## EXAMINATION PAPERS

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HALIFAX, NOVA SCOTIA.

FACULTY OF ARTS. FACULTY OF MEDICINE.

SESSION 1872-73.

## HALIFAX:



## CALENDAR

AND

## EXAMINATION PAPERS

OF



AND

 HALIFAX, NOVA SCOTIA.

> FACULTY OF ARTS.

SESSION 1872-73.

## HALIFAX:

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# Ginibersitu Calenioar, 1872-73. 

## 1872.

## Winter Session.



## Daykousie College and University.

## BOARD OF GOVERINORS.

Hon. Sir William Young, Knight, Chief Justice of Nova Scotia, Chairmas.
Hon. Joseph Howe, M. P., Secretary of State for the Provinces.
Hon. Charles Tupper, C. B., M. D., M. P., President of Privy Council.
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## SEINATE OF TEIE UNIVERSITY-

Very Rev. James Ross, D. D., Principal.
Rev. William Lyall, Ll. D.
Charles Macdonald, M. A., Secretary of Senate.
John Johnson, M. A.
George Lawson, Ph. D., LL. D.
James DeMill, M. A.
William J. Almon, M. D., President of the Faculty of Medicine. Alexander P. Reid, M. D., Dean of the Faculty of Medicine.

Janitor of the College.-John Wilson.

## FACUITY OF ARTS-

Fery Rev. Principal Ross, D. D., Professor of Ethics and Political Economy ${ }_{\text {a }}$ Rev. William Lyall, LL. D., Professor of Logic and Metaphysics.
Charles Macdonald, M. A., Professor of Mathematics.
John Johnson, M. A., Professor of Classics.
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James DeMill, M. A., Professor of History and Rhetoric.
James Liechti, Esq., Tutor in Modern Languages.

## FACUITY OF MEDICINE-

Yery Rev. James Ross, D. D., Principal (ex officio) and Matriculation Examiner.
William J. Almon, M. D., Emeritus Professor of Obstetrics and the Diseases. of Women and Children, President of the Faculty.
Alekxander P. Reid, M.D., L.R.C.S. Edin., L.R.C.P. and S., Ca., Professor of the Principles and Practice of Medicine, Dean and Registrar of the Faculty.
Grorge Lawson, Ph. D., LL. D., Professor of Chemistry and Chemical Toxicology.
Whlliam B. Slayter, M.D., M.R.C.S.L., L.R.C.P. Edin., Professor of Obstetrics and the Diseases of Women and Children.
Edward Farrell, M. D., Professor of Principles and Practice of Surgery.
John Sommers, M.D., Professor of Physiology.
Hugh A. Gordon, M.D., L.R.C.S., Edin., Professor of Anatomy.
Alfred H. Woodill, M.D., Professor of Materia Medica and Therapeutics. J. R. DeWolf, M.D., Ed., L.R.C.S.Ed.. $\}$ Professors of Medical Jurisprudence.

Thos. Trenaman, M.D., and John F. Black, M.D., Demonstrators of Anatomy
Janitor-Joun Welson.

## ffanulty of ghts.

## § I.-WINTER SESSION.

The Winter Session of 1872-73 will commence on Wednesday, October 23rd, 1872, and end on Wednesday, April 30th, 1873.

## § 11.-ADMISSION OF STUDENTS.

Students may enter the College-
1st, as Undergraduates, with the intention of applying for a University Degree at the end of their course ; or

2nd, as General Students, who do not look forward to a University Degree.

Undergraduates may take either of two courses: (1) the Curriculum for the B. A. Degree ; or (2) that for the B. Sc. Degree. (See § IV.)

Students entering as Undergraduates of the First Year are required to pass the Matriculation Examination, (see § III.), at the opening of the Winter Session, and to take the classes prescribed for their respective courses.

The Matriculation Examination will be held on April 23rd, at 10 o'clock, A. M. Candidates are expected to bring their own writing materials, except paper.

Students may also enter as Undergraduates of the Second Year, with the view of applying for the B. A. Degree at the end of their course, by passing the Matriculation Examination of that year, (see § III.), and taking the usual Undergraduate course for the second, third and fourth years, with the classes of the intervening Summer Sessions as prescribed by the Senate.

General Students are not required to pass any preliminary examination, and may attend any classes they choose.

No person can be admitted as an Undergraduate after ten days from the opening of the Session, without the special permission of the Senate. General Students will be admitted at any time during the Session.

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

## 8

## § III-MATRICULATION EXAMINATION.

## FOR THE FIRST YEAR.

The subjects of examination for entrance into the First Year of the B. A. Course are:-
I. In Classics.-Latin Grammar, Greek Grammar, one Latin, and one Greek Author.
Latin.-Cæsar, one book; Virgil, one book; Cicero, two Orations; Horace, one book of Odes.
Greek.-Xenophon, one book; Homer, one book; Lucian's Select Dialogues; New Testament, one Gospel.
II. In Mathematics.-Arithmetic; Euclid's Elements of Geometry, Book I.; Algebra, to the end of Fractions.
III. In Englisir.-Grammar ; History of England; Geography ; Composition.
Special stress will be laid upon accuracy in Latin and Greek Grammar.

The subjects of examination for entrance into the First Year of the B. Sc. Course are the same as the foregoing, except Greek which is not required.

## FOR THE SECOND YEAR.

In order to enter as an Undergraduate of the Second year, a Student must pass an examination,-

1. In the 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.
4. In Roman History, to the Battle of Actium.

## § IV.-COURSE OF STUDY.

## COURSE FOR DEGREE OF B. A.

First Year.-(1) Latin. (2) Greek. (3) Mathematics. (4) English Language and Rhetoric.

For First or Second Class in Classics extra work is required, and special stress is laid upon accuracy in Grammar. (See § XIV.)

Second Year.- (1) Latin. (2) Greek. (3) Mathematics. (4) Chemistry. (5) Logic and Psychology.

For first or second class in Classics extra work is prescribed, and for first or second class in Mathematics an additional hour a week is required, (See § XIV).

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

Fourth Year.-(1) Latin. (2) Ethics and Political Economy. (3) History. (4) French or German. (5) Astronomy and Experimental Physics.

At the beginning of the second year, Undergraduates are required to pass an Examination in Ancient History and Geography, (see § VIII). The result of this Examination is taken into account at the Sessional Examination.

COURSE FOR DEGREE OF BACHELOR OF SCIENCE, B. Sc.
First Year.-(1) Latin. (2) Mathematics. (3) Rhetoric. (4) French (or Spanish). (5) Experimental Physics.

Second Year.-(1) Latin. (2) Mathematics. (3) Chemistry. (4) Logic and Psychology. (5) French (or Spanish).

Third Year.-(1) Mathematical Physics. (2) Chemistry. (3) German. (4) Natural History.

Fourth Year.-(1) Ethics and Political Economy, or History, (2) Mixed Mathematics and Experimental Physics. (3) Natural History. (4) German. (5) Analytical Chemistry. (6) Either Physiology or Human Anatomy, (Lectures by Professors in Medical Faculty).

## § V.-HONOUR COURSES.

These Courses are intended for those Students whose tastes and ability lead them to prosecute special subjects of the Curriculum, and remissions of classes are granted to Students studying such Course or Courses.

Honour Courses are provided in the following groups of subjects:-(1) Classics; (2) Mathematics and Physics; (3) Mental and Moral Philosophy ; (4) History, Political Economy, and English Literature and Language. 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 groups of subjects, obtains the Degree of B. A. with Honours in such subjects.

A Student of the Third Year, for Honours, (see § XV,)
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 sixth subject of the ordinary Course, (see § IV).

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

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

In Mental and Moral Philosophy, may omit Latin and History ;

In History, English Language, \&c., may omit Latin and the fifth (selective) subject of the ordinary Course.

## § VI.-SUMMER SESSION.

The Summer Session will commence on Monday, 5th May, 1873, and close at the end of June.

Classes will be opened for instruction in the following subjects:

> | > Classics. | $\begin{array}{l}\text { Optics. } \\ \text { Theory of Equations. }\end{array}$ |
| :--- | :--- |
| > Botany. |  |
| > Applied Logic. | History of Modern Literature. > | Modern Languages.

A Student able to enter as an Undergraduate of the 2nd year, may modify his Course by taking the Summer Sessions. (See § II).
§ VII--FEES.

The Fee to each Professor, whose class or classes a Student enters, is six dollars for the Session, except the following classes, the fee for each of which is $\$ 4.00$ :-Spanish, Hebrew, Botany and Zoology, Mineralogy and Geology.

The Fees for Anatomy and Physiology are $\$ 6.00$ each; but Students paying these limited fees are not qualified to present themselves for Examination in the Medical Department. An Undergraduate who has completed two years of his course, may attend the Classics and Mathematics during the remainder of his Undergraduate Course without the payment of additional Fees.

Mixed Mathematics and Experimental Physics constitute a separate Class.

General Students pay a fee for every class they attend.
Practical and Analytical Chemistry (optional), fee, six dollars. Students taking this class are required to provide their own apparatus.

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

Both Undergraduates and General Students are required at the beginning of each 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 Student being allowed to attend a Class without them.

The total fees of Undergraduates who take the ordinary B.A. course in Arts, are as follows:-


The fees of Undergraduates who take the B. Sc. course are as follows:-

[^1]
## § VIII,-GRADUATION.

## DEGREE OF B. A.

The Degree of B. A. may be obtained by attending the prescribed Courses of Lectures extending over four Winter Sessions, or by attending three Winter and two Summer Sessions, when the candidate is prepared, on entry, to pass the advanced Matriculation Examination, and enter as a Second year's Student. Undergraduates must pass Examinations at the close of each Session of their attendance on the subjects of the ordinary Course. This year, Undergraduates entering the Second year pass an Examination in Roman History and Ancient Geography.

The Fee for Diploma is five dollars, payable before the commencement of the Final Examinations.

## DEGREE OF B. Sc.

The Degree of B. Sc. may be obtained by attending the prescribed Courses of Lectures extending over four Sessions, and passing Examinations in the subjects taken at the close of each Session. A Student qualified, on entering, to pass a satisfactory Examination on all the first year's subjects of the Science Course (§ IV.) will be admitted as a Second Year's Undergraduate in the same way as for the B. A. Degree.

Fee for Diploma of B. Sc., five dollars, payable before the Final Examination.

## DEGREE OF M. A.

Bachelors of Arts of at least three year's standing, maintaining meanwhile a good reputation, shall be entitled to the Degree of M. A., on producing an approved Thesis on a literary or professional subject.

Fee for Diploma, which must accompany the Thesis, twenty dollars, except in case of those who entered as Undergraduates prior to 1869 , who pay five dollars. Theses to be handed in before the 16 th of April.

## § IX.-REGULATIONS FOR EXAMINATIONS.

1. If an Undergraduate absent himself from any University Examination, except for such cause as may be held good by the Senate, he will lose his year.
2. If an Undergraduate fail to pass in any subject, he will be allowed a Supplementary Examination on the first Thursday of the following Winter Session, on giving notice to the Secretary of the Senate a week before the opening of the Winter Session ; but failure in more than two subjects at the Sessional Examinations will involve the loss of the year. N. B.-In the application of this Rule, Mathematics will be reckoned as two subjects and Latin and Greek each as one subject.
3. In all cases, a Student who presents himself for Supplementary Examination on any day except that mentioned in Rule 2 nd, will be required to pay a fine of two dollars.
4. Students are forbidden to bring any books or manuscripts 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 Examination; and it shall be at the discretion of the Senate whether he be allowed a Supplementary Examination.
5. Students who pass the Examinations in the several subjects of their respective years, are arranged in three classes, according to the merit of their answers in these subjects.
6. A position in the First or Second Class will be considered honourable.

## § $\mathbf{X}$.-SCHOLARSHIPS.

## Two Open Scholarships.

Two scholarships, entitling to free attendance on all the classes of the Undergraduate course as long as the holders maintain a first or second rank at the Sessional Examinations, are offered by the Professors for competition this year; the competition to take place at the Matriculation Examination.

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

## The Governor's Class Prizes, as usual.

## The Sir William Young Prize.

An annual Prize of $\$ 20$ in Elocution is offered by the Hon. Sir W. Young, Knt., Chief Justice of Nova Scotia, and is open for competition to all Arts Students of the first and second years. This prize will be competed for at the close of the Session; it cannot be held twice by the same Student.

The Colonel Laurie Prize.
A Prize of $\$ 20$ is offered by Colonel Laurie, Oakfield, for the best Essay on "Immigration as adapted to the Requirements of Nova Scotia."

Essays to be sent in not later than 13th March, 1873, each signed with a motto, and accompanied with a sealed envelope, bearing the motto and containing the name of the writer.

## North British Society's 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, and held during the Third and Fourth Years of the Undergraduate Course. 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, 1874, at the Sessional Examinations.

## Waverley Scholarship.

This Scholarship, of the annual value of $\$ 60$, has been founded by an unknown Benefactor, whose object in so doing is to encourage the studies of the Curriculum, especially Mathematics.

The first competition for this Scholarship will take place at the opening of the Winter Session 1872-3, (see Calendar), and is open to Undergraduates entering their Fourth Year. The Scholarship will not be awarded unless at least a certain minimum standard of scholarship, as tested by Examination, be attained.

The following are the subjects of Examination:
I. Mathematics.-(1) The Mathematics of the First two Years of the Curriculum.
(2) The Mixed Mathematics of the 3rd Year.
(3) Analytical Trigonometry, as laid down in the 3rd Year Honour Mathematics.
(4) Analytical Geometry-The Equation to the straight line.
(5) Parkinson's Elementary Mechanics-Statics, Chapters II., IV., V., VI. Dynamics Chapters II., II., IV., V. from Art. 94. Problems.
II. Classics.-(1) Latin : Cicero, Tusculan QuestionsBook II. Plautus, Trinummus.
(2) Greek; Thucydides-Book II. Aristophanes-Clouds.
(3) Composition : Latin Prose.
N. B.-Special stress will be laid on accuracy in Grammar and Composition.
III. Einglish.-(1) Marsh's English Language, Smith's Edition.
(2) Spalding's (or Shaw's) English Literature.

## CERTIFICATES OF MERIT.

Certificates of Merit of the First and Second Rank will be given to Students who have obtained a Frst or Second class standing in the aggregate of the branches of study proper to their year.

## § XII-ATTENDANCE AND CONDUCT.

1. All Undergraduates and General Students attending more classes than one, are required to provide themselves with caps and gowns and wear them in going to and from the 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 exercises of the class, and will note as absent those who enter thereafter, unless satisfactory reasons be assigned.
5. Absence or tardiness without sufficient excuse, and inattention or disorder in the Class Room, if persisted in after due admonition by the Professor or the discipline proper to the class, will be reported to the Senate.
6. The amount of absence or tardiness 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 caused; and such other penalty will be imposed as the Senate may think proper.
8. While in the College, or going to it or 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 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 on Sunday, in one of the city churches or chapels.

## § XIII-THE LIBRARY.

Through the liberality of a number of the friends of the College, a Library has been formed, which consists of a careful selection of the most useful works 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 1200 volumes. All students are entitled to the use of the Library, on payment of the annual fee of one dollar.

## § XIV.-ORDINARY COURSE FOR B. A.

## CLASSICS .

FIRST YEAR.
Latin.-Cicero : First against Catiline. *De Amicitia.
Virgil : Aneid, Book X.
Greek.-Lucian: Charon.
Demosthenes: First Olynthiac.
Composition-Principia Latina, Part IV.
SECOND YEAR.

Latin.-Livy : Book XXI., to chap. 30. *Book XXII.
Horace: Odes, Book I.
Greek.-Herodotus: Book I., §§ 95-141. $\$ \$ 153-216$.
Homer: Iliad, Book X.
Composition-Principia Latina, Part IV. Initia Greca, Part III.
†Ancient History and Geography.-History of Rome to B. C. 31. Geography of Italia, Sicilia, Gallia, and Britannia. (Books recommended: Liddell's History of Rome; Schmitz's Ancient Geography.

THIRD YEAR.
Latin-Horace: Satires, Book I, 3, 4, 5, 6, 9. Terence: Andria.
*Plautus: Miles Gloriosus.
Greek-Euripides: Medea. Æschylus: Prometheus Vinctus.
Composirion-Principia Latina, Part V. Initia Greca, Part III.
FOURTH YEAR.
Latin.-Tacitus: Annals, Book I. Juvenal : Satires, III., X.
Greek.-Demosthenes : Philippics, I., III. Plato : Apologia Socratis.
Composition.-Principia Latina, Part V.

## MATHEMATICS AND PHYSICS.

## FIRST YEAR.

Arithmetic-Revision of the Theory of Proportion, Vulgar and Deci ${ }^{-}$ mal Fractions.

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

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

Plane Trigonometry.-Solution of Plane Triangles.
SECOND YEAR.
Grometry.-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.
Algebra.-Simple Indeterminate Equations; Binomial Theorem; Properties of Logarithms; Compound Interest; Annuities.

[^2]EXTRA.
Geometry.-21 Propositions of the Eleventh Book of Euclid; Geometrical Exercises.
Trigonometry.-Extension of Ordinary Course.
Algebra.-Permutations, Combinations, Probabilities, Life Assurance, Investigation of Binomial Theorem and Theory of Logarithms, Indeterminate Coefficients, Higher Equations with Horner's Method of Solution,

EXPERIMENTAL PHYSICS.
(Third Year.)-Text Book : Lardner's Handbook.
(Fourth Year.)-Text Book: Lardner's Handbook.
MATHEMATICAL PHYSICS.
(Third Year.)-Text Books : Galbraith and Haughton's Manual of Mechanics ; Phear's Hydrostatics (or Galbraith and Haughton's.)
(Fourth Year.)-Text Books : Galbraith and Haughton's Manuals of Astronomy and Optics.

## 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: Lyall's "Intellect, the Emotions, and Moral Nature." Mansel's Metaphysics. Lewes' Biographical History of Philosophy. Cousin on The Beautiful. Alison's Essay on the Nature and Principles of Taste.

## CHEMISTRY.

(Second Year.)-Text Book: Fownes' Manual of Chemistry, the whole of the Inorganic part (excepting Physics), and a portion of the Organic.
(Third Year.)-Same Text Book, including whole of the Organic Chemistry.

## Analytical Chemestry.

Macadam's Practical Chemistry ; Fresenius's Qualitative and Quantitative Analysis.

## HISTORY AND RHETORIC.

Rhetoric.-(First Year.)-Text Books: Whately's Elements of Rhetoric; Campbell's Philosophy of Rhetoric.
English Language.-(First Year.)-Text Books : Angus's Hand̈-book of the English Language.

Elocution.-Books Recommended: Porter's Analysis of the Principles of Rhetorical Delivery. Russell's Elocution.

Hrstory.-(Fourth Year.)-Text Books: Gibbon's Decline and Fall of the Roman Empire. Hume's History of England. History of France. Sismondi's Italian Republics. Hallam's Middle Ages. Taylor's Modern History.

## MODERN LANGUAGES.

ordinary course.
French.-(Third Year.)-Pujol's Grammar (first part.) - Scribe's
"Valérie."
German.- (Third Year.-Otto's German Conversation Grammar.Adler's Reader.-Schiller's "Wilhelm Tell."
French.-(Fouth Year.)-"Pujol's Grammar (fourth part).-Molière's
"Le Bourgeois Gentilhomme."
German.-(Fourth Year.)-Otto's German Conversation Grammar.Adler's Reader.-Schiller's "Wilhelm Tell" continued.

## § XV.-HONOUR COURSES.

CLASSICS.
[The following Course, in addition to the Ordinary, is preseribed for Classical Honours in the fourth year.]
Latin.-Plautus: Miles Gloriosus.
Terence: Heautontimorumenos.
Virgil : Georgics, Books I., IV.
Horace: Epistles, Books I., II., Ars Poetica.
Juvenal : Satires.
Cicero: Tusculan Questions, Book I.
Tacitus: Agricola, Germania.
Greek.-Homer : Iliad, XVIII., XXIV.
Æschylus: Prometheus Vinctus.
Sophocles: ©Edipus Rex.
Thucydides: Book II.
Plato: Phædo.
Demosthenes: De Corona.
Composition.-Latin Prose.
History and Ltterature.-Arnold's History of Rome; Mommsen's History of Rome, Vol. I.; Merivale's Hist. of the Romans, Vols. I., II., III.; Grote's History of Greece, Vols. IV., V., XI., XII. ; Müller and Donaldson's Hist. of Ancient Greek Literature ; Roman Classical Literature (Brown's) ; Theatre of the Greeks (Donaldson's.)
Philologx.-Müller's Science of Language, Vols. I., II.; Clark's Comparative Philology ; Donaldson's Varronianus, chaps. VI., VII., VIII., IX., XI., XIV.; Donaldson's Cratylus, Book I., chap. 5, Book III., chap. 2, Book IV. chapter 4 ; Lewis's Essay on the Romance Languages.

## MATHEMATICS AND MATHEMATICAL PHYSICS.

## THIRD YEAR.

Spherical Trigonometry, with application to Astronomy : DeNoivre's Theorem and Angular Analysis.

Analytical Geometry-The Straight Line, the Circle, the Rarabola, the Ellipse, the Hyperbola.

Differential Calculus-Differentiation; Theorems of Leibnitz, Maclaurin, and Taylor; Maxima and Minima of Functions of One Variable. Theory of Equations-Theorems respecting the Roots of Equations; Sturm's Theorem with Horner's Method of solving the Higher Equations.

## FOURTH YEAR

Analytical Geometry-The Locus of the Equation of the Second Degree between two Variables; Plane Loci.
Differential Calculus: Maxima and Minima of Functions of two Variables ; change of the Independent variable ; Radius of Curvature; Osculating Circle ; Envelopes : the Tracing of Curves from their Equations.
Integral Calculus-Integration of Simple Forms: Integration by Parts, and Formulæ of Reduction: Applications to Surfaces, Volumes, \&c.: Differential Equations, selected course.

EXTENSION OF THE ORDINARY COURSE IN MATHEMATICAL PHYSICS.
Prescribed Sections of Parkinson's Elementary Mechanics, Parkinson's Optics, and Hymer's Astronomy. Selections from Walton's Mechanical Problems.
books recommended-(In Order of Preference)
Todhunter's Spherical Trigonometry.
Todhunter's Plane Trigonometry or Colenso's (2nd part.)
Puckle's or Todhunter's Conic Sections.
Hall's, (Hind's, Todhunter's), Differential and Integral Calculus.
Todhunter's or Young's Theory of Equations.
Boole's Differential Equations.

EXPERIMENTAL PHYSICS:
Ganot's Physics, by Atkinson.
Heat a Mode of Motion, by Tyndal.
Optics, by Sir David Brewster.
The Student's Text Book of Electricity (Noad.)
Nichol's Physical Sciences (Article, Magnetism.)

## MENTAL AND MORAL PHLLOSOPHY.

LOGIC.
"Sir William Hamilton's Lectures on Logic. Whately's Logic, Books II., III.; Mill's Logic, I., II.; Sir William Hamilton's Lectures on Metaphysics.

METAPHYSICS AND ESTHETICS.


#### Abstract

Descartes' Principles of Philosophy. Berkeley's Principles of Human Knowledge. Reid's Essays, VI. Sir William Hamilton's Philosophy of Perception and Philosophy of the Unconditioned. Mill's Examination of Sir William Hamilton's Philosophy. Lewis' Biographical History of Philosophy. Cousin's Philosophy of the Beautiful. Alison's Essays on the Principles of Taste. Burke on the Sublime and Beautiful.


ETHICS.
Mackintosh's Dissertation on the Progress of 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.
Thompson's Christian Theism.
Aristotle's Ethics, Books I., III., VI., X., (in English.)

HISTORY, POLITICAL ECONOMY, AND ENGLISH LANGUAGE AND LITERATURE.

## ENGLISH LANGUAGE.

Corson's Selections from Saxon and English Literature. Lectures on the English Language, (Geo. P. Marsh.) Study of the English Language, (F. A. Marsh.) Latham's English Language.
Trench's English Past and Present.
HISTORY.
Bede's Ecclesiastical History of England.
Freeman's History of Norman Conquest of England.
Macaulay's History of England.
Hallam's Constitutional History.
Bryce's Holy Roman Empire.
Stephen's Lectures on the History of Erance.
Menzel's History of Germany.
Mallet's Northern Antiquities.
Guizot's History of Civilization.
POLITICAL ECONOMY.
Smith's Wealth of Nations, by MacCulloch. Science of Wealth, by Walker.
Plato's Republic, Books I., IV., (in English.)

TIME TABLE.

| Hours. | First Year. | Second Year. | Third Ygar. | Fourth Year. |
| :---: | :---: | :---: | :---: | :---: |
| $9-10$. | French (or Spanish). | Prac. Chemistry-2 days. French (or Spanish). | Prac. Chemistry-2 days. Honor Classics-1 day. French-2 days. | Classics-2 days. <br> Honor Classics-1 day. <br> French-2 days. |
| 10-11. | RhetoricDaily. | $\begin{aligned} & \text { Mathematics- } \\ & \text { Daily. } \end{aligned}$ | Classics-4 days. <br> Honor Classics-1 day. | Ethics, Political Econ.Daily. |
| 11-12. | MathematicsDaily. | ClassicsDaily. | Metaphysics-Mo., Tu., Fri. Honor English Literature1 day. | History4 days. |
| 12-1. | ClassicsDaily. | Logic and PsychologyTu., Wed., Th., Fri. | Expl. Physics-2 days. <br> Math. Physics-2 days. <br> Advanced Physics-1 day. | Expl. Physics-1 day. Math. Physics-1 day. |
| 1-2. |  |  | Honor Mathematics2 days. | Honor Mathematics2 days. |
| 2-3. |  | ChemistryDaily. | ChemistryDaily. |  |
| 3-4. |  | - | $\begin{aligned} & \text { German- } \\ & 2 \text { days. } \end{aligned}$ | $\begin{aligned} & \text { German- } \\ & 1 \text { day. } \end{aligned}$ |

#  

MASTER OF ARTS.
Joseph Annand, B. A. Herbert A. Bayne, B. A. James Forrest, B. A. John J. McKenzie, B. A.

## DOCTOR OF MEDICINE AND MASTER OF SURGERY.

George H. H. DeWolf. Finlay MacMillan. Charles W. Hiltz. William McRae.

Roderic Sutherland.

## BACHELOR OF ARTS.

William P. Archibald. James W. Carmichael. Duncan C. Fraser. Hugh McKenzie. Ephraim Scott.<br>William T. Bruce.<br>William Cruikshank. Adam Gunn.<br>Alexander W. Pollok.<br>Arthur I. Trueman.

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## UNIVERSITY PRIZES.

FOURTH TEAR.


Classics. . . . . . . . . . . . . . . . . . . Charles D. McDonald.
Metaphysics. . . . . . . . . . . . . . . . Charles D. McDonald.

Natural Philosophy........ . . Alex. H. MacKay.
Chemistry...................... . Alex. H. MacKay.
Botany and Zoology. . . . . . . . Alex. H. MacKay.
Modern Languages. . . . . . . . . . Charles D. MeDonald.


> C. Herdman ; 2nd., Danl. S. Fraser.

Psychology . . . . . . . . . . . . . . . . James C. Herdman.
Chemistry............................James C. Herdman.
Than first year.
Classics. . . . . . . . . . . . . . . . . . . . . 1 st., George MeMillan. 2nd., Robert McLellan.
Mathematics. . . . . . . . . . . . . . . Robert McLellan.
Rhetoric........................ . . Robert McLellan.

## CERTIFICATES OF GENERAL MERIT.

Of the First Class :-Fourth Year-William P. Arehibald. Third Year-Charles D. McDonald, Alex. H. MacKay, David S. Creelman. Second Year-James C. Herdman, (Pictou Academy), Danl. S. Fraser. First Year-Robert McLellan, (Pictou Academy).

Of the Second Class:-Fourth Year-Ephraim Scott. First YearWm. Brownrig, (Pictou Academy), George McMillan, (Private Tuition), Wm. A. Mills.

## North British Society's Bursary.

The North British Society's Bursary of the Annual Value of $\$ 60$ was awarded to James C. Herdman.

## SPECIAL PRIZES.

The Grant Prize of $\$ 20$ for the best Essay on "The Mechanical Theory of Heat" was awarded to Alex. H. MacKay.

The Young Prize of $\$ 20$ for the best Essay on "The Moral and Political Effects of the Revolution in England in 1688," was awarded to Ephraim Scott.

The Prize of $\$ 20$ offered by Col. Laurie for the best Essay on "Manufactures in Nova Scotia; how co-operation may best be employed for their development" was awarded to Duncan C. Fraser.

The Young Prize of $\$ 20$ for Elocution, open for competition to Students of the first and second years, was won by Wm. A. Mills.

## Cxaminations, 1871-2

## SCHOLARSHIP EXAMINATION, OCTOBER, 1871.

The Scholarships offered for Competition to Students entering as Undergrauduates were gained by

William Brownrig, Pictou Academy. George McMillan, Private Tuition.

## UNIVERSITY EXAMIINATIONS.

The following Undergraduates have passed the University Examinations in their several years :-

## SUPPLEMENTARY EXAMINATIONS, OCT., 1871.

Third Year-James M. Carmichael, Duncan C. Fraser.
Second Year-Melville Logan.
First Year-Alexander C. Patterson.

## ENTRANCE EXAMINATION IN GRECIAN HISTORY.

(Held this Session in January, 1872.)
Second Year-Daniel S. Fraser, James C. Herdman, Louis Jordan, Danl. McGregor, Donald McLeod, Jas. McD. Oxley, R. G. Sinclair.
The following Students of the Second Year passed an equivalent Examination in previous years :-

Walter S. Doull, Wm. C. Herdman, Arch. Sinclair.

## SESSIONAL EXAMINATIONS, APRIL 1872.

Final Examination for Degree of B. A.-Wm. P. Archibald, Wm. T. Bruce, James M. Carmichael, Wm. Cruickshank, Duncan C. Fraser, Adam Gunn, Hugh McKenzie, Alex. W. Pollok, Ephraim Scott, Arthur I. Trueman.
Third Year.-William Cameron, David F. Creelman, John Hunter, Melville Logan, Charles D. McDonald, Alex. H. MacKay, James A. McKeen.
Second Year.-Daniel S. Fraser, Wm. C. Herdman, James C. Herdman, Daniel McGregor, Donald McLeod, James McD. Oxley, Robert S. Sinclair.
First Year-(In the B. A. Course)-William Brownrig, James R. Coffin. Ed. Francis, Andrew Grey, Archibald Gunn, Isaac McDowall, Alex. McLean, Robert McLellan, Alex. McLeod, Geo. McMillan, Wm. A. Mills, Jas. A. Smith. (In the B. Sc. Course)-Francis H. Bell.

## 24

## STANDING OF THE STUDENTS IN THE SEVERAL SUBJECTS.

(The names in the First and Second Classes are arranged in the order of merit ; the others, alphabetically.)

CLASSICS.
Fourth Year.-(Final Examination for the Degree of B. A)-Latin: Class 1.-Wm. P. Archibald. Class 2-None. Class 3-Bruce, Wm. T.; Carmichael, James M. ; Cruickshank, William; Fraser, Duncan C.; Gunn, Adam; McKenzie, Hugh; Pollok, Alex. W.; Scott, Ephraim ; Trueman, Arthur I. Greek: Class 1-None. Class 2-William P. Archibald. Class 3-Gunn, Adam; Pollok, Alexander W.
Third Year.-Latin: Class 1-Charles D. McDonald. Class 2-David F. Creelman. Class 3-Cameron, William; Duff, Kenneth ; Hunter, John; Logan, John A.; Logan, Melville; McDonald, Henry; McKay, Alex.; McKeen, Jas.; Robinson, J. Millen. Greek: Class 1-Charles D. McDonald. Class 2-David F. Creelman. Class 3-Logan, Melville.
Second Year.-Latin and Greek. Class 1-James C. Herdman. Class 2-None. Class 3-Fraser, Dan. Stiles ; Herdman William C.; McGregor, Daniel ; McLeod, Donald; Oxley, James MeD. ; Sinclair, Robert G.
First Year.-Latin and Greek: Class 1-George McMillan, Robert McLellan. Class 2-William Brownrig. Class 3-Coffin, James R. ; Francis, Edward; Grey, Andrew ; Gunn, Archibald; McDowall, Isaac ; McLean, Alexander ; McLeod, Alexander ; Mills, William A.; Smith, James A.

## LATIN.

Class 3-Bell, Francis H, Student in Science; Sinclair, John H., General Student.

## MATHEMATICS.

Second Year.-Class 1-James C. Herdman, Daniel S. Fraser. Class 2-Robert G. Sinclair. Class 3-Herdman, Wm. C.; MeGregor, Daniel ; McLeod, Donald ; Oxley, James McD.
First Year.-Class 1-Robert McLellan. Class 2-William A. Miils, George MeMillan, James R. Coffin, Edward Francis, Archibald Gunn, William Brownrig. Class 3-Bell, Francis H. ; Forbes, Jas. A. ; Gordon, Edward ; Grey, Andrew; McDowall, Isaac ; McLean, Alex.; McLeod, Alex.; Sinclair, John H. ; Smith, James A.

## METAPHYSICS.

Third Year.-Class 1-Charles D. McDonald, Alex. H, MacKay, David F. Creelman, James A. McKeen, Wm. Cameron. Class 2-Kenneth Duff, J. Millen Robinson, John Hunter. Class 3-Logan, John A. ; Logan, Melville.

## LOGIC AND PSYCHOLOGY.

Second Year.-Class 1-James C. Herdman, Daniel Stiles Fraser, Jas. McD. Oxley, William C. Herdman. Class 2-Robert Sinclair Daniel McGregor, Donald McLeod.

## CHEMISTRY.

Third Year.-Class 1-Alex. H. MacKay. Class 2-William Cameron, Class 3-Hunter, John; Logan, John A.; McKeen, James A.

Second Year.-Class 1-J. C. Herdman, Danl. S. Fraser. Class 2-D. McLeod. Class 3-Herdman, Wm. C.; McGregor, Danl, ; McLean, John ; Mitchell, William F.; Oxley, James McD.; Sinclair, R. G.
Practical Chemistry.-Class 1-Alex. H. MacKay. Class 2-Wm. Carneron.

## BOTANY AND ZOOLOGY.

First Year.-Class 1-Alexander H. MacKay, David F. Creelman. Class 1-John A. Logan, Charles D. McDonald. Class 3-Bell, F. H. ; Troop, W. H.

## NATURAL PHILOSOPHY.

Third Year.-Class 1-Alex. H. McKay, Charles D. McDonald, David F. Creelman. Class 2-None. Class 3-Cameron, Wm. ; Hunter, John ; McKeen, James A. ; Logan, Melville.

## ETHICS AND POLITICAL ECONOMY.

Fourth Year.-Class 1-Ephraim Scott, Jas. M. Carmichael, Arthur I. Trueman, Wm. P. Archibald, Wm. Cruickshank, Alex. W. Pollok, Class 2-William Bruce, Hugh McKenzie, Duncan C. Fraser, Adam Gunn.

## HISTORY.

Fourth Year. - Class 1-Wm. P. Archibald, Jas. Carmichael, Ephraim Scott. Class 2-Wm. Cruickshank, Duncan C. Fraser, Arthur I. Trueman. Class $3-$ Bruce, Wm. T.; Gunn, Adam; Mackenzie, Hugh; Pollok, Alex. W.

## RHETORIC.

First Year-Class 1-Robt. McLellan, W. H. Brownrig, F. H. Bell, W. A Mills. Class 2-Geo. McMillan, Jas. W. Smith, Edwd. Francis Jas. R. Coffin, Alex. McLeod, Archibald Gunn, John H. Sinclair Class 3-Forbes, James A.; Gordon, Edwd. ; Grey, Andrew ; McDowall, Isaac ; Mitchell, Wm. F.; McLean, Alex. ; McLeod, Wm. ; Morrow, Geoffrey.

## FRENCH.

Fourth Year.-Class 1-W. P. Archibald. Class 2-James A. Carmichael, Hugh McKenzie, Ephraim Scott, Wm. T. Bruce, Arthur I. Trueman, William Cruickshank. Class 3-Fraser, Duncan C.; Gunn, Adam ; Pollok, A. W.
Third Year.-Class 1-Charles D. McDonald, David F. Creelman. Class 2-A. H. McKay, Class 3-Bell, Francis H.; Cameron, William ; Duff, Kenneth; Hunter, J.; Logan, John A.; Logan, Melville; McDonald, Henry ; McKeen, Jas. A. ; Robinson, J. Millen.

## GERMAN.

Fouth Year.-Class 1-Ephraim Scott. Class 2-Arthur I. Trueman. Class 3-Bruce, William T.; Carmichael, James A.; Cruickshank, William; Fraser, Duncan C.; McKenzie, Hugh.
Third Year.-Class 1-Chas. D. McDonald. Class 2-A. H. MacKay. Francis H. Bell, J. Millen Robinsor., Kenneth Duff. Class 3McKeen, Jas. A.


FIRST YEAR


Science Course.
Bell, Francis Hugh
Troop, William Henry

## GENERAL STUDENTS.

NAME.
Boyd, J Brodrick Blanchard, Robt.J. Campbell, John
Chisholm, Murdoch
Esdaile, John
Forbes, James A.
Frizzle, H. T.
Gordon Edward
Gorham, E. J.
McDonald, Jas. R.
McElmon, Beveridge
McDonald, John
McLean, Charles
McLean, John
McMillen,
Mitchell, Arthur B.
Mitchell, W. F.
Murray, Thomas
Quinn, Albert R.
Sinclair, John H.
Stairs, George
Thomson, James
West, Franklin S.
Whitman, Jas. S.

RESIDENCE.
Five Islands, Colchester, Truro.
Lake Ainslie, C. B.
Loch Lomond.
Dartmouth.
North Dalhousie, Pictou.
Mabou, C. B.
Montrose, P. E. I.
Halifax.
Londonderry.
Whycocomagh, C. B. High Bank, P. E. I.
Halifax.
Lake Ainslie, C. B.
Halifax.
Halifax.
Bedeque, P. E. I.
Cornwallis.
Goshen, Guysborough.
Halifax.
${ }_{6} 6$
66

Undergraduates in Arts,.. .. .. .. .. .. .. ${ }^{46}$
Students in Medicine, .. .. .. .. .. 26
General Students in Arts .. .. .. .. .. 24
Total, .. .. .. .. .. 98

## Faculty of Medicino.

Very Rev. JAMES ROSS, D. D., Princtpal (ex-officio) and Matriculation Examiner.<br>WILLIAM J. ALMON, M. D.,

Emeritus Professor of Obstetrics and the Diseases of Women and Children, and President of the Faculty.

- LEXANDER P. REID, M. D., L.R.C.S., Edin., L.C.P. \& S. Canada, \&c. Professor of the Principles and Practice of Medicine, Clinical Medicine and Dean of the Faculty.

GEORGE LAWSON, Ph. D., LL.D., Professor of Chemistry, Chemical Toxicology and Botany.

WILLIAM B. SLAYtER, M. D., M. R. C. S. L., L. R. C. P., Eng., \&c. Professor of Obstetrics and the Diseases of Women and Cheldren and Clinical Surgery.

EDWARD FARREL, M. D.,
Professor of Principles and Practice of Surgery and Clinical Surgery.
JOHN SOMMERS, M. D,
Professor of Institnte of Medicine and Clinical Medicine.
HUGH A. GORDON, M. D., L. R. C. S., Edin., Professor of Anatomy and Registrar of the Faoulty.

ALFRED H. WOODILL, M. D.
Professor of Materia Medica and Therapeutics.
J. R. DeWOLF, M. D., Edin., L. R. C. S., Edin., and

HIRAM BLANCHARD, Esq., Q. C.,
Professors of Medical Jurisprudence.

> A. LAWSON, M. D.
> Demonstrator of Anatomy.
> JANITOR-JOHN WILSON.

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THE PRINCIPAL (ex-officio.)



The Sixth Session of the Medical Faculty of Dalhousie College and University will be opened on Tuesday, the 29th of October, 1872, with a general introductory lecture. The regular lectures will commence on Wednesday, the 30th of October, and will be continued during the six months following.

The class tickets for the various courses are accepted as qualifying candidates for examination before the Universities of Edinburgh, McGill Montreal, Harvard Boston, and the New York Schools of Medicine.

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The Student is advised to pass the Matriculation Examination in March, so that his four years of pupilage may expire at the close of a winter session. This examination is recommended to be passed before the attendance of a Medical Course -it is similar to that required by McGill University, Montreal, the College of Physicians and Surgeons of Ontario, the provincial law of Nova Scotia, and recommended by the Council of Medical Education and Registration of Great Britain. The time set apart for this examination will be made known after the commencement of the Session. Graduates in Arts of re-
cognized Universities are not required to submit to the Matriculation Examination.

While the University regulations permit a student to graduate after three years' attendance upon Lectures, provided he furnish proof that he has studied one year before attending Lectures, with a private practitioner, yet he is recommended to devote four sessions to systematic instruction, as less time is scarcely sufficient in which to acquire a fair knowledge of the many subjects which compose the curriculum.

With regard to the examination, students are requested to turn to section 10, Article 4, of the "Qulifications and Studies of Students and Graduates for the Medical Degree," in a succeeding part of this announcement.

The division of the examination into primary and final adopted by the McGill University, Montreal, and found to be most advantageous to students, will be adopted by this Faculty also; and it is hoped that the greater number of third year students will avail themselves of this arrangement.

Students of Dentistry will find it of advantage to attend the lectures on Chemisty, Anatomy, and Practical Anatomy.

To intending Druggists' Assistant, the lectures on Chemistry and Materia Medica will be of great practical assistance.

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For additional information apply to the Dean of the Faculty of Medicine, A. P. Reid, M. D., 98 Argyle Street, Halifax, N. S.

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## (f)

(The Lectures will be delivered in the University Building.)
I-OBSTETRICS.
Prof. Slayter, Surgeon to City Hospital.
Including Diseases of Women and Children, illustrated by plates, manikins, etc. Every facility will be given to senior students for attending midwifery cases at the Almshouse and Dispensary, under the direction of the medical officers.
The Emeritus Professor, Dr. Almon, will also give a number of practical lectures.
Class Books-Bedford, Tyler Smith, Cazeau, Scanzoni on Diseases of Women-West on Children.

II-MEDICINE.
Prof. Reid, Physician to City Hospital.
Divided into Principles and Practice. This course will be illustrated by coloured plates and morbid preparations, and special attention will be directed to diseases of the heart and lungs, and to their physical diagnosis, which will be illustrated by the numerous cases in the City Hospital, under the immediate instruction of the Professor, and to which cases every student may have direct access, thus enabling him to obtain a practical knowledge of this part of the profession.
Class Books-Tanner, Flint, Watson, Barlow, Reynolds, Niemeyer.

## III-SURGERY.

## Prof. Farrell, Surgeon to City Hospital.

Divivided into Principles and Practice, including Surgical Anatomy and Operative Surgery, exhibited on the subject. The various surgical instruments and apparatus will be shown, and their uses and applications illustrated.
Class Books-Druitt, Erichsen, Gross, Holmes.

> IV-CHEMISTRY.

Prof. Lawson.
This course will be illustrated by diagrams, tables, apparatus, preparations, and demonstrations on the black-board.Experiments daily.
Class Book-Fownes' Manual.

PRACTICAL CHEMISTRY.
There will be a separate class for Practical Chemistry specially suited to the requirements of Medical Students.
Laboratory Books-Fresenius's Qualitative, Bowman's Med. Ch.

## V-INSTITUTES OF MEDICINE.

Prof. Sommers, Physician to City Dispensary
This course will embrace the principles of Human Physiology, Histology, the use of the Microscope, and General Pathology.
Class Books-Dalton, Carpenter, Todd \& Bowman, Kirk \& Paget, and Williams' Principles of Medicine.

> VI-MATER1A MEDICA.

Prof. Woodill, Physician to City Dispensary
This course will be illustrated by specimens of medicinal plants and samples of the various drugs, chemicals, etc.
Class Books-Pareira by Farre, Stille, Neligan, Dispensatories.
VII-ANATOMY.

Prof. Gordon, Surgeon to City Dispensary.
This course will be illustrated by the fresh subject-dried pre-parations-including skeletons, etc., and life-size coloured plates. Every facility will be afforded to students to become practically acquainted wity Anatomy under the Professor and Demonstrator.

## PRACTICAL ANATOMY.

## A. Lawson, M. D.

Rooms open from 4 to 6 , and from 8 to 10, p. m.
Class Books-Gray, Wilson, Sharpey \& Quain, Ellis's Dissector.

## VIII-MEDICAL JURISPRUDENCE.

Prof. DeWolf, Superintendent of the Hospital for Insane.
Prof. Blanchard, Q. C.
This course includes Toxicology, the mode of testing for poisons, Insanity, and public Hygiene.
Prof. DeWolf will have ample opportunities for instructing his class in the important subject of Psychological Medicine.

Prof. Blandhard will give a short course of lectures on the the legal points connected with this branch of study.

Prof. Lawson will lecture on the subject of Chemical Toxicology.
Class Books-Taylor's Jurisprudence, Guy's Forensic Medicine.

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IX-CLINICAL MEDICINE.
X-CLINICAL SURGERY.
Taught by lectures and tutorially at the bed-side by the Physicians and Surgeons at the Provincial and City Hospital, and City Dispensary, at which institutions ample material is afforded for both classes. The students being individually trained at the bed-side both in Diagnosis and Treatment.

$$
\begin{aligned}
& \text { XI-BOTANY. } \\
& \text { Prof. Lawson. }
\end{aligned}
$$

Students are required to attend one course of three months on this subject. The Natural Orders containing Medicinal and Poisonous plants, will be illustrated as fully as possible.


## 35

## Exizes.

THE SIR WILLIAM YOUNG PRIZES.
These amounting to $\$ 30$ are offered by the Hon. Sir William Young, Kt., Chief Justice of Nova Scotia, to encourage the study of Practical Anatomy. Particulars given at the commencement of the Session.

THE DR. AVERY PRIZES.
These are offered by James F. Avery, M. D., to encourage the study of Clinical Medicine. There are two prizes, of $\$ 10$ each, for the best Clinical Reports. Particulars given at the commencement of the Session.

THE W. H. NEAL PRIZE.
A Prize of $\$ 20$ is offered by W. H. Neal, Esq., to the student passing the best final examination for the Degree of M. D.

## gidguitats, etr.

The Provincial and City Hospital is visited daily at 12 M., by the Medical Offiers ; and the City Alms House containing from 200 to 400 inmates, many of whom are in the Hospital Wards, will be available to students without fee. The best opportunities are here presented for clinical instruction, midwifery practice and treatment of diseases, likewise for the observation of pathological appearances, which will be demonstrated by post-mortem examinations. There is a Hospital fee of $\$ 1$ for certificate of attendance.

The Halifax Dispensary is carried on after the model of the DeMilt Dispensary, New York, being divided into three departments, viz.: (1) Surgical, including the Eye and Ear, (2) Medical, including the Heart and Lungs. (3) Disease of Women and Children. Here the student can have the advantage of becoming practically acquainted with the less severe forms of disease, and will have the privilege likewise of seeing patients with the visiting physicians, and have opportunities for Obstetric practice.

## finalty of datudicine.

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To intending Druggists' Assistant, the lectures on Chemistry and Materia Medica will be of great practical assistance.

Students of Law will be very much benefitted by attending the lectures on Medical Jurisprudence by Dr. DeWolf, H. Blanchard, Esq., Q. C., and Dr. Lawson-the subjects of Insanity, Law as related to Medicine, and Toxicology, being fully explained.

For additional information apply to the Dean of the Faculty of Medicine, A. P. Reid, M. D., 98 Argyle Street, Halifax, N. S.

## 

(The Lectures will be delivered in the University Building.)
I-OBSTETRICS.
Prof. Slayter, Surgeon to City Hospital.
Including Diseases of Women and Children, illustrated by plates, manikins, etc. Every facility will be given to senior students for attending midwifery cases at the Almshouse and Dispensary, under the direction of the medical officers.
The Emeritus Professor, Dr. Almon, will also give a number of practical lectures.
Class Books-Bedford, Tyler Smith, Cazeau, Scanzoni on Diseases of Women-West on Children.

II-MEDICINE.
Prof. Reid, Physician to City Hospital.
Divided into Principles and Practice. This course will be illustrated by coloured plates and morbid preparations, and special attention will be directed to diseases of the heart and lungs, and to their physical diagnosis, which will be illustrated by the numerous cases in the City Hospital, under the immediate instruction of the Professor, and to which cases every student may have direct access, thus enabling him to obtain a practical knowledge of this part of the profession.
Class Books-Tanner, Flint, Watson, Barlow, Reynolds, Niemeyer.

III-SURGERY.

## Prof. Farrell, Surgeon to City Hospital.

Divivided into Principles and Practice, including Surgical Anatomy and Operative Surgery, exhibited on the subject. The various surgical instruments and apparatus will be shown, and their uses and applications illustrated.
Class Books-Druitt, Erichsen, Gross, Holmes.
IV-CHEMISTRY.
Prof. Lawson.
This course will be illustrated by diagrams, tables, apparatus, preparations, and demonstrations on the black-board.Experiments daily.
Class Book-Fownes' Manual.

PRACTICAL CHEMISTRY.
There will be a separate class for Practical Chemistry specially suited to the requirements of Medical Students.
Laboratory Books-Fresenius's Qualitative, Bowman's Med. Ch.

## V-INSTITUTES OF MEDICINE.

Prof. Sommers, Physician to City Dispensary
This course will embrace the principles of Human Physiology,
Histology, the use of the Microscope, and General Pathology.
Class Books-Dalton, Carpenter, Todd \& Bowman, Kirk \& Paget, and Williams' Principles of Medicine.

VI-MATER1A MEDICA.
Prof. Woodill, Physician to City Dispensary
This course will be illustrated by specimens of medicinal plants and samples of the various drugs, chemicals, etc.
Class Books-Pareira by Farre, Stille, Neligan, Dispensatories.
VII-ANATOMY.

Prof. Gordon, Surgeon to City Dispensary.
This course will be illustrated by the fresh subject-dried pre-parations-including skeletons, etc., and life-size coloured plates. Every facility will be afforded to students to become practically acquainted wity Anatomy under the Professor and Demonstrator.

PRACTICAL ANATOMY.

## A. Lawson, M. D.

Rooms open from 4 to 6 , and from 8 to 10, p. m.
Class Books-Gray, Wilson, Sharpey \& Quain, Ellis's Dissector.
VIII-MEDICAL JURISPRUDENCE.
Prof. DeWolf, Superintendent of the Hospital for Insane.
Prof. Blanchard, Q. C.
This course includes Toxicology, the mode of testing for poisons, Insanity, and public Hygiene.
Prof. DeWolf will have ample opportunities for instructing his class in the important subject of Psychological Medicine.

Prof. Blandhard will give a short course of lectures on the the legal points connected with this branch of study.

Prof. Lawson will lecture on the subject of Chemical Toxicology.
Class Books-Taylor's Jurisprudence, Guy's Forensic Medicine.

## IX-CLINICAL MEDICINE.

X-CLINICAL SURGERY.
Taught by lectures and tutorially at the bed-side by the Physicians and Surgeons at the Provincial and City Hospital, and City Dispensary, at which institutions ample material is afforded for both classes. The students being individually trained at the bed-side both in Diagnosis and Treatment.

XI-BOTANY.
Prof. Lawson.
Students are required to attend one course of three months on this subject. The Natural Orders containing Medicinal and Poisonous plants, will be illustrated as fully as possible.


## zexizts.

THE SIR WILLIAM YOUNG PRIZES.
These amounting to $\$ 30$ are offered by the Hon. Sir William Young, Kt., Chief Justice of Nova Scotia, to encourage the study of Practical Anatomy. Particulars given at the commencement of the Session.

## THE DR. AVERY PRIZES.

These are offered by James F. Avery, M. D., to encourage the study of Clinical Medicine. There are two prizes, of $\$ 10$ each, for the best Clinical Reports. Particulars given at the commencement of the Session.

THE W. H. NEAL PRIZE.

A Prize of $\$ 20$ is offered by W. H. Neal, Esq., to the student passing the best final examination for the Degree of M. D.

## fitupitals, ett.

The Provinctal and City Hospital is visited daily at 12 M., by the Medical Offiers; and the City Alms House containing from 200 to 400 inmates, many of whom are in the Hospital Wards, will be available to students without fee. The best opportunities are here presented for clinical instruction, midwifery practice and treatment of diseases, likewise for the observation of pathological appearances, which will be demonstrated by post-mortem examinations. There is a Hospital fee of $\$ 1$ for certificate of attendance.

The Halifax Dispensary is carried on after the model of the DeMilt Dispensary, New York, being divided into three departments, viz.: (1) Surgical, including the Eye and Ear, (2) Medical, including the Heart and Lungs. (3) Disease of Women and Children. Here the student can have the advantage of becoming practically acquainted with the less severe forms of disease, and will have the privilege likewise of seeing patients with the visiting physicians, and have opportunities for Obstetric practice.

## fast §rssion.

## DEGREE OF M. D., C. M.

The following gentlemen after having complied with the regulations of this University, and passed satisfactory examinations received the degree of M. D., C. M.:
Name. Residence. Thesis.

Roderic Sutherland, River John, Pictou Cy., The Pus Crassis. Geo. H. H. DeWolf, Dartmouth, N. S., Surgical Aneurism. Chas. W. Hilitz Bridgetown, An'polis, N.S. Amenorrhoea. Wm. McRae, Richmond, C. B., N. S. Ovarian Dropsy. Finlay MacMillan, Pictou Cy., N. S. Alcohol.

The following gentleman passed the primary examination, which includes Anatomy, Chemistry, Materia Medica, Institutes of Medicine and Botany:
A. W. II. Lindsay, Halifax.

## PRIZES.

Mr. W. H. Neal's Prize for best final examination for the degree M. D., C. M. :-Roderic Sutherland, River John, Pictou County.

Rev. G. M. Grant's Prize for best primary examination :A. W. H. Lindsay, Halifax.

Sir Wm. Young-Prizes in Anatomy-(Practical):-For best Anatomical preparatien-D. A. Campbell, Truro. Anatomy Senior Class-D. A. Campbell, Truro. Anatomy, Junior Class -P. M. Ryan, Halifax.

Dr. J. F. Avery - Prizes for Clinical Reports of Cases:Clinical Medicine-F. McMillan, Wm. McRae:-Clinical Sur-gery-R. Sutherland.

Prof. Slayter's Prizes in Obstetrics:-G. H. H. DeWolf and Chas. W. Hiltz.

Prof. Blanchard's Prize in Forensic Medicine:-Geo. H. H. DeWolf. Honorary Certificates in Practical Anatomy:D. A. Campbell, W. S. Muir and A. W. H. Lindsay.

## (extracts from the datyutations.

## COURSES OF LECTURES, FEES, \&c.

1st.-Each Professor shall deliver at least five lectures during the week, except in the classes of Clinical Medicine and Clinical Surgery, in each of which only two Lectures shall be required ; and in that of Medical Jurisprudence, if extended through six months, in which case three lectures a week will suffice.

2nd.-Each Lecture shall be of one hour's duration.
3rd.-Every Professor shall oecasionally examine his class upon the subjects treated of in his preceeding Lectures; and every such examination shall be considered a Lecture.

4th.-A roll of the names of the Students attending each class shall be called from time to time.

5th.-All tickets which have not a Certificate of attendance attached, shall be rejected when presented as testimonials previous to examination, unless the omissions shall be satisfactorily accounted for.

6th.-The fee for each class shall be $\$ 12$, with the following exceptions: For each of those of Medical Jurisprudence, Practical Anatomy, Practical Chemistry, and Botany, $\$ 6$; for Clinical Medicine and Clinical Surgery, each \$6. The class fees are payable in advance, to the Registrar, who will furnish all tickets.

7th.-Any student, after having paid the fees, and attended two courses of any class, shall be entitled to a perpetual ticket for that class.

8th.-The courses of all the Classes, except Practical Chemistry, Botany and Medical Jurisprudence, shall be of six months' duration; the Classes of Practical Chemistry and Botany, of three months' duration ; and that of Medical Jurisprudence, either of three months' duration, in which case Five Lectures a week shall be given, or of six months' duration, in which case only three Lectures a week shall be required.

9th.-The courses shall commence on the last Tuesday in October, and with the exception of a vacation at Christmas, shall continue till the end of April.

10th.-The Matriculation or Preliminary Examination is similar to that required by McGill University, Montreal : the Medical Act of Nova Scotia; adopted under the Medical Act for Ontario, and recommended by the "Council of Medical Education and Registration" of Great Britain. The requirements are : Compulsory - English Language, including Grammar and Composition; Arithmetic, including Vugar and Decimal Frac-
tions; Algebra, including Simple Equations; Geometry, first two books of Euclid; Latin, Translation and Grammar ; and one of the following Optional Subjects-Greek, French, German, Natural Philosophy, including Mechanics, Hydrostatics, and Pnuematics. Students passing this examination will receive a Certificate. Students may attend the classes without passing this examination.

Graduates in arts of recognized Universities are not required to submit to the matriculation examination.

## Qualifications and Studies of Students and Candidates for the Medical Degree.

1st.-All Students desirous of attending the Medical Lecture ${ }^{8}$ shall, at the commencement of each Session, enrol their names and residences in the Register of the Medical Faculty, and procure from the Registrar a ticket of Matriculation, for which each Student will pay a fee of $\$ 2$.

2nd.-The said Register shall be closed on the 15 th day of December in each year, and no tickets obtained from any of the Professors shall be received without previous enregistration.

3rd. - No one shall be admitted to the Degree of Doctor of Medicine and Master of Surgery, who shall not either: 1st, have attended Lectures for a period of at least four Sessions in this University, or some other University, College, or School of Medicine, approved by this University; or 2nd, have studied Medicine during at least four years, and during that time have attended Lectures for a period of at least three Sessions, either in this University or some other University, and shall have passed the matriculation examination if not a Graduate in arts.

4th.-Candidates for the final Examination shall furnish Testimonials of attendance on the following branches of Medical Education, viz.:

## Anatomy,

Chemistry,
Materia Medica and Pharmacy, Physiology.
Principles and Practice of Surgery, Obstetrics and Diseases of Women and Children,
Principles and Practice of Medicine,
Of which two courses will be required, each of six months' duration.
Practical Anatomy,
Clinical Medicine,
Clinical Surgery,
Medical Jurisprudence, ) Of which one course will be reBotany, $\}$ quired, each of three months' duPractical Chemistry. $\int$ ration.

Provided, however, that Testimonials equivalent to, though not precisely the same as those above stated, may be presented and accepted.

5th.-The Candidate must also give proof by ticket of having attended during twelve months the practice of the Provincial and City Hospital, or that of some otker Hospital, approved by this University.
6.th-He must also give proof by ticket of having attended for at least six months the practice of a Lying-in-Hospital, approved of by the University, or of having attended at least six cases of accouchement.

7th - No one shall be permitted to become a Candidate for examination, or shall receive a degree, who shall not have attended at least One Session of this University, and have obtained from it the tickets for one full Course of all the branches included in its curriculum.

8th.-Courses of less length than the above will only be received for the time over which they have extended.

9th.-Every Candidate for the degree must on or before the 15th day of March, present to the Dean of the Medical Faculty testimonials of his qualifications entitling him to examination, and also a Thesis or inaugural dissertation, written by himself, on some subject connected with Medical or Surgical Science. He must at the same time deliver to the Dean of the Faculty the following Certificate:

## Halifax, -_ 18

I, the undersigned, being desirous of obtaining the Degree of Doctor of Medicine and Master of Surgery, do hereby declare that I have attained the age of twenty-one years, (or if the case be otherwise, that I shall have attained the age of twenty-one years before the next graduation day.) [Signed,] A.B.

10th.-The trials to be undergone by the Candidate shall be:
(1.) The private examination of his Thesis as evidence both of Medical and general acquirement, followed [if approved] by its public defence.
(2.) A general written and oral examination on all the branches of Medical and Surgical Science.
(3.) The Clinical Professors shall conduct the examinations of their classes at the bedside, submitting to them cases for diagnosis and treatment in the wards of the Hospital; they shall also, in estimating the standard of members of their classes and the number of marks to be awarded, take into account the regularity of their attendance and the diligence and care they have evinced in reporting cases.

These examinations will be divided into primary and final, the former comprehending the branches of Anatomy, Chemistry, Materia Medica, Physiology, and Botany or Zoology ; the latter, those of Practice of Medicine, Surgery, Obstetrics, and Medical Jurisprudence. It wil be optional with the student to present himself for the primary examination at the end of the third session or the third year.

11th.-The following Oath or affirmation, will be exacted from the Candidate before receiving his Degree :

## SPONSIO ACADEMICA.

## In Facultate Medicinæ Universitatis Dalhousianæ-

Ego, A-B B Doctoratus in Arte Medica titulo jam donandus, Sancto coram Deo cordium scrutatore, spondeo, me in omnibus grati animi officiis, erga hanc Universitatem a extremum vitæ halitum, perseveraturum, tum porro artem medicam, caute, caste et probe exercitaturum; et, quoad in me est, omnia ad ægrotorum corporum salutem conducentia, cum fide procuraturum ; quæ denique, inter medendum, visa vel audita silere conveniat, non sine gravi causa vulgaturum. Ita presens mihi spondenti adsit Numen.

12th.-The Fee for the Degree of Doctor of Medicine and Master of Surgery shall be twenty dollars, to be paid by the candidate before examination, together with a Registration Fee of one dollar.
N. B.-Board may be obtained at from $\$ 12$ to $\$ 15$ per month.

## Students of ghtedital faruly, ฐrgsion 1871-72.

| Bent, J. K. | Halifax. |
| :---: | :---: |
| Bethune, John | Cape Breton. |
| Campbell, Donald A | Truro. |
| Campbell, Angus. | Pietou County. |
| Chisholm, Donal | Cape Breton. |
| Crooker, P. A. | Brookfield. |
| Cox, Robinson | Guysboro'. |
| DeWolf, Geo. H | Dartmouth. |
| Delaney, W. C. | Halifax. |
| Gunn, Robert E. | Cape Breton. |
| Hiltz, Chas. W | . Bridgetown. |
| Lingley, J. W. | Halifax. |
| Lindsay, A. W. H | Halifax. |
| Moore, Edmund. | Londonderry. |
| Muir Wm. S. . | Truro. |
| Melchertson, Fred. | Halifax. |
| McMillan, Finlay.. | . Pictou County. |
| McIntosh, Alex., D | Pietou County. |
| McRae, William. | Cape Breton. |
| McKay, Duncan R | Truro. |
| Ryan, Philip M. | Halifax. |
| Sutherland Rode | .Pictou County. |
| Weston, R. A. | Dartmouth. |

# DALHOUSIE COLLEGE AND UNIVERSITY, 

 HALIFAX.SESSIONAL EXAMINATIONS, 1872.

WEDNESDAY, APRIL 10,9 A.M. TO 1 P.M.

LATIN.-FIRST YEAR
CICERO: FOURTH ORATION AGAINST CATALINE.
VIRGIL: AENEID, BOOK IX.
Professor Johnson, M. A.......................Examiner.

1. Translate the first extract $(a)$ and either of the two next ( $b$ or $c$ ), but not both.
a. Omnia et provisa et parata et constituta sunt, patres conscripti, quum mea summa cura atque diligentia, tum multo etiam majore populi Romani ad summum imperium retinendum et ad communes fortunas conservandas voluntate. Ommes adsunt omnium ordinum homines, omnium denique aetatum : plenum est forum, plena templa circum forum, pleni omnes aditus hujus templi ac loci. Causa est enim post urbem conditam haec inventa sola in qua omnes sentirent unum atque idem, praeter eos qui quum sibi viderent esse pereundum, cum omnibus potius. quam soli perire voluerunt. * * * * Ceteri vero, dii immortales, qua frequentia, quo studio, qua virtute ad communem salutem dignitatemque consentiunt. Quid ego hic equites Romanos commemorem? qui vobis ita summam ordinis consiliique concedunt ut robiscum de amore reipublicæ certent : quos ex multornm annorum dissensione hujus ordinis ad societatem concordiamque revocatos hodiernus dies vobiscum atque haec causa conjungit ; quam si conjunctionem in consulatu confirmatam meo perpetuam in republica tenuerimus, confirmo vobis nullum posthac malums eivile ac domesticum ad ullam reipublicae partem esse venturum.
b. Nisus ad haee : Equidem de te nil tale verebar,

Nec fas; non: ita me referat tibi magnus ovantem Juppiter, aut quicumque oculis haec aspicit aequis.
Sed si quis-quae multa vides discrimine taliSi quis in adversum rapiat casusve densve, Te superesse velim; tua vita dignior aetas. Sit, qui me raptum pugna pretiove redemptum Mandet humo, solita aut si qua id fortuna vetabit, Absenti feratinferias, decoretque sepulcro. Neu matri miserae tanti sim causa doloris, Quae te sola, puer, multis e matribus ausa Persequitur, magni nec moenia curat Acestae. Ille autem: Causas nequiquam nectis inanes, Nec mea jam mutata loco sententia cedit. Adceleremus, ait. Vigiles simul excitat. Illi Succedunt servantque vices: statione relicta Ipse comes Niso graditur, regemque requirunt.
c. Durum ab stirpe genus natos ad flumina primum Deferimus saevoque gelu duramus et undis; Venatu invigilant pueri, silvasque fatigant; Flectere ludus equos et spicula tendere cornu.

At patiens operum parvoque adsueta juventus Aut rastris terram domat, aut quatit oppida bello. Omne aevum ferro teritur, versaque juvencum Terga fatigamus hasta; nec tarda senectus Debilitat vires animi mutatque vigorem : Canitiem galea premimus; semperque recentes Comportare juvat praedas et vivere rapto. Vobis picta croco et fulgenti murice vestis; Desidiae cordi ; juvat indulgere choreis; Et tunicae manicas, et habent redimicula mitrae. O vere Phrygiae, neque enim Phryges, ite per alta Dindyma, ubi adsuetis biforem dat tibia cantum. Tympana vos buxusque vocat Berecyntia Matris Ideae: sinite arma viris et cedite ferro.
2. Analyse the sentence "Causa est enim . . . voluerunt," so as to shew how its different clauses are connected together in language and thought.
3. a. Decline throughout in combination : ille fatifer arcus, dives quidam senex, nullum malum civile ac domesticum, una castra.
b. Write all the cases of inferias, vices, gelu, Phryges, aethere, canitiem, locus, deus, 厄九s.
4. What are the other degrees of comparison of pauper, benevolus, facilis, providus, primus, idoneus, imus, novus, juvenis.
5. Write in Latin : 7777, 465 th, $\frac{1}{2}$.
6. a. What are the other persons of nolo refero, inquam, ědo. Write out the Fut. Indic. Act. of adeo, velle, moneo, posse, and the Pres. Indie. Pass. of conficio, patefacio, video, fero.
b. In what Tense, Mood, and Voice are these verbs and what are their principal parts, sentirent, tenuerimus, verebar, mandet, vetabit, ausa, nectis, requirunt, juvat, sinite?
7. a. Mark the quantity of each syllable of fiebatis, corporibus, ancipitia, collegeritis, audiebamus, venimusque, vider. Distinguish fügit, fugit: lepörem, lepбrem: obľ̆tus, oblītus: rĕfert, rēfert: lĕgať̌s lēgatīs, lēgatŭs.
b. Scan the last five lines of the third passage for transalation.
8. a. When do Intransitive verbs govern an Accusative? What verbs are followed by a Genitive? What Adjectives govern a Dative?
b. Account for the cases of the following words which occur in the passages above: sibi, soli, quam,-vita, pretio, humo,-venatu, cornu, operum, hasta, rapto, cordi.
9. Give a short sketch of Cicero's life.
10. Translate into Latin :

Homer is deservedly called the King of Poets.
It will delight me to have perished by the hands of men.
The ambassadors who have been sojourning at Rome will return home after a few days.

The magistrate condemns them in their absence to capital punishment.
Semiramis founded Babylon and surrounded it with a wall.
Now, O Aeneas, you need courage, now a dauntless breast.
T. Lartius was appointed dictator about ten years after the first consul.

When the king heard this, he replied that he would come with his whole army in a few days.

## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Wednespat, April 10,3 to 5.30 p. m.<br>CLASSICS.-FIRST YEAR. ADDITIONAL PAPER.<br>\section*{CICERO: SECOND PHILIPPIC.-DEMOSTHENES: FIRST PHILIPPIC.}

Professor Johnson, M. A....................... Examiner.
Translate the following passages :

1. Haec ut colligeres, homo amentissime, tot dies in aliena villa declamasti? quamquam tu quidem, ut tui familiarissimi dictitant, vini exhalandi, non ingenii acuendi causa declamitas. At vero adhibes joci causa magistrum, suffragio tuo et compotorum tuorum rhetorem, cui concessisti ut in te quae vellet diceret, salsum omnino hominem, sed materia facilis est in te et in tuos dicta dicere. Vide autem quid intersit inter te et avum tuum. Ille sensim dicebat quod causae prodesset; tu cursim dicis aliena. At quanta merces rhetori data est! Audite, audite, patres conscripti, et cognoscite reipublicae vulnera. Duo millia jugerum campi Leontini Sex. Clodio rhetori assignasti, et quidem immunia, ut populi Romani tanta mercede nihil sapere disceres. Num etiam hoc, homo audacissime, ex Caesaris commentariis? Sed dicam alio loco et de Leontino agro et de Campano, quos iste agros ereptos reipublicae turpissimis possessoribus inquinavit. Jam enim, quoniam criminibus ejus satis respondi de ipso emendatore, et correctore nostro quaedam dicenda sunt.
2. O praeclaram illam percursationem tuam mense Aprili atque Maio, tum quum etiam Capuam coloniam deducere conatus es. Quemadmodum illine abieris, vel potius paene non abieris, scimus. Cui tu urbi minitaris. Utinam conere, ut aliquando illud 'paene' tollatur! At quam nobilis est tua illa peregrinatio. Quid prandiorum apparatus, quid furiosam vinolentiam tuam proferam? Tua ista detrimenta sunt; illa nostra. Agrum Campanum, qui quum de vectigalibus eximebatur ut militibus daretur, tamen infligi magnum reipublicae vulnus putabamus, hunc tu compransoribus tuis et collusoribus dividebatis. Mimos dico et mimas, patres conscripti, in agro Campano collocatos. Quid jam querar de agro Leontino? quoniam quidem hae quondam arationes Campana et Leontina in populi Romani patrimonio grandiferae et fructuosae ferebantur. Medico tria millia jugerum, quasi te sanum fecisset; rhetori duo, quasi disertum facere potuisset.
3. Translate: Demosthenes’ First Philippie, $a, ~ § \$ 13,14$.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.
Thursday, April 11 th:-9 a.m. to 1 p.m.
GREEK.-FIRST YEAR.
LUCIAN.-CATAPlUS.
Johnson, M.A.............................................................iner.
Profissor Johnson, M.A

## 1. Translate:


















 өада́ттә кодхі́ठшข.
2. In what tense, mood, and voice are the following forms and what
 $\pi \rho \rho \beta a i v \omega \nu, \omega \check{\phi} \theta \eta, \varepsilon \tau \varepsilon \in \theta \pi \varepsilon \varepsilon \nu$.
3. Write the genitive of : $\varepsilon i \varsigma$, ' $\mathrm{E} \rho \mu \tilde{\eta}$, $\pi a \iota \delta i a \iota, ~ \tau \hat{\varepsilon} \tau \tau \alpha \rho a \varsigma, \chi \iota \lambda i o c \varsigma, \pi \eta \chi \varepsilon i \overline{\text {, }}$

4. What is known of Lucian's life ?

GRAMMAR.

1. Explain the terms synæresis, crasis, apheresis, syncope. When is $v$ added to the end of words?
2. What were the original forms of $\varepsilon \dot{v} \delta a i \not \mu \omega \nu, \mu \varepsilon ́ \lambda a \varsigma, \gamma a ́ \lambda a, \gamma i \gamma a \varsigma, a ̆ \nu a \xi$, $\lambda \hat{\varepsilon} \omega \nu,-\dot{\varepsilon} \tau \dot{v} \psi \omega, \delta \iota \delta o v ́ s, \lambda \hat{\varepsilon} \gamma \omega$, в $i \mu i, \sigma \tau \varepsilon ́ \lambda \lambda o v, ~ \ddot{\nu} \nu$.
3. Write down all the cases of $\chi$ ápıs, $\pi a i ̃ s, \pi o \tilde{v} s$, ix $\chi \ddot{s}$, voṽ $\bar{s}$, aidós.
4. Give the other degrees of comparison of $\mu \dot{\varepsilon} \gamma a \varsigma, \pi o \lambda u \varsigma, \mu i \kappa \rho o \varsigma, \pi \rho \omega ̃ \tau o \varsigma$, $\mu a ́ \lambda \iota \sigma \tau a, \dot{\rho} a ́ \delta \iota o \varsigma, ~ a ̉ \lambda \eta \theta \dot{\eta} s, \theta a ̆ \sigma \sigma o v$.
5. Write the Nom. and Acc. sing. and pl. of ovitos, ő õt८s, ő $\delta \varepsilon$, avivós, -

6. What is the difference between a root and a stem? Give two examples of each in nouns and verbs. Where do the first and second conjugations differ? What was the original difference?


7. Write the 3rd pl. perf. Indic. Act. of $\lambda a \mu \beta a ́ \nu \omega, \sigma \tau \varepsilon \lambda \lambda \omega \omega, \kappa \tau \varepsilon i v \omega, \zeta \eta \lambda \sigma \omega$,

8. Form the perf. Infin. passive of $\pi \lambda \varepsilon \kappa \kappa \omega, \tau \rho \varepsilon ́ \pi \omega, \pi \varepsilon i \vartheta \vartheta \omega, \kappa \rho i \nu \omega, \delta \eta \lambda \delta \omega$, $\gamma \varepsilon \lambda a ́ \omega, \pi \rho \alpha \dot{\sigma} \sigma \omega$, $\grave{\imath} \sigma \tau \eta \mu \mu$.
9. Arrange in a tabular form the peculiar tenses in the Active voice of $\delta i \delta \omega \mu \iota$ and $\tau i \vartheta \eta \mu \iota$, giving only one form in each mood and tense.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

## SESSIONAL EXAMINATIONS, 1872.

Friday, April 12, 9 A.M. to 1 P.M.

## MATHEMATICS—FIRSTYEAR.

GEOMETRY.

## Professor C. Macdonald, M. A................. Examiner.

1. At a given point in a giver straight line, to make an angle equal to a given rectilineal angle. Do this also in the shortest practical way.
2. The complements of the parallelograms which are about the diagonals of any parallelogram, are equal to one another.
3. If the side of a parallelogram is $a$ feet and its perpendicular breadth $b$ feet : prove the area $=a b$ square feet. Obtain also a rule for finding the area of a triangle.
4. If a straight line be bisected and produced to any point ; the rectangle contained by the whole line thus produced and the part of it produced, together with the square of half the line bisected, is equal to the square of the straight line made up of the half and the part produced. (By the division of the straight line only, if you can.) Give the algebraic equation. which represents this proposition.
5. The base, AB , of a triangle is bisected in D , and, C being the vertex, $C D$ is joined : prove $\mathrm{AC}^{2}+\mathrm{CB}^{2}=2 \mathrm{AD}^{2}+2 \mathrm{DC}^{2}$.
6. If one circle cut another, they cannot have the same centre.
7. In equal circles, equal chords cut off equal arcs.
8. If a straight line touch a circle, and from the point of contact a straight line be drawn cutting the circle; the angles between the tangent and the secant shall be equal to the angles in the alternate segments of the circle.
9. To inscribe a circle in a given square.
10. In proposition 10th of Book IV. of Euclid, it is shown how to make an isosceles triangle having each of the angles at the base double the third, angle. Describe fully the further use of this proposition, and show how to make a regular polygon of 120 sides.
11. The straight line joining the middle points of two sides of a triangle is parallel to the third side and equal to half of it.
12. If two circles cut one another and diameters be drawn from one of the points of intersection, the straight line joining their other extremities shall pass through the other point of intersection.
13. If chords in a circle cut one another at a constant angle, the sum of the parts of the circumference intercepted by them is constant.
14. ACB is a semicircle, AB the diameter. From B draw a tangent, $B X$, and from A draw AC cutting the circumference in C and BX in D : prove

$$
\mathrm{AC} \cdot \mathrm{AD}=A \mathrm{~B}^{2}
$$

## ALGEBRA.

1. Reduce $\frac{3}{8}$ to a decimal fraction, in such a manner as to shew the reason of the common rule for the purpose. Find also by inspection of denominators, which of the following are represented by terminate decimals and which by interminate: $\frac{5}{48}, \frac{59}{625}, \frac{1}{750}, \frac{7}{512}$.
2. Find, without Algebra, at what time after 12 o'clock the hour and minute hands of a watch are in the same straight line.
3. Simplify the expression,

$$
5 a-7(b-c)-\{6 a-(3 b+2 c)+4 c-(2 a-(b+2 c-a))\} .
$$

4. Find the sum of $\frac{1}{1+x}-\frac{1}{1-x}+\frac{2 x}{1-x^{2}}$ : and also of

$$
\left(\frac{a+b}{a-b}-\frac{a-b}{a+b}\right)\left(\frac{1}{b}-\frac{1}{a}\right)
$$

5. Multiply $a^{m}$ by $a^{n}$; divide the former by the latter also ; and hence shew $a^{0}=1,,^{m}=\frac{1}{a^{m}}$ and $a^{\frac{1}{m}}=\sqrt[m]{a}$.
6. Prove $\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2} 2}(5-2 \sqrt{\overline{6}})=1$.
7. Given $n$ simultaneous equations of the 1st degree, independent of each other, involving $n$ unknown quantities, $x, y, z$, \&e.; describe minutely the method of evaluating these quantities.
8. Given $x+\frac{3 x-10}{5}=4-\frac{5 x-10}{3}$, to find $x$; also given
$7 x-2 y=14+\frac{x}{2}$, and $7 y-2 x=32+\frac{y}{3}$, to find $x$ and $y$.
9. A farmer had a number of horses. Half the number and half a horse were for the farm : half the remainder and half a horse were for sale ; and the remaining two were carriage horses. How many horses had he?
10. Given $\left.\begin{array}{l}x-2 y=1 \\ x^{2}-2 y^{2}=17\end{array}\right\}$; also $\left.x+\sqrt{x+y}=12-y\right\}$; to find $x$ and $y$ in each case.
11. Given $x^{2}+p x+q=0$. Shew that the sum of the roots $=-p$ : and their product $=q$. Shew also that the sum of their squares $=p^{2}-2 q$.
12. Find, taking the usual notation, the sum of $n$ terms of a Geometrical series, $r<1$; and deduce hence the limit of an infinite decreasing series.
13. The infinite series $(r<1), a+a r+a r^{2}+\& c$. : the infinite series, $a-a r+a r^{2}-\& c .:: 3: 2$; prove $r=\frac{1}{5}$, and shew that in the former series the first term $=4$ times the sum of all that follow.
14. Prove $\frac{a+b}{2}>\sqrt{a \bar{b}}$, and enunciate this conclusion with reference to Arithmetical and Geometrical series.
15. If $\frac{a}{b}, \frac{c}{d}, \frac{e}{f}, \ldots . \frac{l}{m}$, be any fractions in the order of magnitude, $\frac{a}{b}$ being the greatest; prove $\frac{a+c+e \ldots+l}{b+d+f \ldots+m}$ greater than $\frac{l}{m}$ and less than $\frac{a}{b}$.

# DALHOUSIE COLLEGE AND UNIVERSITY, halifax. 

SESSIONAL EXAMINATIONS, 1872 .<br>MONDAY, APRIL 15, 9 A.M., To 1 P.M.<br>RHETORIC.<br>Professor DeMill, M.A...................Examiner.

1. Give a brief account of the origin and developement of Rhetoric. Aristotle's definition of Rhetoric. Quintilian's classification of \$tyles.
2. Explain and illustrate what is meant by the "growth" of a language. Give derivation and definition of (a) Barbarism; (b) Solecism. State the chief offences against (a) Purity ; (b) Precision.
3. The general law for the arrangement of words in a sentence. Certain important limitations are to be regarded in the application of this law. Explain what is meant by Digression.
4. Distinguish between Euphony and Elegance. Show the relative importance of Harmony. Explain and illustrate the chief modes in which connectives may be varied.
5. Show the effect produced upon Emphasis by Inversion. Define and illustrate-Comparison, Metaphor, Tropes, Allusion. What is meant by the Illustrative Style? Define and illustrate the following:-Personification, Apostrophe, Vision, Hyperbole, Repetition, Inuendo.
6. Explain the Point of View, and give an illustration from historical and dramatic works. Explain and illustrate the process of classification. Explain what is meant by matters of Fact, and matters of Opinion. Explain and illustrate Arguments from, (a) Negative Testimony ; (b) Undesigned Testimony ; (c) Testimony of Adversaries.
7. Enumerate the chief sources of the Beautiful. Give a short sketch of the origin and growth of Prose Satire. Define-Burlesque, Epigram, Lampoon.
8. Enumerate the great families of languages, and show to which the English belongs. Objections have been offered to the common opinion concerning the origin of the English language. Show the probable native seat of the Angles. Give the divisions of the Celtic class of Languages.
9. State the number of elementary sounds in English. Define syllables; roots; derivatives, primary and secondary. Give examples of diminutive and angmentative forms. Classify words according to their meanings. Define the following terms,-Ellipsis, Pleonasm, Zengma, Tmesis.
10. There are two theories as to the origin of rhyme. Give the general law of rhyme in English Poetry. Give examples of all the Anapaestic metres in English Poetry.

# DALHOUSIE COLLEGE AND UNIVERSITY, HALIFAX. 

SESSIONAL EXAMINATIONS, 1872.<br>Wednissday, April 10, 9 A.M. to 1 P.m.<br>LATIN.-SECOND XEAR.

LIVY: BOOK XXI. CHAPS. 1-30.-HORACE: ODES, BOOK III.
Professor Johnson, M. A.................. Examiner.

## 1. Translate:

a. Si civis vester Alcon, sicut ad pacem petendam ad Hannibalem venit, ita pacis conditiones ab Hannibale ad vos retulisset, supervacaneum hoc mihl fuisset iter, quo nee orator Hannibalis nee transfuga ad vos venissem. Quum ille, aut vestra, aut sua culpa, manserit apud hostem, (si metum simularet, sua; vestra, si periculum est apud vos vera referentibus) ego, ne ignoraretis esse aliquas et salutis et pacis vobis conditiones, pro vetusto hospitio, quod mihi vobiscum est, ad vos veni. Vestra autem causa me, nec ullius alterius, loqui, quae loquor apud vos, vel ea fides sit, quod, neque dum vestris viribus restitistis, neque dum auxilia ab Romanis sperastis, pacis unquam apud vos mentionem feci. Postquam nee ab Romnanis vobis ulla spes est, nee vestra jam aut arma vos, aut moenia satis defendunt, pacem affero ad vos magis necessariam, quam aequam : cujus ita aliqua spes est, si eam quemadmodum ut victor fert Hannibal, sic vos ut victi audiatis: si non id, quod amittitur, in damno, (quum omnia victoris sint) sed, quiequid relinquitur, pro munere habituri estis.
b. Quod ubi Hannibali nunciatum est, moram magis quam bellum metuens, oratores ad regulos eorum misit, colloqui semet ipsum velle cum his ; et vel illi proprius Illiberi accederent, vel se Ruscinonem processurum, ut ex propinquo congressus facilior esset; nam et accepturum eos in castra sua se laetum, nec cunctanter se ipsum ad eos venturum. Hospitem enim se Galliae, non hostem advenisse : nee stricturum ante gladium, si per Gallos liceat, quam in Italiam venisset. Et per nuncios quidem baec. Ut vero reguli Gallorum, castris ad Illiberim extemplo motis, haud gravate ad. Poenum venerunt; capti donis, cum bona pace exercitum per fines suos. praeter Ruscinonem oppidum transmiserunt.
c. Me fabulosae, Vulture in Apulo

Nutricis extra limen Apuliae
Ludo fatigatumque somno.
Fronde nava puerum palumbes
Texere: mirum quod foret omnibus
Quicunque celsae nidum Acherontiae Saltusque Bantinos et arxum Pingue tenent humilis Forenti ;

Ut tuto ab atris corpore viperis Dormirem et ursis; ut premerer sacrou Lauroque collataque myrto Non sine dîs animosus infans.

# Vester, Camenae, vester in arduos 

 Tollor Sabinos, seu mihi frigidumPraeneste, seu Tibur supinum Seu liquidae placuere Baiae.

Vestris amicum fontibus et choris, Non me Philippis versa acies retro, Devota non exstinxit arbor, Nec Sicula Palinurus unda.

Utcunque mecum vos eritis libens Insanientem navita Bosporum

Tentabo, et urentes arenas Litoris Assyrii viator.

Visam Britannos hospitibus feros
Et laetum equino sanguine Concanum;
Visam pharetratos Gelonos, Et Scythicum inviolatus amnem.

## 2. Translate into Latin :

Fabius the Consul pitched his camp near Casilinum, which was held by a garrison of two thousand Campanians, and seven hundred of Hannibal's soldiers. Their commander was Statius Metius, sent thither by Gn. Magius, who was Medixtuticus that year, and was arming slaves and populace alike, for the purpose of attacking the camp of the Romans. None of these matters escaped Fabius. Accordingly he sent word to his colleague at Nola that there was need of another army to oppose the Campanians: that he should either come himself, leaving a small garrison at Nola; or if Nola kept him from coming, he would himself summon the pro-consul Ti. Gracchum from Beneventum. When Marcellus received this message, leaving two thousand soldiers in garrison at Nola, he marched with the rest of his troops to Casilinum, and on his arrival the Campanians, who were just taking up arms, became quiet.
3. Write the passage : colloqui semet . . . . venisset (1.b.) in the form of the oratio recta.
4. Give all the cases in use of jugera, Praeneste, far, vespere, preces, phaselon, jecur, Illiberi (1. b.)
5. What adjectives are compared by magis and maxime? Some have no positive; name them. What adjectives do not admit of comparison?
6. Write in classical Latin: On the 10th of April, A.D. 1872, about three-fourths of the students were present.
7. Give the principal parts of biberes, domitus, linque, blandienti, mānet, lavere, concĭdlt, distet, pendet, fidit, vincunt, recinentis.
8. What examples of Greek construction have you met in the third book of Horace's Odes? Scan the first stanza (1. d.)
9. How may a purpose be expressed in Latin? When is the relative pronoun followed by the Subjunctive? The English conjunction "that" is variously translated in Latin : give a simple example of each form in Latin.
10. $a$. Describe the events in his life to which Horace alludes in the odes you have read, and quote the Latin as far as you can.
b. Give a short sketch of Livy's work : its contents, the materials at his command, the authorities he followed, and the remains of it that have reached us.

#  <br> x. 2 मान 

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# DALHOUSIE COLLEGE AND UNIVERSITY, 

## HALIFAX.

## SESSIONAL EXAMINATIONS, 1872.

Thursdat, April 11: 9 a.m. to 1 p.m.
GREEK.-SECOND YEAR.
HERODOTUS: BOoK I., §§ 26-70.-HOMER: ILIAD, BOOK IX.
Professor Johnson, M.A.
Examiner.

## Translate :













 àтоขобт $\eta \sigma \varepsilon \iota \nu . "$








 $\pi \tilde{v} \rho \delta \varepsilon ̀ ~ M \varepsilon v o u \tau t a ́ \delta \eta s ~ \delta a i ̈ \varepsilon v \nu ~ \mu \varepsilon ́ \gamma a, ~ i \sigma б \theta \varepsilon o \varrho ̧ ~ \phi \omega ́ s . ~$








$$
\begin{aligned}
& \pi \lambda \eta \sigma a ́ \mu \varepsilon v o s ~ \delta ' ~ o i ้ v o l o ~ \delta \varepsilon ́ \pi a \varsigma, ~ \delta \varepsilon i ́ d \varepsilon \kappa \tau ' ~ ' A ~ \chi เ \lambda \eta \tilde{\eta} \text { ' }
\end{aligned}
$$

2. Mention some general pecnliarities of the Ionic dialect.

 бtá̀̀oto.
3. Decline in the Ionic Dialect $\beta a \sigma t \lambda \varepsilon i \alpha, \pi o ́ \lambda \iota \varsigma, v a \tilde{v} \varsigma, \pi o \lambda \dot{v} \varsigma$ : and in the Attic, $\pi a \tau \eta \rho, \beta o \tilde{\varsigma} \varsigma$, ois, $\tilde{\varepsilon} \omega \varsigma$.
4. What is the "Attic Future," the "Ionic Imperfect," the "Aeolic Aorist optative," the "Attic imperative"? Give one e xample of each?



5. What cases express relations of time? Explain the difference of signification. What is the force of $a v \tau \bar{\varphi} \tau \tilde{\varphi} \mu \varepsilon \lambda \dot{\alpha} \theta \rho \omega$ ? What verbs are regularly followed by two accusatives? Give two examples of the Acc. Absolute.
6. What is meant by the "predicative participle"? Give an example. What determines its case? After what verbs is it generally used ?
7. Scan the first five lines of the second extract. Mention some words that began with the Digamma.
8. Give an outline of the arguments for and against the unity of the Iliad.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## halifax.

SESSIONAL EXAMINATIONS, 1872.<br>Friday, April 12, 9 A.M. to 1 P.m.<br>MATHEMATYCS.-SECOND YEAR.<br>geometry and mansuration.<br>Professor C. Macdonald, M. A................ Examiner.

1. If a straight line be drawn parallel to one of the sides of a triangle, it shall cut the other sides, or sides produced, proportionally : and conversely. (Draw only one figure).
2. To divide a straight line similarly to a divided straight line.
3. Similar triangles are to one another in the duplicate ratio of their homologous sides.
4. Trace the steps by which Euclid shews that the duplicate ratio of the preceding theorem is the same as the ratio of the squares.
5. If a perpendicular be let fall from the vertical angle of a triangle on the base, the rectangle of the two sides is equal to the rectangle of this perpendicular and the diameter of the circle circums ribing the triangle.
6. Prove shortly, by the Sixth Book of Euclid, that the rectangle of the secant and its external segment is equal to the square of the tangent, drawn from any point to the circle.
7. The lines drawn from the angles of a triangle to bisect the opposite sides, meet in a point. If ABC is the triangle, and this point 0 , prove the triangles $\mathrm{AOB}, \mathrm{BOC}, \mathrm{COA}$ to be equal.
8. The circular arch of a bridge was described with a radius of 32 ft ., and its height is $4 \frac{1}{2} \mathrm{ft}$. ; find the span and the distance from the spring of the arch to the middle of the keystone.
9. The two sides of a triangle are 10 ft . and 15 ft . and the included angle is $53^{\circ} 52^{\prime}\left(\cos =\frac{3}{5}\right)$ : prove that the third side is equal to 12 ft . nearly, and the area equal to 60 sq . ft.
10. A circle is described with a radins of 20 yds . Cut out of it a sector of $100^{\circ}$, and find the area of the remainder.
11. A cubie foot of water weighs 1000 oz . nearly, and iron is $7 \frac{1}{\mathrm{t}}$ times heavier than water. Find the weight of a cylindrical pillar of iron 10 ft . long and 9 inches in diameter.
12. Draw and describe a Vernier Scale, and shew how it could be used. to measure off the following lengths, viz : 240, 657, 392.
13. A cone weighs 100 lbs ., and is 2 ft in height. Cut off, by a plane parallel to its base, a cone that shall be equal in height to the remaining frustum, and find the weight of this frustum.

Afternoon: 3 р.m. to 5.30 p.m.

## TRIGONOMETRYANDALGEBRA.

1. Given that the arc of a circle is 33 ft . and the radius 18 ft . : find the circular and also the gradual measure of it.
2. Find all the circular functions of angle of $60^{\circ}$.
3. Given the base $b$ and angle $A$ of a right angled triangle : find the other parts, and write the logarithmic equations for the purpose.
4. Assuming the formula for $\sin (A+B)$ and $\cos (A+B)$, find $\tan (A+B)$. Find also $\sin 2 A, \cos 2 A, \tan 2 A$.
5. Prove $\cos (30-\mathrm{A})-\cos (30+\mathrm{A})=\sin \mathrm{A}:$ also $\tan \left(45^{\circ}+\mathrm{A}\right)=$ $\frac{1 \pm \tan A}{1 \mp \tan A}$ and $\frac{\tan A}{1+\sec A} \tan \frac{1}{2} A$.
6. Assuming the formula for $\cos \mathrm{A}$ in terms of the sides of the triangle AB , prove $\cos \frac{1}{2} \mathrm{~A}=\sqrt{\frac{s(s-a)}{b c}}$; shew that the are $a=\sqrt{s(s-a)(s-b)(s-c)}$ and shew the most important use of the latter formula.
7. From the top of a hill, the observed angles of depression of two objects on the plane below and in the same direction, were $30^{\circ}$ and $45^{\circ}$. These objects were known to be a mile apart. Find the height of the hill.
8. Prove $\log m+\log n=\log m n, \log m-\log n=\log \frac{m}{n}$ and $\log$ $m^{p}=p \log m$. What is the use of these formulæ?
9. Find the present value of a sum of money $\mathbf{M}$ due $t$ years hence at $r$ per cent. If the payment be contingent on the life of a person aged $m$ years, what is its present value?
10. Find 4 terms of the expansion $\frac{a}{\sqrt{a^{2}-x^{2}}}$, and shew that the series is interminate.
11. Shew that the equation $12 x^{4}-47 x^{3}+100 x^{2}-51 x-30=0$ has one positive root between 1 and 2 , and one negative between 0 and 1 .

## EXTRA, FOR MERIT.

1. If two straight lines be eut by parallel planes, they shall be eut in the same ratio.
2. If tangents be drawn from $P$ to a circle and $Q T$ be the chord of contact, any straight line from $P$ cutting the circle and the chord is harmonically divided.
3. The lines joining the interior angles of a given regular Hexagon alternately are trisected, and form an interior regular Hexagon whose area is $\frac{1}{3}$ of the given Hexagon.
4. Prove that the combinations of $n$ things, $r$ together, is equal to their combinations $n-r$ together, and apply this to the consideration of the coefficients of the expansion $(a+x),{ }^{n} n$ being a whole number.
5. The Chancellor of the British Exchequer wishes to convert $£ 5,000$,000 of permanent annuities into annuities ternainating in 30 years. Find a formula by which the additional taxation to be imposed on the United Kingdom may be determined.
6. Assuming the Exponential Theorem, prove $\varepsilon^{x}=1+x+\frac{x^{2}}{1.2}+\frac{x^{3}}{1.2 .3}+\& c$. Shew hence how the value of $\varepsilon$ may be calculated. Until $\varepsilon$ is known, a system of logarithms is impossible.
7. Given $\sin n x+\sin (n-2) x-\sin x ;$ prove $x=\frac{\pi}{3(n-1)}$ or $=0$.
8. Given $\mathrm{A}+\mathrm{B}+\mathrm{C}=90^{\circ}$ : hence prove $\cot \mathrm{A}+\cot \mathrm{B}+\cot \mathrm{C}=$ $\cot A \cot B \cot C$.
9. If $m, n, p$ are the distances of the centre of the inscribed circle from the angles of a triangle, prove $r=\left(\frac{m n p}{m+n+p}\right)^{\frac{1}{2}}$.
10. Shew by the method of Indeterminate Co-efficients that the sum of $n$ terms of the series $1.3 .5+3.5 .7+5.7 .9$ is $=n\left(2 n^{3}+8 n^{2}+7 n+2\right)$.



$(7-3)-(6-1)(9-x) \sqrt{2})$

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

Wednesday, April 17, 9 A.M. to 1 P.M.

## LOGIC AND PSYCHOLOGY.

## Professor William Lyall, LL. D.............. . Examiner.

1. In what relation do Logic and Psychology stand to each other ? What is Sir Wm. Hamilton's distribution of the Mental Sciences?
2. What is the usual mode of regarding mind, and what classifications of the Faculties have been adopted accordingly ?
3. In what other way may mind be regarded, and what is the classification we have proposed of the mental phenomena?
4. Specify the Intuitions and the Laws of thought, with the "practical processes" following upon the intuitions of Causality and Uniformity.
5. State the nature of a true Generalization, and the relation of that to reasoning.
6. Distinguish between simply a mental identification and reasoning.
7. What are the laws of Association ? To what one principle or law may they be reduced ? Give some account of Memory and Reminiscence.
8. What is the Ideal faculty, or Imagination?
9. What is Logic? How is it divided? Distinguish between Pure and Modified Logic-Stoicheiology and Methodology.
10. What are Concepts in their quantity, quality, and relation? What is the relation of Subordination; what of Co-ordination, respectively?
11. Show how in the relation of Subordination two quantities emerge, giving two distinct processes of reasoning. Describe these two processes.
12. Is true reasoning a matter of quantity? or how may it rather be regarded?
13. Distinguish between a Judgment and a Concept,-and a Judgment and Reasoning. What is a Syllogism?
14. What affords the distinction between the Major and Minor premises of a Syllogism, in other words, the Sumption and Subsumption? Show how these just change places in the Extensive and Intensive Syllogism.
15. How are Syllogisms divided according as the connexion between the premises and conclusion is determined by the fundamental laws of thought? Give the rules of the Categorical deductive Syllogism in the two quantities respectively.
16. Describe the disjunctive Syllogism in " modus tollente ponens,", and " modus ponente tollens; "-the Hypothetical in "modus ponens" and " modus tollens." What is the Hypothetico-disjunctive?
17. Give some account of Syllogisms in their External, as distinguished from their internal and essential form-particularly the Sorites.
18. What are the Moods and Figures of the Syllogism? How may the second and third Figures be regarded, and what is the maxim applicable to each ?
19. Give a view of the Fallacies. What are properly extra-logical fallacies?
20. To secure what purposes of Logical perfection is a doctrine of method directed? State the rules of Definition, Division, and Probation.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

## SESSIONAL EXAMINATIONS, 1872.

Tuesday, April $16,9 \mathrm{~A} . \mathrm{M}$. to $1 \mathrm{P} . \mathrm{M}$.

CHEMISTRY.-SECOND YEAR.

Professor Lawson......................................miner.

1. Point out the special functions of Chemistry as a branch of Physical Science. What is meant by the term "chemical affinity"?
2. What is the Chemical Constitution of the Atmosphere? What is Oxygen? Give an account, (1) of its discovery; (2) its mode of preparation, with equational re-actions ; (3) its physical properties ; (4) its chemical properties; and (5) indicate briefly the general nature of the more important classes of compounds which it forms by union with other elements.
3. Explain the Laws of Combination : (1) Constancy of Composition. (2) Law of Multiples. (3) Law of Equivalents. What is meant by the terms Monogenic, and Polygenic? What is the difference between the terms Equivalent Weight, and Atomic Weight? Show the way in which the saturating power of an element is usually indicated in a formula.
4. Give a general account of the Constitution of Chlorides, taking HCl as their type.
5. What are the Relatious of Atomic Weights to (1) the Specific Heat of Elementary bodies, (2) to Crystalline Forms of Compounds, (3) to the Specific Gravities of Elements and Compounds.
6. Explain the law of Combination by Volume, noting exceptions.
7. How many Oxides of Nitrogen are there? Give the formula for each, and the amounts by weight, and also by volume, of N and O which each contains. Which of these oxides are capable of uniting with the elements of water and metallic oxides to form salts? What is the formula of Nitric Acid? Describe its properties. Give formulæ for three metallic Nitrates.
8. Describe Chlorine, methods of preparation with reactions, history of the element, its specific gravity and other physical characters, effects of pressure, affinities for other elements, and mode of action on colors. What is Hydrogen Chloride, and how is it prepared?
9. What are the differences in composition between Hæmatite Iron Ore, Cast Iron, Malleable Iron, and Steel? Give a general account of the chemical changes that take place in the blast furnace during the reduction of Iron Ores.
10. What is the basis of Classification of Organic Compounds.

## DALHOUSIE COLLEGE AND UNIVERSITY, HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Wednesday, Aprif 10, 9 A.m. To 1 p.m.<br>LATIN.-THIRD YEAR.

## HORACE: SATIRES, BOOK I., 3, 4, 5, 6, 9.-TERENCE: ADELPHI.

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

## 1. Translate:

a. Non quia, Maecenas, Lydorum quicquid Etruscos

Incoluit fines, nemo generosior est te,
Nec quod avus tibi maternus fuit atque paternus,
Olim qui magnis legionibus imperitarent,
Ut plerique solent, naso suspendis adunco
Ignotos, ut me libertino patre natum.
Cum referre negas, quali sit quisque parente
Natus, dum ingenuus, persuades hoc tibi vere,
Ante potestatem Tulli atque ignobile regnum
Multos saepe viros nullis majoribus ortos
Et vixisse probros, amplis et honoribus auctos:
Contra Laevinum, Valeri genus, unde Superbus
Tarquinius regno pulsus fugit, unius assis
Non unquam pretio pluris licuisse, notante
Judice, quo nosti, populo ; qui staltus honores Saepe dat indignis, et famae servit ineptus;
Qui stupet in titulis et imaginibus. Quid oportet
Nos facere, a vulgo longe longeque remotos?
Namque esto : populus Laevino mallet honorem
Quam Decio mandare novo: Censorque moveret Appius, ingenuo si non essem patre natus,
(Vel merito, quoniam in propria non pelle quiessem), Sed fulgente trahit constrictos gloria curru Non minus ignotos generosis.
b. Sy. Ehem Demea, haud aspexeram te : quid agitur ?

De. Quid agatur? uostram nequeo mirari satis
Rationem. Sy. Est hercle inepta, ne dicam dolo,
Absurda: piscis ceteros purga, Dromo :
Congrum istum maxumum in aqua sinito ludere
Tantisper: ubi ego rediero, exossabitur:
Prius nolo. De. Haecin flagitia! Sy. Mihi quidem hau placent,
Et clamo saepe. Salsamenta haec, Stephanio,
Fac macerentur pulchre. De. Di uostram fidem,
Vtrum studione id sibi habet an laudi putat
Fore, si perdiderit gnatum ? uae misero mihi.
Videre uideor iam diem illum, quom hinc egens
Profugiet aliquo militatum. Sy. O Demea,
Istuc est sapere, non quod ante pedes modost
Videre, sed etiam illa quae futura sunt
Prospicere.
c. De. Ego ille agrestis, saevos, tristis, parcus, truculentus, tenax

Duxi uxorem : quam ibi miseriam uidi! nati filii,
Alia cura: heia autem, dum studes illis ut quam plurimum Facerem, contriui in quaerendo uitam atque aetatem meam :Nunc exacta aetate hoc fructi pro labore ab eis fero, Odium : ille alter sine labore patria potitur commoda.

Illum amant, me fugitant: illi credunt consilia omnia, Illum diligunt, apud illum sunt ambo, ego desertus sum : Illum ut uiuat optant, meam autem mortem expectant scilicet.
Ita eos meo labore eductos maxumo hic fecit suos
Paulo sumptu: miseriam omnem ego capio, hic potitur gaudia.
Age, age nunciam experiamur contra, ecquid ego possiem Blande dicere aut benigne facere, quando hoc prouocat. Ego quoque a meis me amari et magni pendi postulo. . Si id fit dando atque obsequendo, non posteriores feram.
Deerit: id mea minume refert, qui sum natu maxumus.

## 2. Translate into Latin :

But Aratus of Sicyon is justly praised, who, when his state was ruled for fifty years by tyrants, set out from Argos for Sicyon and got possession of the city by entering it secretly. And when he had crushed the tyrant Nicocles, he restored six hundred exiles who had been the wealthiest men of that state, and by his coming freed his country. But when he perceived that money was needed to satisfy the claims of the exiles, he said that he would go to Alexandria to his triend Ptolemaeus, who was the second king since the foundation of Alexandria. When he had explained to him that he wished to free his country, he easily prevailed on the wealthy king to help him with a large sum of money.
3. Explain the grammatical construction of these words which occur in the passages for translation: Lydorum-genus-unius assis non unquam pretio pluris licuisse—quo nosti-Quid agatur-studione id sibi habet-militatum-sapere-posteriores-id mea minume refert.
4. Write short notes on the persons and circumstances alluded to in the following passages:
a. Non quia, Maecenas, Lydorum quicquid Etruscos

Incoluit fines, nemo generosior est te.
b. Quam Decio mandare novo: Censorque moveret Appius, -
c. Multa Cicirrus ad haec : donasset jamne catenam Ex voto Laribus, quaerebat.
d.

Obeundus Marsya, qui se
Vultum ferre negat Noviornm posse minoris.
5. Account for these forms: Exporge, vin, faxo, possiem, scibo, fructi, frugi (adj.), ludier, cĕdo, ipsus, surrexe, coeperet.
6. What is the derivation of hic, actutum, epol, arcesso, commissator, villum, villa, quorsum, ellum, obsonare. Give other derivations similar to each of these.
7. State the reasons for supposing that the ordinary speech of Romans differed considerably from Latin as written, and shew what bearing this question has on the scansion of the Terentian metres.
8. Write a short account of stage representations at Rome : their introduction ; their classification ; their authors ; the place of performance and the plays that have reached us.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HAHIFAX.

## SESSIONAL EXAMINATIONS, 1872.

## Thursday, April $11:-9$ a.m. to 1 p.m.

> GREEK.-THIRD YEAR.
> EURIPIDES:-MEDEA.

Professor Johnson, M.A.
Examiner

1. Translate:
 K $6 \lambda \chi \omega \nu$ és alav кvavéaç $\Sigma v \mu \pi \lambda \eta \gamma a ́ d a s$,
 $\tau \mu \eta \theta \varepsilon i ̄ \sigma a \pi \varepsilon \dot{\varepsilon} \kappa \eta, \mu \eta \delta^{\prime} \dot{\varepsilon} \rho \varepsilon \tau \mu \omega ̃ \sigma a \iota ~ \chi \varepsilon ́ \rho a \varsigma$ àvôpẽvv ảplซté $\omega v$, ồ тò $\pi a ́ \gamma \chi \rho v \sigma o v ~ \delta e ́ \rho o s ~$





 фvүच̆ то入ítas ŏv áфíкето $\chi$ Ө́va,

 ôTav $\gamma v v \grave{~} \pi \rho o े \varsigma ~ a ̆ v \delta \rho a \mu \eta ̀ ~ \delta \iota \chi o \sigma \tau a \tau \eta . ~$










AI. $\pi о \lambda \lambda \grave{\eta} \nu \dot{\varepsilon} \lambda \varepsilon \xi a \varsigma, \bar{\omega}$ रivvar, $\pi \rho о \mu \eta \theta i a v$.














 $\dot{\delta} \mu \grave{v} v \gamma \grave{a} \rho \dot{\eta} \theta \varepsilon \lambda ’ \dot{\varepsilon} \xi a v a \sigma \tau \eta{ }^{\prime} \sigma a \iota ~ \gamma \sigma v v$,
 ба́ркаऽ үєраьàs ह̇бтápaбन' ả $\pi^{\prime}$ ò $\sigma \tau \varepsilon ́ \omega v$.




2. In the second extract a different reading is found ; give it and translate the passage accordingly.
3. 

How has this passage been corrected, and why?
4. Analyse the following clauses, giving rules for canstruction of nouns and verbs:
 Kó̀ $\chi \omega \nu$ és alav кvàéas $\Sigma v \mu \pi \lambda \eta \gamma a ́ \delta a s$.

$$
\begin{equation*}
o \dot{v} \gamma \grave{a ̀} \rho \hat{a} v \delta \varepsilon \sigma \pi o \nu \nu^{\prime} \dot{\varepsilon} \mu \grave{\eta} \tag{b}
\end{equation*}
$$



(c) $\dot{\varepsilon} \mu o i ́ ~ \tau \varepsilon ~ \gamma a ̀ \rho ~ \tau a ́ \delta ' ~ \dot{\varepsilon} \sigma \tau \iota v ~ \dot{\sigma} \sigma \phi a \lambda \varepsilon ́ \varepsilon \tau a \tau a, ~$

5. Paise these verbal forms, and give their principal tenses: $\begin{aligned} & \\ & \phi \\ & \lambda \\ & \lambda\end{aligned}$,


6. What licenses are allowed in Iambic metre? Scan the first six lines of the play. When must the fifth foot be an Iambus ?
7. Explain the origin of the names tragedy and comedy. Why are different dialects used by the Attic tragedians? Write a short sketch of Euripides' life.

## 8. Translate into Greek:

Do not flee from poverty, but from wrong-doing.
These men having come three days after the battle, had no share in the victory.

Would that, 0 basest of men, you had never made your appearance among mortals.

When the general heard the king say this, he perceived that the king was his enemy, and he went away sad. After this, he sent a person to tell the citizens that the enemy had proved victorious and were marching straight for the city, and that he himself would come as soon as possible to protect it.








## DALHOUSIE COLLEGE AND UNIVERSITY, HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>MONDAT, APRIL 15,9 A.M. TO 1 P.M.<br>MATHEMATICAL PHYSICS.-THIRD YEAR.

## Professor C. Macdonald, M. A.............Examiner.

1. Enuntiate and prove the theorem called "The triangle of Forces."
2. The efficacy of a Force in any direction is found by multiplying the Force by the cosine of the angle it makes with the direction. Shew this.
3. Forces of 10 lbs . and $5 \sqrt{2} \mathrm{lbs}$. act at angle $45^{\circ}$. Prove the resultant $=7$. .
4. Shew that if three equal heavy particles be attached to a heavy triangular dise at its angles, the centre of gravity of the system coincides with the centre of gravity of the triangle.
5. Investigate the conditions necessary for the delicacy and stability of a common Balance.
6. Draw any system of Burton pulleys, and, neglecting the weight of the blocks, find its mechanical advantage.
7. Prove the formala, $s=\frac{1}{2} . f t^{2}$, from rest. If the initial velocity be $u$, what does the formula become, and why ?
8. Assuming the usual notation for projectiles, find the time of flight and range on a horizontal plane.
9. Shew that tho force which, owing to the rotation of the earth on its axis, tends to transfer matter on its surface towards the equator, is greatest at lat. $45^{\circ}$, and is nil at the poles and the equator.
10. Prove that equal bodies, supposed to be perfectly elastic and spherical, making direct impact, interchange velocities.
11. A parallelogram ABCD is immersed in a fluid, AB being in the surface of it. The pressure on the triangle $\mathrm{A} C \mathrm{D}$ is double of that on the triangle A CB.
12. Describe Nicolson's Hydrometer, and find by it the specific gravity of a small solid that does not melt in water.
13. In the common apparatus for condensing air, shew that after $n$ strokes of the piston, the density of the air in it is $=\mathrm{P}\left(1+\frac{n \mathrm{~B}}{\mathrm{~A}}\right), \mathrm{B}$ being the internal volume of the cylinder and A that of the holder. Hence describe the air gun.
14. A weight Q resting on a horizontal table, is drawn along the table by a cord passing over a pulley at the edge of the table. If $m$ be the coefficient of friction, prove that the tension of the cord $=\frac{P Q}{P+Q}(1+m)$.
15. A body is projected from a point in an inclined plane with a given velocity. Find the angle of projection so that the range may be the greatest possible.
16. Two circles that touch externally at P have the line of their diameters vertical. Shew that the time down any chord through P from the circumference of the one circle to that of the other is constant.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

ThURSDAy, APRIL 18,9 A. M. To 1 P. M.

EXPERIMENTAL PHYSICS.

## Very Rev. Principal Ross, D. D.................Examiner.

1. What is a law of Nature ; and what advantages may be derived from an acquaintance with them?
2. How are the causes of phenomena usually suggested and indicated?
3. Describe a method by which to determine experimentally the centre of gravity of a body however irregular in shape, and however different in density the materials of which its parts are composed.
4. Outline the instrument called the Gyroscope; and explain the reason why, when in motion, the unsupported end of the axle does not fall.
5. Why should the pendulum of a clock describe a small arc of a circle?
6. Ontline the apparatus, and describe an experiment by which the upward pressure of the atmosphere may be illustrated.
7. What effects are produced by the Interference of waves in liquids?in sounds?-in light?
8. Explain the cause of the mirage.
9. What is the Aberration of Sphericity? How may it be corrected?
10. What is Diffraction ? Mention some of its effects.
11. Explain the nature of Polarization. In how many ways may a ray of light become polarized?
12. Outline the Polariscope employed in the class, and explain its several parts and their uses.
13. Describe the Solar Spectrum and account for Fraunhofer's lines.
14. Explain the Dynamical theory of heat.
15. Enumerate the sources and effects of heat.
16. What is a Thermal unit? What is its mechanical equivalent?

## DALHOUSIE COLLEGE AND UNIVERSITY, HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

WEDNESDAY, APRIL 17, 9 A.M. TO 1 P.M.

METAPHYSICS AND ESTHETICS.

## Professor William Lyall, LL.D

Examiner.

1. Among what people have we the earliest development of speculative thought?
2. In what point of view may speculative enquiry be regarded as a necessity of thought itself? When may it be said to transgress the boundaries of legitimate enquiry ?
3. To what principle, in an attempted cosmogony, did the physical School of Ionia incline? Give the prominent names in the Ionic School?
4. What modern tendency more accords with the Ionian physical School, withont, at the same time, condescending upon any specific Arche or principle? What prominence does this tendency assume at the present day?
5. What was the principle of the Eleatics? and how did they shift the ground of speculative thonght from an Ontological to a Psychological basis? What antagonist views arose accordingly among the Eleata?
6. How did Scepticism take advantage of the conflicting conclusions to which these separate schools led ?
7. How did Plato deal with the Ontological in speculation, and how did the Psychological and Ontological blend in his Theory of Ideas ?
8. How did the Aristotelian philosophy conflict with Plato's, and prepare the way for the New Academy ?
9. What extraneous element did Neo-platonism introduce into Philosophy? Give the dates of Philo, Plotinus, and Proclus, with their respective views.
10. In what form did the Ontological element survive in the Scholastic Philosophy? How did it assume this particular form, and what were the prominent names in connection with the controverted question?
11. Show the Ontological element in modern philosophy, while yet the questions discussed are mainly psychological.
12. What is Berkeley's ideal theory? Point out its Ontologieal bearings.
13. What is the radical fault in Sir Wm. Hamilton's doctrine of " Immediate Perception," and what inconsistencies may be detected in his theory?
14. What is Kant's tri-partite division of mind? How have the Emotions been classified by different writers, and what more philosophie principle of classification may be adopted?
15. Give some account of the second class of Emotions, and show the place of the Esthetic among these.
16. State briefly the theories that have been held on the subject of the Beautiful and Sublime, and which theory seems most to commend itself to acceptance.
17. Classify the Arts. Specify the different kinds of Poetry and Painting according to a certain principle of arrangement or classification among these. How does Cousin arrange the Arts according to a gradation of excellence, as more or less expressive?
18. What is the Orectic in mind ? Classify the Desires. What selfregulative principle may be recognized in these States?
19. What element is clearly distinguishable in the moral judgment apart from, and beyond, a certain regulative power in the desires themselves?
20. How may the Will be regarded? What question divides Philosophers and Theologians on the subject of the Will ? Are motives to be held of the nature of Causes?

# DALHOUSIE COLLEGE AND UNIVERSITY, 

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Tulsday, April 16, 9 A.M., to 1 P.M.<br>CHEMISTRY.-THIRD YEAR.<br>Professor Lawson............................... . Examiner.

1. HCl is acted upon by Na. $\mathrm{H}_{2} \mathrm{O}$ is acted upon by Na . Compare the two re-actions. If the Sodium Hydrate be heated in a tube with Na what further change takes place? From these experiments deduce the chemical constitution of Water and of Hydrochloric Acid respectively, and the atomicity of the several elements composing them.
2. Show by a constitutional formula the number of units of equivalency belonging to the several atoms of which Nitric Acid consists, and the manner in which they are disposed of in the compound by combination with each other. [Any other suitable compound may be selected for illustration.]
3. Classify the more important Metals according to (1) Their Atomicity or Saturating Power ; (2) Action of Nitric Acid upon them ; (3) Re-actions of their Salts with Hydrogen Monosulphide, $\mathrm{H}_{2} \mathrm{~S}$, Ammonium Sulphhydrate, $\mathrm{S}\left(\mathrm{NH}_{4}\right) \mathrm{H}$, and Disodiohydric Phosphate, $\mathrm{PO}_{4} \mathrm{Na}_{2} \mathrm{H} .12 \mathrm{OH}_{2}$.
4. What is Methane? Show from its atomic constitution whether or not it is capable of uniting directly with any Monad Element. What is the relation of the Paraffins to Methane? Notice the more important members of the Paraffin series, and give its general formula.
5. Give the general formula and a brief account of the Olefines and Aromatic Hydrocarbons. To which series of Hydrocarbons do the Terpenes belong?
6. What is the atomic constitution of an Alcohol? (xive the names and formula of all the known members of the series containing the radicals $\mathrm{C}_{n} \mathrm{H}_{2 n+1}$.
7. Explain the way in which the Organic or Carbon Acids are derived from Alcohol, and point out the relation of the Aldehydes to these two classes of bodies.
8. Give an account of the first and second members of the series of Fatty or Adipic Acids, $\mathrm{C}_{n} \mathrm{H}_{2 n} \mathrm{O}_{2}$, explaining their constitution, properties, where found or how formed, and notice briefly the constitution of some of their principal salts.
9. Describe the principal constituents of Milk. Give the composition and properties of each organic constituent, and explain in detail the chemical changes which result in the spontaneous curdling of Milk.
10. Explain very fully, with illustrations, the constitution, mode of formation, \&c., of an Amine, and an Amide.

## DALH0USIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Friday, April 19Th.

FRENCH.-THIRD YEAR.
James Liechti, Eisq..................................... . . Examiner.
Translate: I. A près cette aventure peu s'en fallut qu'il m'en arrivat une autre. J'allai voir un gros chantre qui avait la fièvre. Sitôt qu'il m'entendit parler d'eau chaude, il se montra si récalcitrant contre ce spécifique, qu'il se mit a jurer. Il me dit un million d'injures, et me menaça même de me jeter par les fenêtres. Je sortis de chez lui plus vite que je n'y étais entré. Je ne voulus plus voir de malades ce jour-là, et je gagnai l'hôtellerie où j'avais donné rendez-vous à Fabrice.
(From " Gill Blas" by Lesage).
II. Extract from "Valérie," by Scribe.

1. Account for voir (I). Mention when the Infinitive is required, and state the exception, giving an example for each case.
2. Explain the negation ne in n'y étais entré (I). Three conjunctions require ne before the following verb. One of them also takes de without ne in a certain case. Illustrate by examples.
3. Show by short examples the difference between contre, vers, envers; between entre and parmi.
4. Mention some Prepositions which may be used both as Prepositions and as Adverbs.
5. In what mood is reimisse (II); why? Translate: What would you have him send.
6. Te ne voulus plus voir de malales (I). Explain the word de, and state what you know about the use of this part of speech. Write three sentences in illustration.
7. What reason do yon give for the agreement of privée (II). Explain the agreement of the Past participles in the following examples, and correct those which are incorrect Elle paraît affligé. Nous serons loués. Quelle plaie il a faite anjourd'hni. Voici les livres que j'ai lus. Bien des personnes ont péries.
8. By what form or forms is the English Passive voice expressed in French? Translate: Human life is composed of joys and sorrows. This passage is translated thus. (Two forms).
9. What verb is used in speaking of temperature. Write short examples on: y avoir, denoting time distance and number; also on the ind. prons.: on, tout, qui que, quelqu'un, quoi que.
10. Quelque is variable and invariable; and sometimes written in two words. Explain, and translate: Whatever may be your courage, you will not conquer the enemy. However learned you may be, you are ignorant of that. Whatever faults you may have committed, you will be pardoned.
11. Which verbs, when nsed negatively, reject the negation pas. Give an ex.
12. When do intrans. verhs in the compound tenses require the auxily. woir, and when être? Name those verbs which are always conjugated with être.
13. Write the various forms of what (Nom. and Acc.) when tised as an interog. Pron., a relative Pron., an adjective Pron., and when preceded by a prepos. Write short exs.

Translate into French: I. Tiberius and Louis XI. exiled themselves from their native country before arriving at supreme power. They both were brave in battle, and timid in private life. They gloried in the art of dissimulating. They established arhitrary power. They spent their life in tronble and remorse, and terminated it in concealment, silence and public hatred.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.
Friday, April 19th.

GERMAN.-THIRD YEAR.
Translate: I. "Die Sterne," by M. Claudius.

Ich sehe oft um Mitternacht,
Wenn ich mein Werk gethan,
Und Niemand mehr im Hause waeht,
Die Stern' am Himmel an.

Dann saget unter'm Himmelszelt Mein Herz mir in der Brust:
"Es gibt was Bess'res in der Welt Als all ihr Schmerz und Lust."

Ich wert" mich auf mein Lager hin
Und liege lange wach,
Und suche es in meinem Sinn
Und sehne mich darnach.
II. "Wilhelm Tell," (I Act, 2nd scene), by Schiller, beginning with : Stauffucher: Frau, welchen Sturm qefühticher Gedanken.

1. What part of speech is an. How do snch words affect the verb? Write the Past Part., and the 1st person Sing. of the Present and Past Indic. of anwenden.
2. Unter'm Himmelszelt. Account for the ' $m$. Mention similar forms. State the rule for the formation of the gender of compound Substantives.
3. What word does was (2nd verse, I.) stand for. Of what meanings is was susceptible? Write two examples.
4. Mention the word which corresponds with hin. (3d verse, I.); with what words are they connected and what do they denote. Give examples.
5. Write the Genit. Sing. and the Nom. Plural of: Name, Giossvater, Monarch, Mutter, Wissenschaft, Reichthum, also the Nom. Sing. with the def. Art of: Länder, Amerikaner, Kaufleute, Nasen, Hoffnungen.
6. Während, mit, durch, wegen, fïr, bei. What case do these prepos. require. Which govern two cases; show by examples when they require the one or the other case.
7. Welches sind Ihre Bücher. Dieses ist mein Hut. Ist das Ihre Meinung. State the rule for the use of the Neuter form of the words welches, dieses, das.
8. Account for the two Infinitives in the sentence: Er hat nach Europa gehen wollen.
9. Which verbs do not admit of the prefix ge in the past part. Name those verbs (with regular terminations) which change their root-vowel.
10. Illustrate by examples the difference between the negations : nein, micht, and kein. Give the German Idioms of: We are right, you are wrong. What has become of him.
11. Wenn er seine Pflicht gethan haben würde. Write this sentence in two other ways: (1) substituting the Subjunct. for the Potential mood ; (2) omitting wenn.

Translate into German : I. All the children in this house are ill. Both his sons are at a German University. Have you any relations in this city ? Yes I have some. He lives nearest. There are people who will believe nothing. What are we to do ? It is getting warm. The richest does not always live happiest.
II. Socrates being asked by one of his friends which was the way to gain a good reputation, replied: "You will gain it, if you endeavor to be what you desire to appear."

# DALHOUSIE COLLEGE AND UNIVERSITY, 

## HALIFAX.

## SESSIONAL EXAMINATIONS, 1872.

Friday, April 19Th.

GERMAN.-THIRD YEAR.

James Liechti, Esq. . . . . . . . . . . . . . . . . . . . . . . . . . . . Examiner.
STAUFFACHER.
Frau, welchen Sturm gefährlicher Gedanken Weckst du mir in der stillen Brust ! Mein Innerstes
Kehrst du an's Licht des Tages mir entgegen, Und was ich mir zu denken still verbot, Du sprichst's mit leichter Zange kecklich aus. -Hast du auch wohl bedacht, was du mir räthst?
Die wilde Zwietracht und den Klang der Waffen
Rufst du in dieses friedgewohnte ThalWir wagten es, ein schwaches Volk der Hirten, In Kampf zu gehen mit dem Herrn der Welt ? Der gute Schein nur ist's, worauf sie warten :
Um loszulassen auf dies arme Land
Die wilden Horden ihrer Kriegesmacht, Darin zu schalten mit des Siegers Rechten, Und unterm Schein gerechter Züchtigung: Die alten Freiheitsbriefe zu vertilgen.
"Wilhelm Tell," Schiller.

GERMAN.-FOURTH YEAR.

## MEPHISTOPHELES.

Von Sonn' und Welten weiss ich nichts zu sagen, Ich sehe nur wie sich die Menschen plagen.
Der kleine Gott der Welt bleibt stets von gleichem Schlag,
Und ist so wunderlich als wie am ersten Tag,
Ein wenig besser würd' er leben
Hätt'st du ihm nicht den Schein des Himmelslichts gegeben;
Er nennt's Vernunft und braucht's allein,
Nur thierischer als jedes Thier zu sein.
Er scheint mir, mit Verlaub von Ew. Gnaden,
Wie eine der langbeinigen Cicaden,
Die immer fliegt und fliegend springt
Und gleich im Gras ihr altes Liedchen singt ;
Und läg' er nur noch immer in dem Grase !
In jeden Quark begräbt er seine Nase.
"Faust," (Prolog im Himmel) Goethe.

# DALHOUSIE COLLEGE AND UNIVERSITY, 

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Wednesdat, April 10,9 A.M. to 1 P.M.<br>FINAL EXAMINATION FOR DEGREE OF B. A.

LATIN.-TACITUS: ANNALS, BOOK I. JUVENAL: SATIRES, I. X.
Professor Johnson. M. A.................. Examiner.

1. Translate:
a. Versae inde ad Tiberium preces. Et ille varie disserebat, de magnitudine imperii, sua modestia. Solam divi Augusti mentem tantae molis capacem : se in partem curarum ab illo vocatum experiendo didicisse quam subjectum fortunae regendi cuncta onus. Proinde in civitate tot illustribus viris subnixa non ad unum deferrent: plures facilius munia rei publicae sociatis laboribus exsecturos. Plus in oratione tali dignitatis quam fidei erat; Tiberioque etiam in rebus quas non occuleret, seu natura sive assuetudine, suspensa semper et obscura verba, tunc vero nitenti ut sensus suos penitus abderet, in incertum et ambiguum magis implicabantur. At patres, quibus unus metus, si intelligere viderentur, in questus, lacrimas, vota effundi ; ad deos, ad effigiem Augusti, ad genua ipsius manus tendere, cum proferri libellum recitarique jussit.
b. Iisdem ferme diebus, iisdem causis Germanicae legiones turbatae, quanto plures, tanto violentius, et magna spe fore ut Germanicus Cæsar imperium alterius pati nequiret, daretque se legionibus vi sua cuncta tracturis. Duo apud ripam Rheni exercitus erant: cui nomen superiori, sub C. Silio legato ; inferiorem A. Caecina curabat. Regimen summae rei penes Germanicum, agendo Galliarum censui tum intentum. Sed quibus Silius moderabatur, mente ambigua fortunam seditionis alienae speculabantur: inferioris exercitus miles in rabiem prolapsus est, orto ab unetvicesimanis quintanisque initio et tractis prima quoque ac vicesima legionibus : nam iisdem aestivis in finibus Ubiorum habebantur per otium aut levia munia. Igitur, audito fine Augusti, vernacula multitudo, nuper acto in urbe delectu, lasciviae sueta, laborum intolerans, impellere ceterorum rudes animos: venisse tempus, quo veterani maturam missionem, juvenes largiora stipendia, cuncti modum miseriarum exposcerent, saevitiamque centurionum ulciserentur.
c. Evertere domos totas optantibus ipsis

Di faciles; nocitura toga, nocitura petuntur
Militia; torrens dicendi copia multis
Et sua mortifera est facundia; viribus ille
Confisus periit admirandusque lacertis.
Sed plures nimia congesta pecunia cura
Strangulat, et cuncta exsuperans patrimonia census
Quanto delphinis balaena Britannico major.
Temporibus diris igitur jussuque Neronis
Longinum et magnos Senecae praedivitis hortos

Clausit, et egregias Lateranorum obsidet aedes
Tota cohors : rarus venit in coenacula miles.
Pauca licet portes argenti vascula puri,
Nocte iter ingressus, gladium contumque timebis
Et motae ad lunam trepidabis arundinis umbram :
Cantabit vacuus coram latrone viator.
Prima fere vota et cunctis notissima templis
Divitiae, crescant ut opes, ut maxima toto
Nostra sit area foro. Sed nulla aconita bibuntur
Fictilibus: tunc illa time, quum pocula sumes
Gemmata et late Setinum ardebit in auro.

## 2. Translate into Latin :

The youth then repaired to Aebutia his aunt, and told her the reason why he had been turned out by his mother; afterwards, on her suggestion he laid the matter before the Consul, in the absence of witnesses. The Consul dismissed him with orders to return three days afterwards; and inquired in person of Sulpicia, a lady of dignity, whether she knew any old woman named Aebutia residing on the Aventine. On her replying that she knew her to be a woman of honour and of good character, he said that he had need of her; that she might send a person to summon her. Aebutia, on receiving the message, came to Sulpicia, and presently afterwards the Consul, as if he had come in by chance, made mention of her nephew to Aebutia.
3. Write in oratio recta the sentences which are in oratio obliqua in the extracts from Tacitus.
4. Shew clearly the construction of the sentence, "Tiberioque etiam . implicabantur."
5. Account for the cases of "diebus," "causis," "quanto," "plures," "spe," "cui," "superori," " agendo," "laborum," which are found in the second extract.
6. What is the derivation of cohors, induperator, aplustre, Sarranus, velificatus, tympanum, trechedipna, niceteria, aliptes.
7. "(Augustus) munia senatus, magistratuum, legum in se trahere." Shew this in detail.
s. Give a short account of Tacitus and his works.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HAHIFAX.

## SESSIONAL EXAMINATIONS, 1872.

Thursday, April 11 th:-9 a.m. to 1 p.m.

## B.A. EXAMINATION.

GREEK $\left\{\begin{array}{l}\text { DEMOSTHENES:-PHILIPPICS I., III. }\end{array}\right.$
Professor Johnson, M.A............................................... Examiner.

## 1. Translate :








































 sentence, and shew the relations in which the dependent clauses stand to each other.
3. $\left.\nu v \nu \delta^{\prime} \dot{\varepsilon} \pi\right]^{\prime} \dot{a} \delta j \eta \lambda o \iota \varsigma ~ o v \sigma \sigma \kappa$. T. $\lambda$. Explain the construction of 'a $a \delta \eta \lambda o \iota s$ ovंol $\tau \circ \stackrel{\pi}{ } \varsigma$, and of the infinitives in this sentence.


 щахои́ $\mu$ vov.
 event? Relate the manner in which the peace was made. How was it broken by Philip, according to Demosthenes?
 the circumstances alluded to.
 Write short explanatory notes on these.
9. Relate the chief events in Demosthenes' life after the delivery of the Third Philippic.

# DALHOUSIE COLLEGE AND UNIVERSITY, HALIFAX. 

SESSIONAL EXAMINATIONS, 1872.

Thursday, April 18, $9 \mathrm{~A} . \mathrm{M}$.

ETHICS AND POLITICAL ECONOMY.
Very Rev. Prynótpal Ross, D. D.................Examiner.

1. Can the phenomena of Will be explained on strictly scientific principles? Illustrate.
2. What is meant by the power of contrary choice? Give your opinion respecting the existence of such a power. Assign reasons.
3. Illustrate the importance of studying the influence of motives.
4. Is the desire of Society an original principle in human nature. Assign reasons. Give illustrations of its power.
5. Explain the nature and importance of the principle of Emulation; and the evils to which it may lead, if not properly directed and controlled.
6. Define particularly the Moral Faculty.
7. In Ethical discussions what two distinct subjects have often been confounded.
8. Explain the Utilitarian system of morals. Name the principal writers who have advocated this system.
9. Explicate the argument, from design, for the existence of Deity.
10. Point out the defect in the argument for the immortality of the soul from its immateriality.
11. Mention the principal duties that arise out of the rights of Contract.
12. Is Government merely a social compact? Assign reasons for your opinion.
13. Explain the difference between price and value.
14. What effect has the minute subdivision of labor a tendency to produce upon the intellect of the laborer ?
15. What confers value on gems and precious stones?
16. If laborers in every department of industry strike for higher wages, and obtain them, what will the effect on themselves be?
17. Why can Government borrow money at a lower rate of interest than private individuals?
18. What is Communism? What would be the probable result of its adoption on productive industry.
19. What effect has peasant proprietorship a tendency to produce upon the industry and morals of a community ?
20. What are the usual causes of Commercial crises? Write their history.
21. Upon what articles heavily taxed would a reduction of the duty, within certain limits, increase the revenue? Upon what articles would an increase of the duty produce the same result?
22. State the advantages and disadvantages of indirect taxation.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.



1. Enumerate the principal modifications of Cellular and Vascular tissues observed in plants.
2. How do cells originate? Discuss theories of development.
3. Describe the whole process of Impregnation, structure of pollen grain and ovule and formation of embryo.
4. Describe briefly, in regular order, the various Organs of the Plant, Vegetative and Reproductive.
5. Give an outline of the Natural System of Classification of Plants.
6. Give, comparatively, the characters of the following Natural Orders : Ranunculaceæ, Fabaceæ (Leguminosce), Apiaceæ (Umbelliferce), Asteraceæ (Compositce.)
7. Indicate the general relations observable between the nature of the embryo, structure of the stem, venation of the leaves, and number of parts of the floral whorls.
8. Describe briefly the principal modifications of tissue of which animal structures are formed.
9. Give a general outline of the Classification of Animals.
10. Describe the principal modifications of Dentition in Mammalia.
11. Indicate comparatively the types of structure characteristic of Vertebrata, Articulata, Mollusea, Radiata.
12. Give an outline of the Classification of Insecta.
13. What are the essential structural differences between Mammalia, Aves, Reptilia, Batrachia, Pisces ?

## PRACTICAL CHEMISTRY.

1. Give an outline of the general method to be pursued in ascertaining the constituents of a salt.
2. Determine the bases (if there are any) in the bottles marked Nos. 1 to 10 inclusive.
3. Determine the Acids (free or combined) in bottles Nos. 1 to 5 .

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

## SESSIONAL EXAMINATIONS, 1872.

Tuesday, April 16, 9 A.m., to 1 P.m.
HISTORY.
Professor DeMill, M.A.....................Examiner.

1. Explain the changes effected by Constantine. Enumerate the Barbarian tribes, their conquests, and final settlements.
2. State the causes of the Mahommedan conquests. Give a brief sketch of the rise and decline of the Abbasides. Give an account of the rise of the Seljukian Turks.
3. Show the power of the crown under the Norman Kings of England. What important changes were effected during the reigns of Henry II, John. and Henry III. Enumerate the chief privileges acquired by the Commons before the time of the Tudors.
4. In the Frankish kingdom, indicate the chief events of the struggle between the Romano-Gallic, and the Germanic elements. Explain the first important summons of the Tiers Etat to the States General. Enumerate the changes of Government in France since 1793.
5. What were the chief events in the reign of the Emperor Louis of Bavaria. Give an account of the Swiss War of Independence. Give a brief summary of the Thirty Year's War.
6. State the chief measures in the domestic and foreign policy of Pope Gregory I. Account for the interference of Otho the Great in Italian affairs. Explain the policy of Pope Gregory VII, and mention the most important events in which he was concerned before and after his elevation to the Papacy.
7. What was the origin of the Crusades? Enumerate the different Crusades and state the cause, and leading characteristic of each. Give an account of the rise of the Mendicant Orders.
8. Explain the terms Allodial and Feudal. What were the ordinary duties of a Vassal? What were included under Feudal Incidents?
9. Describe generally the condition of Philosophy during the fifteenth and sixteenth centuries. What was proposed in the scheme of the Instauratio Magna.
10. Give an account of the origin of Metrical Romance. State the chief epochs in the literary history of the leading countries of Europe, and name the principal writers in each. Give brief biographical sketches of Giotto, Brunelleschi, and Ghiberti.

## DALHOUSIE COLLEGE AND UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Fridat, April 19Th.<br>FRENCH.-FOURTH YEAR.<br>James Liechti, Esq................................... . . . . Examiner.

Traduisez: I• Extrait des "fenilles d' Automne" par Victor Hugo.
II. Extrait du "Bourgeois gentilhomme," (1. Acte, lère Scène.) par Molière.

1. Quelle différence y a-t-il entre: la maison d'où je sors et la maison dont je sors? Pourguoi?
2. Personne et chose sont des deux genres. Expliquez quand ils s'emploient au masculin et quand au feminin.
3. Quelque soient vos vertus, quels que grands que soient vos talents, quelque soit votre modéstie, ne croyez pas échapper à l'envie. Corrigez cette plurase, et dites en quoi consistent les fautes. Traduisez: Whatever pains one may take to understand a foreign language, it is necessary that a constant practice acompany the rules.
4. Le verbe se met-il au sing. ou au pluriel, lorsqu'il a pour sujet un nom collectif? Traduisez: The people are unhappy this year.
5. Qu'y a-t-il à dire relativement au Complément du verbe. Est-ce qu'on doit écrire: Croyez-vous ramener ces esprits égarés par la douceur. Saint Louis aimait la justice et à chanter les louanges du Seiqneur. He likes neither conversing, nor playing, nor going to the theatre, nor taking a walk.
6. Quand la forme verbale en ant est-elle participe présent, et quald udjectif verbal? Les phrases suivantes sont-elles écrites correctement ou non ? Pourquoi? La mer mugissant ressemble à une personne irritée. Ils se sont engagés sur cette mer mugissant. Des honmes grondants et souffrants. Personne d' uu caractère donx, ne grondante, ne contredisante jamais.
7. Comment doit-on écrire la forme verbale en ant précédée d'un adverbe ; et comment lorsqu'elle en est suivie. Traduisez: An always scheming woman.
8. Expliquez l'accord des part. passés dans les phrases suivantes : Ce sont mes sentiments qu'il vous a fait entendre Jamais tant de beaute' futclle couronnée? Je fus révolté du peu de confiance qu’il avait mis dans mon amitié. Traduisez: 'The few ships which Mazarin had suffered to rot (laisser pourrir) in the ports, have been repaired.
9. Quelle différence y a-t-il entre plus et davantage; entre ne ... plus de et ne . . . pas plus de Ecrivez des exs. Doit-on dire avee Molière: Il n'y a rien qui chatouille davantage que les applandissements.
10. Les personnes d'esprit ont en eux les semences de tous les sentiments. Quelle figure de Syntaxe cette phrase renferme-t-elle, et en quoi consiste-t-elle? Traduisez: Health as well as fortune withdraw their favors from those who abuse them.
11. Pourquoi l'ellipse est-elle vicieuse dans la phrase suivante: Le crime fait la honte et non pas l'échafaud.

Traduisez en français: The votaries of Mahomet are more assured than himself of his miraculons gifts, and their confidence and credulity increase as they are further removed from the time and place of his spiritual exploits. They believe and affirm that trees went forth to meet him; that he was saluted by stones; that water gushed from his fingers; that he fed the himgry and the sick, and raised the dead . . . . and both animate and inatumate nature were equally subject to the apostle of God.
(Mahomet's Miracles, by Gibbon.)

## DALHOUSIE COLLEGE ANI UNIVERSITY,

## HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

Friday, Aprill 19 TH .
FRENCH.-FOURTH YEAR.
James Liechti, Esq.................................... Examiner.
Après cela, il se peut que.le comte de Halzbourg reunissse ces qualités ; et bien décidément je l'épouserai peut-être, non pas pour moi, mais pour ceux qui m'entourent, et dont il me serait si doux de faire le bonheur! Ma cousine surtout; cette chère Valérie, si aimable, si intéressante! Pauvres toutes les deux, il faudra nous séparer! Riche, je ne la quitterai plus; je l'entourerai de tous les soins que son état réclame. Il est si triste d'être privée de la vue!

> (From " Valérie," by Scribe).

## POUR LES PAUVRES.

> Donnez! il vient un jour où la terre nous laisse ; Vos aumônes, là-haut, vous font une richesse. Donnez! afin qu'on dise: "Il a pitié de nous!" Afin que l'indigent que glacent les tempêtes, Que le pauvre qui souffre à côté de vos fêtes, Au seuill de vos palais fixe un oeil moins jaloux. Donnez! pour être aimés du Dieu qui se fit homme; Pour que le méchant même en s'inclinant vous nomme; Pour que votre foyer soit calme et fraternel. Donnez! afin qu'un jour, à votre heure dernière, Contre tous vos péchés, vous ayez la prière D'un mendiant puissant au ciel !

Victor Hugo.

## LE Maitre de musique.

J'en demeure d'accord, et je les goûte comme vous. Il n'y a rien assurément qui chatouille davantage que les applaudissements que vous dites ; mais cet encens ne fait pas vivre. Des louanges toutes pures ne mettent point un homme à son aise: Il y faut mêler du solide; et la meilleure façon de louer, c'est de louer avec les mains. C'est un homme, à la vérité, dont les lumières sont petites, qui parle à tort et à travers de toutes choses, et n'applaudit qu'à contre-sens ; mais son argent redresse les jugements de son esprit; il a du discernement dans sa bourse, ses louanges sont monuayées : et ce bourgeois ignorant nous vaut mieux, comme vous voyez, que le grand seigneur éclairé qui nous a introduits ici:

[^3]
## DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.<br>Friday, April 19TH

## GERMAN-FOURTH YEAR.

Translate: I. "Wallenstein's Absetzung." by Schiller.
In dieser prahlerisehen Dunkelheit erwartete Wallenstein stille, doch nicht müssig, seine glänzende Stunde und der Rache aufgehenden Tag; bald liess ihn Gustav Adolph's reissender Siegeslauf ein Vorgefühl desselben geniessen. Von seinen hochfliegenden Planen ward kein einziger aufgegeben; der Undank des Kaisers hatte seinen Ehrgeiz von einem lästigen Zügel befreit.
II. "Faust," (Prolog im Himmel) by Goethe, beginning with :

Medhistopheles: Von Sonn' und Welten weiss ich nichts zu sagen.

1. When is the Passive voice expressed by sein, and when by werden. Can active verbs, governing the Dative, be employed as in English? Translate: Carthage was destroyed by the Romans. The gates were shut before I arrived. Yon have been seen. The house is being built. I am allowed ( 2 forms).
2. With it, to it, from it, etc., assume a different form in German ; mention which. How are relative pronouns, preceded by prepositions, contracted. Here is the pen with which I have written.
3. Decline the interrog. Prons. wer and was; and write the Genit. sing. and Plural of the relative Pros. welcher, welche, welches.
4. Write the three pers. sing. of the Ind. pres., the 1st. pers. sing. of the Imperf. and the past participle of the verbs: geben, verbergen, erfinden, abschreiben.
5. Explain the terms : separable and inseparable verbs. What is the construction peculiar to each. Mention the prefixes which are sometimes separable, and sometimes inseparable.
6. By what words and how is the position of the verb, and that of the subject influenced? Mention those words which do not alter the construction. Give ex. Translate: The man is honest, therefore, he is esteemed. It was four o'clock when the sun rose. After he had studied he took a walk.
7. Mention when the Infinitive is used with $z u$, and when without $z u$. Give exs. He began langhing. The Book is not to be had. I do not know where to go.
8. In what form do you render the English Present part. denoting: cause, reason and time. Translate: Having no money, 1 cannot depart. The student being ill, he camot attend. Having spoken so long, he was exhausted.
9. Correct the following sentences: Ich erinnere mich sein. Ein Freund von meinen All das Jahr. Alles was ich habe gesehen. Er hat viele Geld, aber wenig Freunde. Haben Sie nicht von Jemand gehört.
10. Translate and parse the following sentence: Allgemein war das Murren der Armee, als die Absetzung ihres Feldherrn bekannt wurde.

Translate into German :-Pythias: How couldst thou, who hast never loved any person, expect to have friends? If thou hast loved and respected men, thon wouldst have secured their love and respect. Thou hast feared and oppressed mankind, and they [both] fear and detest thee. To be loved and esteemed by men of free and generous minds, thou must be virtuous, kind, just; and know [how] to live on a sort of equality with those who share and deserve thy friendship.


[^0]:    Z NTMEM
     ETBL .

[^1]:    Classes of First Year, with Library and Matriculation Fee.... $\$ 30$
    " $\quad \begin{aligned} & \text { Second " } \\ & \text { "Third } \\ & \text { " } \\ & \text { Thith Library } \\ & \text { Fee......................... } 25 \\ & \text { 2 }\end{aligned}$
    " Fourth " " " ......................... 23

[^2]:    * Only Students competing for a First or Second Class at the Scssional Examinations will be examined in this additional work, which will not be read in Class.
    $\dagger$ The Examination in these subjects will be held at the beginning of the Winter Session.

[^3]:    "Le Bourgeois Gentilhomme," Moliére.

