CALENDAR

AND

EXAMINATION PAPERS

OF

Dalhousie College

AND

University,

HALIFAX, NOVA SCOTIA.

FACULTY OF ARTS.

FACULTY OF MEDICINE.

SESSION 1872-73.

HALIFAX:
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Thos. Trenaman, M.D., and John F. Black, M.D., *Demonstrators of Anatomy.*

Janitor—John Wilson.

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Faculty of Arts.

§ I.—WINTER SESSION.

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

§ II.—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.

§ 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 English.—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.	Optics.
Theory of Equations.	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:—

Classes of First Year,	with Library and Matriculation Fee..		$21
" Second "	with Library Fee.....		25
" Third "	" "		12
		(or more, according to Classes selected.)	
" Fourth "	"		13

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

Classes of First Year,	with Library and Matriculation Fee....		$30
" Second "	with Library Fee.....		25
" Third "	" "		17
" Fourth "	" "		23

§ 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 16th 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 2nd, 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.

§ 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., III., IV., V. from Art. 94. Problems.

II. Classics.—(1) Latin: Cicero, Tusculan Questions—Book 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. English.—(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: Æneid, 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 Græca, 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.
COMPOSITION—Principia Latina, Part V. Initia Græca, 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 Decimal 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 Eighth Proposition, with Geometrical exercises and practical applications.

PLANE TRIGONOMETRY.—Solution of Plane Triangles.

SECOND YEAR.

GEOMETRY.—Sixth Book of Euclid finished; Geometrical Exercises continued; Geometrical Drawing.

PLANE TRIGONOMETRY.—Circular and Gradual Measure; Functions of sum and difference of angles, &c; Relations of the sides and angles of triangles; Mensuration of Heights and Distances; Elementary Problems in Navigation; Use of Logarithms.

ALGEBRA.—Simple Indeterminate Equations; Binomial Theorem; Properties of Logarithms; Compound Interest; Annuities.

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* Only Students competing for a First or Second Class at the Sessional Examinations will be examined in this additional work, which will not be read in Class.

† The Examination in these subjects will be held at the beginning of the Winter Session.

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 CHEMISTRY.

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 Hand-book of the English Language.

ELOCUTION.—*Books Recommended:* Porter's Analysis of the Principles of Rhetorical Delivery. Russell's Elocution.

HISTORY.—(*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.—(*Fourth 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 prescribed 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: Œdipus Rex.
Thucydides: Book II.
Plato: Phædo.
Demosthenes: De Corona.

COMPOSITION.—Latin Prose.

HISTORY AND LITERATURE.—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.)

PHILOLOGY.—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: DeMoivre's Theorem and Angular Analysis.

Analytical Geometry—The Straight Line, the Circle, the Parabola, 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 PHILOSOPHY.

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.

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 France.
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 Year.	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. Honor Classics—1 day. French—2 days.
10—11.	Rhetoric— Daily.	Mathematics— Daily.	Classics—4 days. Honor Classics—1 day.	Ethics, Political Econ.— Daily.
11—12.	Mathematics— Daily.	Classics— Daily.	Metaphysics—Mo., Tu., Fri. Honor English Literature— 1 day.	History— 4 days.
12—1.	Classics— Daily.	Logic and Psychology— Tu., Wed., Th., Fri.	Expl. Physics—2 days. Math. Physics—2 days. Advanced Physics—1 day.	Expl. Physics—1 day. Math. Physics—1 day.
1—2.			Honor Mathematics— 2 days.	Honor Mathematics— 2 days.
2—3.		Chemistry— Daily.	Chemistry— Daily.	
3—4.			German— 2 days.	German— 1 day.

Degrees Conferred, April, 1872.

MASTER OF ARTS.

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

DOCTOR OF MEDICINE AND MASTER OF SURGERY.

George H. H. DeWolf.
Charles W. Hiltz.
Finlay MacMillan.
William McKay.
Roderic Sutherland.

BACHELOR OF ARTS.

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

Prizes and Certificates of Merit.

UNIVERSITY PRIZES.

FOURTH YEAR.

Classics.....William P. Archibald.
Ethics.....Ephraim Scott.
History.....William P. Archibald.
Modern Languages.....William P. Archibald.

THIRD YEAR.

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. McDonald.

SECOND YEAR.

Classics.....James C. Herdman.
Mathematics.....1st., (St. Andrew's prize), James C. Herdman; 2nd., Danl. S. Fraser.
Psychology.....James C. Herdman.
Chemistry.....James C. Herdman.

FIRST YEAR.

Classics.....1st., George McMillan.
2nd., Robert McLellan.
Mathematics.....Robert McLellan.
Rhetoric.....Robert McLellan.

CERTIFICATES OF GENERAL MERIT.

Of the First Class:—*Fourth Year*—William P. Archibald. *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 Year*—Wm. 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.

Examinations, 1871-2.

SCHOLARSHIP EXAMINATION, OCTOBER, 1871.

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

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

UNIVERSITY EXAMINATIONS.

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)—Frances H. Bell.

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 McD.; 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.; McGregor, Daniel; McLeod, Donald; Oxley, James McD.

FIRST YEAR.—Class 1—Robert McLellan. Class 2—William A. Mills, George McMillan, 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. Cameron.

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 Robinson, Kenneth Duff. Class 3—McKeen, Jas. A.

Graduates and Undergraduates of the University, and General Students in Arts.

GRADUATES.

MASTERS OF ARTS.

1869.

Chase, Henry Joseph .. .. .. Cornwallis.

1870.

McNaughton, Samuel .. .. .. Guysborough.
Macdonald, John H. .. .. .. Kentville.

1871.

Cameron, J. J. .. .. Georgetown, P. E. Island.
Carr, Arthur F. .. .. St. Edward's, P. E. Island.
Smith, David H.. .. .. .. Truro.

1872.

Annand, Joseph .. .. Pictou.
Bayne, Herbert A. .. .. .. Pictou.
Forrest, James .. .. Halifax.
McKenzie, John J. .. .. .. Pictou.

DOCTORS OF MEDICINE AND MASTERS OF SURGERY.

1872.

DeWolf, George H. H. .. .. .. Dartmouth, N. S.
Hiltz, Charles W. .. .. Bridgetown, Annapolis.
McMillan, Finlay.. .. .. Pictou Co.
McRae, William .. .. Richmond, C. B.
Sutherland, Roderic .. .. River John, Pictou.

BACHELORS OF ARTS.

1866.

Chase, Henry J. .. .. Cornwallis.
Shaw, Robert .. .. New Perth, P. E. Island.

1867.

Burgess, Joshua C. .. .. Cornwallis.
Cameron, J. J. .. .. Georgetown, P. E. Island.
Lippincott, Aubrey .. .. New Glasgow.
McDonald, John H. .. .. .. Cornwallis.
McNaughton, Samuel .. .. .. East River, Pictou.
Ross, Alexander.. .. .. .. Rogers' Hill, Pictou.
Sedgwick, Robert .. .. Middle Musquodoboit.
Smith, David H.. .. .. .. Truro.
Smith, Edwin .. .. Truro.

1868.

Carr, Arthur F... .. .. .. St. Edward's, P. E. Island.
Christie, Thomas M. .. .. .. Yarmouth.
Creighton, James G. A.. .. .. Halifax.
Forrest, James .. .. Halifax.
McKay, Kenneth .. .. Hardwood Hill, Pictou.
Simpson, Isaac .. .. Merigomish, Pictou.

1869.

Annand, Joseph .. .. Gay's River, Pictou.
Bayne, Herbert A. .. .. Pictou.
Millar, Ebenezer D. .. .. .. Rogers' Hill, Pictou.
McKenzie, John J. .. .. Green Hill, Pictou.
Sutherland, John M. .. .. .. West River.

1870.

Lindsay, Andrew W. H. .. .. .. Halifax.
Scott, Hugh M. .. .. Sherbrooke.
Thorburn, Walter M. .. .. .. Bermuda.
Wallace, John .. .. Shubenacadie.

1871.

Bayne, Ernest S. .. .. Pictou.
McGregor, James G. .. .. .. Halifax.
Russell, Alexander G. .. .. .. Truro.

1872.

Archibald, Wm. P. .. .. .. Halifax.
Bruce, Wm. T. .. .. Middle Musquodoboit.
Carmichael, James .. .. .. New Glasgow.
Cruickshank, Wm... .. .. .. Lower Musquodoboit.
Fraser, Duncan C. .. .. .. New Glasgow.
Gunn, Adam.. .. .. East River, St. Mary's.
McKenzie, Hugh, ... Earltown.
Pollok, Alex. W. .. .. French River, Pictou.
Scott, Ephraim .. .. Douglas Gore.
Trueman, Arthur I.. .. .. .. Point DeBute, N. B.

UNDERGRADUATES, 1871–72.

FOURTH YEAR.

Archibald, Wm. P. .. .. .. Halifax.
Bruce, William T. .. .. Middle Musquodoboit.
Carmichael, James M. .. .. .. New Glasgow.
Cruickshank, William .. .. .. Lower Musquodoboit.
Fraser, Duncan C. .. .. .. New Glasgow.
Gunn, Adam.. .. .. East River, St. Mary's.
McKenzie, Hugh .. .. .. Earltown.
Pollok, Alexander W. .. .. .. French River, Pictou.
Scott, Ephraim .. .. .. Douglas Gore.
Trueman, Arthur I.. .. .. .. Point DeBute, N. B.

THIRD YEAR.

Cameron, William .. .. .. Sutherland's River, Pictou.
Creelman, David F.. .. .. .. Stewiacke,
Duff, Kenneth .. .. Lunenburg.
Hunter, John .. .. New Glasgow.
Logan, John H. .. .. Upper Stewiacke.
Logan, Neville .. .. Halifax.
MacDonald, Charles D.. .. .. Pictou.
MacDonald, Henry .. .. Halifax.
MacKay, Alexander H... .. .. Dalhousie, Pictou.
McKeen, James A. .. .. Tatamagouche.
Robinson, J. Milen .. .. .. Baillie, N. B.

SECOND YEAR.

Doull, Walter S. .. .. Halifax.
Fraser, Dan. S. .. .. Durham, Pictou.
Herdman, James C.. .. .. .. Pictou.
Herdman, Wm. C. .. .. .. Pictou.
Jordan, Lewis H. .. .. Halifax.

McGregor, Daniel	Inverness, C. B.
McLeod, Donald	Strathalbyn, P. E. Island.
Oxley, James McD.	Halifax.
Patterson, Alexander	Halifax.
Sinclair, Archibald J.	Halifax.
Sinclair, Robert G.	Malpeque, P. E. Island.

FIRST YEAR

Browning, William,	Pictou.
Coffin, James Robert	Savage Harbor, P. E. I.
Francis, Edward	Stewiacke.
Grey, Andrew	Pictou.
Gunn, Archibald	Pictou.
McDowall, Isaac	Tatamagouche.
McLean, Alexander	Belfast, P. E. I.
McLellan, Robert	West River, Pictou.
McLeod, Alexander	Onslow, Colchester.
McLeod, Wm. McKenzie	Sydney, C. B.
McMillan, George	Scotch Hill, Pictou.
Mills, Wm. Addison	Bay Fortune, P. E. I.
Morrow, Geoffrey.	Halifax.
Smith, James A.	Colchester.

Science Course.

Bell, Francis Hugh	Halifax.
Troop, William Henry	Dartmouth.

GENERAL STUDENTS.

NAME	RESIDENCE.	CLASSES ATTENDED.
Boyd, J Brodrick	Five Islands, Colchester,	Cl., Ethics, Chem., Logic.
Blanchard, Robt. J.	Truro.	Cl., Chem., Bot., Zool.
Campbell, John	Lake Ainslie, C. B.	Exp. Phy., Met., Che., Eth.
Chisholm, Murdoch	Loch Lomond.	Classics, Math., Rhetoric.
Esdaile, John	Dartmouth.	Math., Rhet., Chemistry,
Forbes, James A.	North Dalhousie, Pictou.	Classics, Math., Rhetoric.
Frizzle, H. T.	Mabou, C. B.	Latin, Mathematics.
Gordon Edward	Montrose, P. E. I.	Classics, Math., Rhetoric.
Gorham, E. J.	Halifax.	Mathematics, Rhetoric.
McDonald, Jas. R.		Classics, Mathematics.
McElmon, Beveridge	Londonderry.	Classics, Math., Rhetoric.
McDonald, John	Whycocomagh, C. B.	Classics, Mathematics.
McLean, Charles	High Bank, P. E. I.	Classics, Math., Rhetoric.
McLean, John	Halifax.	Cl., Math., Logic, Chem.
McMillen,	Lake Ainslie, C. B.	Classics, Rhetoric.
Mitchell, Arthur B.	Halifax.	Math., Rhetoric, Chem.
Mitchell, W. F	Halifax.	Math., Rhetoric, Chem.
Murray, Thomas	Bedeque, P. E. I.	Classics, Rhetoric.
Quinn, Albert R.	Cornwallis.	Cl., Math., Logic, Chem.
Sinclair, John H.	Goshen, Guysborough.	Classics, Math., Rhetoric.
Stairs, George	Halifax.	Rhetoric, Chemistry.
Thomson, James	"	Latin, Math., Rhetoric.
West, Franklin S.	"	Classics, Math., Rhetoric.
Whitman, Jas. S.	"	Chem., History.

Undergraduates in Arts,	46
" in Science,	2
Students in Medicine,	26
General Students in Arts	24
Total,	98

Faculty of Medicine.

VERY 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, and President of the Faculty.

ALEXANDER 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 Children and Clinical Surgery.

EDWARD FARREL, M. D.,

Professor of Principles and Practice of Surgery and Clinical Surgery.

JOHN SOMMERS, M. D,

Professor of Institute of Medicine and Clinical Medicine.

HUGH A. GORDON, M. D., L. R. C. S., EDIN.,

Professor of Anatomy and Registrar of the Faculty.

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.

Faculty of Medicine.

THE PRINCIPAL (*ex-officio.*)

Professor.....Almon,
Lawson,
Reid,
Farrell,
Woodill,
Slayter,
Sommers,
Gordon,
DeWolf,
Blanchard.
Demonstrator.....A. Lawson, M. D.
President of the Faculty.....W. J. Almon, M. D.
Dean.....A. P. Reid, M. D.
Registrar.....H. A. Gordon, M. D.
Matriculation Examiner to the Faculty.....Principal Ross, D. D.

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.

Registration is necessary every session—it is required upon entrance, or as soon afterwards as possible, and always before any class tickets are procured. The time fixed for closing the Register is annually on the fifteenth of December. Class tickets are payable in advance, and if not taken out within the prescribed period of the current session, will not be granted after its expiration.

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.

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.

Course of Instruction in the Faculty of Medicine.

(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. Amon, 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—MATERIA 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 preparations—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.

Prizes.

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.

Hospitals, etc.

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.

Past Session.

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. Hiltz	Bridgetown, An'polis, N.S.	Amenorrhœa.
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. H. 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 Surgery—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 Regulations.

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 occasionally 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 Lectures 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 15th 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,* *Practical Anatomy,* *Clinical Medicine,* *Clinical Surgery,*	Of which two courses will be required, each of six months' duration.
Medical Jurisprudence, *Botany,* *Practical Chemistry.*	Of which one course will be required, each of three months' duration.

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 other Hospital, approved by this University.

6th—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——; 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 præsens 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 Medical Faculty, Session 1871-72.

Bent, J. K.	Halifax.
Bethune, John	Cape Breton.
Campbell, Donald A.	Truro.
Campbell, Angus	Pictou County.
Chisholm, Donald	Cape Breton.
Crooker, P. A.	Brookfield.
Cox, Robinson	Guysboro'.
DeWolf, Geo. H. 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., Jr.,	Halifax.
McMillan, Finlay	Pictou County.
McIntosh, Alex., D.	Pictou County.
McRae, William	Cape Breton.
McKay, Duncan R. C.	Truro.
Ryan, Philip M.	Halifax.
Sutherland Roderic	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. Omnes 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 percundum, 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 vobiscum de amore reipublicae certent: quos ex multorum 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 malum civile ac domesticum ad ullam reipublicae partem esse venturum.

b. Nisus ad haec: 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 tali—
Si quis in adversum rapiat casusve deusve,
Te superesse velim: tua vita dignior aetas.
Sit, qui me raptum pugna pretiove redemptum
Mandet humo, solita aut si qua id fortuna vetabit,
Absenti ferat inferias, 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.
Adcederemus, ait. Vigiles simul excitat. Illi
Succedunt servantque vices: statione relicta
Ipse comes Niso gradiur, 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, ōs.*

4. What are the other degrees of comparison of *pauper, benevolus, facilis, providus, primus, idoneus, imus, novus, juvenis.*

5. Write in Latin: 7777, 465th, $\frac{1}{2}$.

6. *a.* What are the other persons of *nolo refero, inquam, edo.* Write out the Fut. Indic. Act. of *adeo, velle, moneo, posse,* and the Pres. Indic. Pass. of *conficio, patefacio, video, fero.*

b. In what Tense, Mood, and Voice are these verbs and what are their principal parts, *sentirent, tenuerimus, vereber, mandet, vetabit, ausa, nectis, requirunt, juvat, sinite?*

7. *a.* Mark the quantity of each syllable of *fiebatis, corporibus, ancipitia, collegeritis, audiebamus, venimusque, viden.* Distinguish *fugit, fugit: lepōrem, lepŏrem: oblitus, ŏblitus: rĕfert, rēfert: lĕgatis lēgatis, lēgatis.*

b. Scan the last five lines of the third passage for translation.

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, corna, 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.

WEDNESDAY, APRIL 10, 3 TO 5.30 P. M.

CLASSICS.—FIRST YEAR. ADDITIONAL PAPER.

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 illinc 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 queror 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 Philippic, *a*, §§ 13, 14.
b, § 32, (Ed. Teubner.)

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

THURSDAY, APRIL 11TH.—9 A.M. TO 1 P.M.

GREEK.—FIRST YEAR.

LUCIAN.—CATAPLUS.

PROFESSOR JOHNSON, M.A.....*Examiner.*

1. Translate:

(*a*) Ἐπεὶ δὲ κατ' αὐτὸ ἤδη τὸ στόμιον ἦμεν, ἐμοῦ τοὺς νεκροὺς ὡς ἔθος ἀπαριθμοῦντος τῷ Αἰακῷ, κἀκείνου λογιζομένου αὐτοὺς, πρὸς τὸ παρὰ τῆς ἀδελφῆς πεμφθὲν αὐτῷ σύμβολον, λαθὼν, οὐκ οἶδ' ὅπως, ὁ τρισκατάρατος ἀπιὼν ᾤχετο. ἐνέδει οὖν νεκρὸς εἷς τῷ λογισμῷ· καὶ ὁ Αἰακὸς ἀνατείνας τὰς ὀφρῦς, Μὴ ἐπὶ πάντων, ὦ Ἑρμῆ, φησι, χρὸ τῇ κλεπτικῇ· ἅλις σοι αἱ ἐν οὐρανῷ παιδιαι· τὰ νεκρῶν δὲ ἀκριβῆ, καὶ οὐδαμῶς λαθεῖν δυνάμενα. τέτταρας ὡς ὁρᾷς πρὸς τοῖς χιλίοις ἔχει τὸ σύμβολον ἐγκεκαραγμένους· σὺ δέ μοι παρ' ἕνα ἥκεις ἄγων· εἰ μὴ τοῦτο φῇς, ὡς παραλελόγισταί σε ἡ Ἄτροπος. ἐγὼ δὲ ἐρυθριάσας πρὸς τὸν λόγον, ταχέως ὑπεμνήσθην τῶν κατὰ τὴν ὁδόν. κἀπειδὴ περιβλέπων οὐδαμοῦ τοῦτον εἶδον, συνεὶς τὴν ἀπόδρασιν, ἐδίωκον ὡς εἶχον τάχους κατὰ τὴν ἀγουσαν πρὸς τὸ φῶς.

(*b*) Ἔτι δὲ καὶ ἡ κνίσσα, ἡ τῶν σκευαζομένων ἐς τὸ δεῖπνον, ἀπέκναιέ με· ὥστε ὑπερένθρωπός τις ἀνὴρ καὶ τρισάλβιος καταφαίνετο, καὶ μενουνοῦχι καλλίων καὶ ὑψηλότερος ὅλῳ πηχεῖ βασιλικῷ· ἐπαιρόμενος τῇ τύχῃ καὶ σεμνῶς προβαίνων, καὶ ἑαυτὸν ἐξυπτιάζων, καὶ τοὺς ἐντυγχάνοντας ἐκπλήττων. ἐπεὶ δὲ ἀπέθανεν, αὐτός τε παγγέλοιος ὤφθη μοι ἀποδοσάμενος τὴν τρυφὴν κἀμαυτοῦ ἔτι μᾶλλον κατεγέλων οἷον κάθαρμα ἐτεθήπειν, ἀπὸ τῆς κνίσσης τεκμαιρόμενος αὐτοῦ τὴν εὐδαιμονίαν καὶ μακερίζων ἐπὶ τῷ αἵματι τῶν ἐν τῇ Λακωνικῇ θαλάττῃ κολχίδων.

2. In what tense, mood, and voice are the following forms and what are their chief parts: *λαθών*, *οἶδα*, *χοῦ*, *φῇς*, *εἶδον*, *συνεὶς*, *ὑπεμνήσθην*,—*προβαίνων*, *ὤφθη*, *ἐτέθηπεν*.

3. Write the genitive of: *εἷς*, *Ἑρμῆ*, *παιδίοι*, *τέτταρας*, *χιλίους*, *πηχεῖ*, *καλλίων*,—*χεραῖν*, *ἅπασι δανειστήν*, *τὸ ἄνθος*, *ὁδοίς*, *ὀδοῖς*.

4. What is known of Lucian's life?

GRAMMAR.

1. Explain the terms *synæresis*, *crasis*, *aphæresis*, *syncope*. When is ν added to the end of words?

2. What were the original forms of *εὐδαίμων*, *μέλας*, *γάλα*, *γίγας*, *ἄναξ*, *λέων*,—*ἐτέθηπεν*, *διδοῦς*, *λέγω*, *εἰμί*, *στέλλον*, *ὧν*.

3. Write down all the cases of *χάρις*, *παῖς*, *ποῦς*, *ἰχθύς*, *νοῦς*, *οἰδός*.

4. Give the other degrees of comparison of *μέγας*, *πολύς*, *μίκρος*, *πρῶτος*, *μάλιστα*, *ῥᾴδιος*, *ἀληθής*, *θᾶσσον*.

5. Write the Nom. and Acc. sing. and pl. of *οὗτος*, *ὅστις*, *ὅδε*, *αὐτός*,—*μέλας*, *ἡδύς*, *πολύς*, *ἀληθής*.

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. Form the 1st Sing. Imperfect Act. of *ἔχω*, *ὁραω*, *εὑρίσκω*, *ἐάω*, *ὁμιλέω*, *ῥίπτω*, *οἰκτίζω*, *ἑορτάζω*, *προβάλλω*, *συλλέγω*, *δυστυχέω*, *οἰκοδομέω*.

8. Write the 3rd pl. perf. Indic. Act. of *λαμβάνω*, *στέλλω*, *κτείνω*, *ζηλόω*, *βάλλω*, *θνήσκω*, *τίθημι*, *εἴκω*, *οἶδα*.

9. Form the perf. Infin. passive of *πλέκω*, *τρέπω*, *πείθω*, *κρίνω*, *δηλόω*, *γελάω*, *πράσσω*, *ἵστημι*.

10. Arrange in a tabular form the peculiar tenses in the Active voice of *δίδωμι* and *τίθημι*, giving only *one* form in each mood and tense.

FRIDAY, APRIL 12, 3 P.M. TO 5.30 P.M.

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: $\frac{5}{18}$, $\frac{59}{625}$, $\frac{1}{70}$, $\frac{7}{512}$.

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,

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

4. Find the sum of $\frac{1}{1+x}-\frac{1}{1-x}+\frac{2x}{1-x^2}$: 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 $a^0=1$, $a^{-m}=\frac{1}{a^m}$ and $a^{\frac{1}{m}}=\sqrt[m]{a}$.

6. Prove $\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}(5-2\sqrt{6})=1$.

7. Given n simultaneous equations of the 1st degree, independent of each other, involving n unknown quantities, x, y, z, &c.; describe minutely the method of evaluating these quantities.

8. Given $x+\frac{3x-10}{5}=4-\frac{5x-10}{3}$, to find x; also given

$7x-2y=14+\frac{x}{2}$, and $7y-2x=32+\frac{y}{3}$, 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 $\left.\begin{array}{l} x-2y=1 \\ x^2-2y^2=17 \end{array}\right\}$; also $\left.\begin{array}{l} x+\sqrt{x+y}=12-y \\ x^3+y^3=189 \end{array}\right\}$; to find x and y in each case.

11. Given $x^2+px+q=0$. Shew that the sum of the roots $=-p$: and their product $=q$. Shew also that the sum of their squares $=p^2-2q$.

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 $(r<1)$, $a+ar+ar^2+$ &c.: the infinite series, $a-ar+ar^2-$ &c. : : 3 : 2; prove $r=\frac{1}{2}$, and shew that in the former series the first term $=4$ times the sum of all that follow.

14. Prove $\frac{a+b}{2}>\sqrt{ab}$, 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.

FRIDAY, APRIL 12, 9 A.M. TO 1 P.M.

MATHEMATICS—FIRST YEAR.

GEOMETRY.

PROFESSOR C. MACDONALD, M. A.....*Examiner.*

1. At a given point in a given 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 $=ab$ 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, CD is joined: prove $AC^2+CB^2=2AD^2+2DC^2$.

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, BX, and from A draw AC cutting the circumference in C and BX in D: prove

$$AC.\ AD=AB^2$$

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1872.

MONDAY, APRIL 15, 9 A.M., TO 1 P.M.

RHETORIC.

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 Styles.

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, Innuendo.

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 augmentative forms. Classify words according to their meanings. Define the following terms,—Ellipsis, Pleonasm, Zeugma, 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 Anapæstic metres in English Poetry.

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

LATIN.—SECOND YEAR.

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 mihi fuisset iter, quo nec orator Hannibalis nec 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 nec ab Romanis vobis ulla spes est, nec 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, quicquid 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: nec strictorum ante gladium, si per Gallos liceat, quam in Italiam venisset. Et per nuncios quidem haec. 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 nova puerum palumbes

Texere: mirum quod foret omnibus
Quicunque celsae nidum Acherontiae
Saltusque Bantinos et arvum
Pingue tenent humilis Forenti;

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

Vester, Camenae, vester in arduos
Tollor Sabinos, seu mihi frigidum
Praeneste, 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 jactum 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, mane', lavere, concidu, distet, pendet, fidit, vincent, 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.

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1872.

THURSDAY, 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:

(*a*) Εἶπος δὲ ταῦτα ὁ Κροῖσος μεταπέμπεται τὸν Φρύγα Ἄδρηστον, ἀπικομένῳ δέ οἱ λέγει τάδε· "Ἄδρηστε, ἐγώ σε συμφορῇ πεπληγμένον ἀχάρι, τήν τοι οὐκ ὀνειδίζω, ἐκάθηρα καὶ οἰκίοισι ὑποδεξάμενος ἔχω, παρέχων πᾶσαν δαπάνην· νῦν ὦν (ὀφείλεις γάρ, ἐμεῦ προπομψήσαντος χρηστὰ ἐς σὲ, χρηστοῖσί με ἀμείβεσθαι) φύλακα παιδός σε τοῦ ἐμοῦ χρῄζω γενέσθαι ἐς ἄγρην ὁρμεομένου· μή τινες κατ' ὁδὸν κλῶπες κακοῦργοι ἐπὶ δηλήσει φανέωσι ὑμῖν· πρὸς δὲ τοίτῳ, καὶ σέ τοι χρεὼν ἐστι εἶναι ἔνθα ἀπολαμπρύνεαι τοῖσι ἔργοισι· πατρώιόν τε γάρ τοι ἐστὶ καὶ προσέτι ῥώμη ὑπάρχει." Ἀμείβεται ὁ Ἄδρηστος· "ὦ βασιλεῦ, ἄλλως μὲν ἔγωγε ἂν οὐκ ἤιᾳ ἐς ἄεθλον τοιόνδε· οὔτε γὰρ συμφορῇ τοιῇδε κεχρημένον οἰκός ἐστι ἐς ὁμήλικας εὖ πρήσσοντας ἰέναι, οὔτε τὸ βούλεσθαι πάρα· πολλαχῇ τε ἂν ἰσχυν ἐμεωυτόν. νῦν δὲ, ἐπεί τε σὺ σπεύδεις καὶ δεῖ τοι χαρίζεσθαι, (ὀφείλω γάρ σε ἀμείβεσθαι χρηστοῖσι,) ποιέειν εἰμὶ ἑτοῖμος ταῦτα· παιδά τε σὸν τὸν διακελεύεαι φυλάσσειν, ἀπήμονα τοῦ φυλάσσοντος εἵνεκεν προσδόκα τοι ἀπονοστήσειν."

(*b*) Μείζονα δὴ κρητῆρα, Μενοιτίου υἱέ, καθίστα·
ζωρότερον δὲ κέρασε, δέπας δ' ἐντυνον ἑκάστῳ.
οἱ γὰρ φίλτατοι ἀνδρες ἐμῷ ὑπέασι μελάθρῳ.
Ὣς φάτο· Πάτροκλος δὲ φίλῳ ἐπεπείθεθ' ἑταίρῳ.
αὐτὰρ ὅγε κρεῖον μέγα κάββαλεν ἐν πυρὸς αὐγῇ,
ἐν δ' ἄρα νῶτον ἔθηκ' ὄϊος καὶ πίονος αἰγός,
ἐν δὲ σύς σιάλειο ῥάχιν τεθαλυῖαν ἀλοιφῇ.
τῷ δ' ἔχεν Αὐτομέδων, τάμνεν δ' ἄρα δῖος Ἀχιλλεὺς·
καὶ τὰ μὲν εὖ μίστυλλε, καὶ ἀμφ' ὀβελοῖσιν ἔπειρεν·
πῦρ δὲ Μενοιτιάδης δαῖεν μέγα, ἰσόθεος φώς.
αὐτὰρ ἐπεὶ κατὰ πῦρ ἐκάη, καὶ φλὸξ ἐμαράνθη,
ἀνθρακιὴν στορέσας, ὀβελοὺς ἐφύπερθε τάνυσσεν·
πάσσε δ' ἄλῳ θείοιο, κρατευτάων ἐπαείρας.
αὐτὰρ ἐπεὶ ῥ' ὀπτησε, καὶ εἰν ἐλεοῖσιν ἔχευεν,
Πάτροκλος μὲν σῖτον ἐλὼν ἐπένειμε τραπέζῃ,
καλοῖς ἐν κανέοισιν· ἀτὰρ κρέα νειμεν Ἀχιλλεύς.
αὐτὸς δ' ἀντίον ἷζεν Ὀδυσσῆος θείοιο,
τοίχου τοῦ ἑτέροιο· θεοῖσι δὲ θῦσαι ἀνώγει
Πάτροκλον, ὃν ἑταῖρον· ὁ δ' ἐν πυρὶ βάλλε θυηλάς.
οἱ δ' ἐπ' ὀνείαθ' ἑτοῖμα προκείμενα χεῖρας ἴαλλον.
αὐτὰρ ἐπεὶ πόσιος καὶ ἐδητύος ἐξ ἔρον ἕντο,
νεῖκος Αἴας Φοίνικι. νόησε δὲ δῖος Ὀδυσσεὺς·
πλησάμενος δ' οἴνοιο δέπας, δείδεκτ' Ἀχιλῆα·

2. Mention some general peculiarities of the Ionic dialect.

3. What are the Attic forms of ὦν, κείη, τέοισι, χρέωνται, τώυτό, ἱρά, τῆσι, ἐὼν, δοκέω, θωυματος, ὁόμεναι, Πηληϊάδεω, ῥηϊδίως, γενεῇφι, κεν, τάων, σιάλοιο.

4. Decline in the Ionic Dialect βασιλεία, πόλις, ναῦς, πολύς: and in the Attic, πατήρ, βοῦς, οἶς, ἕως.

5. What is the "Attic Future," the "Ionic Imperfect," the "Aeolic Aorist optative," the "Attic imperative"? Give one example of each?

6. Parse φανέωσι, ἤιᾳ, πάρα, πρόσδοκα,—ἀπῖκται, ὀρθεῖσι, μέθες, φόβεαι, εἰρεθείν: ὑπέασι, ἐπεπείθετο, κάββαλεν, νεῖμεν, δείδεκτο, πλησάμενος,—πεπίθωμεν, δαμασσε, ἐρέω, ἀπνίρων, σπείσαν, δόωσι, ἐοι.

7. What cases express relations of time? Explain the difference of signification. What is the force of ἀντῷ τῷ μελάθρῳ? What verbs are *regularly* followed by two accusatives? Give two examples of the Acc. Absolute.

8. What is meant by the "predicative participle"? Give an example. What determines its case? After what verbs is it generally used?

9. Scan the first five lines of the second extract. Mention some words that began with the Digamma.

10. Give an outline of the arguments for and against the unity of the Iliad.

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1872.

FRIDAY, APRIL 12, 9 A.M. TO 1 P.M.

MATHEMATICS.—SECOND YEAR.

GEOMETRY AND MENSURATION.

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 circumscribing 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 A B C is the triangle, and this point O, prove the triangles A O B, B O C, C O A to be equal.

8. The circular arch of a bridge was described with a radius of 32 ft., and its height is $4\frac{1}{2}$ 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 59° 52′ (cos — $\frac{9}{16}$): 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 radius of 20 yds. Cut out of it a sector of 100°, and find the area of the remainder.

11. A cubic foot of water weighs 1000 oz. nearly, and iron is $7\frac{1}{2}$ 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 Verrier 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 P.M. TO 5.30 P.M.

TRIGONOMETRY AND ALGEBRA.

1. Given that the arc of a circle is 13 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°.

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 2A, cos 2A, tan 2A.

5. Prove cos (30 — A) — cos (30 + A) = sin A: also tan (45° + A) = $\frac{1 + \tan A}{1 \mp \tan A}$ and $\frac{\tan A}{1 + \sec A}$ tan ½A.

6. Assuming the formula for cos A in terms of the sides of the triangle A B C, prove $\cos \frac{1}{2} A = \sqrt{\frac{s(s-a)}{b\,c}}$; shew that the area $= \sqrt{s(s-a)(s-b)(s-c)}$ 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° and 45°. 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 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 $12x^4 - 47x^3 + 100x^2 - 51x - 30 = 0$ has one positive root between 1 and 2, and one negative between 0 and 1.

EXTRA, FOR MERIT.

1. If two straight lines be cut by parallel planes, they shall be cut 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 $\frac{1}{9}$ 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 co-efficients 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 terminating 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 $e^x = 1 + x + \frac{x^2}{1.2} + \frac{x^3}{1.2.3} + \&c.$ Shew hence how the value of e may be calculated. Until e is known, a system of logarithms is impossible.

7. Given $\sin nx - \sin(n-2)x - \sin x$; prove $x = \frac{\pi}{3(n-1)}$ or $= 0$.

8. Given A + B + C = 90°: hence prove cot A + cot B + cot 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 $= n(2n^3 + 8n^2 + 7n + 2)$.

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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 A.M. TO 1 P.M.

CHEMISTRY.—SECOND YEAR.

PROFESSOR LAWSON.....*Examiner.*

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 Relations 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.

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

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 imperitaverat,
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 probos, 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 stultus 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 curra
Non minus ignotos generosis.

b. *Sy.* Ehem Demea, haud aspexeram te: quid agitur?
De. Quid agatur? nostram nequeo mirari satis
Rationem. *Sy.* Est hercle inepta, ne dicam dolo,
Absurda: piscis ceteros purga, Dromo:
Congrum istum maximum in aqua sinito ludere
Tantisper: ubi ego rediero, exossabitur:
Prius nolo. *De.* Haecin flagitia! *Sy.* Mihi quidem haec placent,
Et clamo saepe. Salsamenta haec, Stephanio,
Fac macerentur pulchre. *De.* Di vostram fidem,
Utrum studium id sibi habet an laudi putat
Fore, si perdiderit gnatum? nae misero mihi.
Videre videor iam diem illum, quem 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 vidi! nati filii,
Alia cura: heia autem, dum studes illis ut quam plurimum
Facerem, contriui in quaerendo vitam 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 viuat optant, meam autem mortem expectant scilicet.
Ita eos meo labore educos maximo hic fecit suos
Paulo sumptu: miseriam omnem ego capio, hic potitur gaudia.
Age, age numeiam experiamur contra, ecquid ego possiem
Blande dicere aut benigne facere, quando hoc pronocat.
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 maximus.

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 friend 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. Obcundus Marsya, qui se
Vultum ferre negat Novioram posse minoris.

5. Account for these forms: *Expergo, vin, faxo, possiem, scilo, frueti, frugi* (adj.), *ludier, oddo, ipsus, surrexe, coeperat.*

6. What is the derivation of *hic, octutum, epoi, arcesso, commissator, villum, villo, quoxum, illum, 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,

HALIFAX.

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:**

(*a*) ΤΡ. Εἰθ' ὠφελ' Ἀργοῦς μὴ διαπτάσθαι σκάφος
Κόλχων ἐς αἶαν κυανέας Συμπληγάδας,
μηδ' ἐν νάπαισι Πηλίου τεσεῖν ποτε
τμηθεῖσα πεύκη, μηδ' ἐρετμῶσαι χέρας
ἀνδρῶν ἀριστέων, οἱ τὸ πάγχρυσον δέρος
Πελιᾳ μετῆλθον. οὐ γὰρ ἂν δέσποιν' ἐμὴ
Μήδεια πύργους γῆς ἐπλευσ' Ἰωλκίας,
ἔρωτι θυμὸν ἐκπλαγεῖσ' Ἰάσονος,
οὐδ' ἂν κτανεῖν πείσασα Πελιάδας κόρους
πατέρα κατῴκει τήνδε γῆν Κορινθίαν
ξὺν ἀνδρὶ καὶ τέκνοισιν, ἀνδάνουσα μὲν
φυγῇ πολίτας ὧν ἀφίκετο χθόνα,
αὐτή τε πάντα συμφέρουσ' Ἰάσονι,
ὅπερ μεγίστη γίγνεται σωτηρία,
ὅταν γυνὴ πρὸς ἄνδρα μὴ διχοστατῇ.

(*b*) ΜΗ. ἔσται τάδ'· ἀλλὰ πίστις εἰ γένοιτό μοι
τούτων, ἔχοιμ' ἂν πάντα πρὸς σέθεν καλῶς.
ΑΙ. μῶν οὐ πέποιθας; ἢ τί σοι τὸ δυσχερές;
ΜΗ. πέποιθα· Πελίου δ' ἐχθρός ἐστι μοι δόμος
Κρέων τε. τούτοις δ' ὁρκίοισι μὲν ζυγεὶς
ἄγουσιν οὐ μεθεῖς ἂν ἐκ γαίας ἐμὲ,
λόγοις δὲ συμβὰς καὶ θεῶν ὠνώμοτος
φίλος γένοι' ἂν κἀπικηρυκεύμασι
τάχ' ἂν πίθοιο· τἀμὰ μὲν γὰρ ἀσθενῆ,
τοῖς δ' ὄλβος ἐστὶ καὶ δόμος τυραννικός.
ΑΙ. πολλὴν ἔλεξας, ὦ γύναι, προμηθίαν
ἀλλ' εἰ δοκεῖ σοι δρᾶν τάδ', οὐκ ἀφίσταμαι.
ἐμοί τε γὰρ τάδ' ἐστὶν ἀσφαλέστατα,
σεσῆψίν τιν' ἐχθροῖς σοῖς ἔχοντα δεικνύναι,
τὸ σόν τ' ἔραρε μᾶλλον· ἐξηγοῦ θυραῖς.

(a) ΑΓ. πατὴρ δ' ὁ τλήμων ξυμφορᾶς ἀγνωσίᾳ
ἀφνω προσελθὼν δῶμα προσπίτνει νεκρῷ·
ὤμωξε δ' εἰσίδων, καὶ περιπτύξας δέμας
κυνεῖ προσαυδῶν τοιάδ'· ὦ δύστηνε παῖ,
τίς σ' ὧδ' ἄτιμως δαιμόνων ἀπώλεσεν;
τίς τὸν γέροντα τύμβον ὀρφανὸν σέθεν
τίθησιν; οἴμοι, ξυθάνωμί σοι, τέκνον.
ἐπεὶ δὲ θρήνων καὶ γόων ἐπαύσατο,
χρῄζων γεραιὸν ἐξαναστῆσαι δέμας,
προσείχεθ' ὥστε κισσὸς ἐρνεσι δάφνης
λεπτοῖσι πέπλοις, δεινὰ δ' ἦν παλαίσματα·
ὁ μὲν γὰρ ἤθελ' ἐξαναστῆσαι γόνυ,
ἡ δ' ἀντιελάζετο· εἰ δὲ ποδὸς βίαν ἄγοι,
σήρκας γεραιὰς ἐσπάρασσ' ἀπ' ὀστέων.
χρόνῳ δ' ἀτέσβη καὶ μεθῆκ' ὁ δύσμορος
ψυχήν· κακοῦ γὰρ οὐκέτ' ἦν ἐπίρρεπες.
κεῖνται δὲ νεκροὶ παῖς τε καὶ γέρων πατὴρ
πέλας, ποθεινὴ δακρύοισι συμφορά.

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

2. πόσιν δίκην τῶνδ' ἀντιτίνασθαι κακῶν
τὸν δύντα τ' αὐτῷ θυγατέρ' ἥν τ' ἐγήματο.

How has this passage been corrected, and why?

4. Analyse the following clauses, giving rules for construction of nouns and verbs:

(a) εἴθ' ὤφελ' Ἀργοῦς μὴ διαπτάσθαι σκάφος
Κόλχων ἐς αἶαν κυανέας Συμπληγάδας.

(b) οὐ γὰρ ἂν δέσποιν' ἐμὴ
Μήδεια πύργους γῆς ἔπλευσ' Ἰωλκίας,
ἔρωτι θυμὸν ἐκπλαγεῖς' Ἰάσονος.

(c) ἐμοί τε γὰρ τάδ' ἔστιν ἀσφαλέστατα,
σκῆψίν τιν' ἐχθροῖς σοῖς ἔχοντα δυκεύειν.

5. Parse these verbal forms, and give their principal tenses: ὤφελε, διαπτάσθαι, τρηθῶσι, ἀνδάνουσα, συμφέρουσι, ζεύγεσι, μαθεῖς, ἐξαναστῆσαι, ἀπέσβη,—χρῆν, δέον, παρέμεσθα, συγχυθεῖσα, ἐρεῖ.

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, O 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.

MONDAY, APRIL 15, 9 A.M. TO 1 P.M.

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 $5\sqrt{2}$ lbs. act at angle 45° Prove the resultant $= 7. +$.

4. Shew that if three equal heavy particles be attached to a heavy triangular disc 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 formula, $s = \frac{1}{2} ft^2$, 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 the 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°, 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 A B C D is immersed in a fluid, A B being in the surface of it. The pressure on the triangle A C D is double of that on the triangle A C B.

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 pistor, the density of the air in it is $= P\left(1 + \frac{nB}{A}\right)$, 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 $= \frac{PQ}{P+Q}(1+m)$.

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,

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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. Outline 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,

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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, without, 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 thought from an Ontological to a Psychological basis? What antagonist views arose accordingly among the Eleatæ?

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 Ontological 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 philosophic 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 self-regulative 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,

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TUESDAY, APRIL 16, 9 A.M., TO 1 P.M.

CHEMISTRY.—THIRD YEAR.

PROFESSOR LAWSON.....*Examiner.*

1. HCl is acted upon by Na. H_2O is acted upon by Na. Compare the two reactions. 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) Reactions of their Salts with Hydrogen Monosulphide, H_2S, Ammonium Sulphhydrate, $S(NH_4)H$, and Disodiohydric Phosphate, $PO_4 Na_2 H. 12 OH_2$.

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? Give the names and formulæ of all the known members of the series containing the radicals $C_n H_{2n+1}$.

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, $C_n H_{2n} O_2$, 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.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

FRIDAY, APRIL 19TH.

FRENCH.—THIRD YEAR.

JAMES LIECHTI, ESQ. ..... *Examiner.*

Translate: I. Après cette aventure peu s'en fallut qu'il m'en arrivât une autre. J'allai voir un gros chanoine 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 à 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 "GIL 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 *réussisse* (II); why? Translate: What would you have him send.

6. *Je ne voulus plus voir de malades* (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 you give for the agreement of *priée* (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 pluie il a faite aujourd'hui. 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 used negatively, reject the negation *pas*. Give an ex.

12. When do *intrans. verbs* in the compound tenses require the auxily. *avoir*, and when *être*? Name those verbs which are always conjugated with *être*.

13. Write the various forms of *what* (Nom. and Acc.) when used 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 arbitrary power. They spent their life in trouble 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 wacht,
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 werf' 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: *Stauffacher: Frau, welchen Sturm gefährlicher Gedanken.*

1. What part of speech is *an*. How do such 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, Grossvater, Monarch, Mutter, Wissenschaft, Reichthum*, also the Nom. Sing. with the def. Art. of: *Länder, Amerikaner, Kaufleute, Nasen, Hoffnungen.*

6. *Während, mit, durch, wegen, für, 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, nicht*, and *kein*. Give the German Idioms of We are right, you are wrong. What has become of him.

11. *Wenn er seine Pflicht gethan hätte 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 12TH.

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 Zunge kecklich aus.
—Hast du auch wohl bedacht, was du mir räthst?
Die wilde Zwietracht und den Klang der Waffen
Rufst du in dieses friedgewohnte Thal—
Wir wagten es, ein schwaches Volk der Hirten,
In Kampf zu gehen mit dem Herrn der Welt?
Der gute Schein nur ist's, worauf sie warten:
Um loszulassen auf dies arme Land
Die wilden Horden ihrer Kriegesmacht,
Darin zu schalten mit des Siegers Rechten,
Und unterm Schein gerechter Züchtigung
Die alten Freiheitsbriefe zu vertilgen.

"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.

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

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 exsecuturos. 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 alderet, in incertum et ambiguum magis implicabantur. At patres, quibus unus metus, si intelligere videerentur, in questus, lacrimas, vota effundi: ad deos, ad effigiem Augusti, ad genua ipsius manus tendere, cum proferri libellum reciterique jussit.

b. Iisdem ferme diebus, iisdem causis Germaniae legiones turbatae, quanto plures, tanto violentius, et magna spe fore ut Germanicus Cæsar imperium alterius pati nequiret, daretque se legionibus vi sua cuncta tracturis. Duae apud ripam Rheni exercitus erant: sui nomen superiori, sub C. Silio legato; inferiorem A. Caecina curabat. Regimen summae rei penes Germanicum, agendo Galliarum censui tum intentum. Sed quitus 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 petantur
Militia; torrens dicendi copia multis
Et suae mortifera est facundia; viribus ille
Confisus periit admirandusque lacertis.
Sed plures nimia congesta pecunia cura
Strangulat, et cuncta exsuperans patrimonia census
Quanto delphinis balaena Britannica major.
Temporibus diris igitur jussuque Neronis
Longinum et magnos Senecae praedivitis hortos
Clausit, et egregias Lateranorum obsidet aedes
Tota cohors: raris venit in coenacula miles.
Panca licet portes argenti vascula puri,
Nocte iter ingressus, gladium contumaque 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 arca foro. Sed nulla aconita bibuntur
Fictilibus: tunc illa time, quam 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, nicteria, aliptes.*

7. "(Augustus) munia senatus, magistratuum, legum in se trahere." Shew this in detail.

8. Give a short account of Tacitus and his works.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

THURSDAY, APRIL 11TH:—9 A.M. TO 1 P.M.

B.A. EXAMINATION.

GREEK { DEMOSTHENES:—PHILIPPICS I., III.
{ PLATO:—APOLOGIA SOCRATIS.

PROFESSOR JOHNSON, M.A. ..... *Examiner.*

1. Translate:

(*a*) Ἀλλ' ἐὰν ἀφέντες ταῦτ', ἐκεῖνο εἰδῶμεν, ὅτι ἐχθρὸς ἄνθρωπος, καὶ τὰ ἡμέτερα ἡμᾶς ἀποστερεῖ, καὶ χρόνον πολὺν ὕβρικε, καὶ ἅπανθ', ὅσα πώποτ' ἠλπίσαμέν τινα πράξειν ὑπὲρ ἡμῶν, καθ' ἡμῶν εὕρηται, καὶ τὰ λοιπὰ ἐν αὐτοῖς ἡμῖν ἐστί, κἂν μὴ νῦν ἐθέλωμεν ἐκεῖ πολεμεῖν αὐτῷ, ἐνθάδ' ἴσως ἀναγκασθησόμεθα τοῦτο ποιεῖν, ἂν ταῦτα εἰδῶμεν, καὶ τὰ δέοντα ἐσόμεθα ἐγνωκότες, καὶ λόγων ματαίων ἀπηλλαγμένοι· οὐ γὰρ ἄττα ποτ' ἔσται δεῖ σκοπεῖν, ἀλλ' ὅτι φαῦλ', ἂν μὴ προσέχητε τοῖς πράγμασι τὸν νοῦν καὶ τὰ προσήκοντα ποιεῖν ἐθέλητ', εὖ εἰδέναι.

Ἐγὼ μὲν οὖν οὔτ' ἄλλοτε πώποτε πρὸς χάριν εἱλόμην λέγειν, ὅ τι ἂν μὴ καὶ συνοίσειν ὑμῖν πεπεισμένος ὦ, νῦν τε, ἃ γεγνώσκω, πάνθ' ἁπλῶς, οὐδὲν ὑποστειλάμενος, πεπαρρησίασμαι. ἐβουλόμην δ' ἄν, ὥσπερ ὅτι ὑμῖν συμφέρει τὰ βέλτιστα ἀκούειν οἶδα, οὕτως εἰδέναι συνοῖσον καὶ τῷ τὰ βέλτιστα εἰπόντι· πολλῷ γὰρ ἂν ἥδιον εἶπον. νῦν δ' ἐπ' ἀδήλοις οὖσι τοῖς ἀπὸ τούτων ἐμαυτῷ γενησομένοις, ὅμως ἐπὶ τῷ συνοίσειν ὑμῖν, ἐὰν πράξητε, ταῦτα πεπείσθαι λέγειν αἱροῦμαι. νικήσῃ δ' ὅ τι πᾶσιν ὑμῖν μέλλει συνοίσειν.

(*b*) Εἰ μὲν οὖν ἐξεστιν εἰρήνην ἄγειν τῇ πόλει καὶ ἐφ' ἡμῖν ἐστὶ τοῦτο, ἵν' ἐντεῦθεν ἄρξωμαι, φημὶ ἔγωγε ἄγειν ἡμᾶς δεῖν, καὶ τὸν ταῦτα λέγοντα γράφειν καὶ πράττειν, καὶ μὴ φενακίζειν ἀξιῶ· εἰ δ' ἕτερος τὰ ὅπλα ἐν ταῖς χερσὶν ἔχων καὶ δίναμιν πολλὴν περὶ αὑτόν, τοὔνομα μὲν τὸ τῆς εἰρήνης ὑμῖν προβάλλει, τοῖς δ' ἔργοις αὐτὸς τοῖς τοῦ πολέμου χρῆται, τί λοιπὸν ἄλλο, πλὴν ἀμύνεσθαι; φάσκειν δὲ εἰρήνην ἄγειν, εἰ βούλεσθε, ὥσπερ ἐκεῖνος, οὐ διαφέρομαι. εἰ δέ τις ταύτην εἰρήνην ὑπολαμβάνει, ἐξ ἧς ἐκεῖνος πάντα τἄλλα λαβὼν ἐφ' ἡμᾶς ἥξει, πρῶτον μὲν μαίνεται, ἔπειτα ἐκείνῳ παρ' ὑμῶν, οὐχ ὑμῖν παρ' ἐκείνου τὴν εἰρήνην λέγει· τοῦτο δ' ἐστίν, ὃ τῶν ἀναλισκομένων χρημάτων πάντων Φίλιππος ὠνεῖται, αὐτὸς μὲν πολεμεῖν ὑμῖν, ὑφ' ὑμῶν δὲ μὴ πολεμεῖσθαι.

(*c*) Ἴσως ἂν οὖν δόξειεν ἄτοπον εἶναι, ὅτι δὴ ἐγὼ ἰδίᾳ μὲν ταῦτα ξυμβουλεύω περιιὼν καὶ πολυπραγμονῶν, δημοσίᾳ δὲ οὐ τολμῶ ἀναβαίνων εἰς τὸ πλῆθος τὸ ὑμέτερον ξυμβουλεύειν τῇ πόλει. Τούτου δὲ αἴτιόν ἐστιν ὃ ὑμεῖς ἐμοῦ πολλάκις ἀκηκόατε πολλαχοῦ λέγοντος, ὅτι μοι θεῖόν τι καὶ δαιμόνιον γίγνεται, ὃ δὴ καὶ ἐν τῇ γραφῇ ἐπικωμῳδῶν Μέλητος ἐγράψατο. ἐμοὶ δὲ τοῦτ' ἐστιν ἐκ παιδὸς ἀρξάμενον, φωνή τις γιγνομένη, ἣ ὅταν γένηται, ἀεὶ ἀποτρέπει με τούτου ὃ ἂν μέλλω πράττειν, προτρέπει δὲ οὔ ποτε. τοῦτ' ἔστιν ὅ μοι ἐναντιοῦται τὰ πολιτικὰ πράττειν. καὶ παγκάλως γ' ἐμοὶ δοκεῖ ἐναντιοῦσθαι· εὖ γὰρ ἴστε, ὦ ἄνδρες Ἀθηναῖοι, εἰ ἐγὼ πάλαι ἐπεχείρησα πράττειν τὰ πολιτικὰ πράγματα, πάλαι ἂν ἀπολώλη καὶ οὔτ' ἂν ὑμᾶς ὠφελήκει οὐδὲν οὔτ' ἂν ἐμαυτόν. καί μοι μὴ ἀχθεσθε λέγοντι τἀληθῆ· οὐ γὰρ ἔστιν ὅς τις ἀνθρώπων σωθήσεται οὔτε ὑμῖν οὔτε ἄλλῳ πλήθει οὐδενὶ γνησίως ἐναντιούμενος καὶ διακωλύων πολλὰ ἄδικα καὶ παράνομα ἐν τῇ πόλει γίγνεσθαι, ἀλλ' ἀναγκαῖόν ἐστι τὸν τῷ ὄντι μαχούμενον ὑπὲρ τοῦ δικαίου, καὶ εἰ μέλλει ὀλίγον χρόνον σωθήσεσθαι, ἰδιωτεύειν ἀλλὰ μὴ δημοσιεύειν.

2. Ἀλλ' ἐὰν ἀφέντες ταῦτα, κ. τ. λ. Mention the principal clause in this sentence, and shew the relations in which the dependent clauses stand to each other.

3. νυν δ' ἐπ' ἀδήλοις οὖσι κ. τ. λ. Explain the construction of ἀδήλοις οὖσι τοῖς, and of the infinitives in this sentence.

4. Account for the cases of τὰ ἡμέτερα,—ἅπανθ',—ὅσα,—λόγων,—συνοῖσον,—χρηματων,—αὐτὸς μὲν πολεμεῖν ὑμῖν.

5. Parse ἀφέντες, πεπαρρησίασμαι, νικήσῃ, ὠνεῖται, δόξειεν, ἴστε, ἀπολώλη, μαχούμενον.

6. ἀφ' οὗ (Φίλιππος) τὴν εἰρήνην ἐποιήσατο. What is the date of this event? Relate the manner in which the peace was made. How was it broken by Philip, according to Demosthenes?

7. ὥσπερ.....τὰ τελευταῖα πρώην εἰς Πύλας, ἴσως ἂν ὁρμήσαιτε. Narrate the circumstances alluded to.

8. Τριηραρχία,—Διώνυσια,—Λειτουργία,—Μιτοικοι,—Ἡ φυλὴ πρυτανεύουσα. 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 A. M.

ETHICS AND POLITICAL ECONOMY.

VERY REV. PRINCIPAL 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.

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1. Explain the difference between *price* and *value*.

2. What effect has the minute subdivision of labor a tendency to produce upon the intellect of the laborer?

3. What confers value on gems and precious stones?

4. If laborers in every department of industry strike for higher wages, and obtain them, what will the effect on themselves be?

5. Why can Government borrow money at a lower rate of interest than private individuals?

6. What is Communism? What would be the probable result of its adoption on productive industry.

7. What effect has peasant proprietorship a tendency to produce upon the industry and morals of a community?

8. What are the usual causes of Commercial crises? Write their history.

9. 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?

10. State the advantages and disadvantages of indirect taxation.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

SATURDAY, APRIL 20, 3 TO 6 P.M.

BOTANY AND ZOOLOGY.

PROFESSOR LAWSON.....*Examiner.*

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 (*Leguminosæ*), Apiaceæ (*Umbelliferæ*), Asteraceæ (*Compositæ.*)
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, Mollusca, 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 Seljakian 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 1790.

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.

FRIDAY, APRIL 19TH.

FRENCH.—FOURTH YEAR.

JAMES LIRCHTI, ESQ. ..... *Examiner.*

Traduisez : I. Extrait des "*feuilles d' Automne*" par Victor Hugo.

II. Extrait du "Bourgeois gentilhomme," (1. Acte, 1ère Scène.) par Molière.

1. Quelle différence y a-t-il entre : *la maison d'où je sors* et *la maison dont je sors ?* Pourquoi ?

2. *Personne* et *chose* sont des deux genres. Expliquez quand ils s'emplicient 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 phrase, 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 *phariel*, 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 Seigneur.* 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 quand *adjectif 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 hommes *grondants* et *souffrants.* Personne d' un caractère doux, 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 beauté* fut-elle *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 avec Molière : Il n'y a rien qui chatouille davantage que les applaudissements.

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 miraculous 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 hungry and the sick, and raised the dead . . . . and both animate and inanimate nature were equally subject to the apostle of God.

(Mahomet's Miracles, by Gibbon.)

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1872.

FRIDAY, APRIL 19TH.

FRENCH.—FOURTH YEAR.

JAMES LIZCHTI, ESQ. ..... *Examiner.*

Après cela, il se peut que le comte de Halzlourg réunisse 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 seuil de vos palais fixe un œil 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 monnayées ; et ce bourgeois ignorant nous vaut mieux, comme vous voyez, que le grand seigneur éclairé qui nous a introduits ici.

"LE BOURGEOIS GENTILHOMME," Molière.

DALHOUSIE COLLEGE AND UNIVERSITY,

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FRIDAY, APRIL 19TH.

GERMAN—FOURTH YEAR.

Translate: I. "Wallenstein's Absetzung," by Schiller.

In dieser prahlerischen 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 lässigen Zügel befreit.

II. "Faust," (Prolog im Himmel) by Goethe, beginning with:

Mephistopheles: 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. You 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 Pron. *welcher, welche, welches*.

4. Write the three pers. sing. of the Ind. pres., the 1st. pers. sing. of the Impert. 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 *zu*, and when without *zu*. Give exs. He began laughing. 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, I cannot depart. The student being ill, he cannot 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, thou 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.