsen-Gasometric Methods.
Beetz-Physics.
Kohlrausch-Practical Physics.
Autenheimer - Differential and Integral Calculus.
Weber-Electrodynamic Measurem'ts.
Hezekiel-Bismarck.

Lampe - Painting.
School System of Saxony.
Zimmerman's English Grammar. Reading Book.

## English Books.

Thomson \& Tait-Elementary Natural Philosophy.
Thomson's Papers on Electricity and Magnetism.
Routh-Rigid Dynamics.
Olmsted-Philosophy.
Tyndall-Diamagnetism.
Airy-Magnetism.
Brewster-Optics.
Goodwin-Principles of Mechanics.
Tyndall-Heat as a Mode of Motion.
Young-Lectures on Natural Philosophy, 2 vols.
Puckle-Conic Sections.
Jenkin-Electricity and Magnetism. Lardner \& Loewy-Heat.
Hall's Differential and Integral Calculus.
Todhunter's Integral Calculus.
" Differential Calculus.
" Theory of Equations.
" Conic Sections.
Boole's Differential Equations.
Todhunter's Spherical Trigonometry.
Croonian-Lectures on Matter and Force.
Goodwin's Statics.
Tait-Thermodynamics.
Tait \& Steele-Dynamics of a Particle.
Garnet's Treatise on Heat.
Proctor-Spectroscope.
Orme-Heat.
Parkinson's Elementary Mechanics.
Maxwell-Matter and Motion.
Lardner \& Loewy-Hydrostatios and Pneumatics.
Blaikie-Elements of Dynamics.
Bayne's Thermodynamics.
Bottomley-Dynamics or Theoretical Mechanics.
Tate's Philosophy.
McGill University Calendar.
Arnold's First Latin Book.

## UNIVERSITY CALENDAR, 1879-80.

1879. 

## Oct. 24.

Fr.
W.

Th.
Fr.
Nov.

## Mo.

Tu.
W.

Th.
Tu.
22.
1880.

Jan.

## Mo.

Tu.
Fr .
Fr .
W.

Tu.
Sat.
Fr.
W.

Fr.
W.

Th.
Fr .
Sat.
Mo.

Tu.
W.

Th.
Fr.
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Sat.
Mo.
Tu.
W.

April 26.
May
June
1.
21.
28.
29.
30.

## Winter Session.

Meeting of Board of Governors.
Matriculation in Classics, Mathematics and Modern Languages, at 10 A. M. ; continued at 3 P. M. Examinations for Professors' Scholarships.
Matriculation Examinations (English), and Supplementary Examinations, at $10 \mathrm{~A} . \mathrm{M}$.
Meeting of Senate, at 10 A. M. Matriculation, Registration and Library Tickets issued at $11 \mathrm{~A} . \mathrm{M}$.
Classes opened and Class Tickets issued. Entrance Examinations in Classical History and Geography, at 3 P. M.
Anniversary of the opening of the College in 1863. Meeting of Convocation, at 3 P. M.; opening address by Prof. Honeyman.
Final Matriculation and Supplementary Examinations, at 3 P. M.
Meeting of Senate, at $4 \mathrm{P} . \mathrm{M}$.
Meeting of Senate, at $4 \mathrm{P} . \mathrm{M}$.
Christmas Vacation begins.
Class Lectures resumed. Supplementary Examinations in Classical History and Geography, at $31 / 2$ P. M.
Meeting of Senate, at 1 P. M.
College established, 1823.
Meeting of Board of Governors.
Meeting of Senate, at 1 P. M.
Ash Wednesday. No Lectures.
Meeting of Senate, at 1 P. M.
George Ramsay, Earl of Dalhousie, founder of the College, died, 1838.

Good Friday. No Lectures.
Last day for receiving M. A. Theses.
Last day of Class Leetures. Last day for returning Library Books. Meeting of Senate, at 4 P. M.
Examinations in Latin, at 9 A. M. Honour Classics and Honour English and Extra Latin, at 3 P. M.
Examinations in Logic, Metaphysics, Ethics, Honour Classics, at 9 A . M.
Examinations in Greek and Honour English, at 9 A. M. Honour Classics, Honor English, Extra Greek, at 3 P. M.
Examinations in Geology, Botany and Zoology.
Examinations in Mathematics, Mathematical Physics, Honour Classics, Honour English, at 9 A. M. Mathematics continued at 3 P. M.
Examinations in Experimental Physics, Honour Classics, Honour English, at 9 A. M.
Examinations in Rhetoric, History and Honour Classics, at 9 A. M. Early English History and Anglo-Saxon, at 3 P. M.
Examinations in Chemistry, Constitutional History, English Language and Honnur Classics, at 9 A. M. Honour Classics and Honour English, at 3 P. M.
Examinations in French, German and Extra Mathematics, 2nd year, at 9 A. M. French aad German continued at 3 P. M.
Examinations in Practical Chemistry.
Competition for "Young" Elocution Prizes, and Meeting of Senate, at $11 \mathrm{~A} . \mathrm{M}$.
Meeting of Senate, at 10 A. M. Results of Examinations declared.
Annual Meeting of Alumni Association, at 10 A. M. Meeting of Convocation, at 3 P. M.

## Summer Session.

Mo.
Summer Session opens. Meeting of Senate, at 11 A. M. Class Tickets issued at $12, \mathrm{~N}$.
Foundation Stone of College laid, 1820.
Queen's Birthday. No Lectures.
Meeting of Senate, at 4 P. M.
Ascension Queen Victoria.
Mo. Halifax settled, 1749. No Lectures.
Mo. Examinations in Latin, 9-11 A. M. ; Botany, 11 A. M. to 1 P. M. ; Mathematics, 3-5 P. M. ; Practical Chemistry, 5-7 P. M.
Tu. Examinations in Greek, 9-11 A. M. ; History and English Language, 11 A. M. to 1 P. M. ; French, 3-5 P. M. ; Chemical Physics, 5-7 P. M.
W. Examinations in Geology, 9-11 A. M.; Political Economy, 11 A. M. to 1 P. M. ; Logic, 3-5 P. M. ; German, 5-7 P. M.

## 

BOARD OF GOVERNORS.<br>Hon. Sir William Young, Knight, Chief Justice, Chairman.<br>Hon. Sir Charles Tupper, K. C. M. G., C. B., M. 1., M. P.<br>Hon. J. W. Ritchie, Judge, Supreme Court of Nova Scotia.<br>Hon. S. L. Shannon, Q. C.<br>Very Rev. G. M. Grant, D. D., Principal Queen's University, Ont. James F. Avery, Esq., M. D.<br>William J. Stairs, Esq., Vice-Cancellor of the University of Halifax. Rev. John MacMillan, M. A., B. D.<br>Rev. John Forrest.<br>Hon. Alfred G. Jones.<br>William P. West, Esq.<br>John S. McLean, Esq.<br>Peter Jack, Esq.<br>John Doull, Esq.<br>His Worship, The Mayor of Haltfax, ex officio.<br>Herbert A. Bayne, M. A., Ph. D., Pres. Alumni Association, ex officio.<br>George Thomson, Esq., Treasurer.<br>William M. Doull, Esq., Secretary.

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Very Rev. James Ross, D. D., Principal.
Rev. William Lyall, Ll. D.
Charles Macdonald, M. A., Secretary.
John Johnson, M. A.
George Lawson, Ph. D., Ll. D.
James DeMill, M. A.
James Gordon MoGregor, M. A., D. Sa.

#  FACULTY OF ARTS. 

Very Rev. Principal Ross, D. D., Professor of Ethics and Political Economy.<br>Rev. Willtam Lyall, Ll. D., Professor of Logic and Metaphysics.<br>Charles Macdonald, M. A., Professor of Mathematics.<br>John Johnson, M. A., Professor of Classics.<br>George Lawson, Ph. D., Ll. D., Professor of Chemistry and Mineralogy, James DeMill, M. A., Professor of History and Rhetoric.<br>James Gordon McGregor, M. A., D. Sc. Professor of Mathematical and Experimental Physics.<br>Professur Liechit, Tutor in Modern Languages.

DEPARTMENT OF SCIENCE.

Very Rev. Principal Ross, D. D., Professor of Political Economy.
Rev. William Lyall, Ll. D., Professor of Logic.
Charles Maddonald, M. A., Professor of Mathematics.
John Johnson, M. A., Professor of Latin.
George Lawson, Ph. D., Ll. D., Professor of Inorganic Chemistry and Biological Science.
James DeMill, M. A., Professor of English.
James Liechit, Professor of French, German and Spanish.
James Gordon McGregor, M. A., D. Sc., Professor of Mathematical and Experimental Physics.
Herbert A. Bayne, M. A., Ph. D., Professor of Organic Chemistry and Chemical Analysis.
Rev. David Honeyman. D. C. L., Professor of Geology, Palcoontology, Mineralogy.

## OFEICE BEARERS OF ALUMNI ASSOCTATION.

Herbert A. Bayne, Ph. D., President. Hugh McKenzie, M. A., Vice-President. Jimes Forrest, M. A., Treasurer. Francis H. Bell, B. A., Secretary.

Robert Sedgewick, B. A., Walter S. Doull, B. A., James M. Oxley, B. A., Duncan C. Fraser, B. A., James Carmichael, B. A.

Executive Committee, (with Odficer's).
JoHn Wilson, Janitor.

## FACULTY OF ARTS.

## § I.-SESSIONS.

In the Academic year there are two Sessions, a Winter and a Summer Session.

The Winter Session of 1879-80 will cofnmence on Wednesday, October 29th, 1879, and end on Wednesday, April 21 st, 1880.

The Summer Session of 1880 will commence on Monday, April 26th, and end on June 30th.

## § II-ADMISSION OF STUDENTS.

Students may enter the College,

1. As Undergraduates, with the intention of applying for a University Degree at the end of their course ; or
2. As General Students who do not look forward to a University Degree.

The course for Undergraduates in Arts extends over four Winter Sessions, or over three Winter Sessions, with the two intervening Summer Sessions. Students taking either of these courses are required to pass the Matriculation Examination of the First Year (see § III.), and take the classes prescribed for their respective courses.

Students may also complete their course in three Winter Sessions without the intervening Summer Sessions, by passing the Matriculation Examination of the Second Year (see § III.), and taking the usual Undergraduate course for the Second, Third and Fourth Years. Undergraduates of the First Year who have forfeited their standing at the Sessional Examinations will not be allowed to take the course of Three Winter Sessions.

The Matriculation Examinations this year will begin on Oct. 29th, at 10 o'clock, A. M. Candidates are expected to bring their own writing materials, except paper.

General Students are not required to pass a Matriculation Examination, and may attend such classes as they choose.

No person can be admitted as an Undergraduate after ten days from the opening of the classes, without the special permission of the Senate.

Undergraduates from other Universities will, on producing satisfactory certificates, be admitted to similar standing in this University, if, on Examination, they be found qualified to enter the classes proper to their year.

Students that have passed the Matriculation Examination at the University of Halifax, are admitted as Undergraduates without further examination, and Students that have passed the first B. A. Examination of that University, will be admitted to the standing of Undergraduates in Arts that have completed two Winter Sessions.

## § III.-MATRICULATION EXAMINATIONS.

## FOR THE FIRST YEAR.

The Examinations are partly oral and partly written ; the snbjects for entrance into the First Year of the course are :
I. In Classics.-Latin Grammar, Greek Grammar, one Latin, one Greek Author, such as :
Latin.-Cæsar, one book; Virgil, one book ; Cicero, two Catilinarian Orations, or De Senectute, or De Amicitiâ; Horace, one book of Odes.
Greek.-Xenophon, one book; Homer, one book; Lucian's Select Dialogues; New Testament, one Gospel.
Special stress will be laid upon accuracy in Latin and Greek Grammar.
II. In Mathematics.-Arithmetic ; Euclid's Elements of Geometry, Books I. and II. ; Algebra, Simple Rules, and Simple Equations of one unknown quantity, not involving Surds.
III, In English.-Grammar; History of England; Geography; Composition.
The subjects in which Candidates for Professors' Scholarships will he examined will be prescribed from year to year. For Sessions 1879-80, 1880-81, they are the same as those for Matriculation in Arts at the University of Halifax. (See § X.)

## for the second year.- (Course of Three Winter Sessions.)

In order to matriculate for the Three Years Course, a Student must pass an Examination :

1.     * In the ordinary Classics of the first year as specified in § XIV., or their equivalents.
2. In the Mathematics of the first year as specified in § XIV.
3. In English Grammar, English History, Geography and Composition, and Rhetoric.
4. In Roman History and Ancient Geography, as specified in § XIV.
[^0]
## § IV.--COURSE FOR DEGREE OF B. A.

WINTER SESSIONS.
First Year.-(1) Latin and Greek. (2) Mathematics. (3) English Language and Rhetoric.

For First or Second Class at Sessional Examinations in Latin or Greek extra work is prescribed, and special stress is laid upon accuracy in Grammar. (See § XIV.)

For First or Second Class at Sessional Examinations in Rhetoric extra work is required.

Second Year.- (1) Latin and Greek. (2) Mathematics. Chemistry. (4) Logic and Psychology.

For First or Second Class in Latin or Greek, extra work is prescribed, and for First or Second Class in Mathematics an additional hour a week is required. (See § XIV.)

Undergraduates of the Second Year are required to pass an Examination in Roman History and Ancient Geography, on the first Monday of the Winter Session. (See § XIV.)

Third Year.-(1) Latin. (2) Mathematical Physics. (3) Experimental Physics. (4) Metaphysics. (5) French or German. (6) Greek or Chemistry.

Undergraduates of the Third Year are required to pass an Examination in Grecian History and Ancient Geography on the first Monday of the Winter Session. (See § XIV.)

Fourth Year:-(1) Latin. (2) Ethics and Political Economy. (3) History. (4) French or German. (5) Mathematical Physics or Greek.
A. Student must take the same Modern Language as part of his Undergraduate course in both Sessions.

For First and Second Class in History extra work is required.

## SUMMER SESSIONS.

(The work of the Fourth Winter Session is, as far as possible, distributed over the two Summer Sessions.)

First Year:-(1) Latin. (2) Political Economy or English Literature. (3) History. (4) French or German. (5) Mathematical Physics or Greek.

Second Year.-(1) Latin. (2) Ethics. (3) History. French or German. (5) Mathematical Physics or Greek.

## § V.-B. A. HONOUR COURSES.

Honour Courses are intended for Undergraduates whose tastes and ability lead them to prosecute special subjects of the Curriculum, and remissions of classes are granted to those studying such courses.

Honour Courses are provided in the following * subjects :(1) Classics. (2) Mathematics and Physics. (3) Mental and

[^1]Moral Philosophy, and Political Economy. (4) History and English Language and Literature. Instruction of an advanced kind is provided in these subjects during the third and fourth years of the Curriculum.

Examinations in these courses are held at the final Examinations for the Degree of B. A. ; and a Student passing First or Second Class in any of the above subjects obtains the Degree of B. A., with First or Second Rank Honours in such subjects. But First Rank Honours shall not be awarded to any one who has not passed First Class in the corresponding subjects of the Ordinary Course of the Fourth Year ; nor Second Rank Honours to one who has not passed Second Class in the Ordinary.

> Students studying for Honours must attend the Honour Lectures of their respective courses, and their progress must be satisfactory to their Professors. Students who intend to take the Honour Course in Mentul and Moral Philosophy, must give notice of their intention to the Secretary of Senate before the close of the Lectures of their Third Year.

> No Student will be allowed to enter on an Honour Course who has not stood in the First or Second Class at the previous Examination in the corresponding part of the Ordinary Course.

A Student taking an Honour Course, but failing to obtain Honours, will receive the Ordinary Degree, if his Examination in the course be approved of.

A Student of the Third Year, studying for Honours,
In Classics, may omit the Mathematical Physics of the year ;
In Mathematics and Physics, in Mental and Moral Philosophy, in History, Political Economy, \&c., may omit the fifth subject of the Ordinary Course, (see § IV.)

A Student of the Fourth Year studying for Honours,
In Classics, may omit Physics, and either Ethics, and Political Economy or History ;

In Mathematics, may omit either Latin or Ethics and Political Economy ;

In Mental and Moral Philosophy, or in History, Political Economy, \&c., may omit the fifth (selective) subject of the Ordinary Course, (see § IV.)

## § VI.-FEES.

The Fee to each Professor or Lecturer, whose class or classes a Student enters, is six dollars for the Winter Session, and three dollars for the Summer Session.

An Undergraduate in Arts pays only one fee during the Winter Sessions of his course to the Professors of Chemistry, of Logic, and of Physies, and to the Tutor in Modern Languages.

An Undergraduate who has completed two years of his course may attend the Classics and Mathematics during the remaining Winter Sessions of his Undergraduate course without the payment of additional fees.

General Students pay a fee for every class they attend, and Undergriduates taking classes in addition to the prescribed Curriculum pay as General Students.

Practical Chemistry, three months course (optional), fee six dollars. Students taking this class are required to provide their own materials. The use of the larger articles of apparatus will be given in the Laboratory free of expense.

In addition to the Class Fee, there is a Matriculation Fee of two dollars, payable by Undergraduates at their first entrance. General Students pay a Sessional Registration Fee of one dollar.

Both Undergraduates and General Students are also required, at the beginning of each Winter Session, to pay a Library Fee of one dollar, which entitles to the use of the Library for the year.

Matriculation or Registration Tickets, and Class Tickets, must be taken out on the first day of Lectures, no Students being allowed to attend a class without them.

The total fees of Undergraduates, who take the course of Four Winter Sessions in Arts, are as follows :-
Classes of First Winter, with Library and Matriculation Fees...... $\$ 21.00$
"" Second "" with Library Fee...... .......................... 25.00
" Third " " " "
Fourth " " " "................................... 13.00
The total fees of Undergraduates, who take the course of Three Winter Sessions, and the intervening Summer Sessions, are as follows :-

$$
\begin{aligned}
& \text { First, Second and Third Winter..............As above, } \\
& \text { First Summer Session (according to subjects taken)............... } \$ 12 \text { or } \$ 15 \\
& \text { Seeond "" }
\end{aligned}
$$

## § VII.-GRADUATION.

## DEGREE OF B. A.

The Degree of B. A. may be obtained by passing the proper Matriculation Examination, attending the prescribed courses of Lectures, and passing the Sessional Examinations of the several years.

Undergraduates have also to pass the Entrance Examinations of the Second and Third Years, as mentioned in § IV.

The fee for Diploma, payable before the Final Sessional Examination, is five dollars. Fee returned in case of failure at the Examination.

DEGREE OF M. A.
A Bachelor of Arts, of at least three years standing, maintaining meanwhile a good reputation, shall be entitled to the Degree of M. A., on producing an approved Thesis ; subject of Thesis to be first submitted to the Senate.

Fee for Diploma, which must accompany the Thesis, twenty dollars." Thesis is to be handed in on or before the 24th March.

## § VIII.-REGULATIONS FOR EXAMINATIONS.

1. If any Undergraduate absent himself from any University Examination, except from such cause as may be held good by the Senate, he will lose his year.
2. If any Undergraduate fail to pass in any subject at the Sessional Examinations, he will be allowed a Supplementary Examination on the first Thursday of the following Winter Sessien, or of a subsequent Winter Session, by the permission of the Senate, on giving notice to the Secretary of the Senate at or before the opening of such Session ; but failure in more than two subjects will involve the loss of the year.

At the Sessional Examinations of the First and Second Years, Classics (Latin and Greek) will be reckoned as one subject.
3. In all cases, a Student who presents himself for Supplementary Examination on any day except that specified in the rule, will be required to pay an extra fee of two dollars.
4. Undergraduates of the Second and Third Years who fail to present themselves for the Entrance Examinations in Ancient History and Geography on the first Monday of the Winter Session, may, on payment of a fine of two dollars, and on giving notice to the Secretary of the Senate at, or immediately after the opening of the Winter Session, have another day appointed them for such Examinations.
5. Students are forbidden to bring any book or manuscript into the Examination Hall, unless by direction of the Examiner, or to give or receive assistance, or to hold any communication at the Examinations. If a Student violate this rule, he will lose his Sessional Examinations for the year ; and it shall be at the discretion of the Senate whether he be allowed Supplementary Examinations.
6. Students who pass the Examinations in the several subjects of the respective years are arranged in three classes, First Class, Second Class, and Passed, according to the merit of their answers in these subjects.

## § IX.-PROFESSORS' SCHOLARSHIPS.

Two Scholarships, entitling to free attendance on all the Classes of the Undergraduate Course in Arts, as long as the holders obtain a Certificate of Merit at the Sessional Examination, are offered by the Professors for competition this year ; the competition to take place at the Matriculation Examination.

The subjects of Examinations for these Scholarships are the same as those for Matriculation in Arts at the University of Halifax, viz:-

Latin for 1879: Cicero, First Oration against Catiline ; Virgil, Eneid, Book II.
1880: Cresar, Gallic War, Book I. ; Virgit, Æneid, Book III. 1881: Ccesar, Gallic War, Book VI. ; Virgil, Eneid, Book VI.

Greek for 1879: Xenophon, Cyropædia, Book I.
1880: Xenophon, Anabasis, Book I.
1881: Xenophon, Anabasis, Book IV.
Arithmetic: as in University of Halifax, omitting square root. Algebra : as far as Simple Equations and Surds. Geometry : First and Second Books of Euclid.
English: Grammar, Analysis, Outlines of English and Canadian History, and General Geography.

## § X.-PRIZES AND CERTIFICATES OF MERIT.

## The University Prizes.

These Prizes will be awarded to those Stndents who stand first in the several subjects at the Sessional Examinations.

No Student will be allowed to hold a Prize more than orice in the same class.

## The St. Andrew's Prize.

This Prize will be awarded this year to the Undergraduates who shall stand first in Mathematics at the Sessional Examinations of the Second Year, the winner of Bursary being excluded.

## Young Prizes.

Two Elocntion Prizes of $\$ 20$ and $\$ 10$ respectively, are this year offered by the Hon. Sir William Young, Chief Justice of Nova Scotia, and are open for competition to all Students. These prizes will be competed for at the close of the Winter Session. A Student to whom one of these Prizes has been awarded is disqualified for subsequent competition.

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 Examinations of the Second Year's Course in Arts, and held by the successful competitor for two years, namely, during the Third and Fourth Years of his 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, 1880, at the Sessional Examinations. In awarding this Bursary, Classics, Mathematics, and Chemistry will be reckoned each 150 ; Logic, 100.

## The Waverley Bursary.

This Bursary, of the value of $\$ 60$ annually for two years, has been founded by an unknown benefactor, whose object in so doing is to encourage the studies of the Arts Curriculum, especially Mathematics. It alternates with the North British Suciety Bursary. The next competition will be at the Sessional

Examinations of the Second Year in Arts in April, 1881; when the Bursary will be awarded to the Student who shall stand highest at the Examinations. The scale of reckoning will be Mathematics, 200 ; Classics, Chemistry, each 150 ; Logic, 100.
The Dr. Avery Prize.
A Prize of the value of $\$ 25$ is offered by Dr. Avery for competition to the Students of the Fourth Year, who are not studying for Honours. It will be awarded to the Student who stands highest at the Sessional Examinations.

## Governor-General's Medals.

His Excellency the Marquis of Lorne, Governor-General of Canada, has been pleased to offer a Gold and Silver Medal for competition during his tenancy of office. The Gold Medal will be awarded to the student at the fourth year who stands highest at the final examination for the Degree of B. A.; and the Silver Medal will be awarded to the most distinguished student of the fourth year, in the Department of Science.

## CERTIFICATES OF MERIT.

Certificates of merit of the First or Second Rank will be given to Uudergraduates who have respectively obtained a First or Second Class standing in the aggregate of the branches of study proper to their year.

## § XI-ATTENDANCE AND CONDUCT.

1. All Undergraduates, and General Students attending more classes than one, are required to provide themselves with cap and gown, and wear them in going to and from College. Gowns are to be worn at Lectures, and at all meetings of the University.
2. Attendance upon all classes of the year, except those announced as optional, shall be imperative on all Undergraduates.
3. A Class Book will be kept by each Professor, in which the presence or absence of Students will be carefully noted.
4. Professors will mark the presence or absence of Students immediately before commencing the work of the class, and will note as absent those who enter thereafter, unless satisfactory reasons be assigned.
5. Absence without sufficient excuse, or lateness, or inattention or disorder in the Class Room, if persisted in after due admonition by the Professor, will be reported to the Senate.
6. The amount of absence which shall disqualify for the keeping of a Session will be determined by the Senate.
7. Injuries to the building or furniture will be repaired at the expense of the person or persons by whom they have been
cansed, and such other penalty will be imposed as the Senate may think proper.
8. While in the College, or going to and from it, Students must conduct themselves in an orderly manner. Any Professor observing any improper conduct in a Student will admonish him, and, if necessary, report to the Principal.
9. When a Student is brought before the Senate and convicted of a violation of any of these rules, the Senate may reprimand privately, or in the presence of the Students, or report to the parents or guardians, or disqualify for competing for Prizes, or for holding Certificates of Merit, or report to the Governors for suspension or expulsion.
10. Students not residing with parents or guardians must report to the Principal their places of residence within one week after their entering College, and the Principal may disallow such residence if he see good cause. Any change of residence must also be reported.
11. It is expected that every Student will attend Divine Worship regularly, in one of the city churches or chapels.

## § XII.-THE LIBRARY.

The Library consists of a careful selection of the most useful books in each department of study embraced in the University course. There are likewise a few works in general literature. The Library embraces in all upwards of 2000 volumes. All Students are entitled to the use of the Books, on payment of the annual fee of one dollar.

## § XIII-ORDINARY COURSE FOR B. A.

# OLASSICS-WINTER COURSE. 

LATIN.
EIRST YEAR.
Cicero: Fourth Oration against Catiline.

* First Oration against Catiline.

Virgil: Æneid, Book VI.
Composition: Principia Latina, Part IV. SECOND YEAR.
Cicero: Pro Milone.
Horace: Odes, Book III.; *Book IV.
Cumposition: Principia Latina, Part IV.
$\dagger$ THIRD AND FOURTH TEARS,
Plautus: Captivi. Terence: Adelphi.
Juvenal: Satires, III., X., XIII.
Composition : Principia Latina, Part V.
Philology: Outlines of Comparative Philology.

[^2]
## GREEK.

FIRST YEAR.
Xenophon: Cyropædia, Book IV., Chaps. 1-4.

* Cyropædia, Book IV., Chaps. 5, 6.

Grammar: Hadley's Greek Grammar.
SECOND YEAR.
Xenophon: Memorabilia, Book III, Chaps. 1-7.

* Memorabilia, Book III., Chaps. 7 to end.

Homer: Odyssey, Book VI.
Composition: Initia Græea, Part III.
$\dagger$ third and fourth years.
Demosthenes: Philippics I., III.
Plato: Apologia Socratis.
Composition : Initia Greca, Part III.
summer course.
LATIN.
a
FIRST YEAR.
Livy : Book XXI.
SECOND YEAR.
Horace: Epistles.
GREEK.
FIRST YEAR.
Demosthenes: Olynthiacs.
SECOND YEAR.
Euripides: Hecuba.

## * ANCIENT HISTORY AND GEOGRAPHY.

Second Year.-History of Rome, to B. C. 31. Geography of Italia, Sicilia, Gallia, Hispania.
Third Year.-History of Greece to the death of Alexander. Geography of Grecia, Africa, Asia. Books recommended: Liddell's Student's History of Rome; - Smith's Student's or Cox's History of Greece ; Pillans' Classical Geography.

## MATHEMATICS AND PHYSICS. <br> FIRST YEAR.

Arithmetic.-Revision of the Theory of Proportion, Vulgar and Decimal Fractions.

Algebra.-Common Measure, Involution, Evolution, the Arithmetical Extraction of Roots, Fractions, Equations of the First and Second Degree, Proportion, Inequalities, Variation, Progressions, Indeterminate Equations.

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

Plane Trigonometry.-Solution of Plane Triangles.

[^3]
## SECOND YEAR.

Geometry.-Sixth Book of Euclid finished: Geometrical Exercises continued ; Geometrical Drawing.

Plane Trigonometry.-Circular and Gradual Measure; Functions of sum and difference of Angles, \&c.; Relations of the sides and angles of triangles; Mensuration of Heights and Distances; Elementary Problems in Navigation; Use of Logarithms.

Spherical Trigonometry.-As far as the solution of Right Angled Triangles.

Algebra.-Propositions in Theory of Equations; Binomial Theorem; Properties of Logarithms; Compound Interest; Annuities.

EXtra.
Geometry.-21 Propositions of the Eleventh Book of Euclid; Geometrical Exercises; Drew's Conic Sections; The Parabola.

Trigonometry.-Extension of Ordinary Course.
Algebra.-Permutations, Combinations, Probabilities, Life Assurance, Investigation of Binomial Theorem and Theory of Logarithms; Indeterminate Co-efficients, with application to Expansions and Series.

Books recommended: For First Year: Hamblin Smith's (Miller \& Co.) Elements of Geometry, or Colenso's or Todhunter's; Colenso's or H. Smith's Algebra. For Secona Year: Colenso's Algebra, 2nd part; Colenso's Trigonometry, 1st part; Todhunter's Spherical Trigonometry; or Hann's Trigonometry, (Weale's Series) ; Chambers' Logarithmic, \&c., Tables.

## EXPERIMENTAL PHYSICS.

(Third Year.)-Text Book ; Balfour Stewart's Lessons in Elementary Physics.

## mathematical physics.

(Third Year.)-Text Book; Goodeve's Principles of Mechanies.
(Fourth Year.)-Text Books; Galbraith and Haughton's Manuals of Astronomy and Optics ; Phear's Hydrostatics or Galbraith and Haughton's.

## ETHICS.

(Fourth Year.)-Text Books; Stewart's Active and Moral Powers of Man. Whewell's Elements of Morality.

POLITICAL ECONOMY.
(Fourth Year.)-Text Books: Mill's Political Economy. Senior's Political Economy.

## LOGIC AND PSYCHOLOGY.

(Second Year.)-Text Books: Sir William Hamilton's Lectures on Logic. Prof: Lyall's "Intellect, the Emotions, and the Moral Nature."

## METAPHYSICS AND ESTHETICS.

(Third Year.)-Text Books: Sir William Hamilton's Lectures on Metaphysics. Mansel's Metaphysics. Lewes' Biographical History of Philosophy. Cousin on The Beautiful. Allison's Essays on the Nature and Principles of Taste.

## CHEMISTRY.

(Second Year.)-Objects of the Science, Nomenclature, Symbolic Notation, Atomic Numbers, Equivalent Numbers, Formulæ, Equations.

Princtples of Chemical Philosophy:-Laws of Combination by weight and by volume. The Atomic Theory. Equivalence or Saturating power of Elements. Radicals or Residues. Relations of Heat, Light, Magnetism and Electricity, to Chemical Affinity.

Chemistry of Elementary Bodies and thetr Compounds (inorganic).-Processes of production and manufacture illustrating chemical laws. Classification of Minerals. Reduction of Ores. Outline of the modes of analysis of Minerals, Waters, Poisons, \&e.

Organic Chemistry.-Principles of Classification. Organic Series. Comparison of the principal series of the Fatty Group, viz: Parafines and Olefines ; Monatomic, Diatomic, Triatomic and Hexatomic Alcohols and Ethers; Monatomic, Diatomic and Tetratomic Acids; Aldehydes, Cyanogen. Comparison of Amines, Diamines, Triamines, Artificial Bases, Alkaloids, Phosphines, Stibines, Arsines, Ámides (including Urea and its derivatives), Uric Acid, Colouring Matters. Outline of Animal Chemistry-Tissues, Blood, Milk, Urine; Respiration, Digestion, Nutrition.
(Third Year.)-Subjects same as preceding. The general exercises in Theoretical Chemistry will be more elaborate, the equations and calculations more difficult, and the questions in Organic Chemistry will require an intimate acquaintance in detail with the chemical constitution and properties of all the important series of Organic Compounds.

## RHETORIC.

## FIRST YEAR.

The Course includes Style, Invention, Method, the General Departments of Literature, Narration, Description, Exposition, Oratory, Debate.

Exercises in English Composition, daily.
Essays on Stated Subjects, weekly.
Text Book: DeMill's Elements of Rhetoric.
Books recommended: Quintilian's Institutes of Oratory, Whately's. Elements of Rhetoric, Campbell's Philosophy of Rhetoric.

## ELOCUTION.

FIRST YEAR.
Exercises every week, after Christmas Holidays.
Books recommended: Porter's Analysis of the Principles of Rhetorical Delivery. Russell's Elocution. Sargent's Standard Speaker. Lewis, How to Read. Nova Scotia Readers, No. 6 and No. 7.

## ENGLISH LANGUAGE.

## FIRST YEAR.

Anglo-Saxon.-Text Books: Comparative Grammar of the AngloSaxon Languages, F. A. Marsh, Le.D. Anglo-Saxon Reader, F. A Marsh, Le.D.

Early English.-Text Book: Specimens of Early English, by R. A Morris, Ll.D., and W. W. Skeat, M. A., Part Second.

Books recommended: Earle's Philology of the English Tongue. Smith's Student's English Language.

## ENGLISH LITERATURE.

## FIRST YEAR.

Text Books: Shakespeare, Hamlet, Macaulay, Essay on Sir Wm. Temple.

## ENGLISH GRAMMAR.

## FIRST YEAR.

Text Books: Mætzner's English Grammar. Angus' Handbook.

## HISTORY。 <br> FOURTH YEAR.

1. General Course.

Text Books : Gibbon's Decline and Fall of the Roman Empire. Milman's History of Latin Christianity. Greene's History of the English People. Students' History of France. Students' History of Germany. Sismondi's Italian Republics. Hallam's Middle Ages. Taylor's Modern History.
2. Special Course.

History of Canada. Text Books : Garneau's History of Canada, Bell's translation. Murdoch's History of Nova Scotia. Archer's History of Canada.

## CONSTITUTIONAL HISTORY.

FOURTH YEAR.
Text Books: Stubbs' Constitutional History. Hallam's Middle Ages, (Chapters on the English Constitution). Hallam's Constitutional History. May's Constitutional History.

## MODERN LANGUAGES.

French.-(Third Year.) -Pujol's Grammar, (first part).-Scribe's "Diplomate."

Translation: Charles Lamb's "Tales from Shakespeare." Dictation and Parsing.

German.- (Third Year.) - Otto's German Conversation Grammar.Adler's Reader.-Schiller's "Wilhelm Tell."-Dictation, Analysis, Composition.

French.-(Fourth Year.)-Pujol's Grammar, (second part).-Moliere's "L'Avare."

Translation: "One of Sheridan's Plays." An extempore and a prepared Composition every fortnight.

German.-(Fourth Year.)-Otto's German Grammar.-Adler's Reader (4th and 5th parts).-Schiller's "Wilhelm Tell," (continued) ; or, Goethe's "Hermann und Dorothea."

Translations from English writers. A written Composition every fortnight.

## § XIV.-HONOUR COURSES.

I.-CLASSICS.

Latin.-Plautus: Miles Gloriosus.
Terence: Heantontimorumenos.
Virgil: Georgics, Books I., IV.
Horace: Epistles, Books I., II., Ars Poetica.
Juvenal : Satires, VII., VIII., XIV.
Cicero: Tusculan Questions, Book I.
Tacitus: Germania, Agricola.

Greek.- Æschylus: Septem contra Thebas.
Sophocles: CEdipus Rex.
Homer: Iliad XVIII., XXIV.
Thucydides: Book II.
Plato: Phædo.
Demosthenes: De Corona.
Composition.-Latin Prose.
Philology.-Müller's Science of Language, Vol. I., Chaps. 1-7. Peile's Introduction to Greek and Latin Etymology. Brachet's Historical French Grammar. Class Lectures.
Literature.-Müller and Donaldson's History of Ancient Greek Literature, Vols. I., II.; Roman Classical Literature (Brown's); Theatre of the Greeks (Donaldson), Selected portions.

## II.-MATHEMATICS AND MATHEMATICAL PHYSICS.

Trigonometry.-DeMoivre's Theorem, and Angular Analysis. Theory of Equations, with Horner's Method of Solution, and Sturm's Theorem.

Analytical Geometry.-The Straight Line, the Circle, Parabola, Ellipse, Hyperbola. The Locus of the General Equation of the Second Degree between two Variables.

Differential Calculus.-Differentiation; Theorems of Leibnitz Maclaurin, and Taylor; Maxima and Minima of Functions of one Variable; Expansion of Functions of Two Variables; Maxima and Minima of such Functions; Radius of Curvature, Osculating Circle ; Envelopes; the tracing of Curves by means of their Equations.

Integral Calculus.-Integration of Simple Forms ; Integration by Parts, and Formulæ or Reduction. Integration by Substitution, \&c Applications to determine Lengths of Curves, Surfaces, Volumes, \&c.; Differential Equations, (selected course,) Application to Physical Investigation: e. g., Centre of Gravity, Attraction, Central Forces, \&c.
books recommended-(In order of Preference.)
Torhunter's Spherical Trigonometry.
Todhunter's Plane Trigonometry or Colenso's (2nd part).
Todhunter's, Puckle's, or Salmon's Conic Sections.
Hall's, Hind's, or Todhunter's Differential and Integral Calculus.
Todhunter's or Young's Theory of Equations.
Boole's Differential Equations.
EXPERIMENTAL PHYSICS.
Balfonr Stewart's Treatise on Heat.
Optics by Sir David Brewster.
Fleming Jenkin's Electricity and Magnetism.

## III.-MENTAL AND MORAL PHILOSOPHY. LOGIC.

Sir William Hamilton's Lectures on Logic. Whately's Logic, Books II., III., IV. Mill's Logic, I., II. Bacon's Novum Organon.

## METAPHYSICS AND NESTHETICS.

Descartes' Principles of Philosophy. Reid's Essays, VI. Sir William Hamilton's Lectures on Metaphysics. Sir William Hamilton's Philosophy of Perception and Philosophy of the Unconditioned. Lewes' Biographical History of Philosophy. Cousin's Philosophy of the Beautiful. Allison's Essays on the Principle of Taste. Burke on the Sublime and Beautiful.

ETHICS.
Mackintosh's Dissertation of the Progress on Ethical Philosophy. Butler's Sermons on Human Nature, with the Preface and the Dissertation on the Nature of Virtue.

Smith's Theory of Moral Sentiments.
Thomson's Christian Theism.
Aristotle's Ethics, Book I., III., VI., X., (in English).

## IV.-HISTORY, ENGLISH LANGUAGE AND LITERATURE.

## HISTORY.

1.-Macanlay's History of England. Ranke's History of England. Masson's Life of Milton.
II.-Guizot's History of Civilization. Michelet's History of France. Memoires of Philip de Comines. Memoires of the Duke of Sully.
III.-Prescott's History of Ferdinand and Isabella. Prescott's History of Charles V. Prescott's History of Philip II. Motley's History of the Revolt in the Netherlands. Motley's History of the Rise of the Dutch Republic.

ENGLISH LANGUAGE AND LITERATURE.
ANGLO-SAXON.
Thorpe's Analecta Anglo-Saxonica.
Poems of Beowulf, the Scop or Gleeman's tale, and the Fight at Finnesburg-Benjamin Thorpe.

Life of St. Guthlac-Charles Wycliffe Goodwin, M. A.
King Alfred's Anglo-Saxon Version of Orosius-Rev. Dr. Bosworth. english.

Specimens of Early English-Morris \& Skeat, part first.
Specimens of English Literature-W. W. Skeat, M. A.
The Vision of William concerning Piers the Plowman, by William Langland-W. W. Skeat, M. A.

Chaucer, Part First:-The Prologue, The Knighte's Tale, The Nonne Preste's Tale, Edited by R. Morris, Editor for the E. E. T. S. Part Second: The Prioresses' Tale, etc., Edited by W. W. Skeat, M. A.

Spenser's Faery Queene, Books First and Second, by G. W. Kitchin, M. A.

Shakespeare's Select Plays, Edited by W. G. Clark, M. A., and W. Aldis Wright, M. A. I. The Merchant of Venice; II. King Lear; III. Macbeth; IV. Hamlet; V. The Tempest; VI. Julins Caesar.

Bacon, Advancement of Learning-W. Aldis Wright, M. A.
Milton, Poems-R. C. Browne, M. A.
Dryden, Selections by W. D. Christie, M. A.
Pope, Essay on Man, Satires, and Epistles, by Mark Pattison, B. D.

## DEPARTMENT OF SCIENCE.

Students entering upon the Scievoe Course, with a view to the Degree of Bachelor of Science, (B. Sc.), are required to pass a Matriculation Examination in the following subjects :-
I.-In Mathematios: Arithmetic; Euclid's Elements of Geometry, Books I. and II. ; Algebra, Simple Rules; and Simple Equations of one unknown quantity, not involving Surds.
II.-In English: Grammar; History of England; Geography ; Composition.
III.-Latin, or German, or French : Grammar and Translation.

A Professors' Scholarship, entitling to free attendance on all Classes of the Course, will be awarded to the Matriculant who shall pass the most satisfactory Examination. In order to retain this Scholarship the holder must obtain a First or Second Class Certificate of Merit annually.

The Course of Instruction in Science extends over three Winter Sessions and two intervening Summer Sessions. Undergraduates are required to pass Examinations in the respective subjects at the close of each of the several Winter and Summer Sessions. The General Regulations for Students attending the Science Course, and proceeding to the Degree of Bachelor of Science, are similar to those in force in the Faculty of Arts, except when otherwise stated. The fees for Matriculation, Library, and Diploma, are the same. Laboratory Fee, \$6 for each course of three months.

Undergraduates in Science who do not attend the preseribed Classes of the Summer Sessions will be required to take a fourth Winter Session. Attendance must be given and.Examinations passed on all the required subjects of the Science Curriculum before the Degree can be taken, except in the case of a Student attending during the Winter only, and who may be precluded from attendance on a class taught during the Summer Session only ; in such case special work, as nearly equivalent as possible to the omitted Class, will be prescribed.

An Undergraduate in Arts who has passed his Examination at the close of the first Winter Session, will be admitted as an Undergraduate in Science of the same standing.

# COURSE OF INSTRUCTION IN SCIENCE. 

## FIRST YEAR.-WINTER SESSION.

## MATHEMATICS.

As in ordina:y course for Undergraduates in Arts of 1st year.

## EXPERIMENTAL PHYSICS.

Details of the Course of Instruction will be announced at the opening of the Session.

## INORGANIC CHEMISTRY.

General Principles: Chemical Affinity; Combination; Mixture; Solution ; Suspension ; Laws of Combination, by weight, by volume ; Equivalent Numbers; Atomic Numbers; Atomic Theory; Nomenclature; Notation; Formulæ; Equations; Elements and their classification; description in detail of the Non-Metallic Elements, their modes of occurrence in nature, their preparation, their compounds, and of important Chemical Processes, natural and artificial, and manufactures, to which they are related; the Metals, their general characters, classification, occurrence in nature; metallurgical processes, Alloys; description of all the important Metals, their Salts and other compounds, and of chemical processes and manufactures connected with them, modes of testing, etc.

Class meets three times a week.
Class Book: Eowne's Manual of Chemistry, or Roscoe.

## LABORATORY PRACTICE.

Preparation and Examination of Gases, Liquids, and Solids, chiefly the Metalloids and their combinations with each other. Collection of Gases. Use of Pneumatic Trough. Bending and blowing of Glass, and fitting up of Glass Apparatus. Analysis and Synthesis of Water and Air. Illustration of meaning of Terms : Base, Acid, Salt, Neutralization, Combustion, Solubility, Affinity, \&c. Mlustrations of processes of Crystallization, Distillation, Oxidation, \&ct. Systematic Analysis (commenced).

Flame Reactions. Use of Spectroscope.
Text-Books : Laboratory Practice and Qualitative Analysis, by Thorpe and Muir.

The Class meets three times a week.

## LATIN or GERMAN.

Latin.-As in Ordinary Course for Undergraduates in Arts of 1st year, -3 days a week.

German.-As in Ordinary Course for Undergraduates in Arts, (third year)- 3 days a week. Text-Books to be announced at the opening of the Session.

## ENGLISH LANGUAGE AND COMPOSITION.

The Class meets daily.
Undergraduates are required to take English Language and Composition during either their first or second Winter Session, as well as in the intervening Summer Session.

For Text Books see pages 22 and 23.

## FIRST SUMMER SESSION. MATHEMATICS.

As in the first Summer Session of the Arts course.
Text Books: Galbraith and Haughton's Hydrostatics, Optics, and Astronomy.

## ENGLISH LANGUAGE.

1. English Language.-An advanced course of Study in English Philology and Grammar.
Text Books : Earle's English Philology. Maetzner's English Grammar.
Angus' Handbook of the English Language.
English Composition.-Exercises daily. Essays on stated subjects, weekly.

## GERMAN and either FRENCH or SPANISH.

BIOLOGICAL SCIENCE (Botany, Zoology, Histology).
Elementary Course.

## QUALITATIVE CHEMICAL ANALYSIS.

Systematic Qualitative Analysis. Detection of Bases and Acids, separate and in mixtures.

Will's Tables of Chemical Analysis.
Thorpe's Qualitative Analysis.
CHEMICAL PHYSICS.

SECOND YEAR.-WINTER SESSION.

## MATHEMATICS.

As in ordinary course for Undergraduates in Arts, 2nd year.
EXPERIMENTAL PHYSICS (Laboratory).
Two days a week.

## ENGLISH LANGUAGE.

If not taken during the first Winter Session, as well as during the first Summer Session.

GERMAN and either FRENCH or LATIN.

## QUANTITATIVE CHEMICAL ANALYSIS.

The Laboratory will be open daily (except Saturday) from 9 A . M. to 1 P. M., for work in this Department. There is a Reference Library in the Balance Room for the use of Students.

Undergraduates are required to attend three days a week, for at least two hours each day.

Laboratory Book: Thorpe, Quantitative Analysis.

## GEOLOGY, PALAONTOLOGY, MINERALOGY.

Physiographic Geology: especially of Nova Scotia and Cape Breton.
Lithological Geology: Rock Material of the Glohe. Constituent Minerals of Rocks. Mineral Classification. Structure in Rocks. Arrangement of Strata.
Historical Geology: Rocks in order of formation and contemporaneous events in Geological History. Principal Rock Formations of British America and the United States. Characteristic Minerals.
Floras, Faunas. Rhizopods or Foraminifers ; their characters and distribution in time and space.
Dynamical Geology: Effects of Life on the Earth's Crust. Cohesive Attraction. Crystallization. The Atmosphere. Water. Heat.
Practical Geology : Methods of Investigation. Measurements. Use of Clinometer.
The Class meets three times a week.
Text Books recommended: Dana's Text Book or Manual of Geology, Edition of 1878. Chapman's Outlines of Geology of Canada. Dana's (abridged) Manual of Mineralogy, Edition of 1878.

## BIOLOGICAL SCIENCE (Botany, Zoology, Histology).

Botany.-Morphology of the Cell, of the Tissues, and of the External Conformation of Plants. Special Morphology of Thallophytes, Characeæ, Muscineæ, Molecular Forces in the Plant, Aggregation of Organized Structures, Movements of Water and Gases. Chemical Processes, Constituents of Plant Food, Assimilation, Respiration. Influence of Temperature, Light, Electricity, Gravitation. Mechanical Laws of Growth, Tension, Pressure, Fraction. Periodicity of Growth, Periodic Movements. Reproduction. Hybridization. Origin of Species. Origin of Varieties. The Theory of Descent. Classification, including a Description of the Principal Natural Orders of American Plants. Geographical Botany. Outline of Vegetable Palæontology.

Zoology.-Difference between Animals and Plants, in general structure, functions, and chemical constitution. Minute Structure of Animal Tissues. Characters by which the following groups of Animals are distinguished from each other: Brachyopoda, Polyzoa, Tunicta. Mammalia, Aves, Reptilia, Amphibia, Pisces, Cephalopoda, Gasteropoda, Pteropoda, Lamellibranchiata. Insecta, Myriapoda, Arachnida, Crustacea, Annelida, Vermes, Rotifera. Echinodermata, Anthozoa, Hydrozoa, Infusoria. Embryology of the five groups of Vertebrata. Movements of the more common Food Fishes, in relation to Depth, Temperature, Food, Reproduction.

Histology.-Instruction will be given in the general use of the Microscope, the preparation and mounting of Vegetable and Animal Tissues, and the Microscopical Observation of Vital phenomena in living plants and the lower forms of animals.

The Class meets three times a week.
On Saturdays during favorable weather there will be Field Excursions for collecting Botanical and Zoological Specimens, and Demonstrations will likewise be given in the Public Gardens and the Provincial Museum.

SECOND SUMMER SESSION.
MATHEMATICS.
As in second Summer Session in Arts Course.
Text Book: Galbraith and Haughton's Hydrostatics, Optics and Astronomy.

GERMAN and either French or Latin.

QUANTITATIVE ANALYSIS AND INORGANIC PRE-
Text Book: Thorpe's Quantitative Analysis.

GEOLOGY.
Demonstrations in the Provincial Museüm and Field Work.

## EXPERIMENTAL PHYSICS.

Work in Physical Laboratory.
LOGIC.

May be deferred to the third Winter Session.

THIRD YEAR.-WINTER SESSION.
MATHEMATICAL PHYSICS.
Text Books : Goodeve's Principles of Mechanics. Galbraith and Hougho ton's Mechanics.

## EXPERIMENTAL PHYSICS.

Advanced course.

## ORGANIC CHEMISTRY.

Text Book: Wurtz's Manual of Chemistry (translated by Greene), Armstrong's Chemistry.

ORGANIC CHEMICAL ANALYSIS AND ORGANIC PREPARATIONS, OR WORK IN PHYSICAL LABORATORY.

LOGIC (if not taken previously), on ONE MODERN LANGUAGE, GERMAN, FRENCH OR SPANISH.

GEOLOGY AND MINERALOGY, OR BIOLOGICAL SCIENCE.
Geology.-Canadian, especially Nova Scotian, Physiographic, Lithological, Dynamical, and Historical. Lectures and Demonstrations.
Books of reference: Reports of Geological Survey of Canada, Chapman's Outlines of the Geology of Canada. Transactions of the Nova Scotian Institute of Natural Science. Dawson's Acadian Geology,

## gegrees, zuril, 1879.

(The names are arranged alphabetically.)

## BACHELOR OF ARTS WITE HONOURS.

 ORDINARY DEGREE OF BACHELOR OF ARTS.

Frederick B. Chambers .. .... .... ....Truro. Adfred Dickie ... .... .... .... Stewiacke. Robert R. J. Emmersons.. .... .... .... Halifax.

## (8xaminations, $1875=9$.

Undergraduates and General Students who obtained Honours, Certio ficates of Merit, Prizes, \&e.

## UNDERGRADUATES IN THE FACULTY OF ARTS.

## FOURTH YEAR.

Isaac M. McLean : Second Rank Honours in Classics; First Class Certificate of Merit; Prize in Classics; First Class in Latin, Greek, Ethics and French.
Charles S. Cameron : Second Rank Honours in History and English Language; First Class Certificate of Merit ; Prizes in Ethics and French; First Class in Ethics and French; Second Class in Latin and Modern History.
Robert R. J. Emmerson : Dr. Avery's Prize ; Second Class Certificate of Merit; First Class in Latin; Second Class in Ethics, History and French.

THIRD YEAR.
Albert E. Thomson: Second Class Certificate of Merit; Prize in Classics; First Class in Metaphysics and Greclan History ; Second Class in Latin, Greek and French.
Edwin Crowell: Second Class Certificate of Merit; Second Prize in Metaphysics; First Class in Metaphysies and Grecian History; Second Class in Latin and French; Second Prize for Elocution.
Fred. S. Kinsman : Second Class in Grecian History.

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SECOND FEAR.
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Howard Murray : Waverly Bursary; St. Andrew's Prize ; First Class Certificate of Merit; First Prizes in Classics, Mathematics, Logic, Chemistry; First Class in Latin, Greek, Mathematics, Logic, Chemistry and Roman History.

James S. Trueman: Second Class Certificate of Merit; Second Prize in Classics; First Class in Latin and Greek; Second Class in Mathematics, Logic, Chemistry and Roman History.
Graham Creelman: Second Class Certificate of Merit; Second Prize in Mathematics; First Class in Mathematics; Second Class in Latin, Greek, Logic and Chemistry.
Charles W. Blanchard : First Class in Roman History ; Second Class in Mathematics, Logic and Chemistry.
Alfred Costley: Second Class in Logic and Chemistry.
Hénry S. Creighton : First Class in Logic ; Second Class in Chemistry and Roman History.
Andrew G. Downey : Second Class in Mathematics and Chemistry.
Wallace M. McDonald : Second Class in Roman History.
Henry H. McIntosh : First Class in Roman History ; Second Class in Latin and Chemistry.
James A. Sedgewick : Second Class in Chemistry and Logic.
FIRST YEAR.
George M. Campbell: First Alumni Association Prize; First Class Certificate of Merit; First Prizes in Classics and Mathematics; First Class in Latin, Greek, Mathematics; Second Class in Rhetoric.
George S. Carson: Second Alumni Association Prize; First Class Certicfiate of Merit; Second Prize in Mathematics; First Class in Mathematics ; Second Class in Latin and Greek.
John W. McLellan : Second Class Certificate of Merit; Second Class in Latin, Greek, Mathematics and Rhetoric.
Charles H. Martin : First Class in Latin; Second Class in Greek.
George E. Patterson : Second Class in Latin and Rhetoric.
James T. Wyllie: Second Class in Mathematics and Rhetoric.
John McKenzie: First Class in Mathematics.
E. A. Downey : Second Class in Mathematics.

James Ross: Second Class in Rhetoric.

# UNDERGRADUATES IN THE DEPARTMENT OF SCIENCE. 

SECOND YEAR.
Wm. M. Fraser : First Class in French and German ; Second Class in Zoology.

FIRST YEAR.
James Mrtchell: Second Class in Chemical Laboratory Practice.

## GENERAL STUDENTS.

Alex. W. Mahon: Prizes in Constitutional History, Metaphysics, French; First Class in Modern History, Metaphysics, French.
John P. McPhie: Second Class in Chemistry.
George W. Fowler: Prize in Rhetoric ; First Class in Rhetoric.
Charles D. McLaren : First Prize for Elocution.
Wm. F. Fraser: Third Prize for Elocition.

##  Ectholurships.

## B. A. HONOURS.

Classics :-Second Rank-Isaac M. McLean.
History and English Language :-Second Rank-Chas. S. Cameron.

## UNIVERSITY PRIZES.

Fourth Year-Classics, Isaac M. McLean. Math. Physics, Alfred Dickie. Ethics, Charles S. Cameron. History, Alfred Dickie. Constitutional History, Alex. W. Mahon. French, Chas. S. Cameron.

Third Year-Classics, Albert Thomson. Metaphysics, 1. Alex. W. Mahon; 2. Edwin Crowell. French, Alex. W. Mahon.

Second Year-Classics, 1. Howard Murray; 2. James S. Trueman. Mathematics, 1. H. Murray ; 2. Graham Creelman. Logic, H. Murray. Chemistry, H. Murray.

First Year-Classics, G. M. Campbell. Mathematics, 1. G. M. Campbell; 2. G. S. Carson. Rhetoric, G. W. Fowler.

## CERTIFICATES OF MERIT.

(The names are arranged alphabetically.)
First Class: Fourth Year-Chas. S. Cameron, Isaac M. McLean. Third Year-None. Second Year-H. Murray. First Year-G. M. Campbell, G. S. Carson.

Second Class: Fourth Year-R. R.J. Emmerson. Third Year-Edwin Crowell, Albert E. Thomson. Second Year-Graham Creelman, James S. Trueman. First Year, J. W. McLellan.

## WAVERLEY BURSARY.

Howard Murray.

## SPECIAL PRIZES.

The Sir William Young Prizes for Elocution: 1. A. G. McLaren; 2. Edwin Crowell; 3. Wm. F. Fraser.

The St. Andrew's Prize: H. Murray.
The Alumni Association Prizes: 1. G. M. Campbell; 2. G. S. Carson.

The Dr. Avery Prize: R. R. J. Emmerson.

## PROFESSORS' SCHOLARSHIPS.

1. G. M. Campbell, Private Study.
2. James J. Wyllie, Pictou Academy and Halifax High School.

## SESSIONAL EXAMINATIONS, APRIL, 1879.

(The names are arranged alphabetically.)
The following Students have passed the Examinations hereinafter mentioned:

FACULTY OF ARTS.
Fourth Year-Chas. S. Cameron, Alfred Dickie, Fred. B. Chambers, Robt. R. J. Emmerson, Isaac M. McLean.

Third Year-Edwin Crowell, Fred. S. Kinsman, Albert E. Thomson.
Second Year-Chas. W. Blanchard, Graham Creelman, Henry S. Creighton, Andrew G. Downey, Henry H. McIntosh, Howard Murray, James A. Sedgewick, William H. Spencer, James S. Trueman.

First Year-George M. Campbell, G. S. Carson, G. A. Downey, John Wm. McLellan, Chas. H. Martin, Geo. G. Patterson, James Ross.

DEPARTMENT OF SCIENCE.
Second Year-Wm. M. Fraser.
First Year-James Mitchell.
MATRICULATION EXAMINATIONS, OCT., 1878.
faculty of arts.
First Year-G. M. Campbell, G. S. Carson, G. A. Downey, Wellesford Ives, James H. Knowles, John McKenzie, John W. McKenna, John McLeod, Chas. H. Martin, G. G. Patterson, Chas. A. Robson, James Ross, James J. Wyllie.

Second Year-Robert Landells. DEPARTMENT OF SCIENGE.

James Mitchell.
ENTRANCE EXAMINATIONS IN CLASSICAL HISTORY AND GEOGRAPHY
(The names are in the order of merit.)
Third Year-Class I.: Thomson, Crowell. Class II.: Kinsman. Passed: McKnight.
Second Year-Class I.: Blanchard, (McIntosh, Murray,) equal. Class II. : McDonald, Creighton, Trueman. Passed: Sedgewick, Costley, Spencer, Downey, A, G.

## SUPPLEMENTARY EXAMINATIONS IN CLASSICS, HISTORY AND GEOGRAPHY.

Jandary, 1879.
Second Year-Creelman, Landells.

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\text { April, } 1879 .
$$

Second Year-McClure.
SUPPLEMENTARY SESSIONAL EXAMINATIONS.
Second Year-Latin and Greek: McKaight.

## CLASS LISTS.

(The names are arranged in the order of merit.)
LATIN.
Fourth Year-Class I.: McLean, Emmerson. Class II.: Cameron. Passed: Chambers, Dickie.
Third Year-Class I. : None. Class II.: Thomson, Crowell. Passed : Kinsman.
Second Year-Class I.: Murray, Trueman. Class II. : McIntosh, Creelman. Passed: Creighton, Blanchard, McDonald, Spencer, Sedgewick, Costley, Downey, A. G.
First Year-Class I. : Campbell, Martin. Class II.: Patterson, Carson, McLennan. Passed: McLeod, Wyllie, Downey, G. A., Knowles, Ross, McKenzie.

## GREEK.

Fourth Year-Class I.: McLean.
Third Year-Class I.: None. Class II.: Thomson. Passed: Kinsman.
Second Year-Class I.: Murray, Trueman. Class II.: Creelman. Passed: Blanchard, McDonald, Creighton, McIntosh, Sedgewick, Costley, Spencer, Downey.

## PHYSICS.

Fourth Year-Class I. : None. Class II. : Dickie. Passed: Emmerson, Chambers.

## MATHEMATICS.

Seconp Year-Class I.: Murray, Creelman. Class II.: Trueman, Blanchard, Downey, A. G. Passed: Creighton, McIntosh, Spencer, Sedgewick, McClure, Costley (in Trigonometry), McDonald (in Geometry.)

## ETHICS

Fourth Year-Class I.: Cameron, McLean, Dickie. Class II.: Emmerson. Passed: Chambers.

## METAPHYSICS AND AESTHETICS.

Third Year-Class I.: Mahon, Crowell, Thomson. Passed: Kinsman,

## LOGIC AND PSYCHOLOGY.

Second Year-Class I.: Murray, Creighton. Class II.: Blanchard, (McDonald, Spencer, ) equal, McClure, Landells, McPhee, Stewart.

## CHEMISTRY.

Second Year-Class I.: Murray. Class II.: Trueman, Costley, Creighton, McIntosh, Downey, A. G., McPhee, Creelmaú, (Blanchard, Sedgewick,) equal. Passed: (McClure, Mitchell,) equal, Landells, McDonald, Spencer.

## CHEMICAL LABORATORY PRACTICE.

First Year-Class II.: Mitchell.

## ZOOLOGY.

Second Year-Class II. : Fraser, Wm. M.

## HISTORY.

Fourth Year-Class I. : Dickie, Mahon. Class II. : Cameron, Emmerson, Chambers.
constitutional history.
Class I.: Mahon.

## RHETORIC.

First Year-Class I. : Fowler, Carson. Class II.: Wyllie, McLennan, Campbell, Patterson, Ross. Passed; Knowles, Martin, McKenzie, McLeod, Downey, G. A., Mitchell.

## FRENCH.

Fourth Year-Class I.: Cameron, McLean. Class II.: Emmerson. Passed: Dickie, Chambers.
Third Year-Class I. : Mahon. Class II.: Crowell, Thomson.

## GERMAN.

Third Year-Passed: Kinsman.

##  Spcrial 相rizes, der., 1867=79.

B. A. HONOURS.

1873-Mathematics and Physics : Second Rank, Alex. H. McKay. 1874-Classics : Second Rank, James Chalmers Herdman.

Mental and Moral Philosophy: Second Rank, James McDonald Oxley.
1876-Mathematics and Physics: Second Rank, Jas. McG. Stewart Classics: Second Rank, Francis H. Bell.
1877-Mathematics: Second-Rank, John Waddell.
1879-Classics : Second Rank, Isaac M. McLean.
History and English Literature: Second Rank, Charles S. Cameron.

GOVERNOR GENERAL'S MEDALS.
1875-Gold Medal: Louis H. Jordan. Silver Medal: George McMillan. 1876-Gold Medal: Francis H. Bell. Silver Medal: Jas. McG. Stewart. 1877-Gold Medal: John Waddell. Silver Medal: Burgess McKittrick. 1878-Gold Medal : J. L. George. Silver Medal: J. H. Cameron.

## PROFESSORS' SCHOLARSHIPS.

1866-1. A. P. Silver, Halifax Grammar School ; 2. A. W. H Lindsay, Pictou Academy.<br>1867-1. James G. McGregor, private study ; 2. James M. Inglis, Prince of Wales College, Charlottetown, P. E. I.<br>1868-1. Alex. W. Pollock; 2. W. P. Archibald, Halifax Schools.<br>1869-1. Charles D. McDonald, Pictou Academy ; 2. Bruce A. Lawson; 3. Henry Macdonald, Halifax Schools.<br>1870-1. Andrew C. Herdman, Pictou Academy ; 2. Alex. C. Patterson, Fort Massey Academy.<br>1871-1. William Brownrigg, Pictou Academy ; 2. George McMillan, private study.<br>1872-1. Francis H. Bell, private study ; 2. Fred. W. O’Brien, Pictou Academy.<br>1873-1. Jas. McLean, private study ; 2. John Waddell, Pictou Academy. 1874-1. J. L. George, Picton Academy ; 2. John Stewart.<br>1875-l. George W. McQueen, New Glasgow Academy; 2. Issac M. McLean, private study.<br>1876-1. Howard Murray, New Glasgow Academy; 2. W. R. Fraser.<br>18:7-1. Graham Creelman, Pictou Academy ; 2. James S. Trueman, St. John Grammar School.<br>1878-1. G. M. Campbell, Pictou Acadiemy ; 2. James T. Wyllie, Pictou Academy and Halifax High school.

## GRANT PRIZE.

For Essays-1866: Joseph H. Chase. 1867: Aubrey Lippincott. 1868 : Arthur P. Silver. 1869: Herbert A. Bayne. 1870: Hugh M. Scott. 1871: Duncan C. Fraser. 1872: Alex. H. McKay.

## THE YOUNG PRIZES.

General Prize, voted by Students. 1867: 1. John Gow, 3rd and 4th years; 2. Alex. C. McKenzie, 1st and 2nd years. 1868: 1. Geo. Murray, 3rd and 4th years; 2. Wentworth Roscoe, 1st and 2nd years. 1869: 1. John J. McKenzie, 3rd and 4th years; 2. Hiram Logan, 1st and 2nd years. 1870 : For Essay, Walter M. Thorburn; For Elocution, Duncan Fraser. 1871: For Essay, James G. McGregor ; For Elocution, Robert G. Sinclair. 1872: For Essay, Ephraim Scott; For Elocution, Fred. W. Arehibald. 1874 : Richmond A. Logan. 1875 : S. J. MacKnight. 1876: 1. Francis H. Bell; 2. Colin Yitblado. 1877 : 1. H. H. Whittier; 2. G. E. Lowden. 1878: James A. Sedgewick; 2. Duncan Cameron. 1879: 1. Chas. D. McLaren ; 2. Edwin Crowell ; 3. Wm. F. Fraser.

## ROY PRIZES.

For Elocution, 1868: 1. Alex. G. Russell; 2. Jas. G. McGregor. 1869: 1. Albert R. Quinn ; 2. Wm. M. Doull.

## NORTH BRITISH SOCIETY BURSARY.

1868 : Hugh M. Scott. 1870: Ephraim Scott. 1872: James C. Herdman. 1874: James McG. Stewart. 1876: John H. Cameron. 1878: Albert E. Thomson.

## WAVERLEY BURSARY.

1873: Wm. Bearisto, Wm. R. Ross, equal. 1874: James Fitzpatrick. 1875: James McLean. 1876: John Waddell. 1877: Rod. McKay. 1879 : Howard Murray.
LAURIE PRIZE.
1871: Hugh M. Scott, B. A. 1872: Duncan C. Fraser. 1873: David F. Creelman. 1874: Archibald Gunn. 1875: Alex. McLeod. 1876 : No competition. 1877: Richmond Logan.

## ST. ANDREW'S PRIZE.

1873-For Classics : First Year, John W. McLeod.
1874-For Mathematics: Second Year, John W. McLeod.
1875-For Classics: Second Year, James McLean.
1876-For Mathematics: Second Year, T. A. LePage.
1877-For Classics : Second Year, G. W. McQueen.
1878-For Mathematics : Second Year, Albert E. Thomson.
1879-For Classics : Second Year, Howard Murray.

## ALUMNI PRIZES.

1873: James McG. Stewart. 1874: 1. James McLean ; 2. John H. Sinclair. 1875: 1. J. H. Cameron, private study ; 2. R. H. Humphrey, Halifax Grammar School. 1876: Third Year, John Waddell (who resigned in order to hold the Waverley Prize), J. H. Sinclair. First Yeur, 1. Roderick McKay, private study. 1877: Third Year, 1. J. H. Cameron ; 2. Edmund L. Newcombe. First Year, 1. Howard Murray ; 2. W. R. Fraser. 1878: Third Year, 1. Roderick McKay ; 2. J. M. McLean. First Year, 1. James S. Trueman; 2. Graham Creelman. 1879: First Year, 1. G. M. Campbell ; 2. G. S. Carson.

> "UNKNOWN" PRIZE.

1875: James M. McLean.
GRADUATES PRIZE.
1876 : John Wilson McLeod. 1877 : Burgess McKittrick.
MELBOURNE PRIZES.
1875: 1. John W. McLeod; 2. James McG. Stewart. 1876 : George W. McQueen.

##  General §tudents in Artg.

## GRADUATES.

## MASTERS OF ARTS.

$1869 . \quad 1874$.
Chase, Jos. Henry, Onslow.
1870.

McNanghton, Samuel, Preston, G.B. McDonald, John H., Shelburne.

## 1871.

Cameron, J. J., Shakspere, Ont. Carr, Arthur F., Alberton, P. E. I. Smith, David H., Truro.
1872.

Aunand, Joseph, New Hebrides. Bayne, Herbert A., Ph. D., Halifax. Forrest, James, Halifax.
McKenzie, John J., Ph. D., (obit.)

McGregor, J. G., D. Sc., Clifton, G.B.
1875
McKenzie, Hugh, Truro.
Scott, Ephraim, New Glasgow.
1876.

Allan, John M., Edinburgh.
1878.

Archibald, W. P., Cavendish, P.E.I.
Herdman, James C., B. D., Edin., Campbelton, N. B.
Jordan, Lonis H., Halifax.
McLeod, Alexander, Onslow.
Trueman, Arthur I., St. John, N.B.

## DOCTORS OF MEDICINE AND MASTERS OF SURGERY.

1872. 

DeWolfe, Geo. H. H., England. Hiltz, Charles W., Mahone Bay. McMillan, Finlay, (obit.)
McRae, William, Richmond, C. B. Sutherland, Roderic, (obit)
1874.

Campbell, Don. A., Halifax.

Chisholm, Donald, Antigonish. Moore, Edmund, Chatham.

$$
1875
$$

Cox, Robinson, Stewiacke.
Bethune, J. L. Baddeck, C. B. Lindsay, A. W. H., Halifax.
Muir, W. S., Truro.
Casimir, Robert, Arichat, C. B.

## BACHELORS OF ARTS.

1866. 

Chase, J. Henry, Onslow.
Shaw Robert, Charlottetown.
1867.

Burgess, Joshua C., Carleton, N. B. Cameron J. J., Shakspere, Ont.

Lippincott, Aubrey, Pittsburg, Pa:
McDonald, John H., Shelburne.
McNaughton, Samuel, Preston, G.B.
Ross, Alex., Dalhousie, N. B.
Sedgewick, Robt., Halifax.
Smith, David H., Truro.
Smith, Edwin, Stewiacke.

## 1868.

Carr, Arthur F., Alberton, P. E. I. Christie, Thomas M., Trinidad. Creighton, James G. A., Montreal. Forrest James, Halifax.
McKay, Kenneth, Richmond, N. B. Simpson, Isaac, Musquodoboit.

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1869 .
$$

Annand, Joseph, New Hebrides. Bayne, Herbert A., Halifax. Millar, Eben. D., Shelburne. MacKenzie, J. J., (obit.)
Sutherland, John M., Iugwash.

$$
1870 .
$$

Lindsay, Andrew W. H., Halifax.
Scott, Hugh McD., Leipsic.
Thorburn, Walter M., Madras.
Wallace, John.

$$
1871 .
$$

Bayne, Ernest S., Murray Harbor, P. E. I.

McGregor, James G., Bristol, Eng.
Russell, Alex. G., Oyster Bay, L. I., N. Y.

$$
1872 .
$$

Archibald, W. P., Carendish, P. E. I.
Bruce, Wm. T., Vale Colliery.
Carmichael Jas., New Glasgow.
Fraser, I)uncan C., New Glasgow.
Gunn, Adam, Five Islands.
McKenzie, Hugh, Truro.
Pollok, Alex'r W., (obit.)
Scott, Ephraim, New Glasgow.
Trueman, Arthur I., St. John, N. B.

$$
1873 .
$$

Allan, John M., Edinburgh. Bryden, Chas. W., Tatamagonche. Cameron, Wm., Pictou Co. Creelman, D. F., Bay of Islands. Duff, Kenneth, Manitoba. Hunter John, California. Logan, Melville, Halifax. McDonald, Chas. D., Pictou. McKay, Alex. H., Pictou. McKeen, James A., Bermuda. Robinson, J. Millen, Halifax. Ross, Wm., New Brunswick.

$$
1874
$$

Doull, Walter S., Halifax. Fraser, D. Stiles, Mahone Bay.

Herdman, James C., Campbelltown.
Herdman, Wm. C., Stellarton.
McGregor, Daniel, New Dublin.
McLeod, Don., Strathalbyn, P. E. I.
Oxley, James McD., Halifax.

$$
1875
$$

Fitzpatrick Jas., Salt Springs, Pictou Jordan, Louis, Halifax.
McLeod, Alex., Onslow.
McMillan, Geo., Pictou Co.
Stramberg, Hector H., Cape John, Pictou.

$$
1876
$$

Bell, Francis H., Halifax. Fulton, Geo H., Guysborough.
McDowall, Isaac, St. John, N. B.
McLean, James A., Pictou Co.
McLeod, John W., Princeton, N. J
Morton, Joseph, Shelburne.
Munro, John, Montreal.
Stewart, J. McG., Pictou.

$$
1877 .
$$

Archibald, F. W., Truro.
Chambers, Robert E., Halifax.
Grant, W. R., Pictou Co.
Hamilton, Howard H., Pictou.
Herdman, A. W., Pictou.
Laird, Geo. A., Manitoba.
Logan, Richmond, Pine Hill, Hal'fx.
Mason, Wm. A., Pine Hill, Halifax.
McCurdy, Stanley T., New Glasgow
McKittrick, Burgess, Sydney, C. B.
Murray, J. S., Cavendish, P. E. I.
Pitblado, Colin, Manitoba.
Scott, John McD., Halifax.
Waddell John, Dartmouth.

$$
1878
$$

Cairns, John A., Princeton, N. J.
Cameron. John H., Pine Hill, Hal'fx.
George, John L., Princeton, N. J.
McKenzie, Jas., Pictou Co.
Munro, George W., New York.
Newcombe, Edmund L., Kentville.
Rogers, Anderson, Pine Hill, Hal'fx.
Whitman, Alfred, Bridgetown.

$$
1879 .
$$

Cameron. Chas. S., Baddeck, C. B.
Chambers, Fred. B., Truro.
Dickie, Alfred, Stewiacke.
Emmerson, R. R. J., Halifax.
McLean, Isaac M., Belfast, P. E. I.

Graduates are particularly requested to notify the Principal or Secretary of Senate of any changes of address.

## UNDERGRADUATES IN ARTS, 1878-9.

## FOURTH YEAR,

Cameron, Chas. S., Baddeck, C. B. Chambers, Fred. B., Truro. Dickie, Alfred, Stewiacke. Emmerson, R. R. J., Halifax. McLean, Isaac M., Belfast, P. E. I. THIRD YEAR. Crowell, Edwin, Barrington: Kinsman, Fred. S., Centreville. McKnight, S. J., Halifax.
Thomson, Albert E., Halifax.
SECOND YEAR.
Blanchard, Chas. W., Truro.
Costley, Alfred, Halifax.
Creelman, Graham, Up. Stewiacke. Creighton, H. S., Dartmouth.
Downey, Andw. Gl., Barrington.
Landells, Robert, Halifax.
McClure, James K., Truro.

McDonald, Wallace M., Halifax.
McIntosh, H H., Merigomish. Murray, Howard, New Glasgow. Sedgewick, Jas, A., Musquodoboit. Spencer, Wm. H. Great Village. Trueman, James S., Carleton, N.B.

FIRST YEAR.
Campbell, G. M ; Truro.
Carson, G. S., Sussex, N. B.
Downey, G. Albert, Barrington.
Ives, W ellesford, Picton.
Knowles, James H., Milton.
McKenzie, John, Stellarton
McLennan, John Wm., Sydney.
McLeod, John, Halifax.
Martin, Charles H., Virginia, U. S. Patterson, G. G., New Glasgow. Robson, Charles A., Dartmouth. Ross, James, Earltown. Wyllie, James T, Halifax.

## UNERGRADUATES IN SCIENCE.

SECOND YEAR.
Fraser, William, Dartmouth.

FIRST YEAR.
Mitchell, James, Halifax.

## GENERAL STUDENTS IN ARTS.

Crawford, Rupert D., Halifax. Dustan, John F., Dartmouth. Fisher, George, Middle Stewiacke. Fowler, G. W, Hammondvale, N. B. Fraser, William F., Sherbrooke. Gillies, Ewen, Scotland.
Keith, Sylvanus, Stellarton. Lord, Stanfield, Tyron, P. E. I. Mahon, Alexander W., Onslow. McDonald, John A., Pietou Co. McDonald, Willard, Newport. McKay, James A., Ainslie.

McLaren, Charles D., Georgetown, P. E. I.

McLeod, A. B., Strathalbyn, P.E.I.
McMillan, Duncan, Ainslie.
McMillan, John, Ainslie.
McPhie, John P., E. River, Pictou.
Murray, Angus J., River John.
Reid, James W., Musquodoboit.
Ross, Robt. D., East River, Picton.
Sharpe, James, Halifax.
Stewart Thomas, Whycocomah.
Thomson, Duncan R., Pictor Co.

## GENERAL STUDENTS IN SCIENCE.

Aitken, Charles C., Lunenburg. Anderson, Fitz. U., Halifax. Andrews, Alfred, Wilmot. Atkinson, M. C., Baie Verte, N. B. Baxter, Robert, Halifax. Bowles, F. C., Halifax Chisholm, W. P., Onslow. ${ }^{1}$ Cochrane, F: W.
Croskill, George, Halifax.
DeMill, William B., Halifax.
Duffus, Wm. S., Halifax.
Donovan, A. Q.
Frame, Samuel, Stewiacke.
Gisborne, Hartley, Halifax.
Henderson, George, Halifax.
Jack, Andrew, Halifax.

Johnstone, E. J., Cow Bay, C. B. Macdonald, S. A, Halifax. Mandel, F., Halifax.
McKenzie, John, Bonlarderie, C. B. McLean, John J., Salisbury, Pictou. McLeod, John, Halifax.
Moseley, C. A, Dartmouth.
O'Hearn, P., Halifax.
Puttner, C. E., Halifax.
${ }^{2}$ Smith, C. E.
Thomson, Arthur W., Ireland.
Waddell, William H., Halifax.
Wier, John, Halifax.
Woodill, Alfred A., Halifax.
Woodill, W. N., Halifax.
Students in Arts, 58
Students in Science .... 33
Total number of Students.... $\overline{91}$

## ALUMNI ASSOCIATION.

This Association, incorporated by Act of the Legislature, has now entered upon the ninth year of its existence, and gives satisfactory promise of future prosperity. The ends it has in view are, to strengthen the bonds of fellowship among the Alumni, to unite them in the endeavour to promote Higher Education in these Provinces, and specially to extend the influence and usefulness of their Alma Mater.

The Association has already been able to lend assistance to the College by offering Prizes to its Students, and by contributing to the sum raised during the past year for the purchase of Scientific Apparatus ; and it is hoped that it may be able to lend still greater aid, and ultimately develope into an important adjunct to the University.

Since the recent enlargement of the Board of Governors, the Association is represented on the Board by their President, and thus has some direct share in the University management. The Executive Committee is meantime empowered to take such steps as shall seem fitted to promote the purposes of the Association.

Undergraduates of more than two years standing, and General Students who have attended Classes for at least two years, are qualified for admission to the Association ; and it is hoped that before long every Graduate at least will have been enrolled in the list of Members.

The Annual Meeting of the Association takes place on the morning of Convocation day, at the close of the Winter Session,

##  (3)ntarporated.)

## OFEICERS.


#### Abstract

Herbert A. Bayne, Ph. D............................President. Hugh Mackenzie, M. A................................Vice-President. James Forrest, M. A............................ .....Treasurer. Franels H. Bell, B. A.................................Secretary.


Robert Sedgewick, B. A.,
Waiter S. Doull, B. A., James M. Oxley, B. A., Duncan C. Fraser, B. A.,

Executive Committee, (with Officers.)

## HONORARY MEMBERS.

Very Rev. James Ross, D. D., Principal Dathousie College.<br>Rev. Willam Lifall, Ll. D., Professor of Metaphysics, Dalhousie College. Charles McDonald, M. A., Professor of Mathematics, Dalhousie College. John Johnson, M. A., Professor of Classics, Dalhousie College. George Lawson, Ph. D., Professor of Chemistry, Dalhousie College. Jamee DeMill, M. A., Professor of Phetoric, Dalhousie College. James Liechti, Professor of Modern Languages, Dalhousie College. David Honeyxan, D. C. L., Professor of Geology, Dalhousie College.

## MEMBERS.

NAME.
Allen, John M.
Archibald, William P.
Bayne, Herbert A., Ph. D.
Rayne, Ernest S.
Bell, Francis H.
Bruce, William T., M.D. Cameron, John H. Cameron, Charles S. Chambers, Robert E.
Chase, Joseph H.
Carmichael, James
Cruikshank, William
Dickie, Alfred
Doull, Walter S.
Doull, W. M.
Emmerson, Robert R. J.
Forrest, Tames
Fraser, Duncan C.
Fitzpatrick, James
Fraser, D. Stiles George, John L.
Hamilton, Howard H .
Herdman, James C., B. D.
Jordan, Louis H.
Lindsay, A. W. H., M. D.
Logan, Richmond
Miller, Eben D.
Morton, Joseph H.
Munro, John
occupation.
Clergyman.
Professor.
Clergyman.
Barrister.
Clergyman. Theo. Student. Merchant.
Naval Architect.
Clergyman:
Merchant.
Clergyman.
Merchant.
Barrister.
Merchant.
Engineering Student.
Broker.
Barrister.
Clergyman.
Theo. Student.
Manufacturer.
Clergyman.
Physician.
Theo. Student.
Clergyman.
Principal of Academy
Theo. Student.

## RESIDENCE.

Edinburgh, G. B. Cavendish, P. E. I. Halifax.
Murray Harbor, P.E.I. Halifax. Vale Colliery.
Pine Hill, Halifax.
Baddeck, C.B. Halifax.
Onslow, Col.
New Glasgow.
Montreal.
Stewiacke.
Halifax.
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Halifax.
New Glasgow.
Salt Springs, Pictou.
Mahone Bay.
Princeton, N. J.
Pictou.
Campbellton, N. B.
Halifax.
Halifax.
Pine Hill, Halifax.
Shelburne.
Shelburne.
Montreal.

## 44

| MeDonald, Charles D. | Barrister. | Pictou. |
| :---: | :---: | :---: |
| McDowell, Isaac M. | Teacher. | Saint John, N. B. |
| MeKiay, Alex. H. | Principal of Academy | Pictou. |
| McKenzie, Hugh | Barrister. | Truro. |
| McGregor, Jas. G., D. Sc. | Professor. | Clifton, Bristol, G. B. |
| McLean, James A. | Clergyman. |  |
| Mokittrick, Burgess | Principal of Academy | Sydney, C. B. |
| MeMillan, George W. | Clergyman. |  |
| McNaughton, Samuel Oxley, James McD. | Barrist | Preston, G. B. Halifax. |
| Robinson, J. M. | ${ }_{6} 6$ | Halifax. |
| Russell, Alexander C. | Clergyman. | Oyster Bay, L. I., N.Y. |
| Robarts, Casimir, M. D. | Physician. | Arichat. |
| Scott, Hugh McD., B. D. | Clergyman. | Leipsic, Germany. |
| Sedgewick, Robert | Barrister. | Halifax. |
| Stramberg, Hector |  | Montreal. |
| Stewart, James McG. | Barrister. | Pictou. |
| Thorburn, W. M. | India Oivil Service. | Madras Presidency. |
| Trueman, Arthur I. | School Inspector. | Portland, N.B. |
| Wallace, John | Clergyman. |  |
| Whitman, Alfred W. | Law Student. | Bridgetown. |
| Waddell, John | Teacher. | Dartmouth. |

** * The above contains the names of all who have at any time contributed any sum to the funds of the Association. In future the names of members who are in arrears for two years subscriptions will be dropped from the list of membership.

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# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

# SESSIONAL EXAMINATIONS, 1879. 

WBDNESDAY, April 9.-9 A. M. To 1 P. M.

## FIRST YRAR.

LATIN<br>$\{$ Cicero: First Oration against Catiline.<br>\{ Vikgil: Bucolics.

Professor J. Johnson, M. A.................. Examiner.

## I.

1. Translate :
a. Quamquam nonnulli sunt in hoc ordine, qui aut ea, quæ imminent, non videant, aut ea, quæ vident, dissimulent : qui spem Catilinæ mollibus sententiis aluerunt, conjurationemque nascentem non credendo corroboraverunt: quorum auctoritatem secuti multi non solum improbi, verum etiam imperiti, si in hunc animadvertissem, crudeliter et regie factum esse dicerent. Nunc intelligo, si iste, quo intendit, in Manliana castra pervenerit, neminem tam stultum fore, qui non videat conjurationem esse factam, neminem tam improbum, qui non fateatur. Hoc autem uno interfecto, intelligo, hanc reipublice pestem paullisper reprimi, non in perpetuum comprimi posse. Quod si se ejecerit secumque suos eduxerit et eodem ceteros undique collectos naufragos aggregaverit, exstinguetur atque delebitur non modo hæc tam adulta reipublicæ pestis, verum etiam stirps ac semen malorum omnium.
b. Alter erit tum Tiphys, et altera quae vehat Argo

Delectos heroas ; erunt etiam altera bella,
Atque iterum ad Trojam magnus mittetur Achilles.
Hinc ubi jam firmata virum te fecerit aetas,
Cedet et ipse mari vector, nec nautica pinus
Mutabit merces : omnis feret omnia tellus.
Non rastros patietur humus, non vinea falcem;
Robustos quoque jam tauris juga solvet arator;
Nec varios discet mentiri lana colores,
Ipse sed in pratis aries jam suave rubenti Murice, jam croceo mutabit vellera luto ; Sponte sua sandyx pascentis vestiet agnos.
Talia saecla, suis dixerunt, currite, fusis
Concordes stabili fatorum numine Parcae.
c. Omnes, " Unde amor iste, rogant, tibi "? Venit Appollo :

Galle quid insanis? inquit ; tua cura Lycoris
Perque nives alium perque horrida castra secuta est.
Venit et agresti capitis Silvanus honore,
Florentes ferulas et grandia lilia quassans.
Pan deus Arcadiae venit, quem vidimus ipse
Sanguineis ebuli bacis minioque rubentem.
Ecquis erit modus? inquit ; Amor non talia curat;
Nec lacrimis crudelis Amor, nec gramina rivis,
Nec cytiso saturantur apes, nec fronde capellae.
Tristis at ille: Tamen cantabitis, Arcades, inquit, Montibus haec vestris : soli cantare periti
Arcades. O mihi tum quam molliter ossa quiescant, Vestra meos olim si fistula dicat amores !
Atque utinam ex vobis unus, vestrique fuissem
Aut custos gregis, ant maturae vinitor uvae!
2. Write explanatory notes on the following passages :-
a. Alter erit tum Tiphys, altera quae vehat Argo.
b. Amphion Dircaeus in Actaeo Aracyntho.
c. Quem Statorem hujus urbis-vere nominamus.
3. Where, when, and under what circumstances was the first oration against Catiline delivered? Write a sketch of Cicero's life up to this time. What was the result of Catiline's conspiracy?
4. To what does the second extract refer? Of what poems are the Eclogues imitations? What confusion of scenery and incident results from the imitation? When and where was Virgil born? His life and works are briefly expressed in a Latin distich.

## II.

1. a. Give the cases in the singular and the gen. pl. in combinaton of : liquidis fontibus, sceleris nostri, altera Argo.
b. Note peculiarities of declension of : cunabula, rastros, sponte, Pan, altaria, imbres, nemo.
2. Parse, giving chief parts : ejecerit, adulta ; discet, currite ; insanis, florentes ; ausim, defit, invidit, obliviscere.
3. Analyse the sentence: "Nunc intelligo....fateatur" and give the rules for the moods.
4. Translate these lines and explain the syntax of the words in italics :
a. Qui dies futurus esset ante diem XII. Kal. Nov.
b. Faciam ut intelligas quid hi de te sentiant.
c. Jam pridem a me illos abducere Thestylis orat.
d. Vitis ut arboribus decori est.
$e$. Solvite me, pueri ; satis est potuisse videri.
5. Scan the last four lines of the third extract and give shortly the rules for the quantity of final syllables in the first two of them.
6. $a$. When does a relative pronoun not agree in gender and number with its antecedent? Give an example.
b. What verbs govern (1.) two accusatives, (2.) the genitive ?
c. Distinguish the constructions admissible with (1.) consulo, (2.) tempero, (3.) convenio.
7. What is the Latin of: the house was building, was built for me, is built; a general skilled in war; thoughtful for others; from the island of Sicily to Rome; in the city of Athens; at Corinth; with the greatest care ; against my will.
8. Translate into Latin :
a. In the following year I lived for six months in Rome and afterwards returned to the country.
b. Cæsar, with a large army, came to the assistance of his friends.
c. He bought a fine horse for a small sum, and sold it to a friend for as much as he had paid for it.
d. You are loved by all who know you, but I am envied by my neighbours.
e. He said that he would leave the city in a few days.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.
Wednesday, April 9.-3 to $5 \frac{1}{2}$ p. M.

FIRST YEAR.

## Latin : Cicero: The Fourth Oration against Catiline.

(Additional for Students seeking a First or Second Class.)
Professor J. Johnson, . . . . . . . . . . . . . . . . . . . . . Examiner.

## 1. Translate:

Nunc, patres conscripti, ego mea video quid intersit. Si eritis secuti sententiam C. Cæsaris, quoniam hanc is in republica viam, quæ popularis habetur, secutus est, fortasse minus erunt, hoc auctore et cognitore hujusce sententiæ, mihi populares impetus pertimescendi; sin illam alteram, nescio, an ampilus mihi negotii contrahatur. Sed tamen meorum periculorum rationes utilitas reipublicæ vincat. Habemus enim a C. Cæsare, sicut ipsius dignitas et majorum ejus amplitudo postulabat, sententiam tamquam obsidem perpetuæ in rempublicam voluntatis. Intellectum est, quid intersit inter levitatem concionatorum et animum vere popularem saluti populi consulentem. Video de istis, qui se populares haberi volunt, abesse non neminem, ne de capite videlicet civium Romanorum sententiam ferat. Is et nudiustertius in custodiam cives Romanos dedit et supplicationem mihi decrevit et indices hesterno die maximis præmiis affecit. Jam hoc nemini dubium est, qui reo custodiam quæsitori gratulationem indici praemium decrevit, quid de tota re et caussa judicarit. At vero C. Caesar intelligit, legem Semproniam esse de civibus Romanis constitutam ; qui autem reipublicæ sit hostis, eum civem esse nullo modo posse ; denique ipsum latorem legis Semproniæ jussu populi pœnas reipublicæ dependisse.
2. "Si eritis secuti sententiam C. Cæsaris:" What opinion was this, and by what arguments was it supported? Who expressed a different opinion? How did Cicero's action in this matter affect him afterwards?
3. a. "Legem Semproniam:" What was its nature ?
b. "Ipsum latorem legis Semproniae jussu populi pœenas reipublicae dependisse." Is this correct?
4. Explain :
a. Quum vero mihi proposui regnantem Lentulum, sicut ipse ex fatis se sperasse confessus est.
b. Pro provincia quam neglexi; pro clientelis hospitiisque provincialibus.
5. What nouns of the 1st and 2 nd decl. from the gen. pl. in -um? What words from the abl. (1) in $i$, (2) in $i$ or $e$ ? What adjectives are compored by magis and maxime?
6. Write in Latin words :- $\frac{4}{5}$; $\frac{3}{7} ; 7542$; July 2nd ; 24th and 25th of Feb., A. D., 1684.
7. Form sentences to show the cases governed by : plenus, opus est, miseret, libero, gaudeo, rēfert.
8. Show by simple examples what verbal constructions are found with: Video, polliceor, vereor, volo, impero, nemo est, provideo.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

Monday, April 14. -9 A. M.

## FIRST YFAR.

## MATHEMATICS : GEOMETRY.

$\qquad$

1. All the exterior angles of a rectilineal figure made by producing the sides successively in the same direction, are together equal to four right angles.
2. If a straight line be drawn from the vertex of an isosceles triangle cutting the base or base produced, the difference of the squares of this line and the side of the triangle is equal to the rectangle contained by the segments of the base.
3. The greatest line drawn to the circumference from a point within a circle is the line passing thro' the centre, and the remainder of that diameter is the least: prove this. Give also the corresponding enunciation when the point is taken without the circle.
4. The opposite angles of a quadrilateral inscribed in a circle are together equal to two right angles.
5. Give a summary of enunciations of propositions 26-29 inclusive of the Third Book of Euclid, and prove any one of them.
6. If from a point without a circle two straight lines be drawn whereof one meets the circle and the other cuts it, and if the square of the line meeting the circle is equal to the rectangle of the line which cuts and its external part; the former line is a tangent to the circle.
7. Make a triangle having each of the angles at its base double the angle at the vertex.
8. If two triangles have an angle of one equal to an angle of the other, and the sides about these angles proportional, they shall be equiangular.
9. A straight line touches a circle, and from the point of contact chords are drawn making equal angles with the tangent: prove that they are equal.
10. The lines bisecting the angles of a triangle meet in a point.
11. If any point be taken in space, and lines be drawn to the angles of a rectangle, the sums of the squares of the alternate lines are equal to one another.

Why do you mark emphatically the words "in space "?
12. Shew that, over a smooth sea, to a man of the shore whose eye is 6 ft . above the surface of the water, the line of the horizon is distant about 3 miles.

Prove the formula, $t^{2}=\mathrm{D} h$.
13. Draw the internal tangent to two circles the distance of whose centres is greater than the sum of their radii.
14. Two circles touch externally in P ; and $\mathrm{DD}_{1}$, joining their centres, meets the circumferences in D and $\mathrm{D}_{1}$. Thro' P two lines perpendicular to each other are drawn, meeting the circles in QQ/ and $\mathrm{RR}_{/}$. Prove

$$
\mathrm{QQ}\rangle^{2}+\mathrm{RR} \iota^{2}=\mathrm{DD} \boldsymbol{\prime}^{2}
$$

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

Monday, April 14.-3 P. M.

## FIRST YEAR.

## Mathematics : Arithmetic and Algebra.



1. If $\frac{a}{b}$ is reducible to an interminate Decimal fraction, the number of figures in the period must be less than $b$, and is independent of $a$.
2. Prove the rule for finding the greatest Common Measure.
3. Find the greatest common measure of

$$
6 x^{3}+16 x^{2}-12 x+2 \text { and } 15 x^{4}-5 x^{3}+12 x^{2}-4 x .
$$

4. Find the product of $3 \sqrt{8}, 2 \sqrt[3]{6}, 3 \sqrt[4]{54}$. If $m+\sqrt{x}=n+\sqrt{y}$, $\sqrt{x}$ and $\sqrt{y}$ being dissimilar surds, prove that $m=n$ and $x=y$.
5. Solve the equation, $\frac{2}{x+\sqrt{2-x^{2}}}+\frac{2}{x-\sqrt{2-x^{2}}}=x$.
6. Describe the general method of solving $n$ simultaneous equations, involving $n$ unknown quantities, $x, y, z$, \&e.
7. Describe the method of solving the pairs of equations,

$$
\begin{aligned}
& \left.\left.\begin{array}{c}
a x+b y=c \\
m x^{2}+n y^{2}=d
\end{array}\right\} \text { and } \begin{array}{c}
a x y+b y^{2}=c \\
m x^{2}+n y^{2}=d
\end{array}\right\} \text {. Solve also the following: } \\
& x-y=3 \text {, and } x^{3}-y^{3}=378 \text {. }
\end{aligned}
$$

8. $x^{2}+p x+q=0$. Shew that if $p^{2}-4 q<0$, the roots are imaginary. Find also the equation whose roots are an $m^{\text {th }}$ part of those of the given equation.
9. Shew that the ratio $a^{2}+b^{2}: a^{2}-b^{2}>a^{3}+b^{3}: a^{3}-b^{3}$.
10. If $a: b:: a_{1}: b_{1}:: a_{2}: b_{2}$, \&c.; prove that one antecedent is to its consequent, as the sum of the antecedents to the sum of the consequents.
11. Prove that if $a, b, c$ are quantities such that any two are together greater than the third, $a^{2}+b^{2}+c^{2}<2 a b+2 a c+2 b c$, but $>a b+a c+b c$.
12. If $a, b, c$ be in Geometric progression, prove that $a+b, 2 b, b+c$ are in Harmonic progression.
13. Give two separate definitions of Harmonic progression, and shew that they are equivalent.
14. Sum the series $a+a r+a r^{2} \ldots$ to $n$ terms: and when $r<1$, shew that this sum $=\frac{a}{1-r}$.
15. Find general solutions of the equation, $5 x-3 y=20$.

## DALHOUSIE COLLEGE AND UNIVERSITY,

 HALIFAX.SESSIONAL EXAMINATIONS, 1879.<br>Tursday, April 15.-9 A. M. to 1 p. m.<br>FIRST YEAR.

RHETORIC.
Professor Demill, M. A......................Examiner.

1. Give derivation and definition of the term "Rhetoric."
2. Perspicuity is frequently increased by the reiteration of some important fact or statement. Explain this.
3. Give a general classification of figures of speech based upon the ends or aims for which they are employed.
4. Define and illustrate the iterative figures of speech.
5. Enumerate and explain the chief faults of style, as opposed to vivacity.
6. Explain the classification of narrative subject matter.
7. The order of thought may be carried out in several different ways.
8. Define and illustrate arguments from analogy.
9. Explain the leading characteristics of the peroration in oratory.
10. Enumerate the chief theories with regard to the beautiful.


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# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.

Tuksday, Aprill 15. -3 to 6 p. M.
FIRST YEAR.

ANGLO SAXON.
Professor DeMill, M. A........................Examiner.

## 1. Translate:

Hwaet tha gelyfdon forwel manige, and on Godes naman gefullode wurdon, wundrigende thaere bilewitnesse heora unscaedhdhigan lifes, and swetnesse heora heofonlican lare. Tha aet nextan, gelustfuliode tham cyninge Aedhelbrihte heora claene lif and heora wynsume behat, tha sodhlice wurdon mid manegum tacnum gesedhde; and he tha gelyfende weardh gefullod, and miclum tha cristenan gearwurdhode, and swa swa heofonlice ceastergewaran lufode; nolde swa-theah naenne to cristendome geneadian; fortham the he ofaxode aet tham lareowum his haele thaet Cristes theowdom ne sceal beon geneadod ac selfwilles. Ongunnon tha daeghwamlice forwel manige efstan to gehyranne tha halgan bodunge, and forleton heora haedhenscipe, and hi selfe getheoddon Cristes geladhunge, on hine gelyfende.
2. Parse: Gefullode, unscaedhdhigan, cyninge, haele, geneadod, to gehyranne.
3. Show the changes that have taken place in the passage of the following words into modern English: gelyfdon, heofonlican, lare, tacnum, miclum, sceal.
4. Write out the Indicative Active of the verb "niman."
5. Translate :

Tha waes wnldor-torht Heofon-weardes gast ofer holm boren miclum spedum. Metod Engla heht lifes Brytta leoht fordh cuman ofer rumne grund ; radhe waes gefylled Heah cyninges haes; him waes halig leoht ofer westenne, swa se Wyrhta bebead. Tha gesundrode sigora Waldend ofer lago flode leoht widh theostrum, Sceade widh sciman. Sceop tha bam naman lifes Brytta ; leoht waes aerest tharh Drihtnes word daeg genemned, wlitebeorhte gesceaft. Wel licode Frean aet frymdhe fordhbaero tid; daeg aeresta geseah deorc sceado sweart swidhrian geond sidne grund.
6. Explain the versification of the above passage.
7. Parse :-heht, sciman, sceop, gesceaft, licode, Frean.
8. Give examples of foreign words in Anglo Saxon and show to what class they chiefly belong.
9. Words have come into the English language from many foreign sources. Give examples.
10. Write a brief account of the origin and development of the Anglo Saxon language and literature

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## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

Thursday, April 17.-9 A. m, to 1 p. m.

FIRST YEAR.

## ENGLISH LANGUAGE.

Professor DeMill, M. A.......................Examiner.
1 Translate:
Duc William was tho old nyne and thritti yer And one and thritti year he was of Normandie duc er, Tho this bataile was ydo duc Willam let bringe Vaire is fole, that was aslawe an earthe thoru alle thinge. Alle that wolde, leue he yef that is fon anerthe broyte, Haraldes moder vor hire sone wel yerne hem bisoyte Bi messagers, \& largeliche him bed of ire thinge, To granti hire hire sones bodi anerthe vor to bringe. William hit sende hire vaire inou withoute enything warevore; So that it was thoru hire with grat honour ybore To the hous of Waltham \& ibroyt anerthe there, In the holi rode chirche that he let himsulf rare An hous of reli ion of canons ywis, Hit was ther vaire an erthe ibroyt as it yut is.
2. Parse :-ydo, bringe, aslawe, yef, broyte, granti.
3. Show to which of the early English dialects the above passage belongs.
4. Translate:

Quen he this tithand undirstod
Him thoght it nuther fair ne god,
For wel he wend, that ful o suik
To be put ute of his kinkrike;
And did he suith to samen call
The maisters of his kingrike all, And fraind at thaim if thai wist Quar suld he be born that Crist, That suld the king of Iues be Thai said "in Bethleem Iude" For the prophet had written sua And said, "thou Bethleem Iuda, Thof thou be noght the mast cite, Thou es noght lest af dignite ; 0 the sal he be born and bred, Mi folk of Israel sal lede."
5. Show by grammatical and orthographical forms of the above passage to which of the early English dialects it belongs.
6. Translate :
"That is the castel of care" quod heo "hose cometh their Inne,
Mai Banne that he born was to Bodi or to soule,
Ther-Inne woneth a wiht that wrong is Ihote,
Fader of Falseness he foundede it him-seluen;
Adam and Eve he eggede to don ille :
Counsulede Cayn to cullen his Brother ;
Iudas he Iapede with the Iewes seluer,
And on on Ellerne treo hongede him after.
He is a lettere of loue and lyyeth hem alle
That trusteth in heor tresour ther no truth is Inne."
Thenne hedde I wonder in my wit what womman hit weore
That such wyse words of holy writ me schewede;
And halsede hire in the heiye nomme or heo thonne yeode
What heo weore witerly that wissede me so feire.
7. Translate :

They sworen and assenten, euery man, To lyue with hir and dye, and by hir stonde ; And everich, in the beste wise he can, To strengthen hir shal alle hise frendes fonde ; And she hath thus emprise ytake on honde, Which ye shall heren that I shall deuyse, And to hem all she spak right in this wyse.
"We shall first feyne vs Christendom to take, Cold water shall not greue vs but a lite; And I shall swich a feste and renel make, That, as I trowe, I shal the sowdan quite. For though his wyf be cristened neuer so white, She shal have nede to wasshe away the rede, Though she a font-ful water with hir lede."
8. Tell what you know of the author of each of the above passages ( 6 and 7 ) and state the chief differences in their language and vocabulary.
9. Give a tabular view of the active voice of the verb "to love," (a) in Anglo Saxon, and (b) in Early English, Southern dialect.
10. The prefix "a" in modern English words has different explanations as to its origin and meaning.

# DEPARTMENTS OF ARTS AND SCIENCE. 

FIRST YEAR.

GERMAN.
James Liechti, Esq...............................Examiner.
Translate: I. Schiller's Taucher,
"Und wärfst du die Krone selber hinein Und sprächst! Wer mir bringet die Kron', Er soll sie tragen und König sein! Mich gelüstete nicht nach dem theuren Lohn. Was die heulende Tiefe da unten verhehle, Das erzählt keine lebende, glückliche Seele.

Wohl manches Fahrzeug, von Strudel gefasst, Schoss gäh in die Tiefe hinab; Doch zerchmettert nur rangen sich Kiel und Mast Hervor aus dem alles verschlingenden Grab."Und heller und heller, wie Sturmessausen, Hört man's näher und immer näher brausen.
II. Hebel's "Der Fremdling in Memel."-Oft sieht die Wahrheit wie oine Lüge aus. Das erfuhr ein Fremder, der vor einigen Jahren mit einem Schiff aus Westindien an den Küsten der Ostsee ankam. Damals war der russische Kaiser Alexander I., bei dem König von Preussen, Friedrich Wilhelm III., auf Besuch. Beide Monarchen standen in gewöhnlicher Kleidung, ohne Begleitung, Hand in Hand, als zwei recht gute Freunde, bei einander am Ufer. So etwas sieht man nicht alle Tage. Der Fremde dachte auch nicht daran, sondern ging ganz treuherzig auf sie zu, meinte, es seien zwei Kaufleute oder andere Herren aus der Gegend, und fing ein Gespräch mit ihnen an, ganz begierig, allerlei Neues zu hören, das seit seiner Abwesenheit sich zugetragen habe.
III. Theodor Körner's "Mein Vaterland."

> Was ist des Sänger's Vaterland ?-
> Wo edler Geister Funken spruhten,
> Wo Kränze fưr das Schöne blühten,
> Wo starke Herzen freudig glahten,
> Für alles Heilige entbrannt.
> Da war mein Vaterland!

Wie heisst des Sänger's Vaterland ?Jetzt über seiner Söhne Leichen, Jetzt weint es unter fremden Streichen: Sonst hiess es nur das Land der Eichen, Das freie Land, das deutsche Land. So hiess mein Vaterland !
IV. Schiller's "Wallenstein's Absetzung."-Cavaliere aus den edelsten Haüsern wetteiferten um die Ehre, ihn zu bedienen, und man sah kaiserliche Kammerherren den goldenen Schlüssel zurückgeben, um bei Wallenstein eben dieses Amt zu bekleiden. Er hielt sechzig Pagen, die von den trefflichsten Meistern unterrichtet wurden; sein Vorzimmer wurde stets durch fünfzig Trabanten bewacht. Seine gewöhnliche Tafel war nie unter hundert Gängen, sein Haushofmeister eine vornehme Standesperson. Reis'te er üler Land, so wurde ihm Geräthe und Gefolge auf handert sechs = und vierspännigen Wagen nachgefahren; in sechzig Carossea mit fünfzig Handpferden folgte ihm sein Hof. Die Pracht der Livereien,
der Glanz der Equipage und der Schmuck der Zimmer war dem übrigen Aufwande gemäss. Sechs Barone und eben so viele Ritter mussten beständig seine Person umgeben um jeden Wink zu vollziehen, zwölf Patronillen die Runde um seinen Palast machen, um jeden Lärm abzuhalten.

## Translate into German :

I will give you a little advice, and tell you what I have found, and what time hastaught me. Nothing is great that is not good, and nothing is true that is not lasting, (dauernd). Do not tell all that you know, but always know what you tell. Shylock, the Jew, who lived at Venice, had amassed an immense fortune. English, French and German are spoken almost everywhere. There is no man but has his faults. A few students intend going to a German University. I am also thinking of it. With what has this been done. We are reading many a good book. There are all kinds of strange people to be seen in this world. It is said the Governor is to be dismissed, (abgesetzt). You are wrong. The honses are not for sale. The merchant's house has been sold or will be sold to-day.

Grammatical Questions. (1). Decline in both numbers : den edelsten Häusern; Kaiserliche Kammerherren; eine vornehme Standesperson, (IV).
2) Write the Genitive sing. and the Nom. Plur. of: Haar, Doctor, Mensch, Wald, Mutter, Frav, Gesetz, Kapital. Give the fem. of Herr, Neffe, Knabe, Jüngling, Wittwer, Künstler. Distinguish between: der Band, das Band; der Thor, das Thor ; der Verdienst, das Verdienst.
3) Parse the words: hinein, hervor, (I). aus, daran, (II). Account for the position of such words, and show what relation they bear to the verb. Mention forms corresponding with daran, and explain the formation of this class of words, giving two exs.
4) Sondern (II). Mention its synonyma and state why they could not be used instead of sondern. Translate: German is a beautiful language, but it is difficult to learn.
5) Give the 1st pers. of the Impft. Indic., the Infinit. and Past Part, of: erfuhr, ankam, war, bedachte, zugetragen, zerchmettert, anvertrauen, regieren. What are the distinguishing features of the past part. in the various classes of verbs.
6) What kinds of substants. are formed with the suffixes : chen, el, er, in, ling, rich, and what do they denote.
7) Blau, kurz, viel, nahe, gern, bald, gut. Compare these words. Write exs. in illustration of the two forms of the superlative. Translate: In the finest manner. Most politely. Mention a few comparative degrees without a positive.
8) Give the equivalents of: God whose love is great. Whose poems are you reading? The Hall in which the examinations are being held. (abgehalten (p.p.). Of what and of whom are you thinking? Whatever may be done. Whoever may do it. In any country. Nowhere.
9) Wehe dem Jüngling, der lässt vorübergehen die Stunde zu einer grossen That; er ist werth nicht, zu finden eine zweite. Translate and correct this sentence, and give rules for the position of the verbs and the negative nicht.
10) Construct a compound sentence, heginning the first clause with als, and shew how such conjunctions affect the construction. Mention the seven exceptions, giving one ex.
11) Give the dates of the two Classical periods of German Literature, and describe the characteristic features peculiar to each. Which is the oldest written work, and to what century does it belong?
12) What name is given to the written language between the 7th and 11th centuries. Mention the oldest works written in that dialect. What is the Nibelungenlied?

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

# SESSIONAL EXAMINATIONS, 1879. 

Wednesday, ApkiL 9.-9 A. M. To 1 p. M.

## SECOND YEAR.

LATIN $\left\{\begin{array}{l}\text { Livy: Book I. Chafs. 1-30. }\end{array}\right.$ Horace: Odes, Book III.

Professor J. Johnson, M. A......................examiner.

I.

1. Translate:
a. Turbato per metum ludicro mœsti parentes virginum profugiunt, incusantes violati hospitii fadus deumque invocantes, cujus ad solemne ludosque per fas ac fidem decepti venissent. nee raptis aut spes de se melior aut indignatio est minor. sed ipse Romulus circumibat, docebatque patrum id superbia factum qui connnbium finitimis negassent. illas tamen in matrimonio, in societate fortunarum omvium civitatisque, et, quo nihil carius humano generi sit, liberum fore. Mollirent modo iras, et, quibus fors corpora dedisset, darent animos. saepe ex injuria postmodum gratiam ortam, eoque melioribus usuras viris, quod adnisurus pro se quisque sit, ut, cum suam vicem functus officio sit, parentium etiam expleat desiderium.
b. Tum Tullus 'Metti Fufeti, inquit,' si ipse discere posses fidem ac fœedera servare, vivo tibi ea disciplina a me adhibita esset. nune quoniam tuum insanabile ingenium est, at tu tuo supplicio doce humanum genus ea sancta credere, quae a te violata sunt. ut igitnr paulo ante animum inter Fidenatem Romanamque rem ancipitem gessisti, ita jam corpus passim distrahendum dabis. exinde duabus admotis quadrigis in currus earum distentum inligat Mettium, deinde in diversum iter equi concitati lacerum in utroque curru corpus, qua inhaeserant vinculis membra, portantes. avertere omnes ab tanta foeditate spectaculi oculos. primum ultimumque illud supplicium apud Romanos exempli parum memoris legum humanarum fuit. in aliis gloriari licet, nulli gentium mitiores placuisse pœenas.
c.

## Desiderantem quod satis est neque

Tumultuosum sollicitat mare,
Nec saevus Arcturi cadentis
Impetus aut orientis Haedi,
Non verberatae grandine vineae
Fundusque mendax, arbore nunc aquas
Culpante nunc torrentia agros
Sidera nune hiemes iniquas.
Contracta pisces aequora sentiunt
Jactis in altum molibus ; hue freqnens
Caementa demittit redemptor
Cum famulis dominusque terrae

## Fastidiosus. Sed Timor et Minae <br> Scandunt eodem quo dominus, neque <br> Decedit aerata triremi et <br> Post equitem sedit atra Cura.

## Quodsi dolentem nec Phrygius lapis

 Nec purpurarum sidere clarior Delenit usus nec Falerna Vitis Achaemeniumque costum,Cur invidendis postibus et novo Sublime ritu moliar atrium? Cur valle permutem Sabina Divitias operosiores?
2. The date of Horace's birth is fixed by certain passages in his works. What events in his life are mentioned in the Third Book of his Odes? What merit does he claim as an author? (In answering these questions quote the Latin if you can).

Write a short sketch of Livy's life and work. State generally why his First Book is considered unhistorical?

## II.

1. Name the gender and give the nom. and gen. sing. (if used) of :tigres, ordinibus, vires, verbere, cupidine, vectigalia, Tempe, Rhodopen, mănibus, prece.
2. Write explanatory notes on the following :-
a. Fratres tendentes opaco Pelion imposuisse Olympo.
b. Aut Lacedaemonium Tarentum.
c. Concidit anguris

Argivi domus, ob lucrum Demersa exitio.
3. a. Account for the moods of "venissent," "negassent," " placuisse," (I. a). Explain suam vicem.
b. What peculiar construction is found in the extract from Horace?
c. Write in prose Latin: (Testa) moveri digna bono die, descende.
4. Scan the second stanza.
5. a. After what conjunctions is the perfect indicative used to represent an English pluperfect?
b. Express in other ways-Veientes pacem petitum oratores Romam mittunt.
c. When are the conjunctions ne, quo, quominus employed? Illustrate by examples.
6. Turn into oratio recta the remarks of Romulus in the first extract.
7. Translate into Latin :- When Pyrrhus, King of Epirus, was waging war on the Romans, his physician came by night into the camp of the Roman general Fabricius and promised to take off the King by poison, if a reward were given to him. Fabricius at once sent him to Pyrrhus, saying that it was shameful to fight an enemy with poison and not with arms. It is reported that the King therefore said, "The sun can be more easily turned aside from his course, than Fabricius from the path of honour."

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1879.
Wednesday, April 9.-3 to $5 \frac{1}{2}$ P. M.

## SECOND YEAR.

(Additional for Students seeking a First or Second Class.)
HORACE: Odes, Book IV.
Professor J. Johnson, M. A...................Examiner.

1. Translate Ode IV.,

Beginning: Qualem ministrum fulminis alitem.
Ending: In pueros animus Nerones.
2. Write at length in prose Latin the clause " quibus mos . . . distuli.
3. Translate Ode XIII.
4. Write explanatory notes on :
(a) Infelix avis, et Cecropiae domus Aeternum opprobium.

Amaraque
Curarum eluere efficax.
(c) Multa Dircaeum levat aura cycnum.
5. Decline : laribus, lyncas, Minos, compede.

Conjugate: concines, callet, condisce, paventis.
6. What parts of the body are expressed by plural forms only ?
7. Distinguish the use of $u b i$, quum, postquam, signifying "when;" dum, "while;" dum, "as long as;" dum, "until." When is priusquam always followed by the subjunctive?
8. Translate into Latin : Without waiting for the rest of his army, he set out;-he never met the other without calling him a scoundrel;the Romans assisted them without being asked;-we cannot settle the question, without first hearing the evidence.
9. Express a prohibition in several forms, and explain the use of each.

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.

Monday, APRIL 14.-9 A. M.

## SECONDYEAR.

MATHEMATICS :
Euclid, Book VI.-Conic Sections; The Parabola; Mensuration.
$\qquad$

1. Illustrate and criticise Euclid's definition of proportion.
2. In a right-angled triangle, if a perpendicular be drawn from the right angle to the opposite side, the triangles on each side of it are similar to the whole triange and to one another. State also important corollaries.

3 Equiangular parallelograms that have one angle of the one equal to one angle of the other, have the sides about these angles reciprocally proportional.

Does this property hold good in other cases besides when the angles are equal ?
4. Similar polygons having been divided into the same number of similar triangles, shew that the polygons are to one another in the duplicate ratio of their homologous sides. Give the most important corollary,
5. Shew how to make a rectilineal figure equal to one and similar to another given rectilineal figure.
6. Taking the axis of a parabola as the axis of X and the tangent at the vertex as the axis of Y , shew that $\mathrm{PN}^{2}=4 \mathrm{AS}$. AN.
7. Q is a point without a parabola from which are drawn tangents to it, QP and $\mathrm{QP}_{1}, \mathrm{~S}$ being the focus. Shew $\mathrm{QS}^{2}=\mathrm{SP} . \mathrm{SP}^{\prime}$.
8. If the two adjacent angles made by one line meeting another be bisected and another line cut the four lines thus drawn, it is cut harmonically.
9. The common tangent of two circles that touch externally is a mean proportional between their diameters.
10. If two sides of a triangle be cut proportionally and the other bisected, the lines drawn from the angles to the points of section pass through a point.
11. If a straight line bisect the exterior angle at the vertex of a triangle and meet the opposite side produced, the square of this line is equal to the difference of the rectangle of the sides and the rectangle of the segments of the base.
12. Having given the radius of the circle and the height of the segment, show how to find the area of the segment.
13. The interior dimensions of a cylindrical tank are, breadth 3 ft ., depth $4 \frac{1}{2} \mathrm{ft}$. Find its cubic contents.
14. A ship sailed due West 500 miles on the 50 th parallel of latitude. Find her difference of longitude ; (given that $\sin 40^{\circ}=6428$ ).

## DALHOUSIE

# SESSIONAL EXAMINATIONS, 1879. <br> Monday, April 14, 3 p. m. <br> SECOND YEAR. <br> Trigunometry and Algebra. <br> C. Macdonaly, M. A..................... Examiner. 

1. Find the trigonometrical functions of $60^{\circ}$ and $30^{\circ}$, and the general value of the angle whose secant $=2$.
2. The minute hand of a watch indicates the time to be a quarter past three o'clock. Find the circular measure of the angle thro' which the hour hand has travelled since noon.
3. Prove $\sin (\mathrm{A}+\mathrm{B}) \sin (\mathrm{A}-\mathrm{B})=\left(\sin ^{2} \mathrm{~A}-\sin ^{2} \mathrm{~B}=\frac{1}{2}(\cos 2 \mathrm{~B}-\cos 2 \mathrm{~A})\right.$
4. Assuming the formula for $\tan (A+B)$, find the formula for $\tan (\mathrm{A}+\mathrm{B}+\mathrm{C})$, and deduce the property that, if $\mathrm{A}, \mathrm{B}, \mathrm{C}$ are the angles of a triangle, the sum of the tangents $=$ their product.
5. Given one angle of a right-angled triangle, and the side adjacent to it; shew how to find the other parts, writing the logarithmic equations involved in the process.
6. Account for the arrangement of the Tabular Differences in the Common Logarithm Tables.
7. Prove that the common notation for a triangle being assumed, $a^{2}=b^{2}+c^{2}-2 b c \cos$ A. This formula is a fundamental one in Analytical Trigonometry.
8. Find the area and perimeter of a regular polygon of $n$ sides circumscribed above a circle of radius $r$.
9. A church steeple subtends an angle of $\alpha^{\circ}$ at a certain spot, and 100 ft . further off from it on the level the angle of elevation is $\beta^{\circ}$. Find the height of the steeple.
10. If $\alpha, \beta, \gamma$, are the distances from the angles $\mathrm{A}, \mathrm{B}, \mathrm{C}$ to the points of contact of the inscribed circle whose radius is $r$,

$$
\text { prove } r=\sqrt{\frac{\alpha \beta \gamma}{\alpha+\beta+\gamma}}
$$

11. In the expansion of $(a+x)^{n}, n$ being a whole number, shew that the co-efficients of terms equidistant from the extremes are equal, If $n$ be an even number, write the middle term.
12. Prove that to any base, $\log 1=0, \log 0=-\infty$ : and shew, with proof, how logarithms are used to shorten the process of involution or evolution in arithmetic.
13. Reduce 1878 in the denary scale to the senary scale, and square the $\frac{1}{6}$ th part of it in the same scale.
14. Transform a perpetuity of $\$ \mathrm{~A}$ annual value to an annuity terminating after $n$ years.
15. A cent is tossed five time. Shew that it is equally likely to come down 3 heads and 2 tails, or 2 heads and 3 tails, and that either of these results is more probable than any other.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1879.<br>Friday, April 18.-9 a. ${ }^{\bullet}$.

## SECOND YEAR.

MATHEMATICS-EXTRA.
$\qquad$

1. If a solid angle be constituted by any number of plane angles, the sum of these is less than four right angles.
2. The circle described on any focal chord of a parabola as diameter touches the directrix.
3. PN is the ordinate to the diameter, AB , of a circle. From A and B draw two chords, $\mathrm{AC}, \mathrm{BD}$, intersecting PN in the same point. Prove that the straight lines $C D$ cuts $A B$ produced in a fixed point.
4. Prove that $\left(1+\frac{1}{x}\right)^{x}=\varepsilon$, when $x$ is infinite.
5. Shew how the transition is made from Napierian to common logarithms, specifying the requisite calculations. Prove also

$$
\log _{\mathrm{e}} 2=\frac{1}{1.2}+\frac{1}{3.4}+\frac{1}{5.6}+\& c
$$

6. A and B are two persons, aged $m$ and $n$ years. Find the present value of a sum of noney payable at the end of $i$ years, if both or either shall be alive.
7. Prove $\tan ^{11} \frac{1}{3}+\tan ^{1} \frac{1}{7}+\tan ^{-1} \frac{1}{5}+\tan ^{-1} \frac{1}{8}=\frac{\pi}{4}$.
8. $l, l^{\prime \prime}, l^{\prime \prime}$ are the lines drawn from the angles $A, B, C$, of a triangle to the centre of the inscribed circle. Prove $\frac{l^{2}}{b c}+\frac{l_{1}^{2}}{a c}+\frac{l_{11}^{2}}{a b}=1$.
9. $\Delta$ flag staff $a \mathrm{ft}$. high stands on the top of a monument $b \mathrm{ft}$. high. At what point in the horizontal plane passing thro' the base of the monnment must the observer place himself so that both objects may subtend equal angles. $\quad$ (Height of eye $=h$. )
10. A bag contains 5 balls, of which it is only known that they are either black or white balls. After three white balls have been drawn, what is the probability that there was any black ball in the bag?

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

# SESSIONAL EXAMINATIONS, 1879. 

Thursdax, April $10 .-9$ A. M.

## LOGIC AND PSYCHOLOGY.

Professor William Lyall, Li. D............Examiner.

1. What different views have been taken of Mind and its phenomena? How may the view taken in the class be vindicated?
2. Distinguish between Resemblance and Analogy, as laws of Mind. How may the different Analogies be classified? Give an example of each kind.
3. What do we mean by the "Practical Processes?" How do Generalization and Reasoning stand related to each other? What part in Generalization is inductive, and what part deductive? Is there such a thing as inductive Reasoning? What may have led to this abuse of language?
4. What view may be taken of Memory? Point out the practical advantages of this view. How may the laws of Association be regarded, and to what single prlnciple may they be reduced?
5. What is the peculiarity of Imagination? Give an illustration or illustrations.
6. Point out the relation of Logic and Psychology, and what advantage accrues from viewing them together?
7. How is Logic divided? How do some of these divisions not properly come under the subject of our course?
8. Give some account of Concepts and their formation. What are the Predicables of Aristotle? What are the ten Categories? Distinguish between Concepts and Judgments, and between a Judgment and a Proposition.
9. What are the different modes of Conversion of Propositions? Give examples, by symbols or otherwise.
10. Show how by the quantification of the Predicate all Propositions may be converted simply. Do we not virtually quantify the Predicate in every case of conversion? So that the quantification of the Predicate, being a strictly logical process, is really done, apart from any doctrine of quantification?
11. Give the maxim of the Simple Categorical Syllogism, in the Extensive quantity-also in the Intensive. Is Reasoning, however, properly a matter of quantity? How does all true reasoning take the form of the Extensive Syllogism, though not a matter of quantity?
12. Explain the Moods and Figures of the Syllogism. What are the uses of the 2nd and 3rd figures respectively? Show how the 3rd figure is the generalizing process or argument.
13. Give the rules of the Simple Categorical Syllogism, with a scheme of the fallacies, according as they are a violation of these rules, or consist in the matter of the Syllogism-Fallacies "in dictione" and "extra dictionem."
14. What is the Doctrine of Method? How may it be shown to arise out of Logic, rather than form a part of Logic proper? Distinguish between the Analytic and Synthetic Methods. Give the rules of Definition and Division, with examples.
15. How are Probations divided in respect of their matter, 'their form, and their degree of cogeny? Give the rules of Probation, which are also the rules of Syllogism, but more applicable in the case of extended Argument.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.<br>SECOND YEAR OF ARTS COURSE.<br>JUNIOR CHEMISTRY.<br>Professor Lawson ......................................eminer.<br>(Equations to be given where possible.)

1. Give a concise account of the History of Oxygen, and the views entertained regarding it, from the time of its original discovery to that of its liquefaction. (What was meant by Phlogiston?) Point out the principal chemical characters of Oxygen. Describe the process by which the gas is usually prepared, and explain briefly what is meant by the terms
(a) oxide, (b) anhydride, (c) hydrate, (d) acid, (e) salt.
2. Instance one or more experiments to demonstrate the composition of water, with respect to the relative volumes of its constituents. What is the volume of water in the gaseous state as compared with the volumes of its constituents? Explain law of molecular volumes.
3. Compare the Halogen Elements, with respect to (a) physical characters, (b) chemical characters, (c) atomic weights, $(d)$ specific gravities, (e) solubility and stability of their compounds.
4. Illustrate the formation of compounds by the union of elements in definite weights and volumes, and explain what is meant by Atomicity.
5. Give an account of the two Oxides of Carbon. What are their principal characters and properties, physical and chemical ?
6. Caustic Potash, preparation and purification.
7. Sodium, (metal), how obtained.
8. Methods of determining the Members of the First Group of Metallic Oxide Bases.
9. Explain composition of precipitate formed when Platinic Chloride is added to a solution of an Ammonia Salt.
10. Modes of occurrence in nature of the alkaline Earth Metals.
11. Preparation of Anhydrous Magnesium Chloride.
12. Method of testing for bases of Salts of the Alkaline Earth Metals.
13. Give an account of the two basic Oxides of Tron. Mention some of the more common Salts which they form, and explain the way in which soluble Iron compounds are formed in the water of streams and in the soil, and why they are subsequently precipitated or changed into insoluble compounds.
14. Classify the metals according to the action of Nitric Acid upon them.
15. Explain the chemical constitution of one or two of the more important Mineral Silicates, and the changes in compositiou which they may undergo, so as to illustrate the formation of compound Silicates by the substitution or replacement of metallic bases for one another.
16. Explain why Gold occurs in nature in the metallic state, and not in combination.
17. Give a brief statement of the theories of constitution of Salts.
18. Give an acconnt of the principal chemical re-actions that take place in the process of reducing an iron ore in the blast furnace.

1!. Explain the system of grouping of metallic bases for testing, mentioning the principal facts or circumstances upon which it is founded.
20. Enumerate the forms in which Copper occurs in nature, and explain how the ore is reduced.

# DALHOUSIE 

# SESSIONAL EXAMINATIONS, 1879. DEPARTMENT OF SCIENCE. 

Friday, April 18.-9 A. m. то 1 p. M.

SECOND YMAR.

GERMAN.
Professor Liechti. .............................Examiner.

## Translate: I. Goethe's "Hermann uud Dorothea."

- Da versetzte der Wirth, mit männlichen klugen Gedanken : Wie begrüsst ich so oft mit Staunen die Fluthen des Rheinstroms, Wenn ich, reisend nach meinem Geschäft, ihm wieder mich nahte ! Immer schien er mir gross, und erhob niir Sinn und Gemüthe ; Aber ich konnte nicht denken, dass bald sein liebliches Ufer Sollte werden ein Wall, um abzuwehren den Franken, Und sain verbreitetes Bett ein allverhindernder Graben. Seht, so schützt die Natur, so schützen die wackeren Deutschen, Und so schützt uns der Herr ; wer wollte thöricht verzagen? Müde schon sind die Streiter, und alles deutet auf Frieden. Möge doch auch, wenn das Fest, das lang erwünschte, gefeiert Wird, in unserer Kirche, die Glocke dann tönt zu der Orgel, Und die Trompete schmettert, das hohe Te Deum beglertendMöge mein Hermann doch auch an diesem Tage, Herr Pfarrer, Mit der Braut, entschlossen, vor euch am Altare sich stellen, Und das glückliche Fest, in allen den Landen begangen,
Auch mir künftig erscheinen der häuslichen Freuden ein Jahrestag ! Aber ungern seh' ich den Jüngling, der immer so thätig Mir in dem Hause sich regt, nach aussen langsam und schüchtern. Wenig findet er Lust sich unter den Leuten zu zeigen;
Ja, er vermeidet sogar der jungen Mädchen Gesellschaft, Und den fröhlichen Tanz, den alle Jugend begehret.
Also sprach er und horchte. Man hörte der stampfenden Pferde
Fernes Getöse sich nahn, man hörte den rollenden Wagen,
Der mit gewaltiger Eile nun donnert' unter dem Thorweg.
II. Friedrich Jacobs': "Gastfreundschaft." - Das war nun wieder recht nach homerischer Weise, wo Menelaos zu dem scheidenden Telemachos sagt: "Ich werde dich nicht länger hier halten, da dich uach der Rückkehr verlangt; denn gleich unrecht ist es, den Fremden wegzutreiben und ihn aufzuhalten, wenn er gehen will."

Damit nun aber auch das Ende homerisch wäre, tauschten wir Gastgeschenke aus; er verehrte mir das Abbild seines Hauses und der Gegend, die ein deutscher Maler bei ihm aufgenommen und in Chur hatte in Kupfer stechen lassen, und ich ihm dagegen ein Gebetbuch in romanischer Sprache, das ich in Como gekauft und woran mein frommer Wirth W ohlgefallen gezeigt hatte.

## III. Schiller's "Taucher."

> Und sich! aus dem finster fluthenden Schooss
> Da hebt sich's schwanenweiss,
> Und ein Arm und ein glänzender Nacken wird bloss,
> Und es rudert mit Kraft und mit emsigem Fleiss,
> Und er ist's, und hoch in seiner Linken
> Schwingt er den Becher mit freudigem Winken.

Und da hing ich, und war's' mir mit Grausen bewusst,
Von der menschlichen Hülfe so weit,
Unter Larven die einzige, fühlende Brust. Allein in der grässlichen Einsmkeit,
Tief unter dem Schall der menschlichen Rede,
Bei den Ungeheuern der traurigen Oede.

Und schaudernd dacht ich's, da kroch's heran,
Regte hundert Gelenke zugleich,
Will schnappen nach mir; in des Schreckens Wahn
Lass ich los der Koralle umklammerten Zweig,
Gleich fasst mich der Strudel mit rasendem Toben ;
Doch es war mir zum Heil, er riss mich nach oben.

Translate into German: "Human life is a garden. Good works are as beautiful flowers and fruitful trees; but the gardener who plants and cultivates them, is the good purpose of man. Be wise, my son!" The thoughts, words and works of man resemble a brook, running through life. The source is the human mind; all that proceeds from a noble mind, is good and beautiful. Who is the richest man? He who has the least wants. One must work first, then rest; first sow, then reap; first think, then speak. He did not come himself, but he sent his brother. That which is fine is not always good. I have brought the poems of which you have spoken to me. There are many kinds of books, good and bad ones; we ought to read the best. I could not study because I fell ill.

Questions: 1) Parse the words: nicht, halten, verlangt, wegzutreiben, will, aus, woran (II). Explain by rule the position of these words. Stechen lassen: Why two infinitives?
2) Scan the 4 th and 6 th lines in the first stanza (III), and mention why Schiller makes use of this sudden change in the metrum. Criticise the 3rd stanza, and explain the purport of es in kroch's.
3) Distinguish between: Ein schön singender Vogel and ein schöner singender Vogel; ein reich begabter Mann and ein reicher begabter Mann; geistig and geistlich; kindliches Wesen and kindisches Wesen; fleissig, fleischig and fleischlich.
4) Werden. Illustrate the use of this word in German, and show that sein may be the equivalent of the verb to be in the English Passive voice. Turn into German: What has become of his splendid library? It has been sold. Can you explain the difference in the form of the two past parts.
5) Write the word, equivalent to as or since, denoting a reason, and explain the difference in the construction of the German sentence e $g$. : As I intend going to Germany, I study German. What are the corresponding English forms of als in the following sentences: Als er seine Arbeit geendigt hatte. Dieser Mann ist nicht so gelehrt als jener. Nichts als Erfahrung. Er handelte als Freund.
6) How are participal clauses changed into accessory clauses? Exs. : Having said these words, he was led out of the room. Being honest he will find work. On my entering the room he rose.
7) Da ich finde, dass es mir wird sein unmöglich, zu halten mein Versprechen, so ich nehme zurück mein Wort. Correct this sentence, and give rules for the position of the transposed parts of speech.
8) Whence did Goethe derive the material for his Epic poem "Hermann and Dorothea," and what suggested to him the idea of writing an Epic Idyll. What is the essential quality of the Epic as set forth in the poem, and in what respect is the creative power of the poet put to the test.
9) Give the dates of the two classical periods of German Literature, and describe the characteristic features of each. Mention the most ancient documents of German Poetry, and state their metrical form. Can you write down some expressions that have preserved that form, and are frequently used in German at the present time.
10. To what period belongs the Nibelungenlied; when, and by whom, was it composed? Give a definition of the term Nibelungen, and show how beautifully the ancient Germans interpreted the idea expressed by it. Mention the leading events of the 3rd and 4th Periods.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

# SESSIONAL EXAMINATIONS, 1879. 

Wednesdax, April 9.-9 A. m. to 1 p. M.<br>THIRDAND FOURTEE YEARS.

LATIN.<br>HORACE: Selected Satires.<br>tacitus: Germania and Agricola.

Professor J. Johnson, M. A.,..................Examiner.

1. Translate:

Nasidienus ad haec: Tibi di, quaecunque preceris, Commoda dent: ita vir bonus es convivaque comis, Et soleas poscit. Tum in lecto quoque videres Stridere secreta divisos aure susurros. Nullos his mallem ludos spectasse ; sed illa Redde, age, quae deinceps risisti. Vibidius dum Quaerit de pueris, num sit quoque fracta lagena, Quod sibi poscenti non dentur pocula, dumque
Ridetur fictis rerum, Balatrone secundo, Nasidiene, redis mutatae frontis, ut arte Emendaturus fortunam; deinde secuti Mazonomo pueri magno discerpta ferentes Membra gruis, sparsi sale, multo non sine farre, Pinguibus et ficis pastum jecur anseris albae, Et leporum avulsos, ut multo suavius, armos, Quam si cum lumbis quis edit; tum pectore adusto Vidimus et merulas poni et sine clune palumbes, Suaves res, si non causas narraret earum et Naturas dominus, quem nos sic fugimus ulti,
Ut nihil omnino gustaremus, velut illis
Canidia affiasset pejor serpentibus Afris.
2. Mark the gender and write nom. and gen. sing. of:-gruis, sale, farre, ficis, jecur, leporum.
3. a. Quod sibi poscenti non dentur pocula, dumque Ridetur fictis rerum.
b. Hinc omnis pendet Lucilius hosce secutus, Mutatis tantum pedibus numerisque, facetus, Emunctae naris, durus componere versus :-
Write such notes as seem necessary on the italicised words.
4. Translate :

Quinto expeditionum anno nave prima transgressus ignotas ad id tempus gentes crebris simul ac prosperis proliis domuit, jamque partem Britanniae, quae Hiberniam aspicit, copiis instruxit, in spem magis quam ob formidinem, si quidem Hibernia medio inter Brittanniam atque Hispaniam sita et Gallico quoque mari opportuna valentissimam imperii partem magnis invicem usibus miscuerit. Spatium ejus, si Brittaniae comparetur, angustius, nostri maris insulas superat. Solum ceelumque et ingenia cultusque hominum haud multum a Brittania differunt; melius aditus portusque per commercia et negotiatores cogniti.
5. Write notes on the words in italics.

## 6. Translate:

Et aliis Germanorum populis, nsurpatum raro et privata cujusque audentia apud Chattos in consensum vertit, ut primum adoleverint, crinem barbamque submittere, nec nisi hoste caeso exuere votivump obligatumque virtuti oris habitum. Super sanguinem et spolia revelant frontem, seque demum pretia nascendi retulisse dignosque patria ac parentibus ferunt. Ignavis et imbelibus manet squalor. Fortissmus quisque ferreum insuper annulum (ignominiosum id geuti) velut vinculum gestat, donee se caede hostis absolvat. Plurimis Chattorum hic placet habitus, jamque canent insignes et hostibus simul suisque monstrati.
7. How are the dates of the composition of the Germania and Agricola fixed? What other works did Tacitus write? What are the supposed dates of his birth and death? (Agricola) excessit decimo Kalendas Septembres Collega Priscoque consulibus: Express according to our method. When was Agricola born?

## II,

1. Ceterum Germaniae vocabulum recens et nuper additum :-Whom did the Germans consider the founders of their race? How did they come by their name according to Tacitus? What is the supposed derivation of it?
2. Languages may be distributed into three classes. Explain the differences. Name one language in each class. What is meant by a family of languages? European languages, with a few exceptions, belong to one family.
3. How is the passive voice in Latin and Greek supposed to have been. formed? Explain the formation of the Latin perfect active.
4. What cases seem to have been lost in Latin and Greek? What traces of them are found?
5. Translate into Latin :

When Ptolemy Euergetes was setting out on his expedition into Syria, his queen Berenice, who tenderly loved him, fearing the danger to which he might be exposed, made a vow to consecrate her hair, in case he should return home safe. The prince returned not only safe but crowned with victory. Whereupon Berenice, to discharge her vow, immediately cut off her hair and dedicated it to the gods. But as it was lost by the carelessness of the priests, Ptolemy was highly offended, and threatened to punish them for their negligence. Upon this Conon of Samos gave out, in order to appease the king's anger, that the queen's hair had been taken to heaven and changed into a constellation.

## III.

## (For Students seeking a First or Second Class.)

1. Translate the following passage from a work not appointed to be read:-
Magnum propiusque noscendum (sc. avunculo meo), ut eruditissimo viro, visum. Jubet Liburnicam aptrari: mihi, si venire una vellem, facit copiam : respondi studere me malle; et forte ipse quod scriberem dederat. Egrediebatur domo : accipit codicillos Rectinæ (Tasci) imminenti periculo exterrita (nam villa ejus subjacebat, nec ulla nisi navibus fuga) : ut se tanto discrimini eriperet, orabat. Vertit ille consilium, et, quod studioso animo inchoaverat, obit maximo. Deducit quadriremes, ascendit ipse, non Rectinæ modo sed multis (erat enim frequens amœenitas oræ) laturus auxilinm. Properat illuc unde alii fugiunt, recta gubernacula in periculum tenet, adeo solutus metu ut omnes illius mali motus, omnes figuras, ut deprehenderat oculis, dictatret enotaretque. Pliny.
2. What account does Tacitus give of the origin of the Britons? How does he explain the short night in the north of Britain? What does he say about the German women? (Quote his words, when you can).

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

Friday, April 18.-9 A. m. to 1 p. y.

THIRD YEAR.

JUNIOR FRENCH.
James Liechti, Esq...............................Examiner.

> Translate: I. Boileau: "Les Embarras de Paris."
> Tout conspire à la fois à troubler mon repos, Etje me plains ci du moindre de mes maux: Car a peine les coqs, commencant leur ramage, Auront de cris aigus frappé le voisinage, Qu'un affreux serrurier, laborieux Vulcain, Qu'éveillera bientot l'ardente soif du gain, Avec un fer maudit, quà grand bruit il apprête, De cent coups de marteau me va fendre la tete.
II. Le Sage: "Gil Blas."-Je ne fus pas le seul qui y prit garde La plupart des anditeurs, quand il la prononça, comme s'ils eussent été aussi gagés pour l'examiner, se disaient tout bas les uns aux autres: "Voilà un sermon qui sent l'apoplexie." "Allons, monsieur l'arbitre des homélies," me dis-je alors à moi-même, " préparez-vous à faire votre office. Vous voyez que monseigneur tombe; vous devez l'en avertir, nonseulement comme dépositaire de ses pensées, mais encore de peur qne quelqu'un de ses amis ne soit assez franc pour vous prévenir. En ce cas-là, vous savez ce qu'il en arriverait; vous seriez biffé de son testament."Après ces réflexions, j’'en faisais d' autres toutes contraires. L'avertissement dont il s'agissait me paraissait délicat à donner: je jugeais qu'un auteur entêté de ses ouvrages pourrait le recevoir mal; mais rejetant cette pensée, je me représentais qu'il était impossible qu'il le prît en mauvaise part, après l'avoir exigé de moi d'une maniēre si pressante. Ajoutons à cela. que je comptais bien lui parler avec adresse, et lui faire avaler la pilule tout doucement. Enfin, trouvant que je risquais davantage â garder le silence qu'à le rompre, je me déterminai à parler.
III. Scribe: "Le Diplomate."-Chavigni:-Chacun son avis. N'entendant rien aux discussions de la politique, j'ai repris l'état militaire. . . Pour cela il ne faut ni détours, ni finesse . . . on a toujours assez d'esprit pour donner ou recevoir un conp d'épée.
J'aime la guerre, et morbleu, je m'en flatte, Sur le papier, toujours prêts à combattre

Dans la balance du combat
La plume d'un bon diplomate
A moins de poids que le fer du soldat.

Et toujours prêts à vous exterminer, Vous raisonnez, mais sans jamais vous battre,
Nous nous battons sans jamais raissonner.

Le Comte:-C'est un mérite, mais, par malheur il n'y en a pas qui soit plus en opposition avec le genre de talent que je voudrais trouser dans mon gendre. . . Pour un homme sensé, est-il rien de plus absurde que la guerre? n'est-elle pas, de sa nature, l'ennemie née de la diplomatie? Quelle objection voulez-vous faire à cent mille baïonnettes? et quel argument opposer à un coup de cannon ? C'est l'abus, c'est le triomphe de la force; où règne le sabre, la pensée est muette; il n'y a plus de civilisation, e'est la Turquie, nous sommes á Alger.

Translate into French: A. Time is precious; it passes rapidly; if wo lose any we shall repent it.-The French language is spoken in the whole of Europe.-What do you complain of, and why complain of it?-With-
out answering his questions, he left the room.-The better a man is, the less he believes others bad.-Pray, introduce (présenter $\grave{a}$ ) him to me, and I shall introduce you to them (m.) - What is useless is always dear.-The sciences to the study of which the French devote themselves most are: Mathematics and Physics. - What is a country without good laws? To which of the inventions of the Middle Ages (s.) do you give the preference?
B. Charles Lamb: "Tales from Shakspeare."-Shylock, the Jew, lived at Venice : he was an usurer, who had amassed an immense fortune by lending money at great interest to Christian merchants. Shylock, being a hard-hearted man, exacted the payment of the money he lent with such severity, that he was much disliked by all good men, and particularly by Anthonio, a young merchant of Venice, and Shylock as much hated Anthonio, because he used to lend money to people in distress, and would never take any interest.

Grammatical Questions: 1). Explain the origin and use of the circumflex accent. Show reasons why it is found on maîre, même, île, honnête, d $\hat{u}$, fâcher, sûr, $\hat{a} m e$. Name the persons, requiring this accent in every verb. When is it used in verbs ending in aitre and oitre?
2). Yprit garde; l'en avertir; ne soit asses franc. (II). Account for the words $y$, en, ne and soit in those expressions. Illustrate the further use of $y$ and er. Write the femin. and its except. of franc.
3). Parse the following verbs: prononça; eussent; disaient; sent; voyez; jugeais; pourrait ; pitt. (II), and write the infinitive, the pres. and past parts. and the 3rd pers. of the imperf. snbjunctive. State peculiarity in verbs prononça and jugeais.
4). Distinguish between : Bien de belles actions and de bien belles actions. Mention the fundamental difference in the Syntax of English and French possessive adjectives, and translate : Her Majesty the Queen of England. His Majesty the Emperor of Germany. His daughter and her son. Country and nation are flourishing, (florissant).
5). Numeral adjectives are uninflected. Write short sentences on all the exceptions, giving the rule in each case. Translate : One thousand miles. 1879, (in letters).
6). How do you construct a negative sentence, taking for examples: I have not read it. I will not read it. Show by examples that the negative word pas may be suppressed. Translate: Have you spoken to him about it? Not yet.
7). Illustrate the various forms it is may assume in French, according as it expresses temperature, distance, time past, hour of the clock, and when used as a reply to a preceding remark.
8). Certain adverbs are placed after the Part. and the Infinit. Mention them, and write two examples. In what case and how does the adv. ainsi affect the construction? Illustrate.
9). Plus de l'honneur. C'est vous qui l'a fait. Sa amitié est grande. Je vous lui recommande. Dans une demie-heure. Que beancoup de gens ! Qui qu'il est. What grammatical rules have been disregarded in those sentences?
10). Whether is rendered differently in the following sentences. Explain: I desire to know whether you will come. Whether I read or write.
11). What difference do you make between: parler haut and parler hautement ; dans une semaine and en une semaine; l'année dernière and la denière année ; à terre and par terre,
12). The verbal form in ant is variable or invariable. Explain. Establish the difference in the sentences: Ce sont des êtres vivants comme nous and Ce sont des êtres vivant comme nous. Write examples showing that the Past Part. does not agree in certain cases. Illustrate the agreement of the past $p$. used without an aux. Translate : These poor persons have shown themselves grateful for (reconnaissant de) the favors they have received.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.

Thursday, April $10 .-9 \mathrm{~A} . \mathrm{m}$.


#### Abstract

METAPEYSICS AND RESTEETICS.


Professor William Lyale, Ll. D........... Examiner.

1. What are the two questions that Metaphysics chiefly concern itself with ? Which preceded the other, and when did the later question emerge in speculation?
2. Distinguish between the Ionic and Eleatic schools of Philosophy. Show how these schools survive in modern speculation.
3. On what did the Sophists, and the Sceptics, of a later period, base their arguments? Give the origin of these names respectively, and their appropriation at the different periods.
4. How did Socrates deal with Scepticism, whether of the earlier or later period, and into what channel did he divert the current of specnlation?
5. Did Plato recall Philosophy into its older channel, and what is the peculiar service that he rendered to Philosophy in all future time?
6. How did Aristotle differ from Plato, and is there really that radical difference or antagonism between their systems which is said to exist ?
7. Give the circumstances in the rise of the New Academy, and characterize its philosophy,
8. What is the distinguishing characteristic of Neoplatonism, and how does it introduce an element foreign to, or at variance with, speculative thought? How especially did Plotinus transcend the boundaries of speculation, and appeal to an altogether abnormal condition of mind, as the standard of judgment?
9. What special question occupied the schools of the Middle Ages, and down to the period of the Reformation? What was its fate during these ages ?-what different phases did it assume?
10. What new direction did Philosophy take under Descartes, and did it continue to hold ever after? Is Philosophy, however, returning to its more primitive and ontological basis or character? What are the prominent questions, accordingly, discussed at the present time ?
11. How have the emotions been classified, and on what principle does it appear they ought to be classified? What accordingly, is the classification we have adopted, and with what special object or purpose? Give some particular account of the Elevated States.
12. Under which of these states does the Wsthetic Emotion come ? Distinguish the theories of Beauty and Sublimity? What are the physical conditions of the Beautiful and Sublime according to Burke? Show how these accord with Alison's theory of Associated conceptions of emotion as the true element of the Beautiful and Sublime respectively?
13. How may the Desires be classified according to the Emotions? To which class of the Emotions is the Desire of worth or value to be referred? What practical purpose may this riew serve in life and conduct?
14. Enumerate the different Active Powers. What is the peculiarity of Conscience? Give Butler's view of Conscience, and wherein it is defective.
15. How are we to regard the Will? Can we account for the first original volition to Evil, and what is our practical duty in view of this insoluble mystery?

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

Thursday, April 10.-9 A. m.<br>ETHICS.<br>Very Rev. Principal Ross, D. D...........Examiner.

1. Point out the relation of Psychology to Ethics.
2. In what respects is Moral Philosophy a science of observation, and in what respects is it a Speculative Science?
3. What elements does consciousness reveal to us in every exercise of the Moral Faculty ?
4. What constitutes rightness or wrongness in human actions ?
5. Mention the several mental processes which precede action.
6. What is a principle of action? Classify these principles.
7. Explain the relation of the Will, 1st to the Intellect, and 2ndly to the Feelings.
8. What benefits accrued to Moral Science from the publication of Hobbes' theory?
9. What constitutes the rightness of an act, according to the Utilitarian System?
10. What is Duty? How can it be determined independently of Supernatural Revelation? What defects necessarily inhere in this method?
11. In what sense may it be said that man owes anything to himself ? Classify the duties which men owe to themselves.
12. What relation to Duty has Belief in the Existence of a Supreme Being? Is man responsible for his Belief? Assign reasons.
13. What is Pantheism? Point out the revolting inferences fairly deducible from this system.

POLITICAL ECONOMY.

1. What is Political Economy? How does it differ from Politics?
2. Define the terms Wealth, Production, Capital and Value.
3. Exchange is Production. Credit is Capital.
4. What are the requisites of Production?
5. From what source is Capital derived? How is it kept up ?
6. What advantages and disadvantages are connected with minute stbdivision of labor ?
7. Point out the advantages in manufactures in producing on a large scale. Compare the advantages and disadvantages of large and small farming.
8. What are the conditions of value? By which of these conditions is it generally determined? Illustrate by examples.
9. There is no standard of Value.
10. Among what laborers must the price of a pound of tea be distributed?
11. What arrangement between Capitalists and Laborers would probably put an end to strikes?
12. State the arguments for and against direct taxation.

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879. <br> DEPARTMENT OF SCIENCE.

Monday, April 7.-9 a. m.

ZOOLOGY.

Professor Lawson,.................................Examiner.

1. Point out the more important differences between Plants and Animals, structural, functional, and chemical.
2. What is the use of the Gills, and in what group or groups of Vertebrate Animals do they occur? Decribe the proeess of aquatic respiration.
3. Give an outline of the Classification of Fishes, with examples.
4. Describe the Dental Apparatus of the Ophidia.
5. Give a brief comparative statement of the more important facts relating to the Embryology of the five groups of Vertebrata.
6. Characters and classification of the Protozoa.

## HALIFAX.

SESSIONAL EXAMINATIONS, APRIL, 1879.
DEPARTMENT OF SCIENCE.

## CHEMICAL LABORATORY PRACTICE.

H. A. Bayne, M. A., Ph. D..................... Examiner.

1. What are the products of the reaction of Zinc on dilute Sulphurie Acid? What impurities may be present in each of the principal products, and how would you obtain these products pure?
2. Indicate experiments by which you might demonstrate that the terms, "Supporter of Combustion" and "Combustible" are merely relative and not absolute properties of bodies.
3. Define and illustrate by actual examples the chemical terms distillation, sublimation, neutralisation, acid, base, salt.
4. Describe the various modes of collecting gases and state which mode you would apply with the principal gases whose properties yon have studied.
5. Give an ontline of the preparation of the following Nitrogen Compounds, and state briefly their properties, chemical and physical:Nitric Acid, Nitric Monoxide, Nitric Dioxide, Ammonia.
6. Describe the processes of bleaching by Chlorine and Sulpharous Acid. What are the chemical theories in explanation of the same?
7. What is the chemical difference between a luminous and a nonluminous flame? Describe experiments by which a non-luminous flame may be rendered luminous and vice versa.
8. Indicate by a diagram the structure of the Bunsen flame. State the properties, chemical and physical, of each portion of the flame. How are these taken advantage of in the "flame reactions?"
9. Describe the behaviour of the following gases toward combustible bodies:- $\mathrm{O}, \mathrm{H}, \mathrm{N}, \mathrm{Cl}, \mathrm{N}_{2} \mathrm{O}, \mathrm{N}_{2} \mathrm{O}_{2}, \mathrm{NH}_{3}, \mathrm{CO}, \mathrm{CO}_{2}$.
10. Describe minutely the fitting up of apparatus for the preparation of the following: $\mathrm{O}, \mathrm{Cl} . \mathrm{HI}, \mathrm{CO}, \mathrm{H}_{2} \mathrm{~S}, \mathrm{SO}_{2}{ }^{-}$.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.
DEPARTMENT OF ARTS.
Friday, Afril 18.-9 A. m. to 1 p. m.

## FOURTH YEAR.

## SENIOR FRENCH.

Professor Liechti.................................. Examiner.

## Traduisez: I. Corneille: Scènes des Horaces.

Horace: Si vous n'êtes Romain, soyez digne de l'être, Et si vous m'égalez, faites-le mieux paraître. La solide vertu dont je fais vanité N'admet point de faiblesse avec sa fermeté, Et c'est mal de l'honnenr entrer dans la carrière, Que dès le premier pas regarder en arrière. Notre malheur est grand, il est au plus haut point, Je l'envisage entier; mais je n'en frémis point, Contre qui que ce soit que mon pays m'emploie, J'accepte aveuglément cette gloire avec joie: Celle de recevoir de tels commandements Doit étouffer en nous tous autres sentiments. Qui, près de le servir, considère autre chose, A faire ce qu’il doit lâchement se dispose ; Ce droit saint et sacré rompt tout autre lien. Rome a choisi moa bras, je n'examine rien, Avec une allégresse aussi pleine et sincère Que j'épousai la soeur, je combattrai le frère ; Et, pour trancher enfin ces discours superflus, Albe zous a nommé, je ne vous connais plus.
II. Molière : "L'Avare," Acte II., Scène V.

La Flèche.-Se suis votre valet ; et tu ne connais pas encore le seigneur Harpagon, le seigneur Harpagon est, de tons les humains, l'humain le moins humain, le mortel de tous les mortels le plus dur et le plus serré. Il n'est point de service qui pousse sa reconnaissance jusqu'a lui faire ouvrir les mains. De la louange, de l'estime de la bienveillance en paroles, et de l'amitié, tant qu'il vous plaira, mais de l'argent, point d'affaires. Il n'est rien de plus sec et de plus aride que ses bonnes grâces et ses caresses ; et donner est un mot pour qui il a tant d'aversion, qu'il ne dit jamais, je vous donne, mais je vous prête le bonjour.

Frosine,-Mou Dien! je sais l'art de traire les hommes ; j’ai le secret da m'ouvrir leur tendresse, de chatoniller leurs coeurs, de trouver les endroits par où ils sont sensibles.

La Flèche.-Bagatelles ici. Je te défie d’attendrir, du côté de l'argent, l'homme dont il est question. Il est Turc là-dessus, mais d'une turquerie à désespérer tout le monde, et l'on pourrait crever, qu'il n'en branlerait pas. En un mot, il aime l'argent plus que réputation, qu'honneur et que vertu; et la vue d'un demandeur lui donne des convulsions : c'est le frapper par son endroit mortel; c'est lui percer le coeur; e'est lui arracher les entrailles, et si.... Mais il revient: je me retire.
III. Sainte-Beuve: Causeries du Lundi: Qu'est ce qu'un classiqne?

Un vrai classique, comme j'aimerais à l'entendre définir, c'est un auteur qui a enrichi l'esprit humain, qui en a réellement angmenté le trésor, qui lui a fait faire un pas de plus, qui a découvert quelque vérité morale non équivoque, ou ressaisi quelque passion éternelle dans ce coeur oū tout semblait connu et exploré ; qui a rendu sa pensée, son observation ou son invention, sous une forme n'importe laquelle, mais large et grande, fine et sensée, saine et belle en soi; qui a parlé à tous dans un style à lui et qui se trouve aussi celui de tout le monde, dans un style nouveau sans néologisme, nouveau et antique, aisément contemporain de tous les âges.

## Traduisez en Anglais : I. Sheridan's "School for Scandal."

Sir Peter:-Ay, there's another precious circumstance-a charming set of acquaintances you have made there.

Lady Teazle.-Nay, Sir Peter, they are all people of rank and fortune, and remarkably tenacious of reputation.

Sir Peter.-Yes, egad, they are tenacious of reputation with a vengeance, for they don't choose anybody should have a character but themselves. Such a crew! Ah! many a wretch has rid on a hurdle who has done less mischief than these utterers of forged tales, coiners of scandal, and clippers of reputation.
II. You have now got over the dry and difficult parts of learning; what remains requires much more time than trouble. You have lost time by your illness; you must regain now or never. I therefore most earnestly desire, for your own sake, that for these next six months, at least six hours every morning, uninterruptedly, may be inviolably sacred to your studies with Mr. -. I do not know whether he will require so much, but I know that $I$ do, and hope you will, and consequently prevail with him to give you that time.-Chesterfield.

Questions: 1) Expliquez l'emploi et l'accord de l'article dans les phrases suivts: He whom we love has no faults ; if we happen to hate him, he has no virtues. I shall not take pains for nothing. When ambition is not the finest of passions, it becomes the vilest. Those of our dramatic authors who wrote best are also those who gave most interest.
2) Il est de ces mortels favorisé des ciels qui sont tout par eux-même et rien par leurs aïeuls. On peut tout sacrifier a l'amitié exceptés l'honnête et le juste. Qu'est-ce qui est incorrect dans ces phrases ? Le partic. passé est variable et invariable; donnez-en la règle appuyée d'exs. et citez d'autres mots semblables.
3) Quel est l'accord du mot même, selon qu'il est adjectif ou adverbe ; donnez des exs.
4) Indiquez la différence entre: De tonte autre manière et d'une tout autre manière; ces vins sont tout purs et ces vins sont tous purs. Traduisez: At the death of Caesar all Rome was consternated. However learned these ladies are, they are ignorant of a great many things. The whole country took up arms.
5) Ecrivez deux phrases interrogatives où figurent quelque chose et rien, dans le sens de anything, et indiquez la nuance entre les deux phrases.
6) Riches, honors, friends, relations, everything becomes useless after death. Lafontaine was forgotten as well as Corneille, neither of them was a courtier. Neither your friend nor mine will be appointed in place of the director who has just died. Not only all his riches and honors, but all his virtue is vanishing, (s'évanouir). Mentionnez les règles de l'accord du verbe dans ces phrases.
7) Il y a inversion du sujet dans certains cas. Ecrivez des exs. à l'appui de ce fait.
8) Traduisez et faites l'analyse des verbes: tu connais, je fais, il crut, il crût, il se tut, j'ouvre, il saura, il revient. Ecrivez l'infinitif et le part. passé de chacun.
9) Quand faites-vous suivre le verbe il semble de l'indicatif et quand mployez-vous le subjonctif. Je crains qu'il ne tombe de la neige. Pourquoi ne dans cette phrase, dans quel cas faut-il la supprimer après le verbe craindre.
10) La charité chrétienne nous commande d’aimer et de prêter assistance à notre prochain. Votre frère ètudie et s'adonne entierement à la chimie et aux sciences naturelles. Les Athéniens passaieñt leur temps ¿̀ écouter leurs orateurs, et aux jeux, aux courses et aux spectacles. Qu'y a-t-il a dire à l'égard du complément du verbe dans ces phrases.
11) L'accord de la forme verbale en ant est-il correct ou non dans la phrase: Tu foules une terre fumant tonjours du sang des malheureux mortels. Eerivez un antre ex.
12) A quels règles d’accord sont sujets les part. passés suivants: Never was so much beauty crowned. Les tableaux que j'ai faits peindre. The little confidence he had placed in my friendship. Les lettres que j'ai ou écrire. Elle s'est proposée de vous peindre.
13) Rendez compte des services qu'ont rendus Molière et Racine à la littérature française. En quoi ces deux écrivains se ressemblent-ils et quel est le trait caractéristique qui les sépare l'un de l'autre. Classifiez leurs ouvrages et mentionnez-en les chefs-d'oeuvre. Qu'est ce que l'Avare:
14) Qui est-ce qui a composé le discours sur l'histoire universelle. Pourquoi cet ourrage pent-il être appelé l'épopée des temps modernes. Faites la revue des autres ouvrages de cet anteur, et dites par quoi il s'est fait remarquer particulièrement.

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.<br>Tursday, April 15.-9 A. м. то 1 р. m<br>FOURTE YEAR.

## HISTORY.

Professor DeMill, M.A........................Examiner.

1. Give a brief account of the northern races of Europe, their conquests, and final settlements.
2. Enumerate the Eastern Roman Emperors of the Macedonian dynasty, and state the chief events of their respective reigns.
3. Narrate briefly the chief events of the reign of Louis XI. of France.
4. Give an outline of German history during the reign of the Emperor Maximilian I.
5. Write an outline of the reign of Pedro the Cruel.
6. A certain period in the history of the Papacy is called the "Babylonian Captivity." Explain its origin and termination.
7. Give an account of the Union of Calmar.
8. Write a brief historical account of (a) the Ghaznevides, and (b) the Seljukians.
9. State the chief epochs in the literary history of the leading countries of Europe, aud name the principal writers in each.
10. Show the condition of learning and science in the 13th, 14th, and 15 th centuries.

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879. <br> Tuesday, April $15,-3$ to 6 p . M. <br> FOURTH YEAR.

## EARLY ENGLISH HISTORY.

Professor DeMill, M. A......................Examiner.

1. Many important facts are to be gathered from Tacitus concerning the institutions of the ancient Germans.
2. The Saxons being a kindred people to the Franks, much light may be thrown on the institutions of the former by the study of those of the latter.
3. Give an account of the Scirgemot.
4. England presents the best example of the growth of purely Teutonic institutions.
5. Discuss the question of the origin of trial by jury.
6. The reign of Richard I . is marked by two important occasions when the royal power received a perceptible check.
7. Explain the functions of the County Courts during the reigu of Henry III.
8. Give the substance of the articles justifying the deposition of Edward II.
9. State generally the effects of the great plague on the condition of the agricultural classes in England.
10. What were the immediate results of the fall of the Duke of Gloucester and his party in the reign of Richard II ?

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.

Thursday, April 17. -9 a. m to 1 p. m.

## FOURTE YEAR.

## CONSTITUTIONAL HISTORY.

Professor $\mathrm{D}_{\mathrm{E}}$ Mill, M. A.......................Examiner.

1. Show the influence of the Star Chamber, under the Tudors, in enhancing the royal power.
2. Describe the character of Lord Burleigh's administration.
3. Under the Tudor princes, and especially Elizabeth, the House of Commons asserted and acquired many of those peculiar authorities and immunities which constitute what is called privilege of Parliament.
4. Show the result of the struggle between James I. and the Parliament.
5. Give the argụments in the case of John Hampden in the matter of the ship money.
6. "There was so much in the conduct and circumstances of both parties in 1642 to excite disapprobation and distrust, that a wise and good man could hardly unite cordially with either of them." Explain.
7. "In the year 1859 it is manifest that no idea could be more chimerical than that of a republican settlement in England." Explain.
8. Explain the secret treaty of 1670 and the difference between Charles and Louis as to the mode of its execution.
9. Narrate briefly the proceedings of the convention of 1688.
10. Show the diminution of the authority of the sovereign after the Hanoverian settlement.
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# DALHOUSIE COLLEGE AND UNIVERSITY, 

HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

MONDAy, APRIL 14.-9 A. M.

## FOURTE YEAR.

HYDROSTATICS, OPTICS, ASTRONOMY.

$\qquad$

1. Explain, by resolving forces vertically and horizontally, how the pressure on the base of a hollow cone filled with liquia is equal to the weight of cylindrical mass of the fluid of same base and height.
2. Define "Centre of Pressure" in Hydrostatics. Prove that if a triangular surface be immersed in a liquid, one side being in its surface, the depth of the Centre of Pressure is half the depth of the vertex below the surface.
3. Find the equation to determine the height to which water will rise in a submerged cylindrical diving-bell: given $d$ the depth of the lower edge of the bell, $h=\mathrm{its}$ height, and pressure of air $=$ weight a column of 33 ft . of water.
4. Shew that in exhausting the receiver of an air-pump, the successive densities of the air are in Geometric progression. A perfect vacuum cannot be produced.
5. A ship, whose sides are nearly vertical about the water line, sinks 6 inches on receiving 200 tons of freight. Find the area of a horizontal section about the water line. ( $\mathrm{Sp}: \mathrm{gr}$ : of sea-water $=1.026$.)
6. Show that the deviation of a ray of light after reflexion at two plane surfaces, in a plane perpendicular to both, is equal to twice the angle between the planes.
7. Given a convex spherical mirror. Find the equation connecting the conjugate foci : and shew that the image of an object is always erect and diminished.
8. Take the formula for the fecal length of a standard lens, and adapt it to determine the focal lengths and positions of the foci of a double convex, a double concave, a plano-convex, and a plano-concave lens.
9. Explain the Kaleidoscope.
10. Describe the Astronomical Telescope, and find its magnifying power. Compare its advantages with those of the Galilean telescope.
11. Draw a representation of the celestial sphere in the latitude of the Arctic circle. Mark the daily course of the pole of the ecliptic, and the daily course of the sun on the longest and shortest days of the year. Place a body $m$ anywhere, and illustrate the three different pairs of co-ordinates, altitude, azimuth, \&c.
12. The period of 21,077 years is an important Astronomical cycle. Explain fully.
13. What is the effect of refraction on the apparent positions of the celestial bodies? Prove also that for distances not far from the zenith

$$
r=(\mu-1) \tan z
$$

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.<br>MONDAy, April 14.-9 A. M. TO 1 p. M.<br>B. A. RONOUR EXAMINATIONS IN CLASSICS.

Plautus: Miles Gloriosus.<br>latin \(\left\{\begin{array}{l}Terence: Heautontimorumenos.<br>Virgil: Georgics, Books I., IV.\end{array}\right.\)

Professor J. Johnson, M. A..................Examiner.

1. Translate:
a. Miles Gloriosus. vss. 312-332.

Beginning: Sceledre, quis homo in terrast alter ted audacior? Ending: Hic obsistam, ne imprudenti huc ea se subrepsit mihi.
b. Mil. Glo. vss. 727-744.

Beginning: Si hoc paravissent, et homines essent minus multi mali.
Ending: .mihi quidvis sat est.
2. Explain any unusual forms in the preceding passages.
3. Translate the following lines. What peculiar constructions and forms are found in them ?
a. ille ejus domi cupiet miser :

Qui nisi adulterio, studiosus rei nulli aliaest improbus.
$b$.
Talentum Phillippum huic opus aurist.
c. Plus pol mi auri millest modium Phillippi.
4. Translate :
a. Heautontim, Act II , sc. 3, vss. 112-139.

Beginning: Ridiculum est te istuc me admonere, Clitipho.
b. Heautontim, Act V., sc. 4.
5. a. Scan any four lines of the extracts. b. How may certain difficulties in the scansion of Plautus and Terence be explained?
6. Derive: Scilicet, satagit, cervix, horsum, arrhabo, bolus, tis, ellum, cédo, ilico, sedulo.
7. Translate:
a. Georg. I. vss. 160-175.
b. Georg. IV., vss. 228-247.
8. What works has Virgil imitated in his Georgics ?
9. Write notes on :
a. Altaque Pangaea, et Rhesi Mavortia tellus.
b. Curetum sonitus crepitantiaque aera secutae.
c. Aut Athon, aut Rhodopen, aut alta Ceraunia telo.

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

# SESSIONAL EXAMINATIONS, 1879. 

Wednesday, April $9 .-3$ p. M. to $5 \frac{1}{2}$ P. m.

# B. A. HONOUR EXAMINATIONS IN CLASSICS. 

Professor J. Johnson, M. A................. Examiner.
COMPARATIVE PHILOLOGY.

1. An account of the Second of the three stages through which the Science of Language passed.
2. The importance of the discovery of Sanscrit. A simple test shows its proper relationship to Latin and Greek.
3. What is meant by root-determinatives, secondary roots, stem suffixes, and inflexional suffixes. Illustrate by the root STA. Give a list of the stem suffixes of nouns.
4. Forms of the root DHU are found in several languages. Give other examples of similar changes.
5. Prove that the spirttus asper is not an original sound in Greek.
6. How are the forms faxo, faxim, fecerim, differently accounted for ?
7. Show by examples the changes the hard mutes have undergone in passing from Latin into French. If they were preceded by $s$, what are the resulting forms in French ?
8. The Latin declensions and cases were gradually reduced in number. How does $s$ come to be the sign of the French plural, and the absence of it that of the singular ?

## LATIN PROSE COMPOSITION.

Translate into Latin:
He was soon followed by his colleague Marcellus and the greater part of the magistrates. Pompey had left the town the day before, and was on his way to Apulia, where he had quartered the legions he had received from Cæsar. The levies were discontinued within city, and no place appeared secure on this side Capua. Here, at last, they took courage and rallied, and began to renew their levies in the colonies round about, which had been sent thither by the Julian Law. Lentulus summoned into the Forum the gladiators whom Cæsar had ordered to be trained up there, gave them their liberty, furnished them with horses, and commanded them to follow him. But being admonished by his friends that this step was universally condemned, he dispersed them into the neighbouring towns of Campania to keep guard there.

# DALHOUSIE COLLEGE AND UNIVERSITY, <br> HALIFAX. 

## SESSIONAL EXAMINATIONS, 1879. <br> Tuesday, Aprll 15.-9 A. M. то 1 p. m. <br> B. A. HONOUR EXAMINATIONS IN CLASSICS.

Latin \(\left\{\begin{array}{l}HORACE: Epistles, Ars Poetica.<br>JUVENaL: Satires, VII., VIII., XIV.<br>CICERO : Tusculan Questions, Book I.\end{array}\right.\)

Professor J. Johnson
Examiner.

1. Translate:
a. Hor. Epist. I., 9.
b. Hor. A. P. vss. 330-347.

Beginning: At haec animos aerugo et cura peculi.
Ending: Et longum noto seriptori prorogat aevum.
2. Ego cur acquirere panca.

Si possum invideor, cum lingua Catonis et Enni
Sermonem patrium ditaverit et nova rerum
Nomina protulerit? Licuit semperque licebit
Signatum praesente nota producere nomen.
a. This passage illustrates the license that Horace claims for poets.
b. Quote from the Epistles and Ars Poetica imitations of Greek syntax and words found only in Horace.
c. Translate the last sentence as it is and according to a different reading.
3. $a$. Write in full :

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X|CLXXXDC; I\rhoDCID; CCCCID\rhoDNH. S. ; S. P. D.
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b. Translate : heres ex dodrante; a. d. bissextum Kal. Mar. How was the rate of interest expressed ?
4. Translate : Juvenal, Sat. (a) VII., vss. 171-189.
(b) XIV., vss. 189-209.
5. Write explanatory notes on :
a. Rufum qui toties Ciceronem Allobroga dixit.
b. Stemmata quid faciunt ?
c. Tunc licet a Pico numeres genus.
d. aut vitem posce libello.
e. Ut locupletem aquilam tibi sexagesimus annus

Afferat.
f. Morieris stamine nondum

Abrupto.
6. Translate : Tusc. Ques., Chap. 44.

# DALHOUSIE COLLEGE AND UNIVERSITY, <br> HALIFAX. 

SESSIONAL EXAMINATIONS, 1879.<br>Monday, April 14.-3 to $5 \frac{1}{2}$ P. M.<br>B. A. HONOUR EXAMINATYONS IN CLASSICS.

## CLASSICAL LITERATURE.

Professor J. Johnson, M. A..................Examiner.
(N. B.-Only three questions of each group are to be attempted.)
A. 1. a. The Cyclic poems and their authors. b. On what grounds does Mr. Paley contend that the Iliad and Odyssey are of - later origin than the Cyclic poems?
2. The Elegy : its form, accompaniment, subject and writers.
3. Thucydides: his life; the difference between his History and similar preceding works; the peculiar value of his History; his reasons for the importance of his subject; his style. How was the history of his subject completed ?
4. Greek Pastoral poetry and its chief writer.
B. 1. Origin of Tragedy, Comedy, and the Satyric Drama. Derivation of the names.
2. The chorus and actors. What was the duty of the chorus according to Horace ?
3. Difference between Greek and modern plays, in the time and place of representation, and audience.
4. What stage machinery had the Attic theatre ?
C. 1. An example of Old Latin verse. What was its nature? What opinion did Horace express about it? Who introduced the new metres into Latin?
2. Terence's life. To what class of plays do his comedies belong? What is the subject of his Prologues ?
3. In what kind of writing did the Romans shew originality ? Mention its chief writers and compare their styles.
4. Roman Tragedy and its authors. What references to them or quotations from them, have you met in your reading?

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1879.
Wednesday, April 16 th : -9 a.k. to 12 Noon.

## B.A. HONOUR EXAMINATIONS IN CLASSICS.

GREEK $\left\{\begin{array}{l}\text { AESCHYLUS-SEPTEAI CONTRA THEBAS } \\ \text { SOHHOCLES-OEDHUS REX. } \\ \text { HON }\end{array}\right.$ $\left\{\begin{array}{l}\text { SORHOCLES-OEDIPUS REX. } \\ \text { HOMER-ILIAD, XVII, XXIV. }\end{array}\right.$

Examiner,
Professor J. Johnson, M.A.

1. Translate Sept. c. Thebas
(a). Vss. 597-625,


(b). Vss. 741-765,

Beginning $\pi a \lambda a \iota \gamma \varepsilon v \tilde{\eta} \gamma \grave{\rho} \rho \lambda \delta \gamma \omega$.
Ending $\mu \bar{\eta} \pi \dot{\sigma} \lambda_{c s} \delta \alpha \mu a \sigma \vartheta \bar{\eta}$.
2. Name the Trilogies to which the extant plays of Aeschylus belong.
3. Translate Oed. Rex., vss. 1260-i285.
 makes a difference in the meaning.
5. (a) Aह́лovtı кảuoì тoüt' âv ग̉v.





Translate these extracts, and write notes on the syntax where you think them necessary.
6. Translate Hom. Il. (a). XVIII, vss. 541-560.

$$
\text { (b). XXIV, vse. } 443-456
$$

 $\tilde{\varepsilon} \sigma \sigma \varepsilon, ~ i \delta v i \eta \sigma \iota . a ̉ \lambda \lambda \tau o$.
8. The meaning and derivation of:- $\dot{u} \lambda \phi e \sigma \iota \beta$ ia $; \vartheta \varepsilon \sigma \pi \varepsilon \sigma i \omega ~ \dot{d} \lambda \alpha \lambda \eta \tau \omega^{\prime}$;


9 , Give the roots of the following words. The same rocts are found in other languages. Explain the differences.
 $\dot{v} \mu \varepsilon i \varsigma, \eta{ }^{\eta} \omega \varsigma, \eta \dot{\eta} \delta \dot{v}$.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1879.
Thursday April 17th:-9 A.m. to 1 p.m.
B.A. HONOUR EXAMINATIONS IN CLASSICS.

GREEK $\left\{\begin{array}{l}\text { THUCYDIDES-BOOK II. } \\ \text { PLATO-PHAEDO- } \\ \text { DEMOSIHENES-DE CORONA. }\end{array}\right.$
Examiner,
Professor J. Johnion, M.A.

1. Translate Thuc. II., chaps. $37,38,76$.
2. Explain these terms in seamanship:-




3. An account of the causes of the Peloponnesian war.
4. Translate Phaedo.

(b) § 60 to di oias àv кai $\tau \tilde{\eta} s$ र行 pécaov.
$5, a$. In what different ways may a purpose be expressed? b. Illustrate by examples the use of $\pi \rho i v, \hat{\omega} \omega$, $\omega \sigma \pi \varepsilon$.
5. Explain the origin of the phrases: àizov, (ì Rov)—áaíXavov boov
 $\mu \hat{\eta} \sigma \tau \varepsilon p \eta \vartheta \hat{\eta} \mathrm{~s}$.
6. Translate De Corona :-
a. § 76-78.

Beginning $\dot{\varepsilon} v$ тotaúry dè катабтáбet

b. §§ 368-370.


8. $a$. The circumstances that led to the delivery of this speech. b. The objections of Aeschines and Demosthenes' answers.

# DALHOUSIE COLLEGE AND UNIVERSITY, <br> HALIFAX. 

SESSIONAL EXAMINATIONS, 1879.<br>APRIL 14.-10 A. M. TO 1. P. M.<br>B. A. EONOUR EXAMINATIONS IN ENGLISE.<br>HISTORY OF EUROPE.<br>Professor DeMide, M. A.......................Examiner.

1. Give a brief account of the mythology of Northern Europe.
2. Exhibit your acquaintance with the literature of the ancient Scaudinavians.
3. Show the relations of the primitive Germans toward the Romans, and their feelings toward Rome and the Empire.
4. Discuss the question as to the probable intention of Charlemagne in assuming the Imperial title.
5. Explain the theory of the Holy Roman Empire.
6. Mention various instances in which the claims of the Holy Roman Empire to universal dominion were more or less admitted by the other States of Europe.
7. Give a brief account of the system of election in the Empire, and of the electoral body.
8. Give an account of the Peace of Westphalia and show its political importance.
9. Write a short outline of the History of Prussia till the accession of Frederic the Great.
10. Give an account of the German Confederation.

## DALHOUSIE COLLEGE AND UNIVERSITY

 HALIFAX.SESSIONAL EXAMINATIONS, 1879.<br>Wednesday, April 9.-3 то 6 p. m.<br>HONOR EHNGLISE. EISTORY OF FNGGAND.

Professor DeMill, M. A........................ Examiner.

1. Show the points of difference between the English conquests and the Teutonic conquests.
2. Describe the character and extent of the Danish occupation of England.
3. Show the importance of Swegen's conquest as introductory to William's.
4. Describe the condition of England during the visit of William to the Court of King Edward.
5. Give a brief account of Godwine, from his return till his death.
6. The discretion of the Tudors was such that their power, though often resisted, was never subverted.
7. Describe the state of the English agricultural classes at the time of the accession of James II.
8. Explain the foreign policy of James II., and his plans of domestic government.
9. "William felt that the difficulties of his enterprise were but beginning. He had pulled a government down. The far harder task of reconstruction was now to be performed." Explain this.
10. Give an account of the origin of the National Debt.

# SESSIONAL EXAMINATIONS, 1879. <br> APRIL 12.- 3 то 6 р. м. <br> B. A. HONOUR EXAMINATIONS IN ENGLISE. <br> HISTORY OF FRANCE. <br> Professor DeMile, M. A.......................Examiner. 

1. According to Guizot, there are three essential elements in the feudal system.
2. Give an account of the origin of feudal castles and their multiplication in the ninth and tenth centuries.
3. Describe the general character of feudal society ; showing, (a) its grood principles, and ( $b$ ) its vices.
4. There are three different sources from which we may derive the origin of the third estate in France.
5. Show the difference between the Roman municipal system, and that of the middle ages.
6. Give a brief outline of the third estate in France from the eleventh to the fourteenth century.
7. Divide the reign of Louis XIV. into periods, and state the leading characteristic of each.
8. Discuss the efforts of Colbert to re-establish the finances, and relieve the people, after the Peace of Nimeguen.
9. Give a brief account of Voltaire and the Encyclopædists.
10. Explain the financial condition of France under Necker and his successors till 1783,

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1879.<br>Saturday, April 19.-10 A. m. to 1 p. m.<br>B. A. HONOUR EXAMINATIONS IN ENGLISH.

## MODERN ENGLISH.

Professor Demill, M. A.......................Examiner.

1. Give a general outline of the narrative of the first book of Spenser's Faery Queene.
2. What do you s uppose are represented allegorically by (a) the dwarf, (b) the lion, (c) Duessa, (d) Una's sojourn among the Satyrs, (e) Sir Satyranne, ( $f$ ) Orgoglio.
3. Describe : (a) Duessa's interview with Night, (b) the Beadman of the Holy Hospitall, (c) St. George'sinterview with Heavenly Contemplation.
4. State the chief peculiarites of Spencer's language and show the influences upon his poetry of (a) the French, (b) the Latin, and (c) the Italian.
5. Explain the following words :

- he challenged essoyne-dyed deep in graine-well worthy impetheir trinal triplicities.

6. Two stories are combined in the Merchant of Venice. Give an account of each.
7. Give the substance of Portia's speech in the Court of Justice.
8. Give an account of the scene in the lists at Coventry in King Richard the Second.
9. Describe the scene in Westminster Hall and give the substance of the words of King Richard.
10. In what connexion do the following words occur:

Frailty, thy name is woman!
The time is out of joint
What's Hecuba to him, or he to Hecuba?
The counterfeit presentment of two brothers
Diseases desperate grown
By desperate appliance are relieved
When sorrows come, they come not single spies,
But in battalions.
Imperious Caesar, dead and turned to clay,
Might stop a hole to keep the wind away.
11. Annotate the following passages:-

Gray malkin. . . . . Paddock.
Kerns and gallowglasses.
St Colmes Inch.

## If the assassination

Could trammel up the consequence, and eatch
With his surcease success. . . .
making the green one red.
But in them nature's copy's not eterne.
If trembling I inhabit then, protest me
The baby of a girl.
. . the blood boltered Banquo smiles upon me. my way of life
Is fallen into the sear, the yellow leaf.
12. Give a brief outline of the first book of Paradise Lost.
13. Exhibit your acquaintance with the scene between Samson and Dalilah.
14. In what connection do the following lines occur:-

The wakeful trump of doom must thunder through the deep. . . .
Linked sweetness long drawn out.
The smoke and stir of this dim spot
Which men call earth.
Fame is no plant that grows on mortal soil.
who would lose
Though full of pain, this intellectual being
Those thoughts that wander through eternity-?
Evil be thou my good.
Among the faithless, faithful only he
15. Give an outline of the argument of Dryden's Religio Laici.
16. Annotate the following lines:

Great wits are sure to marlness near allied.
To compass this the triple bond he broke.
Heaven had wanted one immortal song.
And canting Nadab let oblivion damn.
A church vermilion and a Moses face.
17. Exhibit your acquaintance with Pope's Epistle to Augustus.
18. Annotate the following lines :-

Awake, my St. John.
A hero perish, or a sparrow fall.
All are but parts of one stupendons whole.
The proper study of mankind is man.
One flaunts in rags, one flutters in brocade.
The wisest, brightest, meanest of mankind.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

## HALIFAX.

# SESSIONAL EXAMINATIONS, 1879. <br> Thursday, April 17.-3 то 6 p. m. <br> B. A. EONOUR EXAMINATIONS IN ENGLISE. 

SEMI SAXON, EARLY ENGLISH, AND MIDDLE ENGLISH.
Professor DeMill, M. A.......................Examiner.

1. Translate:

And whase wilenn shall thiss boc efft otherr sithe writenn,
himm bedde icc thatt het write rihht, swa summ thiss boc himm teachethth,
all thwerrt ut affterr thatt itt iss uppo thiss firrste bisne,
Withth all swille rime alls her iss sett withth all se fele wordess;
Ard tatt he loke wel that he an bokstaff write twiyyess
Eyywhaer thaer itt uppo thiss boc iss writen o thatt wise;
loke he well that het write sua forr he ne mayy nohht elless
on Ennglissh writenn rihht te word thatt witt he wel to sothe.
And yiff mann wile witenn whi iec hafe don thiss dede,
whi ice till Ennglissh hafe wennd goddspelless hallyhe lare;
ic hafe itt don forrthi thatt all chrisstene follkess berrhless
iss lang uppo thatt an, that teyy goddspelless hallyhe lare
withth fulle mahhte follyhe rihht thurrh thohht thurrh word thurrh dede.
2. Translate :

Theo queth the alde king, unraeth him fulede:
Theren ich wille of the Cordoille,
sua the helpe Appollin, hu deore the beo lif min.
The answarede Cordoille, lude and nowiht stille, mid gomene and mid lehtre, to hire fader leue:
Theo art me leof al so mi faeder, and ich the al so thi dohter, Ich habbe to the soh faste love, for we buoth swithe isibbe, and swa ich ibide are, ich wille the suge mare: al swa muchel thu bist worth swa thu welden aert, and al swa muchel swa thu hauest men the willet luuien for sone heo bith ilayed the mon the lutel ah
Thus seide the maeiden Cordoille, and seoththen set swithe stille. Tha warthe the king waerth for he nes this noht iquemed, and wende on is thonke, thaet hit weren for untheawe, that he hire weore swa unwourth, that heo hine nold iwurthi, swa hire twa sustren, the ba somed laesinge speken.
3. Exhibit your acquaintance with the poems from which the above extracts are taken, and explain the versification of each.
4. Translate:

Ye, and yit a poynt, quod Piers, I preye yow of more,
Loke ye tene no tenaunt but treuthe will assent.
And thowgh ye mowe amercy hem late merey be taxoure,
And mekinesse thi mayster maugre medes chekes,
And thowgh pore men profre yow presentes and yiftis,
Nym it nanyte an auenture ye mowe it nanyte deserue ;
For thou shalt yelde it ayein at one yeres ende,
In a ful perillous place purgatorie it hatte.
And mysbede nouyte thi bondemen the better may thow spede ;
Though he be thyn underlynge here wel may happe in henene,
That he worth worthier sette and with more blesse,
Than thow, bot thou do bette, and lyue as thou shulde ;
For in charnel atte churche cherles ben yuel to knowe,
Or a kniyte from a knave there, knowe this in thin herte.
And that thou be trewe of thi tonge and tales that thow hatie,
But if thev ben of wisdome or of witte thi workmen to chaste.
5. Show your acquaintance with the Prologus of Piers the Plowman.
6. Give an account of the vision of the Seven Deadly Sins.
7. In what part of the poem is the character of Piers the Plowman first introduced?
8. Render into molern English :

> A clerk there was of Oxenford also
> That unto logik hadde long i-go.
> As lene was his hors as is a rake,
> And he was not right fat, I undertake;
> But lokede holwe, and thereto soberly.
> Ful threadbare was his overeste courtepy,
> For he hadde geten him yit no benefice,
> Ne was so worldly for to have office.
> For him was levere have at his beddes heede
> Twenty bookes, clad in blak or reede,
> Of Aristotle and his philosophie,
> Then robes riche, or fithele, or gay sawtrie.
> But al be that he was a philosophre,
> Yet hadde he but litel gold in cofre;
> But al that he mighte of his frendes hente,
> On bookes and on lerning he it spente,
> And busily gan for the soules preye
> Of hem that yaf him wherwith to scoleye,
> Of study took he most cure and most heede.
9. Explain the versification of the above.
10. Point out words belonging to the Southern dialect in the first six lines.
11. Write brief explanatory notes on the following: "clerk," "Oxenford," " courtepy," " yaf him," " scoleye," " cure."
12. State the probable source from which Chaucer derived the Clerkes Tale, and give a brief outline of the story.

## DALHOUSIE COLLEGE AND UNIVERSITY

## HALIFAX.

## SESSIONAL EXAMINATIONS, 1879.

Wednesday, April 16.-10 A. M. to 1 p. m.

## B. A. HONOUR EXAMINATIONS IN ENGLISH.

ANGLO SAXON.<br>Professor DeMill, M. A........................Examiner

1. Translate:

Thanon eft gewiton eald-gesidhas, swilce geong manig, of gomen-wathe, fram mere modge, mearum ridan, beornas on blancum. Thaer waes Beowulfes meardho maened ; monig oft gecwaedh, thaette sudh ne nordh, be saem tweonum, ofer eormen-grund, other naenig, under sweglas begong, selra naere rond-haebbendra, rices wyrdhra. Ne hie huru wine-drihten wiht ne logon glaedne Hrothgar, ac waes thaet god cyning. Hwilum heatho rofe hleapan leton on geflit faran, fealwe mearas, thaer him fold-wegas fargere thuhton cystum cuthe. Hwilum cyninges thegn guma gilp-hlaeden, gidda gemyndig, se dhe eal-fela eald gesegena worn gemunde, word other fand sodhe gebunden. Secg eft ongan sidh Beowulfes snyttrum styrian and on sped wrecan, spel gerade wordum wrixlan.
2. State your opinion about the author of Beowulf with regard to (a) his country, (b) his language, and (c) his religion.
3. Give an account of the struggle between Beowulf and Grendel.
4. Various incidents in the above poem give us information respecting ancient Norse manners and customs.

## 5. Translate:

Mine gebrodhra tha leofostan, us gedafenadh thaet we Godes swingle. the we on aer towearde ondraedan sceoldon, thaet we huru nu andwerde and afandode ondraedon. Geopenige ure sarnys us infaer sodhre gecyrr ednysse, and thaet wite dhe we dhrowiadh tobrece ure heortan heardnysse Efne nu dhis folc is mid swurde thaes heofonlican graman ofslegen, and
gehwilce aenlipige sind mid faerlicum slihte aweste. Ne seo adl dham deadhe ne forestaepdh, ac ge geseodh thaet se sylfa deadh thaere adle yldinge forhradadh. Se geslagena bidh mid deadhe gegripen, aerdhan dhe he to heofungum sodhre behreowsunge gecyrran maege. Hogiadh fordhi hwile se becume aetforan gesihdhe thaes strecan Deman, sedhe ne maeg thaet yfel bewepan dhe he gefremode. Gehwilce eordh-bugigende sind aetbrodene, and heora hus standadh aweste. Faederas and moddra bestandadh heora bearna lic, and heora yrfenuman him sylfum to forwyrde forestaeppadh. Uton eornostlece fleon to heofunge sodhre daedbote, tha hwile dhe we moton, aerdhan the se faerlica slege us astrecce.
6. Name the source from which the above passage is derived, and exhibit your acquaintance with it.
7. Parse the following words:-leofostan, geopenige, tobrece, slihte, adle, sodhre, maege, lic, uton, moton.
8. Translate :

Ys on Bretone-lande sum fenn unmaetre mycelnysse, that onginnedh fram Granta ea naht feor fram thaere cestre, dhy ylcan nama ys nemned Granteceaster. Thaer synd unmaete moras, hwilon sweart waeter-steal, and hwilon fule ea-rithas yrnende, and swylce eac manige ealand and hreod and beorhgas and treow-gewrido, and hit mid menigfealdan bignyssum widgille and lang thurhwunadh on nordh sae. Mid than se foresprecena wer Gudhlac thaes widgillan westenes tha ungearawan stowe thaer gemette, tha waes he mid godcunde fultume gefylst, and tha sona than rihtestan wege thyder togeferde. Tha waes mid tham the he thyder com thaet he fraegn tha bigengcan thaes landes, hwaer he on them westene him eardungstowe findan mihte. Mid thy hi him menigfeald thing saedon be thaere widgilmysse thaes westennes. Tha waes Tatwine gehaten sum man, saede tha thaet he wiste sum ealand synderlice digle thaet oft menige men eardian ongannon, ac for menigfealdum brogum and egsum, and for annysse thaes wedgillan westenes thaet hig naenig man adreogan ne mihte, ac hit aelc forthan befluge.
9. State what you know of the authorship and date of the life of S. Guthlac.
10. Write brief notes on the following words :-mycelnysse, onginnedh, yrnende, ealand, beorghas, thurhwunadh, wer, stowe, fultume, gehaten.


[^0]:    * In 1880, and subsequently, Candidates must pass also in the Classics required for the Matriculation Examination of the First Year.

[^1]:    * For details of subjects see § XV.

[^2]:    * Students seeking a First or Second Class at the Sessional Examinations are examined in this additional work, which is not read in class.
    † Passages taken from works not previously named will be set for translation, to Students seeking a First or Second Class at the Sessional Examinations in these years.

[^3]:    *The Examinations in these subjects will be held at the beginning of the Winter Session. (See § IV.)

