CALENDAR

OF

DALHOUSIE COLLEGE

AND

UNIVERSITY,

HALIFAX, NOVA SCOTIA.

SESSION 1876-7.

HALIFAX:
PRINTED FOR THE UNIVERSITY, BY NOVA SCOTIA PRINTING COMPANY.
1876.

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NOTE.

The University Calendar for the Year 1876-7, does not differ in any marked respect from the Calendars of recent years. The minor changes introduced into the Calendar from year to year, are believed by the Governors and Senate to tend to the development and increased educational efficiency of the Curriculum; and the present Calendar has not more than an ordinary share of such changes. The attention of Students, however, especially of such as intend to enter College, is drawn to the fact that, in consequence of the Act passed by the Legislature last Session, providing for the creation of a new Examining and Degree-Conferring Body to be called "the University of Halifax," the Curriculum as set forth in this Calendar may hereafter be modified. Whatever changes may be introduced, the interests of Students that have entered College under existing arrangements will be carefully guarded.

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University Calendar,

1876-7.

Winter Session.

1876.		
Oct. 20.	Fr.	Meeting of Board of Governors.
25.	W.	Winter Session begins. Matriculation Examinations in Classics and Mathematics at 10 A. M. Examination for Scholarships.
26.	Th.	Matriculation Examinations continued, (English). Supplementary Examinations, at 10 A. M.
27.	Fr.	Meeting of Senate at 10 A. M. Matriculation, Registration, and Library Tickets issued at 11 A. M. Convocation at 3 P. M.
30.	Mo.	Arts Classes opened. Class Tickets issued. Entrance Examinations in Ancient History and Geography for Second and Third Years at 3 P. M.
Nov. 8.	W.	Anniversary of opening of the College in 1863. Final Matriculation and Supplementary Examinations at 3 P. M.
9.	Th.	Meeting of Senate at 4 P. M.
Dec. 5.	Tu.	Meeting of Senate at 1 P. M.
22.	Fr.	Christmas Vacation begins.
1877.		
Jan. 4.	Th.	Class lectures resumed.
5.	Fr.	Supplementary Examinations in Ancient History and Geography at 3 P. M.
9.	Tu.	Meeting of Senate at 1 P. M.
16.	Tu.	College established, 1823.
26.	Fr.	Meeting of Board of Governors.
Feb. 6.	Tu.	Meeting of Senate at 1 P. M.
14.	W.	Ash Wednesday. No Lectures.
March 6.	Tu.	Meeting of Senate at 1 P. M.
21.	W.	George Ramsay, Earl of Dalhousie, founder of the College, died 1838.
23.	Fr.	Last day for receiving Essays in competition for "Laurie" Prize.
29.	Th.	Last day for receiving M. A. Theses.
30.	Fr.	Good-Friday. No Lectures.
April 3.	Tu.	Meeting of Senate at 1 P. M.
6.	Fr.	Last day of Class Lectures. Last day for returning Library Books.
11.	W.	Examinations in Latin, 9 A. M. Honour Examinations in Classics, English, Mathematics, and Extra Latin, 3 P. M.
12.	Th.	Examinations in Greek and Mathematical Physics, 4th year, 9 A. M. Honour Classics, Extra Greek, 1st and 2nd years, 3 P. M.
13.	Fr.	Examinations in Logic and Metaphysics, 9 A. M.
16.	Mo.	Examinations in Mathematics and Mathematical Physics, 3rd year, Honour Classics, Honour Mathematics, Honour English, 9 A.M. Examinations in Mathematics, and Honour Examinations continued, 3 P. M.
17.	Tu.	Examinations in Ethics and Experimental Physics, 9 A. M. Honour Classics, 3 P. M.
18.	W.	Examinations in Rhetoric and History, 9 A. M. Examinations in Early English History and Anglo-Saxon, 3 P. M.
19.	Th.	Examinations in Chemistry, Constitutional History, and English Language, 9 A. M. Honour Classics, Honour Mathematics, and Extra Mathematics, 2nd year, 3 P. M.
20.	Fr.	Examinations in French and German, 9 A. M.
21.	Sat.	Competition for "Young" Elocution Prizes, 10 A. M.
23.	Mo.	Meeting of Senate, 10 A. M.
24.	Tu.	Results of Examinations declared.
25.	W.	Meeting of Convocation, 3 P. M.

Summer Session.

April 30.	Mo.	Summer Session opens. Registrations, 10 A. M. Meeting of Senate at 11 A. M.
May 1.	Tu.	Lectures begin.
23.	W.	Foundation Stone of College laid, 1820.
24.	Th.	Queen's Birthday. No Lectures.
June 5.	Tu.	Meeting of Senate at 1 P. M.
20.	W.	Accession of Queen Victoria.
21.	Th.	Halifax settled, 1749.
22.	Fr.	Lectures close.
25.	Mo.	Examinations.
26.	Tu.	Examinations. Session ends.

Dalhousie College and University.

BOARD OF GOVERNORS.

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JAMES LIECHTI, ESQ., *Tutor in Modern Languages.*

Janitor—JOHN WILSON.

Faculty of Arts.

§ I.—WINTER SESSION.

The Winter Session of 1876–77 will commence on Wednesday, Oct. 25th, 1876, and end on Wednesday, April 25th, 1877.

§ II.—ADMISSION OF STUDENTS.

Students may enter the College,

1. As Undergraduates, with the intention of applying for a University degree at the end of their course; or

2. As General Students who do not look forward to a University Degree.

The usual Course for Undergraduates extends over Four Winter Sessions. Students taking this Course are required to pass the Matriculation Examination of the First Year (see § III), and take the classes prescribed for their respective Courses.

But students may shorten their attendance by one year, by passing the Matriculation Examination of the Second Year (see § III), and taking the usual Undergraduate Course for the Second, Third, and Fourth Years.

The Matriculation Examinations this year will begin on Oct. 25th, at 10 o'clock, A. M. Candidates are expected to bring their own writing materials, except paper.

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

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

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

§ III.—MATRICULATION EXAMINATIONS.

FOR THE FIRST YEAR. *(Four Years' Course.)*

The Subjects of Examination for entrance into the First Year of the Course are:

1. In Classics —Latin Grammar, Greek Grammar, one Latin, one Greek Author.

Latin.—Caesar, 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.

The Books in which Candidates for Professors' Scholarships will be examined, will be prescribed from year to year. For session 1876-77, they are in Latin, Cæsar's Commentaries, Book V.; in Greek, Xenophon's Anabasis, Book I.

II. In Mathematics.—Arithmetic; Euclid's Elements of Geometry, Book I.; Algebra, Simple Rules, and Simple Equations of one unknown quantity, not involving Surds.

III. In English.—Grammar; History of England; Geography; Composition.

Special stress will be laid upon accuracy in Latin and Greek Grammar.

FOR THE SECOND YEAR. *(Three Years' Course.)*

In order to Matriculate for the Three Years' Course, a Student must pass an Examination,—

I. 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 and Ancient Geography, as specified in § XIV.

§ 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 Latin or Greek, extra work is prescribed, and special stress is laid upon accuracy in Grammar. (See § XIV.)

For First or Seond class in Rhetoric extra work is required.

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

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

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

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

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

Fourth Year.—(1) Latin. (2) Ethics and Political Economy. (3) History. (4) French or German. (5) Mathematical Physics or Greek.

A Student must take the same Modern Language as part of his Undergraduate Course in the Third and Fourth Years.

For First or Second Class in History, extra work is required.

§ V.—HONOUR COURSES.

Honour 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. But first Class Honours shall not be awarded to any one who has not passed First Class in the corresponding subjects of the Ordinary Course of the Fourth Year: nor Second Class Honours to one who has not passed Second Class in the Ordinary.

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

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

A Student of the Third Year, 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 Physics, and either Ethics and Political Economy or History;

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

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

§ VI.—SUMMER SESSION.

The Summer Session will commence on Tuesday, 1st May, 1877, and close at the end of June.

Classes will be open for instruction in the following subjects.

Classics.	Optics.
Theory of Equations.	Chemistry.
Applied Logic.	English Literature.

Modern Languages.

§ VII.—FEES.

The Fee to each Professor, whose class or classes a Student enters, is *six dollars* for the Session.

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.

Mathematical and Experimental Physics constitute a separate class.

General Students pay a fee for every class they attend.

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

In addition to 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 also 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 fee of Undergraduates, who take the Ordinary B. A. Course in Arts, are as follows :—

Classes of	First Year, with Library and Matriculation Fee	...	$21 00
"	Second Year, with Library Fee	...	25 00
"	Third " "	...	13 00
"	Fourth " "	...	13 00

§ VIII.—GRADUATION.

DEGREE OF B. A.

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

Undergraduates have also to pass entrance Examinations, as set forth in § IV.

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

DEGREE OF M. A.

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

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.* Thesis to be handed in before the 30th of March.

§ 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 at the Sessional Examinations, he will be allowed a Supplementary Examination on the first Thursday of the following Winter Session, or of a subsequent Winter Session by the permission of the Senate, on giving notice to the Secretary of the Senate at or before the opening of the Winter Session; but failure in more than two subjects 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 *one* subject.

3. In all cases, a Student who presents himself for Supplementary Examination on any day except that specified in the Rule, will be required to pay an extra fee of *two dollars.*

4. Undergraduates of the Second and Third Years who fail to present themselves for the Entrance Examinations in History and Ancient Geography on the day named in the Calendar, may, on payment of a fine of *two dollars,* have another day appointed them for such Examinations.

5. Students are forbidden to bring any book or manuscript into the Examination Hall, unless by direction of the Examiner, or to give or receive assistance, or to hold any com-

munication at the Examinations. If a Student violate this rule, he will lose his Sessional Examinations for the year; and it shall be at the discretion of the Senate whether he be allowed Supplementary Examinations.

6. Students who pass the Examinations in the several subjects of the respective years, are arranged in three classes, First Class, Second Class, and Pass, according to the merit of their answers in these subjects.

§ X.—PROFESSORS' 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 Examinations. For subjects of Examination, see § III.

§ XI.—PRIZES, CERTIFICATES OF MERIT, AND MEDALS.

The University Prizes.

These Prizes are awarded to those Undergraduates who stand first in the several subjects at the Sessional Examinations, provided they occupy positions in the First or Second Class, and have passed in all the other subjects proper to their year.

The St. Andrew's Prize.

This Prize will be awarded this year to the Student who stands first in Classics at the Sessional Examinations of the Second Year.

Young Prizes.

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

Laurie Prize.

A Prize of $20 is offered by Colonel Laurie, Oakfield, for the best Essay on "Public Roads in Nova Scotia; on what system can their construction and maintenance be best provided for in the public interest?"

Essays to be sent in not later than the 16th March, 1877, each signed with a motto, and accompanied with a sealed envelope, bearing the motto and containing the name of the writer.

THE WAVERLEY BURSARY.

This Bursary, of the value of $60 annually for two years, has been founded by an unknown Benefactor, whose object in so doing is to encourage the studies of the Curriculum, especially Mathematics. As announced in the Calendar of last year, it will hereafter alternate with the North British Society Bursary, and be competed for at the Sessional Examinations of the Second Year. The next competition will take place in April, 1877, when the Bursary will be awarded to the Student who stands highest at the Examinations. The scale of reckoning will be Mathematics, 200; Classics, Chemistry, each 150; Logic, 100.

THE ALUMNI ASSOCIATION PRIZES.

The Almuni Association, with increased liberality, have this year provided *Four* Prizes: two for students of the first year, and two for those of the third year. The First prizes are each $30: the Second, each $20. These Prizes will be awarded to the two students in these years who stand highest at the Sessional Examinations; the marks being reckoned according to a scale defined by the Association, which will be published at the beginning of the Session, and of which an important feature is that values will be counted for Class Essays in the subjects of Rhetoric and Metaphysics.

GOVERNOR GENERAL'S MEDALS.

His Excellency, Earl Dufferin, Governor General of Canada, has been pleased to offer a gold and silver medal for competition, during his tenancy of office. These Medals will be awarded to the two Students of the Fourth Year who stand highest at the Final Examinations for the Degree of B. A.

GRADUATES PRIZE.

This Prize, of the value of $30, given by a Graduate, is continued for this year; and will be awarded to the Student of the Graduating Class who, not studying for honors, obtains the highest total of marks at the Sessional Examinations in the subjects proper to the year.

CERTIFICATES OF MERIT.

Certificates of merit of the First or Second Rank will be given to Undergraduates who have respectively obtained a First 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 cap and gown, and wear them in going to and from College. Gowns are to be worn at Lectures, and at all meetings of the University.

2. Attendance upon all classes of the year, except those announced as optional, shall be imperative on all Undergraduates.

3. A Class Book will be kept by each Professor, in which the presence or absence of Students will be carefully noted.

4. Professors will mark the presence or absence of Students immediately before commencing the work of the class, and will note as absent those who enter thereafter, unless satisfactory reasons be assigned.

5. Absence without sufficient excuse, or lateness, or inattention or disorder in the Class Room, if persisted in after due admonition by the Professor or the discipline proper to the class, will be reported to the Senate.

6. The amount of absence which shall disqualify for the keeping of a Session will be determined by the Senate.

7. Injuries to the building or furniture will be repaired at the expense of the person or persons by whom they have been caused; and such other penalty will be imposed as the Senate may think proper.

8. While in the College, or going to 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 regularly, in one of the city churches or chapels.

§ XIII.—THE LIBRARY.

The Library consists of a careful selection of the most useful books in each department of study embraced in the University course. There are likewise a few works in general literature. The Library embraces in all upwards of 1600 volumes. All

Students are entitled to the use of the Books, on payment of the annual fee of *one dollar*.

§ XIV.—ALUMNI ASSOCIATION.

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

Hitherto the only assistance they have lent the University has been the furnishing of Prizes for competition to Undergraduates at the Sessional Examinations, (see § XI.), but it is expected that the time is not distant when the Association shall have developed into an important adjunct to the University. Since the recent enlargement of the Board of Governors the Association is represented on the Board by their President, and thus has some direct share in the University management. The present Executive Committee is meantime empowered to take such steps as shall seem fitted to promote the purposes of the Association.

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

The annual meeting of the Association takes place on the evening of Convocation Day, at the close of the Winter Session.

Office-bearers for the present year:

President.....R. SEDGEWICK, B. A.
Vice-President.....J. McG. STEWART, B. A.
Secretary.....F. H. BELL, B. A.
Treasurer.....JAS. FORREST, M. A.
C. D. McDONALD, B. A.
W. S. DOULL, B. A.
L. H. JORDAN, B. A.
} *To compose the Executive Committee together with the officers.*

§ XV.—ORDINARY COURSE FOR B. A.

CLASSICS.

LATIN.

FIRST YEAR.

Cicero: First Philippic.
*Third Oration against Catiline.
Virgil: Aeneid, Book VI.
Composition: Principia Latina, Part IV.

SECOND YEAR.

Livy: Book I., chaps. 1-30. * Book I., chaps. 30-60.
Horace: Odes, Book I.
Composition: Principia Latina, Part IV.

† THIRD AND FOURTH YEARS.

Horace: Satires, Book I., 3, 4, 5, 6, 9; Book II., 6, 7, 8.
Terence: Andria.
Composition: Principia Latina, Part V.
Philology: Outlines of Comparative Philology.

GREEK.

FIRST YEAR.

Lucian: Select Dialogues.
*Demosthenes: First Olynthiac.

SECOND YEAR.

Herodotus: Book I., secs. 95-129. * Book II., secs. 34-58 and 68-90.
Homer: Odyssey, Book IX.
Composition: Initia Græca, Part III.

† THIRD AND FOURTH YEARS.

Euripides: Alcestis.
Aeschylus: Prometheus Vinctus.
Composition: Initia Græca, Part III.

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‡ ANCIENT HISTORY AND GEOGRAPHY.

SECOND YEAR.—History of Rome, to B. C. 31. Geography, Italia, Sicilia, Gallia, Britannia.

THIRD YEAR.—History of Greece to the Roman Conquest. Geography of Græcia, Africa, Asia.

Books recommended: Liddell's History of Rome; Smith's History of Greece; Pillan's Classical Geography.

MATHEMATICS AND PHYSICS.

FIRST YEAR.

ARITHMETIC.—Revision of the Theory of Proportion, Vulgar and Decimal Fractions.

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* Students seeking a First or Second Class at the Sessional Examinations are examined in this additional work, which is not read in class.

† Passages taken from works not read in the course will be set for translation, to Students seeking a First or Second Class at the Sessional Examination in these years.

‡ The Examinations in these subjects will be held at the beginning of the Winter Session. (See § IV.)

ALGEBRA.—Common Measure, Involution, Evolution, the Arithmetical Extraction of Roots, Fractions, Equations of the First and Second Degrees, 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.

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, Spherical Trigonometry, with applications to Astronomy.

EXPERIMENTAL PHYSICS.

(Third Year.)—Text Book: Ganot's Physics.

MATHEMATICAL PHYSICS.

(Third Year.)—Text Book: Galbraith and Haughton's Manual of Mechanics.

(Fourth Year.)—Text Books; Galbraith and Haughton's Manuals of Astronomy and Optics; Phear's Hydrostatics (or Galbraith and Haughton's.)

ETHICS.

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

POLITICAL ECONOMY.

(Fourth Year.)—Text Books: Mill's Political Economy; Senior's Political Economy.

LOGIC AND PSYCHOLOGY.

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

METAPHYSICS AND ESTHETICS.

(Third Year.)—Text Books: Sir William Hamilton's Lectures on Metaphysics. Mansel's Metaphysics. Lewes' Biographical History of Philosophy. Cousin on The Beautiful. Alison's Essays 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.

RHETORIC.

FIRST YEAR.

RHETORIC.—Text Books: Quintilian's Institutes of Oratory. Whately's Elements of Rhetoric. Campbell's Philosophy of Rhetoric. Essays and exercises on the principles of Rhetoric, weekly.

ELOCUTION.—Exercises every week after the Christmas holidays. Books recommended: Porter's Analysis of the principles of Rhetorical delivery. Russell's Elocution. Sargent's Standard Speaker. Dominion Elocutionist. Nova Scotia Readers No. 6 and No. 7.

ENGLISH LANGUAGE.

FIRST YEAR.

ANGLO-SAXON.—Text Books: Comparative Grammar of the Anglo Saxon Language, F. A. Marsh, LL.D. Anglo-Saxon Reader, by F. A. Marsh, LL.D.

ENGLISH.—Text Books: Specimens of Early English, by R. Morris, LL.D., and W. W. Skeat, M. A. Part Second. The Philology of the English Tongue, by John Earle, M. A.

HISTORY.

FOURTH YEAR.

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

CONSTITUTIONAL HISTORY.

FOURTH YEAR.

Text Books: Stubb's Constitutional History. Hallam's Middle Ages, (Chapters on the English Constitution). Hallam's Constitutional History.

MODERN LANGUAGES.

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.

§ XVI.—HONOUR COURSE.

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, III., X., XIII.
Cicero: Tusculan Questions, Book I.
Tacitus: Annals, Book I.

GREEK.—Æschylus: Septem contra Thebas.
Sophocles: Œdipus Rex.
Homer: Iliad XVIII., XXIV.
Thucydides: Book II.
Plato: Phædo.
Demosthenes: De Corona.

COMPOSITION.—Latin Prose.

LITERATURE.—Müller and Donaldson's History 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., chap. 4; Lewis's Essay on the Romance Languages.

MATHEMATICS AND MATHEMATICAL PHYSICS.

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

ANALYTICAL GEOMETRY—The Straight Line, the Circle, Parabola, Ellipse, Hyperbola. The Locus of the General Equation of the Second Degree between two Variables.

DIFFERENTIAL CALCULUS—Differentiation; Theorems of Leibnitz, Maclaurin, and Taylor; Maxima and Minima of Functions of one Variable; Expansion of Functions of Two Variables; Maxima and Minima of such Functions; Radius of Cuvature, Osculating Circle; Envelopes; the tracing of Curves by means of their Equations.

INTEGRAL CALCULUS—Integration of Simple Forms; Integration by Parts, and Formulæ of Reduction. Integration by Substitution, &c. Applications to determine Lengths of Curves, Surfaces, Volumes, &c.; Differential Equations, (selected course,) Application to Physical Investigations: *e. g.*, Centre of Gravity, Attraction Central Forces, &c.

BOOKS RECOMMENDED—(In order of Preference.)

Todhunter's Spherical Trigonometry.
Todhunter's Plane Trigonometry or Colenso's (2nd part.)
Todhunter's, Puckle's, or Salmon's Conic Sections.
Hall's, Hind's or Todhunter's Differential and Integral Calculus.
Todhunter's or Young's Theory of Equations.
Boole's Differential Equations.

EXPERIMENTAL PHYSICS.

Heat a Mode of Motion, by Tyndall.
Optics, by Sir David Brewster.
The Student's Text Book of Electricity (Noad.)
Nichol's Physical Science (Article, Magnetism.)

MENTAL AND MORAL PHILOSOPHY.

LOGIC.

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

METAPHYSICS AND ESTHETICS.

Descartes' Principles of Philosophy. Reid's Essays, VI. Sir William Hamilton's Lectures on Metaphysics. Sir Wm. Hamilton's Philosophy of Perception and Philosophy of the Unconditioned. Lewes' 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, Book I., III., VI., X., (in English.)

HISTORY, ENGLISH LANGUAGE AND LITERATURE, AND POLITICAL ECONOMY.

HISTORY.

Bede's Ecclesiastical History of England.
Freeman's History of the Norman Conquest.
Freeman's English Constitution.
Stubbs' Select Charters.
Macaulay's History of England.
Bryce's Holy Roman Empire.
Guizot's History of Civilization.
Martin's History of France.
Menzel's History of Germany.
Mallet's Northern Antiquities.

ENGLISH LANGUAGE.

ANGLO-SAXON.

Thorpe's Analecta Anglo-Saxonica.
Poems of Beowulf. the Scop or Gleeman's tale, and the Fight at Finnesburg—Benjamin Thorpe.
Life of St. Guthlac—Charles Wycliffe Goodwin, M. A.
King Alfred's Anglo-Saxon Version of Orosius—Rev. Dr. Bosworth.

ENGLISH.

Specimens of Early English—Morris & Skeat, part first.
Specimens of English Literature—W. W. Skeat, M. A.
The Vision of William concerning Piers the Plowman, by William Langland—W. W. Skeat, M. A,
Chaucer, Part First:—The Prologue, The Knighte's Tale, The Nonne Preste's Tale, Edited by R. Morris, Editor for the E. E. T. S. Part Second: The Prioresses' Tale, etc., edited by Rev. W. W. Skeat, M. A.
Spencer's Faery Queene, Books First and Second, by G. W. Kitchin, M.A.
Shakespeare's Select Plays, edited by W. G. Clark, M. A., and W. Aldis Wright, M. A. I. The Merchant of Venice; II. Richard the Second; III. Macbeth; IV. Hamlet; V. The Tempest.
Bacon, Advancement of Learning—W. Aldis Wright, M. A.
Milton, Poems—R. C. Browne, M. A.
Dryden, Selections by W. D. Christie, M. A.
Pope, Essay on Man, Satires, and Epistles, by Mark Pattison, B. D.

Degrees Conferred, April, 1876.

MASTER OF ARTS.

JOHN MUNN ALLAN.

BACHELOR OF ARTS.

FRANCIS HUGH BELL,
GEORGE HERBERT FULTON,
ISAAC MCDOWALL,
JAMES ALEXANDER MCLEAN,
JOHN WILSON MCLEOD,
JOSEPH SMITH MORTON,
JOHN MUNRO,
JAMES MCGREGOR STEWART.

Honours, Medals, Prizes and Certificates of Merit, 1876.

B. A. HONOURS.

MATHEMATICS.

Second Rank—JAMES MCG. STEWART, Cape Breton.

CLASSICS.

Second Rank—FRANCIS H. BELL, Halifax.

THE GOVERNOR GENERAL'S MEDALS.

THE GOLD MEDAL..... .....Francis H. Bell, Halifax.
THE SILVER MEDAL .... James McG. Stewart, Cape Breton.

UNIVERSITY PRIZES.

FOURTH YEAR.

CLASSICS ....J. W. McLeod.
PHYSICS..... .... J. McG. Stewart.
ETHICS ....J. McG. Stewart.
HISTORY..... .... J. McG. Stewart.
MODERN LANGUAGES..... ....J. McG. Stewart.

THIRD YEAR.

CLASSICS	J. McD. Scott.
NATURAL PHILOSOPHY	1. J. Waddell. 2. J. McD. Scott.
METAPHYSICS	J. H. Sinclair.
CHEMISTRY	J. H. Sinclair.
MODERN LANGUAGE	And. W. Herdman.
CHEMISTRY, (Special Prize)	W. M. Fraser.

Note.—NAT. PHILOSOPHY. W. S. Whittear, was first in point of merit, but was disqualified as a general student.

SECOND YEAR.

CLASSICS	T. A. LePage.
MATHEMATICS	T. A. LePage.
PSYCHOLOGY	T. A. LePage.
CHEMISTRY	T. A. LePage.

FIRST YEAR.

CLASSICS	G. McQueen.¶
MATHEMATICS	1. Rod. McKay. 2. Is. M. McLean.
RHETORIC	1. Rod. McKay. 2. Is. M. McLean. 3. G. W. McQueen.

CERTIFICATES OF MERIT.

FIRST CLASS:—*Fourth Year*—Francis H. Bell, John W. McLeod, James McG. Stewart. *Third Year*—John Waddell. *Second Year*—Robert H. Humphrey, Thomas A. LePage. *First Year*—Roderick McKay, Isaac M. McLean, George W. McQueen.

SECOND CLASS:—*Third Year*—John M. Scott. *Second Year*—John H. Cameron. *First Year*—Edwin Crowell.

SPECIAL PRIZES.

The SIR WM. YOUNG PRIZES for Elocution, were won by: 1st ($20), Francis H. Bell, Halifax. 2nd ($10), Colin Pitblado, Truro.

The ST. ANDREW'S PRIZE, for the best Examination in the Mathematics of the Second Year, was won by THOMAS A. LEPAGE, Charlottetown, P.E.I.

The WAVERLEY PRIZE of $60, for highest total of marks made at the Examinations of the Third Year, was won by JOHN WADDELL, Halifax.

The ALUMNI ASSOCIATION PRIZES, of $35 each, for the best student in the First and Third Year respectively, were won by: 3rd year, JOHN WADDELL, (who, having won the Waverley Prize was disqualified by the rules of the Association for holding this Prize also. It therefore devolved to) J. H. SINCLAIR, Guysborough Co. 1st year, RODERICK MCKAY, Pictou Co.

The NORTH BRITISH SOCIETY'S BURSARY of $60, Annually for Two Years, to be awarded to the best student of the Second Year, who is qualified to become a member of the Society at the proper age, was won by JOHN H. CAMERON, Antigonish.

The MELBOURNE PRIZE of $25, to be awarded to the student of the First Year, who obtains the *second* highest total of marks, was won by GEORGE WM. MCQUEEN, Pictou Co.

The GRADUATES' PRIZE of $30, to be awarded to the student of the Fourth Year not reading for Honours, who makes the highest total of marks at the Final Examination for the degree of B.A., was won by JOHN WILSON MCLEOD, Colchester Co.

Examinations, 1875-6.

SCHOLARSHIP EXAMINATION, OCT. 1875.

The Professors' Scholarships, offered for competition to Students entering as First Year's Undergraduates, were gained by

1. GEORGE McQUEEN, New Glasgow Academy.
2. ISAAC M. McLEAN, Private Study.

UNIVERSITY EXAMINATIONS.

The following Undergraduates have passed the University Examinations hereinafter mentioned:—

SUPPLEMENTARY EXAMINATIONS, OCT., 1875.

SECOND YEAR.—Greek: Fred. Archibald, Isaac Archibald.
Mathematics: Richmond Logan.
Psychology: Wm. R. Grant.
Chemistry: St. T. McCurdy, Colin Pitblado.
THIRD YEAR.—Metaphysics: G. H. Fulton, Jos. S. Morton.

ENTRANCE EXAMINATIONS IN ANCIENT HISTORY AND GEOGRAPHY, NOV. 1876.

THIRD YEAR.—Class 1.—Howard H. Hamilton. Class 2.—W. R. Grant, Richmond Logan, John Waddell, Colin Pitblado, J. H. Sinclair. *Passed.*—W. A. Mason, St. T. McCurdy, F. W. Archibald, J. McD Scott, Is. L. Archibald.

SECOND YEAR.—Class 1.- R. H. Humphrey, E. L. Newcomb, G. W. Munro. Class 2.—(J. L. George, W. S. Stewart,) equal, Rod. C. McRae, J. H. Cameron. *Passed.*—J. A. Cairns, J. R. Law, T. A. LePage, S. J. McKnight, R. D. Ross, Alf. Whitman.

SUPPLEMENTARY EXAMINATIONS IN ANCIENT HISTORY AND GEOGRAPHY, JAN. 1876.

THIRD YEAR.—*Passed.*—R. E. Chambers, J. S. Murray.

SESSIONAL EXAMINATIONS, APRIL, 1876.

PASS LIST.

(The names are arranged alphabetically.)

FOURTH YEAR.—FINAL EXAMINATION FOR DEGREE OF B. A.—F. H. Bell, G. H. Fulton, Is. McDowall, J. A. McLean, J. W. McLeod, J. S. Morton, J. Munro, J. McG. Stewart.

THIRD YEAR.—Is. L. Archibald, F. W. Archibald, R. E. Chambers, Wm. Grant, H. H. Hamilton, A. W. Herdman. G. A. Laird, St. McCurdy, J. S. Murray, C. Pitblado, J. M. Scott. J. H. Sinclair, J. Waddell.

SECOND YEAR.—J. A. Cairns, J. H. Cameron, R. H. Humphrey, J. R. Law. T. A. LePage, J. A. McKenzie, R. C. McRae, E. L. Newcomb, W. S. Stewart, A. Whitman.

FIRST YEAR.—C. S. Cameron, Ed. Crowell, Alf. Dickie, R. Emmerson, R. M. Hunt, D. McIntyre, Rod. McKay, Is. M. McLean, An. McLeod, G. McQueen, W. P. Scott.

CLASS LISTS.

(The names are arranged in the order of merit.)

LATIN.

FOURTH YEAR.—(Final Examination for Degree of B. A.)—Class 1.—J. W. McLeod, F. H. Bell. *Passed.*—J. Munro, J. S. Morton, Is. McDowall, G. H. Fulton, I. A. McLean.

THIRD YEAR.—Class 1.—None. Class 2.—J. McD. Scott, J. Waddell, (A. W. Herdman, J. H. Sinclair,) equal. *Passed.*—H. H. Hamilton, Colin Pitblado, W. R. Grant, G. A. Laird, W. A. Mason, F. Archibald, S. McCurdy, (Is. Archibald, J. S. Murray,) equal, R. E. Chambers, R. Logan.

SECOND YEAR.—Class 1.—T. A. LePage, J. L. George, R. H. Humphrey. Class 2.—J. H. Cameron, G. W. Munro, W. S. Stewart. *Passed.*—J. Cairns, J. R. Law, E. L. Newcomb, A. Whitman, J. McKenzie, R. McRae, C. Mitchell.

FIRST YEAR.—Class 1.—G. McQueen, Is. McLean. Class 2.—A. McLeod, R. McKay. *Passed.*—R. Emmerson, E. Crowell, D. McIntyre, C. S. Cameron, R. Hunt, (E. Torey, A Dickie,) equal, F. Chambers, W. Scott, F. Bremner, A. Thompson.

GREEK.

FOURTH YEAR.—(Final Examination for Degree of B. A.)—Class 1.—(F. H. Bell, J. W. McLeod,) equal. *Passed.*—John Munro, J. A. McLean.

THIRD YEAR.—Class 1.—J. McD. Scott. Class 2.—J. Waddell, Colin Pitblado, H. H. Hamilton. *Passed.*—G. A. Laird, J. S. Murray, S. McCurdy, W. A. Mason.

SECOND YEAR.—Class 2.—J. L. George, T. A. LePage, R. H. Humphrey. Class 2.—J. H. Cameron. *Passed.*—E. L. Newcomb, W. Stewart, R. C. McRae, J. Cairns, G. W. Munro, A. Whitman, J. McKenzie, J. R. Law.

FIRST YEAR.—Class 1.—S. McQueen, Is. McLean. Class 2.—R. McKay, A. McLeod. *Passed.*—E. Crowell, D. McIntyre, F. Chambers, Ch. S. Cameron, R. Emmerson, A. Dickie, W. Scott, R. Hunt.

MATHEMATICS.

SECOND YEAR.—Class 1.—Thomas LePage, Robert H. Humphrey, Roderic C. McRae. Class 2.—John R. K. Law, John H. Cameron. *Passed.*—William Stewart, Edward Newcomb, John A. Cairns, Howard Chambers, Alfred Whitman, James W. McKenzie.

FIRST YEAR.—Class 1.—Roderic McKay, Isaac M. McLean, Edwin Crowell. Class 2.—Geo W. McQueen, Alfred Dickie, Edgar Torey, Daniel McIntyre. William P. Scott. *Passed.*—Ralph M. Hunt, Charles S. Cameron, Fred. B. Chambers, Thomas Stewart, Angus McLeod, Robert R. Emmerson.

NATURAL PHILOSOPHY.

FOURTH YEAR.—Class 1.—J. McG. Stewart. Class 2.—G. H. Fulton. *Passed.*—I. McDowall, J. A. Morton.

THIRD YEAR.—Class 1.—W. S. Whittear, John Waddell. Class 2.—J. M. Scott. *Passed.*—J. H. Sinclair, R. E. Chambers, H. H. Hamilton, A. W. Herdman, W. R. Grant, G. A. Laird, I. L. Archibald, F. W. Archibald, S. T. McCurdy, J. S. Murray, C. Pitblado.

EXPERIMENTAL PHYSICS.

Passed.—W. M. Fraser.

METAPHYSICS AND ESTHETICS.

THIRD YEAR.—Class 1.—J. H. Sinclair, J. Waddell, F. W. Archibald, Is. L. Archibald. Class 2.—G. A. Laird, J. McD. Scott, H. H. Hamilton, A. W. Herdman, W. R. Grant, W. A. Mason, Richmond Logan. *Passed.*—R. E. Chambers, St. T. McCurdy, J. S. Murray, Colin Pitblado.

PSYCHOLOGY.

SECOND YEAR.—Class 1.—T. A. LePage, (R. H. Humphrey, E. L. Newcomb, equal, J. H. Cameron, (J. L. George, G. W. Munro,) equal. Class 2.—J. A. McKenzie, (J. R. K. Law, W. S. Stewart,) equal, J. A. Cairns. *Passed.*—Rod. C. McRae, Alf. Whitman.

ETHICS AND POLITICAL ECONOMY.

Class 1.—James McG. Stewart, John Munro. Class 2.—Isaac McDowall, James A. McLean, Joseph S. Morton, John W. McLeod, George H. Fulton. *Passed.*—Duncan McKenzie.

CHEMISTRY (SENIOR).

THIRD YEAR.—Class 1.—William M. Fraser, J. H. Sinclair, R. E. Chambers, A. W. Herdman. Class 2.—William R. Grant, Fred. W. Archibald, Isaac L. Archibald, Richmond Logan.

CHEMISTRY (JUNIOR).

SECOND YEAR.—Class 1.—T. A. LePage, Hugh D. Cameron, E. L. Newcomb, John A. Cairns, John R. K. Law, Robert H. Humphrey. Class 2.—John L. George, G. W. Munro, Alfred Whitman, Rod. C. McRae. *Passed.*—James MacKenzie, W. S. Stewart.

HISTORY.

FOURTH YEAR.—Class 1.—J. McG. Stewart, John Munro, J. W. McLeod, F. H. Bell. Class 2.—J. S. Morton, Isaac M. McDowall. *Passed.*—Jas. A. McLean, Geo. H. Fulton, D. McKenzie.

CONSTITUTIONAL HISTORY.

J. McG Stewart, (F. H. Bell, J. W. McLeod,) equal.

RHETORIC.

FIRST YEAR.—Class 1.—Rod. McKay, Isaac M. McLean, G. W. McQueen, E. Crowell. Class 2.—D. McIntyre. C. S. Cameron, E. J. Torey. *Passed.*—R. Emmerson, Wm. P. Scott, Alfred Dickie, Albt. Thompson, Ralph M. Hunt, M. W. LeNoir, Angus McLeod, Thomas Stewart, F. W. D. Bremner, J. W. Zwicker, W. J. G. Thomson.

MODERN LANGUAGES.

FRENCH.

FOURTH YEAR.—Class 1.—Francis H. Bell, James McG. Stewart. Class 2.—John Munro, John W. McLeod. *Passed.*—George H. Fulton, Is. McDowall, James A. McLean, Joseph S. Morton.

THIRD YEAR.—Class 1.—Andrew W. Herdman. Class 2.—Robert E. Chambers, Howard H. Hamiiton. *Passed.*—Fred. W. Archibald, Is. L. Archibald, W. R. Grant, George A. Laird, Wm. A. Mason, Stanley T. McCurdy, John S. Murray, Colin Pitblado.

GERMAN.

THIRD YEAR.—Class 1.—John Waddell. Class 2.—R. Logan, John McD. Scott, John H. Sinclair.

GENERAL LIST OF HONOURS, MEDALS, SCHOLARSHIPS, SPECIAL PRIZES &c., 1866-76.

B. A. HONOURS.

1873.—MATHEMATICS AND PHYSICS:—Second Rank.—Alex. H. McKay.
1874.—CLASSICS:—Second Rank.—James Chalmers Herdman.
MENTAL AND MORAL PHILOSOPHY:—Second Rank.—James McDonald Oxley.
1876.—MATHEMATICS AND PHYSICS:—Second Rank.—James McG. Stewart.
CLASSICS:—Second Rank.—Francis H. Bell.

GOVERNOR GENERAL'S MEDALS.

1875.—*Gold Medal:*—Louis H. Jordan. *Silver Medal:*—George McMillan.
1876.—*Gold Medal:*—Francis H. Bell. *Silver Medal:*—James McG. Stewart.

PROFESSORS' SCHOLARSHIPS.

1866.—1. A. P. Silver, Halifax Grammar School; 2. A. W. H. Lindsay, Pictou Academy.
1867.—1. James G. McGregor, Private Study; 2. James M. Inglis, Prince of Wales College, Charlottetown, P.E.I.
1868.—1. Alex. W. Pollok; 2. W. P. Archibald, Halifax Schools.
1869.—1. Charles D. McDonald, Pictou Academy; 2. Bruce A. Lawson; 3. Henry Macdonald, Halifax Schools.
1870.—1. Andrew C. Herdman, Pictou Academy; 2. Alex. C. Patterson, Fort Massey Academy.
1871.—1. William Brownrigg, Pictou Academy; 2. George McMillan, Private Study.
1872.—1. Francis H. Bell, Private Study; 2. Fred. W. O'Brien, Pictou Academy.
1873.—1. James McLean, Private Study; 2. John Waddell, Pictou Academy.
1874.—1. J. L. George, Pictou Academy; 2. John Stewart.
1875.—1. George W. McQueen, New Glasgow Academy; 2. Isaac M. McLean, Private Study.

GRANT PRIZE.

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

THE YOUNG PRIZES.

General Prize, voted by Students. 1867—1. John Gow, 3rd and 4th years; 2. Alex. C. McKenzie, 1st and 2nd years. 1868—1. George Murray, 3rd and 4th years; 2. Wentworth E. Roscoe, 1st and 2nd years. 1869—1. John J. McKenzie, 3rd and 4th years; 2. Hiram Logan, 1st and 2nd years. 1870—*For Essay:* Walter M. Thorburn; *For Elocution:* Duncan C. Fraser. 1871—*For Essay:* James G. McGregor; *For Elocution:* Robert G. Sinclair. 1872—*For Essay:* Ephraim Scott; *For Elocution:* Wm. A. Mills. 1873—*For Elocution:* Fred. W. Archibald. 1874—Richmond A. Logan. 1875—S. J. MacKnight. 1876—1. Francis H. Bell; 2. Colin Pitblado.

ROY PRIZES.

For Elocution: 1868—1. Alex. G. Russel; 2. James G. McGregor. 1869—1. Albert R. Quinn; 2. Wm. M. Doull.

NORTH BRITISH SOCIETY BURSARY.

1868—Hugh M. Scott. 1870—Ephraim Scott. 1872—James C. Herdman. 1874—James McG. Stewart. 1876—John H. Cameron.

LAURIE PRIZE.

1871—Hugh M. Scott, B.A. 1872—Duncan C. Fraser. 1873—David F. Creelman. 1874—Archibald Gunn. 1875—Alex. McLeod. 1876—No competition.

ST. ANDREW'S PRIZE.

1873.—*For Classics:—First Year.*—John W. McLeod.
1874.—*For Mathematics:—Second Year.*—John W. McLeod.
1875.—*For Classics:—Second Year.*—James McLean.
1876.—*For Mathematics:—Second Year.*—T. A. LePage.

ALUMNI PRIZES.

1873—James McG. Stewart. 1874—1. James McLean; 2. John H. Sinclair. 1875—1. J. H. Cameron, Private Study; 2. R. H. Humphrey, Halifax Grammar School. 1876—*Third Year.*—John Waddell (who resigned in order to hold the Waverly Prize), J. H. Sinclair, *First Year.*—Roderic McKay, Private Study.

"UNKNOWN" PRIZE.

1875—James McLean.

GRADUATES PRIZE.

1876—John Wilson McLeod.

WAVERLEY PRIZE.

1873—Wm. Beairsto, Wm. R. Ross, equal. 1874—James Fitzpatrick. 1875—James McLean. 1876—John Waddell.

MELBOURNE PRIZES.

1875—1. John W. McLeod; 2. James McG. Stewart. 1876—George W. McQueen.

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

GRADUATES.

MASTERS OF ARTS.

1869.

Chase, Joseph Henry ..... 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.

1874.

McGregor, James G. ..... Halifax.

1875.

McKenzie, Hugh ..... Earltown.
Scott, Ephraim ..... Douglas, Gore.

1876.

Allan, John M. ..... Newfoundland.

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.

1874.

Campbell, Don. A. ..... Truro.
Chisholm, Donald ... . Longpoint.
Moore, Edmund ..... Londonderry.

1875.

Cox, Robinson ..... Stewiacke.
Bethune, J. L. .....
Lindsay, A. W. H. ..... Halifax.
Muir, W. S..... ..... Truro.
Casimir, Robt. ..... Arichat.

BACHELORS OF ARTS.

1866.

Chase, J. Henry ..... 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..... Roger's Hill, Pictou.
Sedgewick, 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, Hants.
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.
Russel, Alex. 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.

1873.

Allan, John M. ..... Newfoundland.
Bryden, Ch. W. ..... Tatamagouche.
Cameron Wm. ..... Sutherland's River.
Creelman, D. F. ..... Stewiacke.
Duff, Kenneth ..... Lunenburg.
Hunter, John.... ..... New Glasgow.
Logan, Melville ..... Halifax.
McDonald, Chas. D..... Pictou.
McKay, Alex. H..... Dalhousie, Pictou.
McKeen, James A. ..... Tatamagouche.
Robinson, J. Millen ..... Baillie, N. B.
Ross, Wm. ..... East River, Pictou.

1874.

Doull, Walter S. ..... Halifax.
Fraser, D. Stiles ..... Durham, Pictou.
Herdman, James C. ..... Pictou.
Herdman, Wm. C. ..... Pictou.
McGregor, Daniel. ..... Inverness, C. B.
McLeod, Donald ..... Strathalbyn, P. E. I.
Oxley, James McD. ..... Halifax.

1875.

Fitzpatrick, James. ..... Rogers' Hill, Pictou.
Jordan, Louis H. ..... Halifax.
McLeod, Alex. ..... Onslow, Colchester.
McMillan, George ..... Scotch Hill, Pictou.
Stramberg, Hector H. ..... Cape John, Pictou.

1876.

Bell, Francis H. ..... Halifax.
Fulton, George H. ..... Bass River, Colchester.
McDowall, Isaac ..... Tatamagouche.
McLean, James Alex. ..... Pictou.
McLeod, John W. ..... N. River, Colchester.
Morton, Jos. S. ..... New Glasgow.
Munro, John. ..... Valleyfield, P. E. I.
Stewart, J. McG ..... Whycocomagh, P. E. I.

UNDERGRADUATES, 1875-6.

FOURTH YEAR.

Bell, Francis H. ..... Halifax.
Fulton, George ..... Bass River, Colchester.
McDowall, Is. ..... Tatamagouche.
McLean, James A. ..... Pictou.
McLeod, John W. ..... N. River, Colchester.
Morton, Joseph S. ..... New Glasgow.
Munro, John. ..... Valleyfield, P. E. I.
Stewart, James McG. ..... Whycocomagh.

THIRD YEAR.

Archibald, F. W. ..... Truro.
Archibald, Is. L. ..... Truro.
Chambers, Robt. E. ..... Truro.
Grant, W. R. ..... Springville, Pictou.
Hamilton, Howard H. ..... Pictou.
Herdman, A. W. ..... Pictou.
Laird, George A. ..... Cavendish.
Logan, Richmond ..... Stewiacke.
Mason, Wm. A. ..... East River.
McCurdy, Stanley T. ..... New Glasgow.
Murray. J. S. ..... Cavendish, P. E. I.
Pitblado, Colin ..... Truro.
Scott, John McD. ..... Gore Hants.
Sinclair, John H. ..... Goshen, Guysborough.
Waddell, John ..... Sheet Harbor.

SECOND YEAR.

Cairns, J. A. ..... Upper Freetown, P. E. I.
Cameron, J. H. ..... South River, Antigonish.
George, J. L. ..... Pictou.
Humphrey, R. H. ..... Halifax.
Law, J. R. K. ..... Kingston, N. B.
LePage, T. A. ..... Charlottetown, P. E. I.
McKenzie, J. A. ..... Green Hill, Pictou.
McKnight, S. J. ..... Dartmouth.

McRae, Rod. C. ..... Belfast, P. E. I.
Miller, Wm. ..... Stellarton.
Munro, G. W. ..... New York.
Newcomb, E. L. ..... Cornwallis.
*Ross, R. D. ..... East River, Pictou.
Stewart, W. S. ..... St. Peter's Road, P. E. I.
Whitman, Alf. ..... Annapolis.

FIRST YEAR.

Bremner, Fred. W. ..... Halifax.
Cameron, Ch. S. ..... Baddeck, C. B.
Crowell, Edwin ..... Barrington.
Dickie, Alf. ..... Stewiacke.
Emmerson, R. R. J. ..... Halifax.
Hunt, Ralph. M. ..... Dartmouth.
McIntyre, Dan. ..... Dalhousie, N. B.
McKay, Rod. ..... Dalhousie, Pictou.
McLean, Is. M. ..... Belfast, P. E. I.
McLeod, Angus ..... Valleyfield, P. E. I.
McQueen, George Wm. ..... Sutherland's Riv. Pictou.
Scott, Wm. P. ..... Lunenburg.
Thomson, Alb. Ed. ..... Halifax.
Torey, Edgar J. ..... Guysborough.

*Left ill at the beginning of the Session.

BACHELORS OF ARTS.

Doull, W. S. ..... Halifax. ..... History.
Jordan, Louis H. ..... Halifax. ..... German, Rhetoric.

GENERAL STUDENTS.

FOURTH YEAR OF ATTENDANCE.

NAME.	RESIDENCE.	CLASSES ATTENDED.
Forbes, Jam. Alf.	Dalhousie, Pictou.	Class., Nat. Phil., Metaphs.
Gordon, G. L.	Sutherlandshire, G. B.	Latin, History, Ethics.
Gunn, Arch.	Pictou.	Ethics.
McKenzie, Duncan	Loch Lomond.	Latin, Ethics, History.
Ross, J. T.	Earltown, Colch.	History.

THIRD YEAR.

Fraser, Wm. M.	Dartmouth.	Chemistry, Rhetoric.
Whittear, W. S.	Upper Rawdon, Hants.	Nat. Phil., Metaphs., Ger.

SECOND YEAR.

Barnes, H. W.	Halifax.	History.
Chambers, Howard	Truro.	Math., Logic, Chemistry.
Gundry, Arthur	Halifax.	Mathematics.
Johnson, Wilbert	Bass River, Colch.	Classics, Logic.
McGregor, Murdoch	Lake Ainslie, C. B.	Class., Logic, Metaphysics.
McMillan, Angus	St. Ann's, C. B.	Latin, Math., Logic.
Mitchell, Ch.	Halifax.	Latin, Rhetoric, French.
Moseley, Fred.	Dartmouth.	Logic, Rhetoric.
Thorpe, Edward	Cornwallis.	Classics, Math., Logic.

FIRST YEAR.

Archibald, W. E.	Edinburgh.	Classics, Math., Rhetoric.
Bligh, Fred.	Halifax.	Rhetoric.
Cameron, Hugh D.	Antigonish.	Chemistry.
Campbell, Malcom	Big Glace Bay, C. B.	Mathematics, Rhetoric.
Chambers, Fred.	Truro.	Classics, Math., Rhetoric.
Chisholm, Dun. F.	Antigonish.	Chemistry.
Cunningham, N. F.	Halifax.	"
Densmore, J. D.	Shubenacadie.	"
Henry, Sydney	Musquodoboit.	"
Jack, Clifford	Halifax.	Math., Rhetoric, French.
Johnson, D. M.	"	Chemistry.
Lanigan, John A.	"	"
Lenoir, Melaine N.	"	Latin, Math., Rhetoric.
Malcom, Thomas	Tatamagouche.	Chemistry.
McCallum, J. A.	Halifax.	Practical Chemistry.
McClure, Jam. K.	Truro.	Classics, Math., Rhetoric.
McKay, Alex.	Dartmouth.	Practical Chemistry.
McKenzie, John	Halifax.	Classics.
McKenzie, W. D.	Sydney, C. B.	Chemistry.
McLellan, W. E.	Durham, Pictou.	Classics, Math., Rhetoric,
McLeod, A. F.	Marble Mountain, C. B.	Chemistry.
Moir, Jam. F.	Halifax.	Rhetoric, French.
Orpen, John E.	Aylesford.	Practical Chemistry.
Robb, Walt. R.	Amherst.	Classics, Math., Rhetoric.
Smith, Freeman P.	Brookfield, Queen's Co.	Practical Chemistry.
Stewart, Th.	Whycocomagh, C. B.	Classics, Math., Rhetoric.
Thomson, W. J. G.	Halifax.	Mathematics, Rhetoric.
Tyler, Walt. E.	"	Chemistry.
Welling, Fred. N.	Shediac, N. B.	Classics, Mathematics.
Woodill, W. N.	Halifax.	Chemistry.
Zwicker, Jam. W.	Mahone Bay.	Rhetoric, History.

Undergraduates in Arts	52
General Students in Arts	47
Graduates continuing their Studies.....	2
Total number of Students...	101

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

FIRST YEAR—LATIN.

CICERO: FIRST ORATION AGAINST CATILINE.
VIRGIL: AENEID, BOOK V.

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

1. Translate:

(*a*) Castra sunt in Italia contra rempublicam in Etruiæ faucibus collocata: crescit in dies singulos hostium numerus: eorum autem imperatorem castrorum ducemque hostium intra mœnia atque adeo in senatu videmus, intestinam aliquam quotidie perniciem reipublicæ molientem. Si te jam, Catilina, comprehendi, si interfici jussero, credo, erit verendum mihi, ne non hoc potius omnes boni serius a me, quam quisquam crudelius factum esse dicat. Verum ego hoc, quod jampridem factum esse oportuit, certa de caussa nondum adducor, ut faciam. Tum denique interficiam te, quum jam nemo tam improbus, tam perditus, tam tui similis inveniri poterit, qui id non jure factum esse fateatur. Quamdiu quisquam erit, qui te defendere audeat, vives: et vives ita, ut nunc vivis, multis meis et firmis præsidiis obsessus, ne commovere te contra rempublicam possis: multorum te etiam oculi et aures non sentientem, sicut adhuc fecerunt, speculabuntur atque custodient.

(*b*)

Est procul in pelago saxum, spumantia contra
Littora, quod tumidis submersum tunditur olim
Fluctibus, hiberni condunt ubi sidera Cori:
Tranquillo silet, immotâque attollitur undâ
Campus, et apricis statio gratissima mergis.
Hic viridem Æneas frondenti ex ilice metam
Constituit, signum nautis, pater; unde reverti
Scirent, et longos ubi circumflectere cursus.
Tum loca sorte legunt; ipsique in puppibus auro
Ductores longe effulgent ostroque decori:
Cetera populeâ velatur fronde juventus,
Nudatosque humeros oleo perfusa nitescit.

(*c*)

At matres primo ancipites, oculisque malignis
Ambiguæ, spectare rates, miserum inter amorem
Præsentis terræ fatisque vocantia regna;
Quum Dea se paribus per cœlum sustulit alis,
Ingentemque fugâ secuit sub nubibus arcum.
Tum vero attonitæ monstris actæque furore,
Conclamant, rapiuntque focis penetralibus ignem:
Pars spoliant aras, frondem ac virgulta facesque
Conjiciunt: furit immissis Vulcanus habenis
Transtra per et remos et pictas abiete puppes.

2. Analyze the sentence 'Si te jam, Catilina,....dicat' (supplying ellipses) so as to show the connection of clauses.

3. Give the rules of Syntax for cases and moods of the following words: (*a*) 'comprehendi,' 'mihi,' 'dicat,' 'hoc, quod,' 'tui.'—(*b*) 'tranquillo,' 'scirent,' 'humeros.'—(*c*) 'spectare,' 'regna,' 'habenis,' 'abiete.'

4. Decline and mark quantities of: hastilia, imbribus, senes, pelago viros.

5. Write the forms in the other degrees of comparison corresponding to: ultimă, ocior, plura, pius, summis, acrius (adv.), primum, clarâ, imis.

6. Parse, give principal parts and mark quantities of: senties, obstipuere, cient, texunt, pertæsum est, agnoscunt, proficiscere, obstitisse, haurit, prosunt.

7. Write the 2nd pl. fut. ind. act. and pass. forms (if used) of: conficio, perferre, it, velle, secant, jussi, meruit, petivit, emensæ, ausus.

8. What verbs are followed by (*a*) two accusatives, (*b*) two datives, (*c*) accusative and genitive?

9. Scan the first five lines of last extract.

10. Write a sketch of Virgil's life.

11. Translate into Latin: His father's friend pities me.—Come hither, my dear son.—Setting out from Rome he remained a good while at Cumæ.—If you and Tullia are well, Cicero and I are well.—You have a leader mindful of you, forgetful of himself.—Your treaty will cost you dear.—What difference does it make to you?

ADDITIONAL FOR FIRST AND SECOND CLASS.

CICERO: THIRD ORATION AGAINST CATILINE.

1. Translate Chap. IX.

2. Decline: Irim, faucibus, Idibus, natu, Beroe, heroum.

3. What nouns of the 3rd decl. form the gen. pl. in *-ium*? Give exceptions.

4. What adjectives lack (*a*) the positive only, (*b*) the comparative only, (*c*) the superlative only.

5. Write in Latin $\frac{3}{4}$; $\frac{5}{7}$; 25,768; Nov. 8th.

6. Distinguish the meanings of: quotidie, in dies—promitto, polliceor—oblītus, oblĭtus—comitium comitia—consulere tibi, consulere in te—summus, supremus—aemulari, with dat. and with acc.—mānibus, mănibus.

7. Translate these passages, and write grammatical or explanatory notes on the words in italics:

(*a*) Dixi....caedem te optimatium contulisse *in ante diem V Kal. Nov.*

(*b*) Multi....non tam *sui conservandi* quam tuorum consiliorum reprimendorum causa profugerunt.

(*c*) *Ad omnia pulvinaria supplicatio*....decreta est.

(*d*) Dixerunt Lentulum sibi confirmasse ex *fatis Sibyllinis haruspicumque* responsis se esse tertium illum Cornelium.

(*e*) Quid tandem te impedit? Mosne majorum?....An *leges*, quae *de civium Romanorum supplicio* rogatæ sunt.

DALHOUSIE COLLEGE AND UNIVERSITY.

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 13TH.

FIRST YEAR.

GREEK—LUCIAN—TIMON.

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

1. Translate:—

(*a*) Ζεῦ, πέμπε με, τοὺς αἰσθησομένους τῆς δωρεᾶς, τοὺς περιέψοντας, οἷς τίμιος ἐγὼ, καὶ περιπόθητος. οὗτοι δὲ οἱ λάροι τῇ πενίᾳ ξυνέστωσαν, ἣν προτιμῶσιν ἡμῶν, καὶ διφθέραν παρ' αὐτῆς λαβόντες, καὶ δίκελλαν, ἀγαπάτωσαν ἀθλιοι, τέτταρας ὀβολοὺς ἀποφέροντες, οἱ δεκαταλάντους δωρεὰς ἀμελητὶ προϊέμενοι. ΖΕΥΣ. Οὐδὲν ἔτι τοιοῦτον ὁ Τίμων ἐργάσεται περὶ σέ. πάνυ γὰρ αὐτὸν ἡ δίκελλα πεπαιδαγώγηκεν, εἰ μὴ παντάπασιν ἀνάλγητός ἐστι τὴν ὀσφῦν, ὡς χρῆν σε ἀντὶ τῆς πενίας προαιρεῖσθαι. σὺ μέντοι πάνυ μεμψίμοιρος εἶναί μοι δοκεῖς, ὃς νῦν μὲν τὸν Τίμωνα αἰτιᾷ, διότι σοι τὰς θύρας ἀναπετάσας, ἡφίει περινοστεῖν ἐλευθέρως, οὔτε ἀποκλείων, οὔτε ζηλοτυπῶν· ἄλλοτε δὲ τοὐναντίον ἠγανάκτεις κατὰ τῶν πλουσίων, κατακεκλεῖσθαι λέγων πρὸς αὐτῶν ὑπὸ μοχλοῖς, καὶ κλεισὶ, καὶ σημείων ἐπιβολαῖς· ὡς μηδὲ παρακύψαι σοι ἐς τὸ φῶς δυνατὸν εἶναι. ταῦτα γοῦν ἀπωδύρου πρός με, ἀποπνίγεσθαί λέγων ἐν πολλῇ τῇ σκοτῳ· καὶ διὰ τοῦτο ὠχρὸς ἡμιν ἐφαίνου, καὶ φροντίδος ἀνάπλεως, συνεσπακὼς τοὺς ζακτύλους πρὸς τὸ ἔθος τῶν συλλογισμῶν, καὶ ἀποδράσασθαι ἀπειλῶν εἰ καιροῦ λάβοιο παρ' αὐτῶν.

(*b*) ΠΛΟΥΤ. Ἐχρῆν μέντοι ἴσως καὶ μακρὰ εἰπεῖν, οὕτω πολλὰ ὑπὸ κατηγορηθέντα· ὁμως δὲ ὅρα εἴ τι σε, ὡς φῂς, ἠδίκηκα· ὃς τῶν μὲν ἡδιστων ἁπάντων αἰτιός σοι κατέστην, τιμῆς, καὶ προεδρίας, καὶ στεφάνων, καὶ τῆς ἄλλης τρυφῆς· περίβλεπτος δέ τοι καὶ ἀοίδιμος δι' ἐμὲ ἦσθα, καὶ περίσπουδαστος· εἰ δὲ τι χαλεπὸν ἐκ τῶν κολάκων πέπονθας, ἀναίτιος ἐγώ σοι· μᾶλλον δὲ αὐτὸς ἠδίκημαι τοῦτο ὑπὸ σοῦ, διότι με οὕτως ἀτίμως ὑπέβαλλες ἀνδράσι καταράτοις, ἐπαινοῦσι, καὶ καταγοητεύουσι, καὶ πάντα τρόπον ἐπιβουλεύουσι μοι. Καὶ τόγε τελευταῖον ἔφησθα, ὡς προδέδωκά σε· τοὐναντίον δὲ αὐτὸς ἐγκαλέσαιμί σοι πάντα τρόπον ἀπελαθεὶς ὑπὸ σοῦ, καὶ ἐπὶ κεφαλὴν ἐξωσθεὶς τῆς οἰκίας. τοιγαροῦν ἀντὶ μαλακῆς χλαμύδος, ταύτην τὴν διφθέραν ἡ τιμωτάτη σοι Πενία περιτέθεικεν. ὥστε μάρτυς ὁ Ἑρμῆς οὑτοσὶ, πῶς ἱκέτευον τὸν Δία μηκέθ' ἥκειν παρὰ σὲ, οὕτω δυσμενῶς μοι προσενηνεγμένον.

2. Decline throughout (giving contractions)—δεσπότης, αἰγίς, πατέρα, , τὸ τεῖχος, βαρύς.

3. What adjectives of the first and second declensions form the masculine and feminine alike? Give examples.

4. Write the forms in the other degrees of comparison that correspond to *δικαίῳ, ὦ 'γαθέ, πρῶτον, πολύν, ταχέως, γλυκεῖα, μᾶλλον, ῥᾳδίως, σοφῆς, ἀληθεῖς.*

5. Give the plural forms of—*ἐμαυτῷ, ἑαυτῆς, αὐτό, ταύτης, τώ, πολύν, νῷν, τίνι, οἵ, ὅτι.*

6. Form 3 sing. imperf. indic. act. of—*ὁμιλέω, εὑρίσκω, οἰκτίζω, ἐάω, ἔχω, περιβάλλω, ῥάπτω, ἐκφευγω, ἔνειμι, προδίδωμι.*

7. What verbs do not reduplicate the perfect? Write the 2 sing. and 3 pl. perf. indic. pass. of—*κλίνω, φιλέω, φεύγω, καλέω, πείθω, λαμβάνω, ῥίπτω, ὑπακούω, ἀποφαίνω, τίθημι.*

8. Parse the following words.—(*a*) *Ολυμπίων, κύνας, τὰμά, νίέ, γυναῖκα, ὄναρ, αὑτῶν, ἀυτῶν*—(*b*) *δόξω, ὀφθείην, εὑρήσει, πεμφθείς, καταλιπών, οἶει, ἐπέδειξε, καταληφθείς, πρόοιντο.*

ADDITIONAL FOR FIRST OR SECOND CLASS.

Lucian.—The Dream.

1. Translate:—*Καὶ ὁ νῦν πένης ὁ τοῦ δεῖνος, ὁ βουλευσάμενός τι περὶ ἀγεννοῦς οὕτω τέχνης, μετ'ὀλίγον ἅπασι ζηλωτὸς καὶ ἐπίφθονος ἔσῃ, τιμώμενος καὶ ἐπαινούμενος, καὶ ἐπὶ τοῖς ἀρίστοις εὐδοκιμῶν, καὶ ὑπὸ τῶν γένει καὶ πλούτῳ προὐχόντων ἀποβλεπόμενος, ἐσθῆτα μὲν τοιαύτην ἀμπεχόμενος, (δείξασα τὴν ἑαυτῆς· πάνυ δὲ λαμπρὰν ἐφόρει), ἀρχῆς δὲ καὶ προεδρίας ἀξιούμενος. κἂν που ἀποδημῇς, οὐδ' ἐπὶ τῆς ἀλλοδαπῆς ἀγνώς οὐδ' ἀφαντὴς ἔσῃ· τοιαῦτά σοι περιθήσω τὰ γνωρίσματα, ὥστε τῶν ὁρώντων ἕκαστος τὸν πλησίον κινήσας δείξει σε τῷ δακτύλῳ 'ΟΥΤΟΣ 'ΕΚΕΙΝΟΣ, λέγων. Ἂν δὲ τι σπουδῆς ἄξίον ᾖ, καὶ τοὺς φίλους ἢ καὶ τὴν πόλιν ὅλην καταλαμβάνῃ, εἰς σὲ πάντες ἀποβλέψονται. κἂν που τι λέγων τύχῃς, κεχηνότες οἱ πολλοὶ ἀκούσονται, θαυμάζοντες, καὶ εὐδαιμονίζοντές σε τῶν λόγων τῆς δυνάμεως, καὶ τὸν πατέρα τῆς εὐποτμίας. ὃ δὲ λέγουσιν, ὡς ἄρα ἀθάνατοι γίγνονταί τινες ἐξ ἀνθρώπων, τοῦτό σοι περιποιήσω.*

2. Shew by examples what forms result from the following combinations at the end of (*a*) nouns, and (*b*) verbs:—

(*a*) *αδς, οντς, υθς, ακτς, εFς. εσος.*

(*b*) *ασο, εμεν, οντς, αντ, θηθι, κσθαι.*

4. Parse and accentuate:—*φθασαι, κατεδραθον, αποδρας, ποριη, απιστησητε, εισρυηναι, διαρραγωσι, ανελεσθαι, ηφιει, αναπετασας.*

5. What verbs beginning with a vowel take (*a*) the syllabic augment, (*b*) two augments, (*c*) no augment, (*d*) *ει*?

6. Write short notes on the following names, which occur in the text:—*Δημοσθένης, Φίλιππος, Δευκαλίων, Σαλμωνεύς,*

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

MONDAY, APRIL 17.—9 A.M. to 1 P.M.

MATHEMATICS—FIRST YEAR.

GEOMETRY.

PROFESSOR MACDONALD,.....*Examiner.*

1. Prove the part of the 16th Proposition of the First Book, which is dismissed in your Euclid with the words "In the same manner," &c.

2. If the square of one side of a triangle is equal to the sum of the squares of the other two sides, the angle contained by these is a right angle. When you have proved it, point out a common error of the unwary in dealing with this Proposition.

3. If a straight line be divided into two equal and also into two unequal parts, the rectangle contained by the unequal parts together with the square of the line between the points of section, is equal to the square of half the line. (By the division of the straight line only, if you can.)

4. BCD is a triangle, F being the middle point of BD. Prove

$$BC^2 + CD^2 = 2BF^2 + 2FC^2.$$

5. The 6th Proposition of the Second Book is really a case of the 5th. Shew this, and extend your criticism to some other Propositions in the same Book. Also, write the algebraic equation which represents any one of them you choose.

6. Draw the longest and also the shortest line to the circumference of a circle from a point in a diameter produced.

7. The angle at the centre is double the angle at the circumference, standing on the same arc. Hence, by *the principle of continuity*, prove the 31st Proposition of this Book.

8. On a given straight line to describe a segment of a circle containing an angle equal to a given angle.

9. About a given circle to describe a triangle equiangular to a given triangle.

10. On a given straight line describe a regular octagon.

11. Divide a straight line into two parts so that the difference of their squares may be equal to a given square. Point out when the problem is impossible.

12. If two chords in a circle cut at right angles, the sum of the squares of their segments is equal to the square of the diameter.

13. If a quadrilateral be described about a circle, the sum of the angles at the centre subtended by two opposite sides is constant.

14. C is the middle point of the arc ACB, and CDF is drawn cutting the chord AB, either internally or externally, in D and the circle in F. Prove $FC.CD = AC^2$.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

MONDAY, APRIL 17.—3 TO 6 P. M.

MATHEMATICS—FIRST YEAR.

ALGEBRA.

PROFESSOR MACDONALD,.....*Examiner.*

1. Prove the rule for the division of Vulgar Fractions, by working and explaining the example $\frac{5}{6} \div \frac{3}{4}$.

2. Shew, by reasoning on the matter, that $a+(b-c)=a+b-c$; and that $a-(b-c)=a-b+c$. Also simplify

$$a-\left\{a+b-[a+b+c-(a+b+c+d)]\right\}$$

3. Resolve into factors (one of which is $x \pm y$), when possible,

$$x^3 \pm y^3,\ x^4 \pm y^4,\ x^{2n-1} \pm y^{2n-1},\ x^{2n} \pm y^{2n}.$$

4. Find the greatest common measure of $6a^3-6a^2y+2ay^2-2y^3$ and $12a^2-15ay+3y^2$, and the least common multiple of $2(x-1)$, $3x-6$, x^2-1, x^2-4.

5. Shew that $\sqrt{x} \pm \sqrt{y}=a$, a rational quantity, is impossible, when $\sqrt{x}$ and $\sqrt{y}$ are true and different surds. Shew also that

$$(12+\sqrt{19})^{\frac{1}{3}}(12-\sqrt{19})^{\frac{1}{3}}=5, \text{ and } \frac{8-5\sqrt{2}}{3-2\sqrt{2}}=4+\sqrt{2}.$$

6. Solve the equation $\frac{x-a}{3}-\frac{2x-3b}{5}-\frac{a-x}{2}=10a+11b$.

7. Describe 3 methods for solving Simultaneous Equations of two unknown quantities: and employ two of them successively to solve the following: $9x-4y=8$, and $13x+7y=101$.

8. Find the two values of x in the equation, $3x^2-7x=40$.

9. Given that $x=2$ is one of the roots of the cubic equation, $x^3+7x^2+2x-40=0$; find the other roots, by considering the relations of the roots to the coefficients.

10. A company at an inn had \$28.80 to pay: but three of them having slunk away before the bill was settled, the others had to pay 80 cents a piece more than their fair share. How many did the company consist of?

11. In an A.P. the sum of terms equi-distant from the extremes is constant. Also, state and prove the analogous property in a Geometrical series.

12. If a, b, c, d are in G.P., prove $a:d::a^3:b^3$; and if a is greatest, she that $a+d>b+c$.

13. The limit of the sums of the series, $a+ar+ar^2+$&c. ad inf: $=\frac{a}{1-r}$. Prove this and apply it to find the value of $\cdot\dot{8}\dot{2}\dot{3}$.

14. z varies as $x+y$, and y varies as x^2: when $x=\frac{1}{2}$, $y=\frac{1}{3}$, and $z=\frac{1}{4}$: find the equation, between x and z.

15. Solve the equation: $9x-3x^2+4\sqrt{x^2-3x+5}=11$.

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1876.

WEDNESDAY, APRIL 19.—9 A.M. TO 1 P.M.

RHETORIC—FIRST YEAR.

PROFESSOR DEMILL, M. A.....*Examiner.*

(Only one question is to be answered out of each group.)

1. Explain what is meant by Purity of Style, and show how it is most frequently violated. Give examples of new words which entered into the language during the 16th and 17th centuries.

2. What is Unity? Explain the proper and improper use of the Parenthesis. Give the general law for the arrangement of words

3. Show the relative importance of Strength of Expression. Write out a paragraph on any subject so as to introduce the following figures.—Comparison, Allusion, Metaphor, Antithesis.

4. Explain Harmony in Style, and show its relative importance in different kinds of composition. Define Onomatopœia, and illustrate its use in prose and poetry.

5. There are various kinds of Description. Explain Concurrent Streams, Retrospect, and Summary, in Narrative. In Discussion, explain Example, Illustration, Definition.

6. Explain what is meant by Matters of Fact, and Matters of Opinion. Define and illustrate Arguments from *(a)* Negative Testimony; *(b)* Undesigned Testimony; *(c)* Testimony of adversaries.

7. Distinguish between Invention and Method in Arguments, and give illustrations from Narrative and Exposition. Explain the difference between the Subject and the Question. Show the different arrangement of arguments in Proof and Refutation.

8. Enumerate the chief sources of *(a)* the Beautiful, and *(b)* the Sublime. What is meant by the Three Unities of Dramatic Composition?

9. Criticise the following passage:—

With our readers in general, with men of right feeling anywhere, we are not required to plead for Burns. It pitying admiration, he lies enshrined in all our hearts, in a far nobler mausoleum than that one of marble; neither will his Works, even as they are, pass away from the memory of men. While the Shakespeares and Miltons roll on like mighty rivers through the country of Thought, bearing fleets of traffickers and assiduous pearl-fishers on their waves; this little Valclusa Fountain will also arrest our eyes: For this also is of Nature's own and most cunning workmanship, bursts from the depths of the earth, with a full gushing current, into the light of day; and often will the traveller turn aside to drink of its clear waters, and muse among its rocks and pines!

10. Write an original example of Narrative Composition upon any well known subject; *e. g.*—Alfred the Great, Oliver Cromwell, Napoleon Buonaparte;—the Indian Mutiny, the Southern War, the Franco Prussian War. Write an original example of Expository Composition upon any familiar subject;—*e.g.*—War, Religion, Temperance, Literature, Education, The Press.

DALHOUSIE COLLEGE AND UNIVERSITY,
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SESSIONAL EXAMINATIONS, 1876.

WEDNESDAY, APRIL 19.—3 to 6 P.M.

ANGLO SAXON—FIRST YEAR.

PROFESSOR DEMILL, M.A.,.....*Examiner.*

1 Translate

Tha ongan seo abbudisse clyppan and lufian tha Godes gife in tham men, and heo hine tha monode and laerde, thaet he weoruldhad forlete and munuchhade onfenge; and he thaet wel thafode; and heo hine in thaet mynster onfeng mid his godum, and hine getheodde to gesamnunge thara Godes theowa, and het hine laeran thaet getael thaes halgan staeres and spelles, and he eal tha he in gehernesse geleornian mihte mid hine gemyngode, and swa swa claene nyten eodorcende in thaet sweteste leodh gehwyrfde, and his song and his leodh waeron so wynsum to gehyranne, thaet tha selfan his lareowas aet his mudhe writon and leornodon.

2 Parse ongan, onfenge, het, halgan, to gehyranne, selfan.

3 Give as many examples as you can of words of Latin or Greek origin in the Anglo Saxon language, and show why they were introduced.

4 Give the modern English forms of the following words, and explain the euphonic changes that have taken place: gife, weoruldhad, godum, laeran, claene, nyten.

5 Show the euphonic changes that have taken place in the passage of the following words into modern English: geleornode, meahte, arn, axian, gescy, wyrcan, betwux, climan.

6 Write out forms of the definite and indefinite declensions of any adjective.

7 Write out the forms of the Indicative mood active of the verb lufian.

8 Translate

Gewat tha neosian sydhdhan niht becom
hean huses, hu hit Hring Dene
aefter beor-thege gebun haefdon;
fand tha thaerinne aedhelinga gedriht
swefan aefter symble: sorge ne cudhon,
wonsceaft wera. Wiht unhaelo
grim and graedig gearo sona waes,
reoc and redhe, and on raeste genam
thritig thegna; thanon eft gewat
hudhe hremig to ham faran,
mid thaere wael fille wica neosan.
Tha waes on uhtan mid aer-daege
Grendles gudh-craeft gumum undyrne:
tha waes aefter wiste wop up-ahafen,
micel morgen sweg.

9 Parse gewat, becom, wera, waes, neosan, gumum.

10 Give the modern English forms of the following words, and explain the euphonic changes that have taken place: huses, wonsceaft, graedig, aer-daege, wop, up-ahafen.

11 Explain the nature of Anglo-Saxon versification.

12 Give a brief account of the Anglo-Saxon language, its origin, its chief dialectic divisions, and the chief differences between it and modern English.

13 Give a brief account of Anglo-Saxon literature.

14 Give the Anglo-Saxon forms of the following modern English words, their derivations and euphonic changes: minster, church, priest, monk, lord, lady.

15 Give the Anglo-Saxon equivalents of the following words, with remarks on Anglo-Saxon compound words: orthodox, pious, compassion, disciples, Pharisee, Saviour, Sabbath.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 20.—9 A.M. to 1 P.M.

EARLY ENGLISH—FIRST YEAR.

PROFESSOR DEMILL, M. A.....*Examiner.*

1. Translate:—

The King Willam, uorto wite the wurth of is lande,
Let enqueri streitliche thoru al Engelonde,
Hou moni plou-land, and hou moni hiden also,
Were in euerich ssire & wat hii were wurth ther-to;
& the rentes of ech toun, & of the wateres echone,
Thet worth, & of wodes ek that ther ne bileuede none,
That he nuste wat hii were worth of al Engelonde,
& wite al clene that worth ther-of, ich understonde,
& let it write clene ynov, & that scrit dude iwis
In the tresorie at Westminstre, there as it yut is;
So that vre kinges suththe wanne hii raunson toke,
Iredy wat folc miyte yiue hii founde there in hor boke.—*Robert of Gloucester.*

2. Give a short account of the nature of the poem from which the above extract is taken, and the probable date of its publication.

3. Parse enqueri, hiden, hii, thet, write, kinges, hor.

4. State the dialectic divisions of Early English, and give the chief characteristics of each.

5. Explain the versification in the above passage.

6. Translate:—

Lenten ye come with love to toune,
With blosmen & with briddes rovne,
That al this blisse bryngeth;
Dayes—eyes in this dales,
Notes suete of nightegales,
Veh foul song singeth,
The threstelcoc him threteth oo,
Away is huere wynter wo,
When woderoue springeth;
This foules singeth ferly fele,
Ant wlyteth on huere wynter wele,
That al the wode ryngeth.—*Early English Lyric Poetry.*

7. Translate:—

Vs telles alsua Iohn Gildenmuth
Of a folk ferr and first uncuth,
Wonnand be the est occean,
That biyond tham ar wonnand nan.
Among squilk was broght a writte,
O Seth the name was laid on it;
O suilk a stern the writt it spak,
And of thir offerands to mak.
This writte was gett fra kin to kin,
That best it cuth to haf in min,
That at the last thai ordeind tuelue
The thoohtfulest amany tham selue,
And did tham in a montain dern,
Biseli to wait the stern.—*Cursor Mundi.*

8. Show by the grammatical and orthographical forms of the above two passages, to which of the Early English dialects they respectively belong.

9. Translate:

Thenne lauyten they leue this lordynges at Meede.
With that ther come Clerkes to cumforte the same:
" We biddeth the be blithe for we beoth thin owne,
Forte worche thi wil while vr lyf dureth,"
Hendeliche thenne heo behihte hem the same,
To louen hem lelly and lordes to maken,
And in Constorie at Court to tellen heore names.
" Schal no lewednesse hem lette the lewedeste that I loue,
That he ne worth avaunset; for Icham I-knowe
Ther cunnynge Clerkes schul couche behynde."

—*The Vision of William concerning Piers the Plowman.*

10. Give a brief account of the poem from which the above is taken.

11. Explain the versification.

12. State to which dialect of early English the above belongs; and give corresponding forms in another dialect, of the following words: biddeth, beoth, heo, hem, louen, heore, Icham, I-knowe, schul.

13. Translate:

O sodeyn wo! that euer art successour
To worldly blisse, spreynd with bitternesse
Thende of the ioye of oure worldly labour;
Wo occupieth the fyn of oure gladnesse,
Herke this conseil for thy sikernesse,
Vp-on thy glade day haue in thy mynde.
The vnwar wo or harm tha comth bihynde.

For shortly for to tellen at a word,
The Sowdan and the christen euerichone
Ben al tohewe and stiked at the bord,
But it were oonly dame Custance allone.
This olde sowdanesse, this cursed crone,
Hath with her frendes doon this cursed dede,
For she hirself wolde al the contree lede.

—*Geoffrey Chaucer: The Man of Lawes Tale.*

14. Give examples of Southern dialectic forms in the above passage.

15. Scan the first four lines.

16. Explain the various forms of words ending in "e" as used by Chaucer.

17. Give examples from the above passage (*a*), of Anglo-Saxon grammatical forms; (*b*), of Norman French words; and (*c*), of cases where the "e" final is elided.

18. Show by a comparison with the foregoing extracts in what way Chaucer improved English versification.

19. Give examples from the above passage (*a*), of obsolete words and meanings; (*b*), of agglutinatives and compounds; and (*c*), of words with a different accent from the modern.

20. Give a brief historical sketch of the English language from the Anglo Saxon period to that of Chaucer.

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1876.

SECOND YEAR—LATIN.

LIVY: BOOK I. CHAPS 1-30.—HORACE: ODES, BOOK I.

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

1. Translate:

(*a*). Tum Sabinæ mulieres, quarum ex injuria bellum ortum erat, crinibus passis scissaque veste, victo malis muliebri pavore, ausæ se inter tela volantia inferre, ex transverso impetu facto, dirimere infestas acies, dirimere iras, hinc patres, hinc viros orantes, ne se sanguine nefando soceri generique respergerent: ne parricidio macularent partus suos, nepotum illi, liberum hi progeniem. Si affinitatis inter vos, si connubii piget, in nos vertite iras: nos causa belli, nos vulnerum ac cædium viris ac parentibus sumus. Melius peribimus, quam sine alteris vestrum viduæ, aut orbæ vivemus. Movet res tum multitudinem, tum duces. Silentium et repentina fit quies; inde ad fœdus faciendum duces prodeunt: nec pacem modo, sed et civitatem unam ex duabus faciunt; regnum consociant; imperium omne conferunt Romam.

(*b*). Ibi infit Albanus: Injurias et non redditas res ex fœdere, quæ repetitæ sint, et ego regem nostrum Cluilium, causam hujusce esse belli, audisse videor: nec te dubito, Tulle, eadem præ te ferre. Sed si vera potius quam dictu speciosa dicenda sunt, cupido imperii duos cognatos vicinosque populos ad arma stimulat. Neque recte, an perperam, interpretor: fuerit ista ejus deliberatio, qui bellum suscepit; me Albani gerendo bello ducem creavere. Illud te, Tulle, monitum velim. Etrusca res quanta circa nos teque maxime sit, quo propior es Tuscis, hoc magis scis. multum illi terra, plurimum mari pollent. Memor esto, jam quum signum pugnæ dabis, has duas acies spectaculo fore, ut fessos confectosque simul victorem ac victum aggrediantur. Itaque, si nos dii amant, quoniam non contenti libertate certa, in dubiam imperii servitiique aleam imus, ineamus aliquam viam, qua, utri utris imperent, sine magna clade, sine multo sangnine utriusque populi decerni possit.

(*c*).

Quis desiderio sit pudor aut modus
Tam cari capitis? Praecipe lugubres
Cantus, Melpomene, cui liquidam pater
  Vocem cum cithara dedit.

Ergo Quinctilium perpetuus sopor
Urget! cui Pudor et Justitiae soror
Incorrupta Fides nudaque Veritas
  Quando ullum invenient parem?

Multis ille bonis flebilis occidit,
Nulli flebilior quam tibi, Virgili.
Tu frustra pius heu non ita creditum
  Poscis Quinctilium deos.

Quodsi Threïcio blandius Orpheo
Auditam moderere arboribus fidem,
Non vanae redeat sanguis imagini,
  Quam virga semel horrida

Non lenis precibus fata recludere
Nigro compulerit Mercurius gregi.
Durum : sed levius fit patientia,
Quidquid corrigere est nefas.

2. (*a*) Analyze the sentence 'Tum Sabinae mulieres . . . . progeniem,' explaining the connection of the various clauses.

(*b*) In the sentence 'Injurias . . . . videor.' show the connection of the words.

3. Account for the moods and cases of (*a*) 'respergerent,' 'affinitatis,' (*b*) 'ferre,' 'dictu,' 'bello gerendo,' 'illud te monitum velim,' 'sit,' 'Tuscis,' 'mari,' 'spectaculo,' (*c*) 'gregi.'

4. Scan the first four lines of (*c*) and give a scheme of the Sapphic stanza.

5. (*a*) Mark the quantities and decline throughout: Clio, cubito, loricis, dîs, nuptias, fidibus, mănibus.—(*b*) What forms in other degrees of comparison correspond to: facile, novis, superis, iniquus, primum, acre, diu, melius, ocior.

6. Name the tense, mood and voice of the following words, mark quantity of syllables, and give the chief parts and fut. particip. active: pepigisse, findere, sectis, feriam, visere, quatiunt, mearis, levi, nectis, severis, micat, plectantur.

7. (*a*) Distinguish the use of *dum* and *quum* with the indicative and subjunctive.

(*b*) What moods and conjunctions are used with verbs of (1) fearing and (2) doubting? Distinguish their meaning.

8. Show how the different cases of the gerund are employed. When may the gerundive be substituted? What changes take place then?

9. Writh a short account of Horace's life.

10. Translate into Latin: Whilst these events were taking place amongst the Volscians, the Dictator M.' Valerius routed the Sabines, put them to flight, and deprived them of their camp. By a charge of cavalry he had thrown into confusion the centre of the enemy's line which in extending their wings too far they had not sufficiently strengthened. The infantry attacked them when in confusion, and by the same attack the camp was taken and the war ended. The Dictator enters the city in triumph. In addition to the usual honours, a place in the Circus was assigned to himself and his descendants, and there a chair of state was placed.

ADDITIONAL FOR FIRST AND SECOND CLASS.

LIVY: BOOK I, CHAPS 30-60.

1. Translate Chap 41.

2. Change the passages in chap. 41, which are written in *oratio directa* and *oratio obliqua* into the opposite forms.

3. What nouns of the 2nd decl. are feminine? What nouns of the 1st decl. have no singular? What adjectives do not admit of comparison?

4. From short sentences in English and Latin to show in how many ways 'that' may be rendered in Latin.

5. Shew by examples in what different ways the English infinitive may be translated.

6. Quote the passages in Horace in which these phrases are found: arbiter Hadriae—seculum Pyrrhae—Lesbio primum modulate civi—Vaticani montis imago—quid sit futurum—carpe diem.

7. What forms in prose would correspond to: Audax omnia perpeti—Herculeus labor—nil mortalibus ardui est—integer vitae—Daunias latis alit esculetis—quam nigro compulerit Mercurius gregi—pecus egit visere montes.

8. Can you point out any inconsistencies in Livy? What are the reasons for disbelieving his account of the Regal period? How may the stories have arisen? Illustrate by an example.

DALHOUSIE COLLEGE AND UNIVERSITY.

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 13TH.

SECOND YEAR.

GREEK :—HERODOTUS : BOOK I., SECS. 95—141.
HOMER:—ODYSSEY, BOOK IX.

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

1. Translate:—

(*a*) Ἄρπαγος μὲν δὴ τὸν ἰὸν ἐφαίνε λόγον. Ἀστυάγης δὲ κρύπτον τόν οἱ ἐνείχεε χόλον διὰ τὸ γεγονὸς, πρῶτα μὲν, κατάπερ ἤκουσε αὐτὸς πρὸς τοῦ βουκόλου τὸ πρῆγμα, πάλιν ἀπηγέετο τῷ Ἁρπάγῳ· μετὰ δὲ, ὡς οἱ ἀπαλιλλόγητο, κατέβαινε λέγων, ὡς "περίεστί τε ὁ παῖς καὶ τὸ γεγονὸς ἔχει καλῶς· τῷ τε γὰρ πεποιημένῳ," ἔφη λέγων, "ἐς τὸν παῖδα τοῦτον ἐκαμνον μεγάλως, καὶ θυγατρὶ τῇ ἐμῇ διαβεβλημένος οὐκ ἐν ἐλαφρῷ ἐποιεύμην· ὡς ὦν τῆς τύχης εὖ μετεστεώσης, τοῦτο μὲν τὸν σεωυτοῦ παῖδα ἀπόπεμψον παρὰ τὸν παῖδα τὸν νεήλυδα, τοῦτο δὲ, (σῶστρα γὰρ τοῦ παιδὸς μέλλω θύειν τοῖσι θεῶν τιμὴ αὕτη προσκέεται,) πάρισθί μοι ἐπὶ δεῖπνον." Ἅρπαγος μὲν ὡς ἤκουσε ταυτα, προσκυνήσας, καὶ μεγάλα ποιησάμενος ὅτι τε ἡ ἁμαρτάς οἱ ἐς δέον ἐγεγόνεε καὶ ὅτι ἐπὶ τύχῃσι χρηστῃσι ἐπὶ δεῖπνον κέκλητο, ἦϊε ἐς τὰ οἰκία·

(*b*) Ἐν μὲν γὰρ λειμῶνες ἅλος πολιοῖο παρ' ὄχθας
Ὑδρηλοὶ μαλακοὶ· μάλα κ' ἄφθιτοί ἄμπελοι εἶεν·
Ἐν δ' ἄροσις λείη· μάλα κεν βαθὺ λήϊον αἰεί
Εἰς ὥρας ἀμῷεν, ἐπεὶ μάλα πῖαρ ὑπ' οὐδας.
Ἐν δὲ λιμὴν εὐορμος, ἵν' οὐ χρεὼ πεισματός ἐστιν,
Οὔτ' εὐνὰς βαλέειν οὔτε πρυμνήσι' ἀνάψαι,
Ἀλλ' ἐπικέλσαντας μεῖναι χρόνον, εἰς ὅ κε ναυτέων
Θυμὸς ἐποτρύνῃ καὶ ἐπιπνεύσωσιν ἀῆται.
Αὐτὰρ ἐπὶ κρατὸς λιμένος ῥέει ἀγλαὸν ὕδωρ,
Κρήνη ὑπὸ σπείους· περὶ δ' αἰγειροι πεφύασιν.
Ἔνθα κατεπλέομεν, καὶ τις θεὸς ἡγεμόνευεν
Νύκτα δι' ὀρφναίην, οὐδὲ προυφαίνετ' ἰδέσθαι·
Ἀὴρ γὰρ παρὰ νηυσὶ βαθεῖ' ἦν, οὐδὲ σελήνη
Οὐρανόθε προυφαινε, κατείχετο δὲ νεφέεσσιν.
Ἔνθ' οὔ τις τὴν νῆσον ἐσέδρακεν ὀφθαλμοῖσιν·
Οὔτ' οὖν κύματα μακρὰ κυλινδόμενα προτὶ χέρσον
Εἰσίδομεν πρὶν νῆας εὐσσέλμους ἐπικέλσαι.
Κελσάσῃσι δὲ νηυσὶ καθείλομεν ἱστία πάντα,
Ἐκ δὲ καὶ αὐτοὶ βῆμεν ἐπὶ ῥηγμῖνι θαλάσσης.
Ἔνθα δ' ἀποβρίξαντες ἐμείναμεν ἠῶ δῖαν.

2. Decline the following words in the Attic dialect:—*Δηΐόκεω, νεφέεσσι, σφιν, πόλιος, πολιτέων, πόσις.*

3. Give the Attic forms of the following cases in the sing. and pl. —*βασιλῆϊς, ἑωυτῷ, πολλόν, πλεῦνος, ὕβριος, ἐούσης,—ἑτάρων, σέθεν, μακρῇσιν, ἤματα, Κυκλώπεσσι.*

4. What are the forms in the other degrees of comparison corresponding to —*καλόν, βαθεῖα, πρώτιστα, μέγαν, φίλῳ, φέρτεροι, πολλά, ἀσσον πίονα*?

5. State in what part of the verb these forms are found; write their Attic forms, when different; and give their chief parts in use. —*ἀπεχρᾶτο, ἐξέφηνε, ἀπικνέεσθαι, διεξῄει, ἡσθῆναι,—μένεμεν, περόωσι, κοιμήθημεν, τετυγμένα, ἕνεικεν.*

6. What verbs are regularly followed by two accusatives? What is the force of the article in Homer? Has it ever this force in Attic Greek? How is it used in the Ionic dialect? What is the force of an adjective preceding or following a noun that has the article?

7. Distinguish the meanings of:—*ἀλλά, ἄλλα, τὰ ἄλλα,—οἶνον πίνει, οἴνου πίνει—συμβουλεύει μοι, συμβουλεύεταί μοι,—πείθειν τινά, πείθεσθαί τινι,—ἑκάτερος, ἕκαστος, —αὐτός, ὁ αὐτός.*

8. The Persians, having confidence in their numbers, fought a sea fight.—I admire the saying of Solon: "We do not speak evil of the dead."—Of this I am well assured, there is no greater evil than injustice.—So great renown had Themistocles attained after the battle of Salamis; nevertheless he was prosecuted for peculation,—not unjustly, as it seems to me.

9. Give some account of the Homeric controversy.

ADDITIONAL FOR FIRST AND SECOND CLASS.

Herodotus: Book II., secs. 1—34.

1. Translate Secs. 8 and 25.

2. Give all the cases in use, with accents, (distinguishing Attic and Ionic forms) of—*ἠώς, κλεῖς, Ὀδυσσεύς, ἀνήρ.*

3. Parse and accentuate the following words:—*γενοιατο, παρατεταται, ελασσονες, διασκιδναντες,—ὑφυσσας, επιειμενον, αμφεν, επασσαμεθα, ορωρει.*

4. What are the forms of (*a*) the Ionic imperfect, (*b*) Epic aorist, (*c*) Attic future, (*d*) Epic genitive, (*e*) Ionic 3rd. pl. perf. indic. pass? Give two examples of each.

5. Mention verbs, nouns and pronouns that had the digamma in Homer; and give the corresponding words in Latin.

6. Translate into Latin: (*a*) *Κελεύει σε Ἀστυάγης τὸ παιδίον τοῦτο λαβόντα, θεῖναι, ἐς τὸ ἐρημοτατον τῶν ουρέων, ὅκως ἂν τάχιστα διαφθείρῃ.* (*b*) *Ἅρπαγος δὲ ὡς εἶδε με, ἐκελεύε τὸ παιδίον οἰ χεσθαι φέροντα, πολλ' ἀπείλησας εἰ μὴ τοῦτο ποιήσαιμι.*

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1876

MONDAY, APRIL 17.—3 to 6 P.M.

MATHEMATICS—SECOND YEAR.

TRIGONOMETRY AND ALGEBRA.

PROFESSOR MACDONALD,.....*Examiner.*

1. Prove the formula, $\vartheta = \frac{A^\circ}{180^\circ}\pi$, explaining the symbols employed.

2. Shew that $sin\ A = sin\ (180 - A)$, $cos\ A = -cos\ (180 - A)$; also, $cos\ (90 + A) = sin\ A$, $cos\ (90 - A) = -sin\ A$.

3. Given (1) a side and an angle of a right-angled triangle, and (2) two side of it: (choose one case of each as you please, and) find the other parts, writing the *logarithmic equations.*

4. Given $cos\ A = \frac{2\sqrt{mn}}{m+n}$: find the other five functions.

5. Prove, geometrically or analytically, stating in what case it is to be used, the formula, $a + b : a - b :: tan\ \frac{1}{2}(A+B) : tan\ \frac{1}{2}(A-B)$.

6. Give an acccount of the method by which $cos\frac{A}{2}$, $sin\frac{A}{2}$, $tan\frac{A}{2}$, $sin\ A$ &c. are determined in terms of the sides of the triangle ABC.

7. Prove $\frac{tan\ B}{tan\ C} = \frac{a^2+b^2-c^2}{a^2-b^2+c^2}$, or prove $tan\frac{A}{2}tan\frac{B}{2} = \frac{a+b-c}{a+b+c}$.

8. Prove that $log\frac{m}{n} = log\ m - log\ n$, to any base.

9. How many different arrangements could be made of the letters of the word *success*: in how many of these would the three s's stand last?

10. Find the number of terms in the expansion, $(a+x)^m$, m being a positive integer. Shew also that the coefficients are all whole numbers; and write down the middle term, when m is even.

11. Find the present value of a sum of money, A, payable after n years at r per cent: and adapt your formula to the case of half yearly payments.

12. If the last figure of a number be 5, the last two figures of its square are 25.

13. Find the value of the fraction $\frac{2x^3-5x^2-4x+12}{x^3-12x+16}$, when $x = 2$.

14. Prove that imaginary roots enter an equation, $f(x) = 0$, in pairs. Shew that the equation, $2x^3 - 3x - 6 = 0$, has a root between 1 and 2, and find the equation which resnlts after you depress its roots successively by 1 and ·7. What is the next figure of the root?

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SESSIONAL EXAMINATIONS, 1876.

MONDAY, APRIL 17.—9 A. M. TO 1 P. M.

MATHEMATICS—SECOND YEAR.

GEOMETRY AND MENSURATION.

PROFESSOR MACDONALD,.....*Examiner.*

1. If a, b, c are lines, what is the meaning of the expressions ac, bca, $\frac{a^3c}{b^2}$ What of $\frac{a^2}{\sqrt{a^2-b^2}}$? Shew also that $ab+c$, $abc+b^2$ &c., are nonsensical.

2. If $a:b=c:d=e:f$ &c., prove $a:b::a+c+e$ &c$:b+d+f$ &c., and express this result in words.

3. If two triangles have the sides about each of their angles proportionals, the triangles are equiangular.

4. Find a mean proportional between two given straight lines.

5. Similar triangles are to one another in the duplicate ratio of their homologous sides. Also, shew the importance of this Proposition.

6. BCD is a triangle, and CF bisects the angle C, cutting BD in F: prove BC. CD = BF. FD + CF^2.

7. If two circles touch externally, the common external tangent is a mean proportional between the diameters.

8. The alternate angles of a regular Hexagon are joined by straight lines: prove that the interior figure is also a regular Hexagon, and find the ratio of its area to that of the outer Hexagon.

9. Find a line such that perpendiculars let fall from any point in it on two given lines may be in a constant ratio.

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10. The chord of an arc is 12 ft. and the chord of double the arc is 20 ft.: find the diameter of the circle.

11. Find the length of an arc of 15°, the radius of the circle being 1 mile.

12. The height of a conical wooden tower is 30 ft. and the length of the slant is 34 ft.; find the price of painting it at 20 cents per square yard.

13. The diameter of the moon being 2160 miles, what is the curvature per mile of the Lunar surface, supposed spherical.

14. A square is inscribed in a circular piece of pasteboard of radius r inches, and circles again between the circumference and the sides of the square, touching these at their middle points. Cut out the square and the small circles and find the area of the remainder.

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SESSIONAL EXAMINATIONS, 1876.

FRIDAY, APRIL 21.—9 A. M.

SECOND YEAR—MATHEMATICS, EXTRA.

PROFESSOR MACDONALD,.....*Examiner.*

1. If two straight lines meeting one another be parallel to two others which meet but are not in the same plane with the former, the plane passing through the first pair of lines is parallel to the plane passing through the second.

2. Draw a straight line of given length to meet and make equal angles with two given planes which meet.

3. Find cot (A + B + C) in terms of the cotangents of A, B, and C; and deduce (1) that when A + B + C = 180°, cot A cot B + cot A cot C + cot B cot C = 1; (2) when A + B + C = 90: cot A + cot B + cot C = cot A cot B cot C.

4. The angle 2α is divided into two parts whose sines are in the ratio of $m : n$. Shew that, if $2x$ = the difference of the angles, $\tan x = \frac{m-n}{m+n} \tan \alpha$.

5. Given $(1-\tan \phi)(1+\sin 2\phi) = 1 + \tan \phi$: find general values of ϕ.

6. Given $\sin^{-1} 2x - \sin^{-1} x\sqrt{3} = \sin^{-1} x$: to find x.

7. If the bases of systems of logarithms be in Geometric Progression, their *moduli* are in Harmonic Progression.

8. Assume the series for ε^x, ε being the base of the Natural system of logarithms, and prove, by equating the co-efficients of the same powers of x in two expansions, that

$$n^n - n(n-1)^n + \frac{n(n-1)}{1 \cdot 2}(n-2)^n + \&c. = 1 \cdot 2 \cdot 3 \ldots n \text{; unless } r < n.$$

9. It is 3 to 1 that A speaks the truth, 4 to 1 that B does, and 6 to 1 that C does. When A and B assert and C denies that a certain event, not *a priori* incredible, has happened, find what is to be believed.

10. An annuity is to commence after q years and last forever, but each payment is only *half* the preceding. Shew that its present value $= \frac{A}{R^q} \cdot \frac{2}{2R-1}$.

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SESSIONAL EXAMINATIONS, 1876.

LOGIC AND PSYCHOLOGY.

SATURDAY, APRIL 15.—9 A. M. TO 1 P. M.

PROFESSOR WILLIAM LYALL, L.L.D.....*Examiner.*

1. Show the place which Logic holds in Sir W. Hamilton's distribution of the Mental Sciences.

2. Give Sir W. Hamilton's classification of the Mental Faculties.

3. On what grounds may another view of mind be vindicated ?

4. What classification of the Mental Phenomena, accordingly, have we adopted ?

5. Distinguish between the empirical and intuitional views of mind.

6. With which of the phenomena of mind, in our classification, does Logic connect itself ?

7. How do we regard Memory ? How may Imagination be characterized ?

8. How may Logic be divided, 1st in relation to the mind, or thinking subject, and 2nd in its application or non-application to objects ?

9. How is Logic abstract or general divided ? How is Pure Logic divided ?

10. Distinguish between a concept, or classification simply, and generalization.

11. How would you distinguish between Reasoning in the extensive, and Reasoning in the intensive, or comprehensive, quantity ?

12. Show how Reasoning in these two quantities, respectively, is an affair simply of the subordination of concepts. Does true reasoning come under this view ? What is the theory of true reasoning ?

13. Give the rules of the extensive syllogism.

14. Give the rules of the intensive or comprehensive, and show why the latter are just the reverse of the former, as regards at least, the second and third of these rules.

15. Explain the principle and nature of the Categorical, the Disjunctive, the Hypothetical, and the Hypothetico-Disjunctive, or Dilemmatic, Syllogisms. Give examples.

16. Explain the moods and figures of the syllogism. Show what is the true meaning of the second and third figures, and whether they are *properly* reduceable to the first.

17. Give a scheme of the Fallacies, as they are a violation of the laws of the Syllogism. Which of the Fallacies belong rather to Probation, and are not therefore to be regarded as simply a violation of these laws ?

18. Explain the Analytic and Synthetic methods.

19. Distinguish between Inductive and Deductive reasoning, and show how the Inductive is essentially Deductive.

20. Give the Rules of Definition, Division, and Probation. How may the rules of Definition and Division be shown to follow upon the principle of classification, and the determination of concepts ?

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SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 20.—9 A.M. TO 1 P.M.

JUNIOR CHEMISTRY—SECOND YEAR OF ARTS COURSE.

PROFESSOR LAWSON.....*Examiner.*

1. What is meant by the specific gravity of a body? What is the specific gravity of Atmospheric Air, of Water, of Hydrogen, of Platinum, of Lithium? What is the relation between the specific gravities and atomic numbers of the Elements?

2. Give an account of the discovery of Oxygen, describe the Element, explain, with equation, its mode of preparation, indicate the principal facts of its distribution in the earth and atmosphere (free and combined), and show wherein it resembles and wherein it differs (chemically) from Chlorine.

3. Describe the process of Manufacture of Sulphuric Acid (English method), with equations, and give an account of its chemical properties.

4. What is meant by the terms *acid, neutral* and *basic* as applied to oxides? When such oxides combine with Water what compounds are formed? What is a salt? how is it constituted? Give a few examples to illustrate the different classes of salts.

5. Give briefly, in outline, a classification of the Metals according to their equivalence or atomicity. In what way is the equivalence or atomicity of an element determined? Give some examples of Metals in which the equivalence varies. Lead in combination with Chlorine and with Oxygen appears to be dyadic, why then should it be regarded as a tetrad?

6. What are the sources of the plant's food? Where does it obtain the material that afterwards appears as ash when the plant is burnt, in what form or forms does that exist before assimilation, in the plant's tissue, and in the ash. Out of what materials are the carbohydrates (starch, sugar, &c.,) formed, and what is the chemical change by which they are produced. What gases are taken up or given off by the plant during the process?

7. "The classification of Organic compounds is based upon the equivalence or atomicity of Carbon." Explain clearly what is meant by this.

8. A solution containing Hydrocyanic Acid yields a precipitate to Argentic Nitrate in the proportion of 11 grains of precipitate to 100 grains weight of solution. What per-centage of Hydrocyanic Acid does it contain.

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FOURTH AND THIRD YEARS—LATIN.

TACITUS: AGRICOLA; GERMANIA CHAPS. 1—27.
JUVENAL SATIRES VII, VIII, XIV.

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

1. Translate: *(When the translation differs much from the Latin idiom, show that you understand the latter.)*

(*a*) Natus erat Agricola Caio Caesare tertium consule Idibus Juniis: excessit sexto et quinquagesimo anno, *decimo Kal. Sept.*, Collega Priscoque consulibus. Quodsi habitum quoque ejus posteri noscere velint, decentior quam sublimior fuit: nihil metus in vultu; gratia oris supererat. Bonum virum facile crederes, magnum libenter. Et ipse quidem, quamquam medio in spatio integrae aetatis ereptus, quantum ad gloriam, longissimum aevum peregit. Quippe et vera bona, quae in virtutibus sita sunt, impleverat, et consulari ac *triumphalibus ornamentis* praedito quid aliud adstruere fortuna poterat? Opibus nimiis non gaudebat; speciosae contigerant. Filia atque uxore superstitibus, potest videri etiam beatus incolumi dignitate, florente fama, salvis affinitatibus et amicitiis futura effugisse. Nam, sicuti durare in hac beatissimi saeculi luce, ac principem Trajanum vidēre, quod augurio votisque apud nostras aures ominabatur, ita festinatae mortis grande solatium tulit evassisse postremum illud tempus, quo Domitianus, non jam per intervalla ac spiramenta temporum, sed continuo et velut uno ictu, rempublicam exhausit.

(*b*) Hæc illi veteres præcepta minoribus: at nunc
Post finem autumni media de nocte supinum
Clamosus juvenem pater excitat: "Accipe ceras,
Scribe, puer, vigila, causas age, perlege rubras
Majorum leges, aut *vitem posce libello.*
Sed caput intactum buxo naresque pilosas
Annotet, et grandes miretur Lælius alas.
Dirue Maurorum attegias, castella Brigantum,
Ut *locupletem aquilam* tibi sexagesimus annus
Afferat: aut, longos castrorum ferre labores
Si piget, et trepidum solvunt tibi cornua ventrem
Cum lituis audita, pares, quod vendere possis
Pluris dimidio, nec te fastidia mercis
Ullius subeant ablegandæ Tiberim ultra,
Neu credas ponendum aliquid discriminis inter
Unguenta et corium. Lucri bonus est odor ex re
Qualibet. Illa tuo sententia semper in ore
Versetur, Dîs atque ipso Jove digna, poetæ:
Unde habeas, quærit nemo: sed oportet habere."
Hoc monstrant vetulæ pueris repentibus assæ;
Hoc discunt omnes ante alpha et beta puellæ.

2. (*a*) Mention the different readings, that are found in the preceding passages, and translate accordingly. (*b*) Analyze the last sentence of the first extract. (*c*) Write short notes on the words in italics in the preceding passages.

3. Write all the cases of: fuligo, balnea, ossa, altaria, Arpinas, conchem, lepŏrem, crambe.

4. Parse the following forms giving their chief parts: fulta, perfrixit, desisti, vescerentur, resecentur, ascivit, cănet, deposcendis, tergeat, scrutantur, pectere, ausim.

5. Give the meaning and derivation of: tessera, cathedra, pollice, stemma, epiredia, maniplus, popina, triscurria, serratos, semodius.

6. Translate, and write explanatory and grammatical notes on the following passages:

a. In universum aestimanti, plus penes peditem roboris.

b. Britanniae situm populosque multis scriptoribus memoratos . . . referam.

c. Emere ultro frumenta ac ludere pretio cogebantur (Britanni).

d. Occidit miseros crambe repetita magistros.

e. Jurat
Solam Eponam et facies olida ad præsepia pictas.

f. Effice summam,
Bis septem ordinibus quam lex dignatur Othonis.

7. Trace the different steps in what is called by Max Müller the Empirical stage of the science of Language.

8. Shew by examples the forms under which words beginning in English with *b, f, g, t, s* and *y* are found in Latin and Greek.

9. Translate into Latin: Marius having been appointed consul, made a speech after this fashion, when the people had voted him the province of Macedonia: I am aware, Romans, that most people do not seek office from you, and after they have obtained it, manage it in the same manner; that at first they are industrious and moderate, but afterwards pass their time in apathy and pride. But the opposite course seems to me the proper one; for just as the whole commonwealth is of more importance than a consulship or a praetorship, so much the more carefully ought it be managed than the others sought. Nor does it escape my notice, how serious a task I am undertaking; at once to prepare for war and to spare the treasury, to force into the ranks those whom one does not wish to offend, to attend to everything at home and abroad is more difficult than is generally supposed, Romans.

ADDITIONAL FOR FIRST AND SECOND CLASS.

1. Translate the following passage, which is taken from a book not read in the Course:

Ad hoc lamenta paventium feminarum, fessa aetate aut rudis pueritiae aetas, quique sibi quique aliis consulebant, dum trahunt invalidos aut opperiuntur, pars morâ, pars festinans, cuncta impediebant. Et saepe, dum in tergum respectant, lateribus aut fronte circumveniebantur; vel si in proxima evaserant, illis quoque igni correptis, etiam quae longinqua crediderant, in eodem casu reperiebant. Postremo, quid vitarent quid peterent ambigui, complere vias, sterni per agros; quidam, amissis fortunis, diurni quoque victus, alii caritate suorum, quos eripere nequiverant, quamvis patente effugio interiere. Nec quisquam defendere audebat, crebris multorum minis restinguere prohibentium, et quia alii palam faces jaciebant, atque esse sibi auctorem vociferabantur, sive ut raptus licentius exercerent, seu jussu. *Tacitus: Annals XV.*

2. How does Tacitus describe the appearance and character of the British? Give his words when you can.

3. Mention some characteristics of his style.

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THURSDAY, APRIL 13TH.

THIRD AND FOURTH YEARS.

GREEK.

DEMOSTHENES :—OLYNTHIACS, II, III.—PLATO :—APOLOGIA SOCRATIS.

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

1. Translate :—

(*a*) Οὐ μὴν οὐδ' ἐκεῖνό γ' ὑμᾶς ἀγνοεῖν δεῖ, ὦ ἄνδρες Ἀθηναῖοι, ὅτι ψήφισμα οὐδενὸς ἀξιόν ἐστιν, ἂν μὴ προσγένηται τὸ ποιεῖν ἐθέλειν τά γε δόξαντα προθύμως ὑμᾶς. εἰ γὰρ αὐτάρκη τὰ ψηφίσματα ἦν ἢ ὑμᾶς ἀναγκάζειν, ἃ προσήκει πράττειν, ἢ περὶ ὧν ἂν γραφῇ διαπράξασθαι, οὐτ' ἂν ὑμεῖς πολλὰ ψηφιζόμενοι μικρά, μᾶλλον δ'οὐδέν, ἐπράττετε τούτων, οὔτε Φίλιππος τοσοῦτον ὑβρίκει χρόνον· πάλαι γὰρ ἂν,ἕνεκά γε ψηφισμάτων, ἐδεδώκει δίκην. ἀλλ' οὐχ οὕτω ταῦτ' ἔχει· τὸ γὰρ πράττειν τοῦ λέγειν καὶ χειροτονεῖν ὕστερον ὂν τῇ τάξει, πρότερον τῇ δυνάμει καὶ κρείττόν ἐστιν. τοῦτ' οὖν δεῖ προσεῖναι, τὰ δ' ἄλλα ὑπάρχει· καὶ γὰρ εἰπεῖν τὰ δέοντα παρ' ὑμῖν εἰσίν, ὦ ἄνδρες Ἀθηναῖοι, δυνάμενοι, καὶ γνῶναι πάντων ὑμεῖς ὀξύτατοι τὰ ῥηθέντα, καὶ πρᾶξαι δὲ δυνήσεσθε νῦν, ἐὰν ὀρθῶς ποιῆτε.

(*b*) Φαῦλοι γὰρ ἂν τῷ γε σῷ λόγῳ εἶεν τῶν ἡμιθέων ὅσοι ἐν Τροίᾳ τετελευτήκασιν οἵ τε ἄλλοι καὶ ὁ τῆς Θέτιδος υἱός, ὃς τοσοῦτον τοῦ κινδύνου κατεφρόνησε παρὰ τὸ αἰσχρόν τι ὑπομεῖναι, ὥστε ἐπειδὴ εἶπεν ἡ μήτηρ αὐτῷ προθυμουμένῳ Ἕκτορα ἀποκτεῖναι, θεὸς οὖσα, οὑτωσί πως, ὡς ἐγῷμαι· ὦ παῖ, εἰ τιμωρήσεις Πατρόκλῳ τῷ ἑταίρῳ τὸν φόνον καὶ Ἕκτορα ἀποκτενεῖς, αὐτὸς ἀποθανεῖ· αὐτίκα γάρ τοι, φησί, μεθ' Ἕκτορα πότμος ἑτοῖμος· ὁ δὲ ταῦτ' ἀκούσας τοῦ μὲν θανάτου καὶ τοῦ κινδύνου ὠλιγώρησε, πολὺ δὲ μᾶλλον δείσας τὸ ζῆν κακὸς ὢν καὶ τοῖς φίλοις μὴ τιμωρεῖν, αὐτίκα, φησί, τεθναίην δίκην ἐπιθεὶς τῷ ἀδικοῦντι, ἵνα μὴ ἐνθάδε μένω καταγέλαστος παρὰ νηυσὶ κορωνίσιν ἄχθος ἀρούρης. μὴ αὐτὸν οἴει φροντίσαι θανάτου καὶ κινδύνου; οὕτω γὰρ ἔχει, ὦ ἄνδρες Ἀθηναῖοι, τῇ ἀληθείᾳ· οὗ ἂν τις ἑαυτὸν τάξῃ ἢ ἡγησάμενος βέλτιστον εἶναι ἢ ὑπ' ἀρχοντος ταχθῇ, ἐνταῦθα δεῖ, ὡς ἐμοὶ δοκεῖ, μένοντα κινδυνεύειν, μηδὲν ὑπολογιζόμενον μήτε θάνατον μήτε ἄλλο μηδὲν πρὸ του αἰσχροῦ.

2. Give all the cases of: *νίεέ*, Σωκράτης, *ἥττω*, *ἀξιόχρεως*, *γείτονος*.

3. In what voice, mood, tense and person are the following verbs found? Give their present, future, aorist, and perf. act., and the fut. passive, (if used)—*ἠφίετε*, *ληφθῇ*, *ἠνώχλει*, *προπέποται*, *ἀπεστερήμεθα*, *ἁλῷς*, *ᾔδη*, *ὤνησας*, *δέδιασι*, *ὁρμήσειε*.

4. Translate these sentences; account for the cases and moods, and supply ellipses: (*a*) *ὡς δ' ἐγώ* * * *τινὸς ἥκουαν ἀνδρὸς οὐδαμῶς οἵου*

ε ψεύδεσθαι, (ἐκεῖνοι) οὐδένων εἰσὶ βελτίους· (b) εἰ δή τῳ σοφώτερος του φαίην εἶναι, τούτῳ ἄν, ὅτι οὐκ εἰδὼς ἱκανῶς περὶ τῶν ἐν Ἅιδου, οὕτω καὶ οἴομαι οὐκ εἰδέναι.

5. What moods are found in dependent questions? Explain their use. Shew that the infinitive is more constantly used in Greek than in Latin.

6. Translate these phrases:—*κατὰ ῥόον—παρ'ἐμοί—παρ'ἐμοῦ—παρὰ τὸν νόμον—τὴν ἀρχήν—τελευτῶν—ἑκὼν εἶναι—ὀλίγου δεῖν—ὁ οὐ πιστεύων—ὁ μὴ πιστεύων—νόμον θεῖναι, νόμον θέσθαι.*

7. Write short notes on:—*Ποτίδαια, συμμορίαι, Περικλῆς, τὰ θεωρικά, Καλλίας ὁ Ἱππονίκου.*

8. Give some account of the charges against Socrates: his defence, and the court by which he was tried.

9. Translate into Greek:—The Athenian generals were afraid lest the city should be besieged.—He said that they ought to go to the assistance of the Athenians, when they were injured by others, and were not themselves injuring others.—I never yet repented of having been silent, but frequently of having spoken.

ADDITIONAL FOR FIRST AND SECOND CLASS.

1. Translate the following passage, taken from a work not read in the course:—

Ὁρᾶτε δὲ κἀκεῖνο, ὦ ἄνδρες Ἀθηναῖοι, ὅτι πολλοὺς ὑμεῖς πολέμους πεπολεμήκατε καὶ πρὸς δημοκρατίας καὶ πρὸς ὀλιγαρχίας, καὶ τοῦτο μὲν ἴστε καὶ αὐτοί· ἀλλ' ὑπὲρ ὧν πρὸς ἑκατέρους ἐσθ' ὑμῖν ὁ πόλεμος, τοῦτ' ἴσως ὑμῶν οὐδεὶς λογίζεται. ὑπὲρ τίνων οὖν ἐστίν; πρὸς μὲν τοὺς δήμους, ἢ περὶ τῶν ἰδίων ἐγκλημάτων, οὐ δυνηθέντων δημοσίᾳ διαλῦσασθαι ταῦτα, ἢ περὶ γῆς μέροῦς, ἢ ὅρων, ἢ φιλονεικίας, ἢ τῆς ἡγεμονίας· πρὸς δὲ τὰς ὀλιγαρχίας, ὑπὲρ μὲν τούτων οὐδενός, ὑπὲρ δὲ τῆς πολιτείας καὶ τῆς ἐλευθερίας, ὥστ' ἐγωγ' οὐκ ἂν ὀκνήσαιμι εἰπεῖν, μᾶλλον ἡγεῖσθαι συμφέρειν δημοκρατουμένους τοὺς Ἕλληνας ἅπαντας πολεμεῖν ὑμῖν, ἢ ὀλιγαρχουμένους φίλους εἶναι.

2. What are the Latin equivalents for:—*παρ' οὐδὲν ποιεῖσθαι—ἐπὶ τούτῳ—ὡς ἔπος εἰπεῖν—κατὰ δύναμιν—χαλεπὸν εὑρεῖν—ἀξιὸς ἐπαινεῖσθαι ἐμαυτῳ ξυνῄδειν οὐδὲν ἐπισταμένῳ?*

3. In what different ways may a purpose be expressed in Greek? Distinguish the use of *οὐ* and *μή* with the different moods.

4. Translate into Greek;—The present crisis, if ever any did, needs much thought and counsel. But the counsel I ought to give on the present state of affairs, I do not think the most difficult question; but I am at a loss about this point: in what way I ought to speak to you about them, Athenians.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

MONDAY, APRIL 17.—9 A.M. to 1 P.M.

THIRD YEAR—STATICS AND DYNAMICS.

PROFESSOR MACDONALD,.....*Examiner.*

1. Prove the last of the subdivisions of the Proposition called the "Parallelogram of Forces."

2. Three forces, not in the same plane, whose direction and magnitude are given, act at a point. Find their Resultant.

3. Forces of 15 and 8, acting at a point, have a resultant 17 : find the angle at which they act. Suppose these forces acted at angle 60°, what would the Resultant be ?

4. Find the Resultant, and its point of application, of two parallel forces that act in opposite directions. Consider the case when they are equal.

5. Given a homogeneous cone of height a: cut out from it another cone of the same base and of height b; find the centre of gravity of the remaining tapering shell.

6. A sphere rests against a smooth verticalplane, and is kept from falling by a string fastened to a point in its surface and to a point in the plane. Show that the points of attachment and the centre of the sphere are in the same straight line, and find the tension of the string.

7. Classify the Mechanical Powers, with remarks on them : and prove the principle of *Virtual Velocities* for any one of them.

8. Explain the formula in Dynamics, $v = V \pm ft$: and deduce from the proper sources the formula $v^2 = V^2 \pm 2fs$.

9. Prove the formula for Centrifugal Force, $f = \frac{v^2}{r}$, and adapt it to find the *pull* of a body of weight W, which is restricted to a circular orbit.

10. Show that the velocity, acquired from rest, by a body that has descended through any height is independent of the path described.

11. To attain, with a given velocity of projection, any Range on a horizontal plane, short of the greatest, a body may be projected at either of two angles. Find their relation to each other.

12. If two perfectly elastic balls make direct impact, prove

$$m v^2 + m' v'^2 = m V^2 + m' V'^2.$$

13. A weight Q resting on a horizontal table (r the co-efficient of relative friction) is drawn along the table by a weight P, attached to Q by means of a horizontal cord passing over a pully placed at the edge of the table. Shew that the tension of the cord is $\frac{PQ}{P+Q}(1+r)$.

14. A weight P, after falling freely through h feet, begins to pull up, as in Attwood's machine, a heavier body Q. Shew that the height through which Q will rise $= \frac{P^2 h}{Q^2 - P^2}$.

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1876.

TUESDAY, APRIL 18.—9 A.M. to 1 P.M.

EXPERIMENTAL PHYSICS.

VERY REV. PRINCIPAL ROSS, D.D.....*Examiner.*

1. What is an Atom ?—a Molecule ?—a Physical law ?—Physical force ?

2. In what circumstances is the weight of a body a correct measure of its mass ?

3. What is the difference between the amount of matter contained in a pound of lead and a pound of cork weighed in the usual way ?

4. Compare the force of gravity at the Equator, and at any parallel (say 80°) N. or S. latitude.

5. What is the Unit of Force ?—a Horse power ?

6. Explain what is meant by the Elasticity of flexure ?—of torsion ?

7. What is the fundamental principle in Hydrostatics ? Outline the apparatus by which this principle may be proved. What powerful machine has been constructed on this principle ? What is its peculiar advantage ?

8. Outline the instrument called Marriotte's tube. State the law which it is intended to verify.

9. Explain the nature and cause of Echoes,—of Resonance,—of Multiple echoes.

10. What is the smallest number of vibrations in a second audible by an ordinary ear ?—the largest number ?

11. Explain the reasons why signals at sea furnished by fog whistles, syrens, &c., are frequently deceptive. What rule should the mariner follow when he hears the sound, in order to be perfectly safe ?

12. What are the general effects of Heat.

13. Explain minutely the experiment by which water is frozen under an exhausted receiver.

14. What is Diathermancy and Athermancy ? Give examples.

15. Explain the phenomenon of total reflection. What is the critical angle ?

16. Describe a converging concavo-convex lens. For what purpose is it employed ?

17. What is Chromatic aberration ? How can it be corrected ?

18. What is Thermo-Electricity ? How is it excited ?—Magneto-Electricity ?—How excited ?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

METAPHYSICS AND ESTHETICS.

SATURDAY, APRIL 15.—9 A. M. TO 1 P. M.

PROFESSOR WILLIAM LYALL, L.L.D.....*Examiner.*

1. How is Metaphysics, as a Science of Being, reducible at last to a Science of Knowing?

2. In what School of Philosophy did this distinction, or rather identity, first emerge? Show how the limits of the two enquiries came to define themselves.

3. Point out the first stage of divergence between Materialism and Idealism in Philosophy. Who were the early representatives of the respective systems of thought?

4. What were the circumstances in which the system or school of the Sophists arose? From what opposite points of view did Gorgias and Protagoras assail Philosophy, and so involve all knowledge in uncertainty?

5. How did Socrates meet the emergency in thought created by the Sophists?

6. In what respects did Plato seem to solve the Difficulties, on either hand, in regard to the theories of knowing and being?

7. What is the point of difference, but in some sense really the point of accord, between Plato and Aristotle?

8. What is the doctrine of Diffidence of Arcesilaus, and the doctrine of Probabilities of Carneades; and how may you connect their views with previous speculation?

9. On what kind of faith did Philo insist, and what was the theory of ecstasy and absorption as held by Plotinus?

10. With what name does Ancient Philosophy close?

11. What is the place of Boethius, Cassiodorus, Isidorus of Seville, and the venerable Bede of England, in Philosophy?

12. What question chiefly divided the scholastic age of speculation, and what was the fate of this question?

13. What are the forms which Ontological Speculation takes in Modern Philosophy? On what different sides do Modern Philosophers range themselves on the question of Realism and Nominalism?

14. What are the theories that divide the philosophic world on the subject of perception? What is the Ontological, and what the Psychological element in this question?

15. What is Kant's tri-partite division of mind, and in opposition to what division of Aristotle was this proposed?

16. On what principle have the emotions been classified, and what seems to afford the only philosophic ground of classification?

17 What is the place of the esthetic emotion? Give a statement of the different theories of the Beautiful and Sublime. Wherein do Cousin's and Alison's theories agree?

18. Classify the Arts. Classify Painting on somewhat the same principle as Poetry.

19. Whether do the Conations precede the Emotions or the Emotions the Conations? How may we classify the Desires?

20. Is the will but the prevailing desire? What views have been held in regard to the Will?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

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HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 20.—9 A.M. TO 1 P.M.

SENIOR CHEMISTRY—THIRD YEAR OF ARTS COURSE.

PROFESSOR LAWSON.....*Examiner.*

1. Describe Ammonia, as regards its sources, its chemical and physical properties and the mode of testing for its salts. Compare Ammonia, Amines, Amides, Alkaloids. What is Urea?

2. Give an account of the Manufacture of Phosphorus from Bone Earth, explaining each step of the process, with equations showing the re-actions that take place.

3. Give a general account of the principles of Classification of Organic Compounds.

4. What is the constitution, modes of occurrence, formation, properties and re-actions of the first series of Hydrocarbons of the Fatty Group, $C_n H_{2\,n+2}$

5. What is the Constitution of an Alcohol? Why are the Alcohols classed as monatomic, diatomic, triatomic, &c. What is a haloid Ether? What is the constitution, mode of formation and chemical properties of Common or Ethyl Alcohol? Describe briefly some of the more important Ethylic Ethers.

6. Does Methenyl Alcohol exist? To which class or series (as regards atomicity) does it belong? In what way is Methenyl Chloride produced, what are its properties, and in what way is it tested for in cases of poisoning.

7. What is Glucose, what is a Glucoside, what is a Poly-glucossic Alcohol. Give examples.

8. Compare, as regards their composition and constitution, Potassium Cyanide, Potassium Ferrocyanide, and Potassium Ferricyanide. Describe each salt briefly, and the mode of Manufacture of the Ferrocyanide.

9. Give a concise account of the constitution of the Fatty Acids $C_n H_{2\,n} O_2$. What is Stearic Acid. Describe the process of Saponification.

10. Compare the Paraffins, Olefines, Alcohols and Ethers, Organic Acids Aldehydes, and Ketones, of the Fatty Group.

DALHOUSIE COLLEGE AND UNIVERSITY,
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SESSIONAL EXAMINATIONS, 1876.

FRIDAY, APRIL 21.—9 A.M. TO 1 P.M.

FRENCH—ELEMENTARY CLASS.

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

Translate: †I. Cette humiliation devant celui qui envoie les orages et le calme; cette conscience de notre petitesse à la vue de l'Infini; ces chants s'étendant au loin sur les vagues; la nuit s'approchant avec ses embûches; la merveille de notre vaisseau au milieu de tant de merveilles; un équipage réligieux, saisi d'admiration et de crainte; un prêtre auguste en prière; Dieu penché sur l'abîme, d'une main retenant le soleil aux portes de l'occident, de l'autre élevant la lune à l'horizon opposé, et prêtant, à travers l'immensité, une oreille attentive à la faible voix de sa créature: voilà ce que l'on ne saurait peindre, et ce que tout le coeur de l'homme suffit à peine pour sentir.—*Châteaubriand.*

II. J'avais lieu d'être content de mon partage. Cela m'inspira une nouvelle ardeur pour la médecine. Le lendemain, dès que j'eus dîné, je repris mon habit de substitut, et me remis en campagne. Je visitai plusieurs malades que j'avais inscrits, et je les traitai tous de la même manière, bien qu'ils eussent des maux différents. J'entrai chez un marchand épicier qui avait un fils hydropique. J'y trouvai un petit médecin brun qu'on nommait le docteur Cuchillo, et qu'un parent du maître de la maison venait d'amener. Je fis de profondes révérences à tout le monde, et particulièrement au personnage que je jugeai qu'on avait appelé pour le consulter sur la maladie dont il s'agissait.—Le Sage (*Gil Blas*).

III. † *Ledru (seul, brossant l'habit).* Voilà ce qui s'appelle ne pas avoir la moindre idée des convenances! Il faudra que je lui donne des leçons là-dessus. Mais lui parler dans ce moment-ci. . .

M. Roberville. En voici bien d'une autre! qu'est-ce que je vois là! Notre gouverneur qui bat les habits de mon fils!

Ledru. Ce n'est rien, ce n'est rien, ne faites pas attention; c'est une suite de mon système d'éducation: comprenez-vous? Je tiens à ce que mon élève soit tenu proprement. Nous autres philosophes, nous regardons la propreté comme le miroir de l'âme.

M. Rob. D'accord; mais il ne fallait pas vous donner ce soin. Le premier domestique. . . .

Ledru. Vous n'y êtes pas. Le domestique, c'est moi. Le premier précepte de la sagesse est de savoir se passer des autres et de se servir soi-même.—*Scribe.*

*IV. *a*) Extracts from Boileau (*Les embarras de Paris*); lines 57-68 inc.
b) do. from Delille (*Les catacombes de Rome*); lines 63-74 do.

Translate into French: A. Elizabeth, Queen of England.—Elizabeth loved her people; and, by her strict economy, she took peculiar care of the public money. Although possessed of many virtues, her passions were too strong to admit of constant restraint, which caused her to commit some injustice; but these faults were opposite to her natural character. No woman ever reigned with more glory; and there are few kings whose reign can be compared with hers. It is the most glorious era of English history, and it produced a great number of celebrated statesmen and warriors.

B. Dialogue between *M. Jourdain* and his *Master of Philosophy:*

Master.—Very well! Is it poetry you wish to write to her? *Jonrd.*—No, no, no poetry.—You only want prose?—No, I neither want prose nor poetry.—It however must be one or the other.—Why?—Because, sir, there

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Questions marked (†) are to be substituted for those marked (*), by the advanced class.

is only prose or poetry in which to express one's self.—There is only prose or poetry?—Yes, sir, all that is not prose is poetry, and all that is not poetry is prose.—And as one speaks, what is that?—Prose.—What! if I say: Nicole, bring me my slippers, and give me my night-cap, is this prose?—Yes, sir —On my faith! for more than forty years I have been speaking prose without my knowing anything about it, and I am exceedingly obliged to you for having apprized me of that.

(1). Distinguish between: *Voilà ce que* (I) and *Voilà ce qui* (III) mention the corresponding *interrogative prons.*, and translate: What causes so much misfortune? What I am thinking of, is your welfare That is not what he is complaining of I distinctly remember what was spoken of at the meeting. What was done, was well done.

*(2) *Bien qu'ils eussent* (II). Account for this expression. Explain 1): why the verb must be in this mood, 2) *in what case this mood may be substituted by the* INFINITIVE, 3) *when the verb is to be preceded by* NE. Write an ex. in. illustration of each case.

(3). What is to be observed respecting the following expression: *venait d'amener* (II) 2. Mention other similar forms. Translate: You ought to succeed. He should have taken a prize.

(4.) Write the following sentences correctly, and state the rule in each instant: *Il y a plus que cents ans. C'est moi qui l'a fait. Vous êtes un Anglais. Il nous lui recommande. La chose—je pense à elle. Ces questions—nous allons parler d'elles, et répondre à elles.*

(5). Determine the position of the noun, following in English the *relative* pron. *whose*, and give two exs. How do you express the *interrog.* pro. *whose*? Translate: God, from whom we have received reason, and to whose love we owe what we are. *Le fils de la reine qui se trouve en pays étranger . . . ;* how and why should the construction be altered?

†(6) *Quiconque; quelques-uns; chacun; nul; telle.* Write short exs. on these words.

(7) Whatever was your intention, you were wrong to act thus. However beautiful she may be, she cannot conceal her ignorance. Show by an ex that *whatever*, written in *one* word, may assume the *plural* form.—Write the equivalents of Whatever may be said about it Whoever he, they (f) may be. He is some sixty years old

†(8) *Placer, juger, mener, appeler. payer;* write the *present* part. & the 3rd pers. pl. *Ind. pres.* of these verbs. Also, the 3 pers. sing. of *past def.*, 3d pers. pl. of *Future*, and the participles of: *acquérait, meurs, parvenir, pourvois, sais, s'asseoir.*

(9) The *reflective* pron. (*2d pers. sing.*) assumes a peculiar form in the *Imperative* mood? Give an ex.; write the same ex. in the interrogative and negat. interrog. forms of the *Indicative*. Mention all the verbs that are conjugated with *être*.

(10) Correct what is wrong in the follg. sents., and explain the agreement of participles: Les personnes *aimantes* tout le monde, n'aiment ordinairement personne. Ils sont *parti* en *courant*. Ce sont des connaissances utiles qu'il s'est *acquis*. C'est aux sciences naturelles qu'ils se sont *voués*.

(11) Give the rules of agreement for participles in: The quantity of snow that has fallen (*fait* or *faite*). Those persons have written to one another though they have never seen each other. We have been walking more than four hours. The physicians that have been sent for.

(12) Mention adverbs which follow the *participle* and the *Infinit.* *Ainsi* requires inversion of the *subject* in one case? write an ex. *Ces merchandises coûtent chérs.* Correct this sent. giving full explanation. Parler *bas, hant;* parler *bassement, hantement.* Point out the difference between these expressions.

*(13) The Conjunction *whether* has three forms? Translate: I desire to know whether you will come. Whether I read or write. He doubts whether he will succeed.

(14) Illustrate the use of *chez; en retard; vers; envers; dans, en.*—Name those prepositions which are also used as *adverbs.*

*(15) Write short notes, giving dates and mentioning the principal works of the following authors: Bossuet, Boileau, J. J. Rousseau, Voltaire, and Delille.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

FRIDAY, APRIL 21.—2 P M. to 6 P.M.

GERMAN—ELEMENTARY CLASS.

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

Translate: I. Schiller's *Taucher,*

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

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

II. Uhland's *Sängers Fluch.*

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

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

Sie singen von Lenz und Liebe, von sel'ger goldner Zeit
Von Freiheit, Männerwürde, von Treu' und Heiligkeit,
Sie singen von allem Süssen, was Menschenbrust durchbebt,
Sie singen von allem Hohen, was Menschenherz erhebt.

III. Wieland's *Abderiten.*

Zum Unglück erstreckte sich die schlimme Gewohnheit auf ihre Handlungen; denn gemeiniglich schlossen sie den Käficht erst, wenn der Vogel entflogen war. Dies zog ihnen den Vorwurf der Unbesonnenheit *zu*; aber die Erfahrung bewies, dass es ihnen nicht besser ging, wenn sie sich besannen. Machten sie (welches ziemlich oft begegnete) irgend einen sehr dummen Streich, so kam es immer daher, weil sie es gar zu gut machen wollten; und wenn sie in den Angelegenheiten ihres gemeinen Wesens recht lange und ernstliche Berathschlagungen hielten, so konnte man sicher darauf rechnen, dass sie unter allen möglichen Entschliessungen die schlechteste ergreifen würden.

IV. A. Wilhelmi's *Einer muss heirathen!*

Jakob. Wilhelm. Um's Himmelswillen, Tante—Erschrecken Sie uns nicht so!

Gertrude. Pfui! Schämt Euch, mir alten Frau auch gar nichts zu Liebe zu thun. Wenn ich Euch auch nichts gelte, solltet Ihr doch das Gebot Eures sterbenden Vaters in Ehren halten. Ich habe nichts studirt, aber das weiss ich doch, dass es eine heilige Pflicht ist, den Wunsch der Eltern zu erfüllen.—Habt Ihr denn gar nicht gemerkt, warum ich meines verstorbenen Bruders Tochter in's Haus nahm?

Jakob. Wie, Tante, Louise? Ihre Nichte? Unsere Verwandte?

Gertrude. Eine so weitläufige Verwandtschaft hat gar nichts zu sagen. Sie ist nicht reich, aber schön und, was die Hauptsache ist, gut und brav. Also kein Federlesens, sondern einen raschen Entschluss, denn nicht Alles wird gut, was lange währt. Drum fackelt nicht lange! Einer von Euch

muss unter die Haube, will sagen unter den Pantoffel. Ueberlegt jetzt, und wenn ich wiederkomme, muss ich wissen, welcher von Euch Bräutigam ist. Adieu!

Translate into German:

A countryman brought home from the city five of the most beautiful peaches that could be seen. But his children saw the fruit for the first time, and were very much astonished at and pleased with the beautiful apples with the rosy, velvety cheeks. The father gave one to each of his four sons, and one to the mother.....This gentleman has been absent from his native country for many years; he is a German, and a man much to be respected. What can he be laughing at? It should have been thought of earlier. The longer the days are, the shorter are the nights. The patient was not allowed to leave the room. What would you have him do? Paris is said to be the finest city in the world. The institution is to be opened next week! Half of this house is to (be) let. German is the only language in which he is not perfect yet. The affair happened while I was in London. It is not to be thought of.

(1) Decline in the four cases sing.: die einzige fühlende Brust; blut'ger Nordlichtschein; a noble English count; white hair (*Sing. & Plur.*); many good people.

(2) What part of speech is *darauf* (III)? Which is its English equivalent. Show by two exs. that there are other corresponding forms. Explain the Syntax of the word *zu* (III).

(3) Indicate, by giving an ex for each, the three forms in which the *Superlative* degree may be expressed. Compare: *kurz, nahe, voll, viele, weuig, gern, bald.* Translate: You drink stronger coffee than is good for you. I know it is more strong than good. London is nearly again as large as Paris. The richer he becomes, the less he gives to the poor.

(4) In what do assonant and dissonant verbs differ? Which verbs reject the syllable *ge* in the part. p.? Write the Imperf. and past part. of: *ersuchen, einführen, frühstücken, rennen, studiren, widersprechen, anvertrauen, übersetzen, gehen, aufstehen, liegen bleiben, zuvorkommen, geschehen.*

(5) Analyze the sentence beginning with: *Machten sie....(III),* fully explaining the various forms of construction.

(6) Write exs., showing *a*) the position of the negation *nicht*; *b*) the position of the adverbials of *time* and *place*; *c*) the position of the *Subject* if the sent. begins with another part of speech. Correct the sent.: Nachdem Gott hatte erschaffen die Welt, er ruhte aus am siebenten Tag.

(7) What form does the *English* present part. assume in German? Translate: Relating the matter to him, he became angry. When has the adverb of interrogation the value of a relative conjunction. Translate: I don't know why he has not written.

(8) State the difference between the English and German *passive voice,* and give three exs. in illustration of it.

(9) Into how many periods is the history of German literature divided? Mention them. Give the dates of the two classical periods, state briefly the chaaracteristic features of both. Which are the most ancient documents of German poetry; what is their metrical form, and date. Which is called the Old High German Language?

(10) Mention the most important written poetic works of the 2nd period (of the 8th and 9th cent.) What is the *Heliand* and in what dialect is it written?

(11) Which is the most celebrated work of the 3rd period; When and by whom was it written? What is its metrical form, and what its subject? What is *Gudrun*? what relation does it bear to the other work?

(12) Mention the most celebrated writers of the second classical period. Give dates of Birth and Death of *Schiller* and *Goethe.*

(13) Classify Schiller's dramas. Which are his best lyric poems and when composed? What is the leading feature of his writings?

(14) Which of his dramas particularly displays the beauty of the German Language? State the principle features of any two of them.

DALHOUSIE COLLEGE AND UNIVERSITY,
HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

TUESDAY, APRIL 18, 9 A.M. TO 1 P.M.

ETHICS.

VERY REV. PRINCIPAL ROSS, D.D.....*Examiner.*

1. State the arguments for and against the claims of Ethics and Sociology to be recognized as true Sciences.

2. What special difficulties are to be encountered in the study of mental Phenomena?

3. What method of investigation is to be employed in our efforts to determine the law of mental processes?

4. Define volition; and mention the mental states and operations by which it is preceded.

5. What determines the choice of the will?

6. Classify the motives which stimulate to action.

7. Illustrate the power of the desire of society as a principle of action.

8. Shew the importance of the desire of Superiority in improving the Individual and Society.

9. What elements must necessarily enter into the constitution of the Summum Bonum?

10. Analyze the phenomena connected with an act of conscience.

11. Explain the *Utilitarian* system of morals. State the objections to which it is open. Name the principal advocates of this system in Great Britain.

12. Write notes on Hutcheson's theory of morals;—on Smith's theory of moral sentiments.

13. Prove that justice is a duty.

14. Give Whewell's classification of duties.

15. Did Socrates act rightly when, being unjustly condemned to die, he refused to escape? Assign reasons.

16. What is the distinguishing feature of the composite order of Architecture?

17. What is the supposed origin of the column?

POLITICAL ECONOMY.

1. Define Political Economy.
2. What is a Product?
3. By what means can human labor, so far as it is merely the exercise of power, be supplemented?
4. What incentives should be employed to stimulate productive industry?
5. In what way does the Poor Laws especially in Great Britain and in this country, interfere with these incentives?
6. What are the effects of minute subdivision of labor upon the laborer?
7. What principally regulates the cost of production?
8. Is the removal of Capital from a country necessarily a national loss? Assign reasons.
9. In what way does credit assist production?
10. Compare the advantages of large and small farming.
11. Compare the advantages and disadvantages of Direct and Indirect taxation.
12. Write notes on the *Laisser-faire* principle.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876

WEDNESDAY, APRIL 19.—9 A.M. TO 1 P.M.

MODERN HISTORY—FOURTH YEAR.

PROFESSOR DEMILL, M. A.... .....*Examiner.*

(Not more than six questions are to be answered.)

1. The chief events in the history of Rome *(a)* political, and *(b)* ecclesiastical, during the reign of the Emperor Justinian.

2. The revival of the Empire of the West by Charlemagne, its causes, and results.

3. The Empire in Germany from Rudolf I, to Maximilian I; its domestic and foreign relations.

4. The chief marriages by which the power of the House of Hapsburg was enlarged and perpetuated.

5. The pontificate of Innocent III.

6. The history of Switzerland from the Battle of Morgarten to that of Morat.

7. The history of Poland from the accession of John Sobieski to the final partition.

8. The States General of France, their origin, chief meetings, causes for which they were summoned, and proceedings on each occasion.

9. The French Parlements.

10. The history of the Ottoman Empire from the conquest of Constantinople to the death of Amurath IV.

11. The origin and developement of civil law in Europe.

12. The Feudal System.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876

THURSDAY, APRIL 20.—9 A.M. TO 1 P.M.

CONSTITUTIONAL HISTORY—FOURTH YEAR.

PROFESSOR DEMILL, M. A.... .....*Examiner.*

(Not more than six questions are to be answered.)

1. The demands of Henry VIII, in Parliament were considerable both in frequency and amount.

2. A difference arose between Queen Elizabeth and the Parliament concerning the succession.

3. There was a disagreement between King James and the Commons arising out of the question of the war in the Palatinate.

4. Give an account of the proceedings of the first and second Parliaments of the reign of Charles I.

5. What was the Council of York?

6. Enumerate the salutary measures of the Long Parliament.

7. What were the circumstances that brought about the Restoration?

8. Give an account of the impeachment of the Earl of Clarendon.

9. Show the power of the press during the reign of Charles II.

10. Relate the proceedings of the Convention of 1688.

11. What were the chief Constitutional measures of the reign of William III.

12. Explain the distinctive principles of Whigs and Tories.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

WEDNESDAY, APRIL 19.—3 to 6 P.M.

EARLY ENGLISH HISTORY—FOURTH YEAR.

PROFESSOR DEMILL, M. A.....*Examiner.*

(Not more than six questions are to be answered.)

1. Give an account of the conversion of the Anglo-Saxons to Christianity.

2. Mention the earliest notices *(a)* of the Teutonic Race; and *(b)* of the Angles and Saxons in Germany; and show the value of such notices.

3. The institutions of the Franks may throw much light on those of the ancient Saxons in Germany.

4. Describe the mode of settlement adopted by the Teutonic invaders of Britain.

5. Enumerate the privileges of Royalty among the Anglo-Saxons.

6. In the course of time the Anglo-Saxons institutions became subject to modifications, and underwent a slow but regular developement.

7. Give an account of the growth of the Towns and Guilds during the Norman period.

8. Describe the military system under the Normans.

9. Give an account of the system of taxation under the Plantagenets.

10. Show the change which took place in the respective position of the different orders of State *(i.e.,* the monarchy, nobility, clergy, and commonalty,) during the Norman and Plantagenet periods.

11. Give a summary of the progress of Parliament in the acquisition of various rights and privileges up to the time of the Tudors.

12. Give an account of the Villeins, from the Norman period to that of the Tudors.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 13, 9 A.M.

FOURTH YEAR—HYDROSTATICS, OPTICS, ASTRONOMY.

PROFESSOR MACDONALD,.....*Examiner.*

1. Two fluids that do not mix, are at rest in the same vessel. Prove that their common surface is level.

2. ABCD is a parallelogram (breadth h) immersed vertically in a liquid, AB parallel to the surface and at a depth h below it. Draw the diagonals AEC and BED, and compare the pressures on the triangles AEB and CED.

3. How is the law, PV=P′V′, for elastic fluids proved? Write the equation connecting *volumes*, *pressures* and *temperatures*, for the same quantity of a gas. There are 100 cubic inches of air (dry) at temp. 32°, barometer 30 inches: what will be the volume of this air whem the barometer falls 1 inch, and the temperature rises to 72° Fahr?

4. Draw a Forcing pump, and find approximately the resistance to be overcome by a piston of 2 feet area, which delivers water at a height of 44 feet above the surface of the water raised.

5. Account, on the Thermo-dynamical theory, for the disappearance and evolution of heat in the processes of liquefaction and congelation. Also: 2 lbs. ice at 32° are exposed to the action of 1 lb. of steam at 212°. After a short interval what is the result?

6. A heavy conical shell, was allowed to sink in water, till the water rose through $\frac{1}{3}$ of the internal height of the shell. Assuming that the pressure of 33 ft. of water is equivalent to 1 Atmosphere, find the depth of the edge of the cone below the surface.

7. The flame of a candle, 2 inches in height, is placed in front of a concave mirror of 3 feet radius and at a distance of 10 feet. Find the position and magnitude of the image, and shew whether it is erect or inverted.

8. Describe the Astronomical Telescope, and find its magnifying power.

9. The formula for the principal focal length of a concavo-convex lens is $\frac{1}{f} = (\mu - 1)\left(\frac{1}{r} - \frac{1}{r'}\right)$. Adapt this to the cases of a double-concave, double-convex, and plano-convex lens.

10. Shew the importance to the sailor of a Noon-observation of the sun.

11. Explain the *sidereal*, *tropical*, and *anomalistic* years, mentioning any secular effects dependent on their differences.

12. Give a circumstantial account of the moon's motion, correcting any popular misconceptions you are aware of.

13. Show how to find the equation $R = r.\frac{\sin z + \sin z'}{z + z, - l - l,}$ which according to the usual notation determines the moon's horizontal parallax.

14. Prove, geometrically, Kepler's *second law*, "that the areas swept over by the radius vector are proportional to the times."

DALHOUSIE COLLEGE AND UNIVERSITY.

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

FRIDAY, APRIL 21.—2 to 6 P.M.

FRENCH—ADVANCED CLASS.

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

Traduisez: I.

Curiace. Que désormais le ciel, les enfers et la terre
Unissent leurs fureurs à nous faire la guerre :
Que les hommes, les dieux, les démons et le sort
Préparent contre nous un général effort ;
Je mets à faire pis, en l'état où nous sommes,
Le sort et les démons, et les dieux, et les hommes :
Ce qu'ils ont de cruel, et d'horrible, et d'affreux,
L'est bien moins que l'honneur qu'on nous fait à tous deux.

Horace. Le sort, qui de l'honneur nous ouvre la barrière,
Offre à notre constance une illustre matière :
Il épuise sa force à former un malheur,
Pour mieux se mesurer avec notre valeur;
Et comme il voit en nous des âmes peu communes,
Hors de l'ordre commun il nous fait des fortunes.
Mourir pour le pays est un si digne sort,
Qu'on brignerait en foule une si belle mort.
Mais vouloir au public immoler ce qu'on aime,
S'attacher au combat contre un autre soi-même,
Attaquer un parti qui prend pour défenseur
Le frère d'une femme, et l'amant d'une sœur,
Et, rompant tous ces nœuds, s'armer pour la patrie
Contre un sang qu'on voudrait racheter de sa vie:
Une telle vertu n'appartenait qu'à nous.
L'éclat de son grand nom lui fait peu de jaloux;
Et peu d'hommes au cœur l'ont assez imprimée,
Pour oser aspirer à tant de renommée.– *Corneille.*

II. Pour reconnaître si le genre humain pense avec Helvétius que les actions ne sont moralement bonnes qu'en raison de leur utilité, soumettons à son jugement deux actions différentes. Je crois de mon devoir de faire telle action ; supposons, par exemple, une fondation charitable, un asile, une école, une maison pénitentiaire, ou tout autre établissement semblable: je fais cette action avec la conscience qu'il n'y a pas en moi le moindre calcul d' intérêt personnel; je la fais uniquement parce que je crois devoir la faire. Mais voilà que cette action, noble dans ses motifs, et conduite avec sagesse et prudence, tourne mal cependant, et me porte préjudice à moi-même, et même aussi à la société. Si donc le genre humain pense comme Helvétius, il jugera que cette action est mauvaise moralement; il jugera que c'est un crime, puisqu'au lieu de servir elle nuit. Or le genre humain juge-t-il ainsi? Pas le moins du monde. Il regrette que cette action n'ait point réussi, il s'afflige de son mauvais succès, il recherche s'il y a eu témérité et imprudence: s'il ne trouve qu'un malheur immerité, il absout le malheur et il déclare l'action elle-même juste et bonne; et cela, bien qu'il ne soit pas intéressé à la juger telle, bien qu'il en ait été comme moi la victime.—*Cousin, (La morale de l'intérêt.*

Traduisez en Français :—(A) It was the twilight of a summer night (9th July, 1575), the sun having for some time set, and all were in anxious expectation of the Queen's immediate approach. The multitude had remained assembled for many hours, and their numbers were still rather on the increase. A profuse distribution of refreshments, together with roasted oxen, and barrels of ale set abroach in different places of the road, had kept the populace in perfect love and loyalty towards the Queen and her favorite, which might have somewhat abated, had fasting been added to watching. —*Walter Scott (Kenilworth.)*

(B) You cannot but be convinced that a man who speaks and writes with elegance and grace, who makes choice of good words, and adorns and

embellishes the subject upon which he either speaks or writes, will persuade better, and succeed more easily in obtaining what he wishes, than a man who does not explain himself clearly, speaks his language ill, or makes use of low and vulgar expressions, and who has neither grace nor elegance in anything that he says.—*Lord Chesterfield.*

(C) Do you not think that it justly can be said that the people of Athens have always been ungrateful to those who have constructed the edifice of their fame? You have just read the history of this nation. Did you not everywhere find proofs of its ingratitude? You did not tell me the name of the author of your history; therefore I do not know in what sense it is written; but I cannot believe that you have been allowed to read a bad book. The facts at least must be correct; I see it from all you tell me about it.

Questions de Syntaxe et de Littérature.—(1) Faites l'analyse des *gallicismes* suivants: Il faut beaucoup travailler pour réussir. Il sied d'être modeste. C'est se tromper que de croire.....Il pleut. Il tonne.

(2) Celui qui travaille à dompter ses passions il ne peut manquer d'être heureux. En quoi Socrate nous semble le plus admirable, est d'avoir subi un arrêt injuste avec douceur et résignation. Presque toujours l'art gâte au lieu d'ajouter aux grâces naturelles. Tôt ou tard on regrette le temps perdu et de n'avoir pas mis à profit tous les instants de sa jeunesse.—Corrigez ces phrases et dites pourquoi elles sont incorrectes.

(3) Il y a ellipse des négations *pas* et *point* dans certains cas. Ecrivez quatre exs. Aprés certains verbes, le verbe de la proposition subordonnée prend tantôt la negation *ne*, tantôt il la rejette? Traduisez: But for little the patient would have died. The human being is far from being perfect.

(4) *Extravagant, extravaquant; différent, différant; fabricant, fabriquant; négligent, négligeant.* Qu'y a-t-il à dire relativement à ces mots? Quand la forme verbale en *ant* est-elle *adjectif verbal*, et quand *participe présent?* Comment s'accorde-t-elle dans ces cas?

(5) Quel est l'accord de la forme verbale en *ant*, modifiée par un complément adverbial? Ecrivez un ex.

(6) Il a été exempté des charges publiques *attendue* son infirmité. Je fus révolté du peu de confiance qu'il avit *mise* dans mon amitié. Ces personnes se sont *nui*. C'est le latin et le grec qu'on leur a *faits* étudier. Ces airs je les ai *entendu* chanter. Donnez la règle d'accord pour les part. ci dessus, et corrigez ceux qui sont incorrects.

(7) Qu'est-ce que le *grand vers*, et dans quels ouvrages s'emploie-t-il en français? Quelle est la règle de l'hémistiche? La muette peut-elle se trouver à la *césure?* Scandez et corrigez les vers suivants: Mais bientôt les prêtres nous ont enveloppés *(Racine)*. Une élégante idylle doit éclater sans pompe *(Boileau)*. Et leurs terreurs s'oublient leur courage renaît

(8) L'*e* muet, suivi de *s* ou de *nt*, employé dans le corps du vers, s'élide-t-il ou non? Ex. (I) Que remarquez—vous dans ces vers: Et redire avec tant de plaisir les exploits. Adieu je m'en vais à Paris pour mes affaires. Un tel mot pour avoir réjoui le lecteur.

(9) Qu'est-ce qu'on appelle *rimes suivies* et *rimes croisées*; dans quels ouvrages se sert-on des unes et des autres? Quelle sorte de rime y a-t-il dans ce qui suit:

O père qu'adore mon père!
Toi, qu'on ne nomme qu'à genoux!
Toi, dont le nom terrible et doux
Fait courber le front de ma mère!—*Lamartine.*

(10) Quel est le mérite particulier de Molière? Mentionnez ses principaux ouvrages. Quelles sont les sources où Molière a puisé? Qu'est ce que les *Précieuses ridicules*, et quel en est le but? En quoi Molière est-il supérieur à Racine?

(11) Quel genre de Poésie fut créé par *Racine*? A quelle source a-t-il emprunté son chef-d'œuvre; quand fut-il écrit et comment s'appelle-t-il? Nommez les pièces imitées d'Euripide.—Quel fut l'œuvre de *Boileau?* Par quels ouvrages s'est-il distingué?—Qui est-ce qui a composé le *discours sur l'histoire universelle?* Quelle influence l'auteur a-t-il eue sur son siècle?

(12) Par quoi se signalise le xviii siècle? De quelle école *Delille* fut-il le chef? Mentionnez ses principaux ouvrages.

(13) Quand la réforme littéraire fut-elle commencée et par qui? Une autre réforme s'est opérée dans notre époque? Nommez les auteurs les plus célèbres du xix. siècle.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

FRIDAY, APRIL 21.—3 P.M.

MATHEMATICS—WAVERLY PRIZE.

PROFESSOR MACDONALD,.....*Examiner.*

1. Similar polygons may be divided into the same number of similar triangles having the same ratio to one another that the polygons have.

2. A B C is a triangle, D the middle point of B C. In A D produced take any point Q, and draw B Q and C Q meeting the produced sides of the triangle in L and M. Prove LM parallel to BC.

3. If any number of factors, $x+a$, $x+b$, $x+c$, &c., be multiplied together, shew the law of the formation of the co-efficients of the successive powers of x, commencing with the highest. This can be employed to prove an important theorem.

4. Prove, by an application of the Binomial Theorem, that

$$1^2+n^2+\left(\frac{n\,(n-1)}{1.2}\right)^2+\&c.,+\frac{2n\,(2n-1)\,\ldots\,(n+1)}{1.2.3\,\ldots\,n}.$$

5. Sum n terms of the series, $1.\,1^2+3.\,2^2+5.\,3^2+$ &c.

6. A, B, and C are three stations in a straight line, whose distances from each other are given. At these the angles of elevation of a balloon (α, β, γ), are observed at the same instant. Shew how to calculate the height of the balloon.

7. Prove $\sin\phi > \phi - \frac{\phi^3}{4}$.

8. If A,B,C, are the angles of a triangle, prove that

$$\sin^2\frac{A}{2}+\sin^2\frac{B}{2}+\sin^2\frac{C}{2}+2\sin\frac{A}{2}\sin\frac{B}{2}\sin\frac{C}{2}=1.$$

9. If p be the probability of an event happening in a single trial, and $q=1-p$; expand $(p+q)^n$, and shew the probabilities expressed by the successive terms of the expansion.

DALHOUSIE COLLEGE AND UNIVERSITY

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

TUESDAY, APRIL 18TH.—9 A. M. TO 1 P. M.

B. A. HONOUR EXAMINATIONS IN CLASSICS.

HORACE: EPISTLES, BOOKS I, II. ARS POETICA.
JUVENAL: SATIRES, III, X, XIII.
CICERO: TUSCULAN QUESTIONS, BOOK I.
TACITUS: ANNALS, BOOK I.

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

1. Translate :
   (*a*) Hor : Epist. II. 1, vss. 245—270.
   (*b*) Juv : Sat. III, vss. 278—301.
   (*c*) Cic : Tus. Quest. I, Chap. 22.
   (*d*) Tac : Annals, I, Chap. 28.

2. Write grammatical notes on some peculiarities in the following sentences :
   (*a*) Vir bonus et sapiens dignis ait esse paratus.
   (*b*) Reddes dulce loqui ; reddes ridere decorum.
   (*c*) Rexque paterque
   Audisti coram.
   (*d*) Acclamavere ut filius Blaesi tribunus legatione ea fungeretur.
   (*e*) Macte virtute !
   (*f*) Nunc Satyrum, nunc agrestem Cyclopa movetur.

3 Explain the allusions in these passages :
   (*a*) Caerite cera
   Digni.
   (*b*) Perfidus Ixion, Io vaga, tristis Orestes.
   (*c*) Ripa nutritus in illa
   Ad quam Gorgonei delapsa est pinna caballi.
   (*d*) Quisquis adhuc uno partam colit asse Minervam.

LATIN COMPOSITION.

4 Translate into Latin : Crassus was liked by none, but few could afford to despise him ; while his ambition might have been kept within bounds by the concession of legitimate honours and dignities, and the show of listening to his counsels. At the moment when Pompeius was passing over to the people, Crassus might have been retained on the side of the oligarchy from which he had never wholly estranged himself. His immense riches, the sources of which lay close at hand, gave him clients in the Senate as well as among the Knights ; his slaves, his freedmen, his debtors, and his tenants, constituted an army in the heart of the city to sway the debates of the forum and overawe its seditions. But when the nobles refused to support him in his suit for the Consulship, they drove him to league himself with his popular competitor Pompeius : when they denounced him as a confederate of Catilina, they threw him into the arms of Cæsar.

DALHOUSIE COLLEGE AND UNIVERSITY

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

WEDNESDAY, APRIL 12TH.—3 P. M. TO 6 P. M.

B. A. HONOUR EXAMINATIONS IN CLASSICS.

PLAUTUS: MILES GLORIOSUS.
TERENCE: HEAUTONTIMORUMENOS.
VIRGIL: GEORGICS. BOOKS I, IV.

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

1. Translate : (*a*) Mil. Glor. vss. 836—862.
   (*b*) Heautontim. Act III, sc. 2, vss. 26—50.
   (*c*) Georgics. Book IV, vss. 227—247.

2. Explain the syntatical construction of these sentences :—
   (*a*) Neque eo nunc dico, quo quicquam illum senserim :
   Sed si quid, ne quid. *Heaut. Act III, sc. 2, vss. 43, 44.*
   (*b*) Nunquam commodius unquam herum audivi loqui,
   Nec quum male facerem crederem mihi impunius
   Licere. *Heaut. Act III, sc. 2, vss. 48—50.*

3. Translate the following sentences and write grammatical notes where you think explanation necessary :
   (*a*) Ita me Di amabunt ut nunc Menedemi vicem
   Miseret me.
   (*b*) Quapropter hæc res neutiquem neglectu est mihi.
   (*c*) At hoc demiror, qui tam facile potueris
   Persuadere illi quae solet quos spernere.

4. Explain these forms :
   dixis, ted, horsum, tis, actutum, mi's, impetrassere, volup, faxo, illaec, epol.

5. Translate and write explanatory notes on :
   (*a*) Mirum lolio victitare te tam vili tritico.
   (*b*) Quid ais tu ? itane tibi ego videar oppido
   Acherunticus ?
   (*c*) Votaque servati solvent in litore nautae
   Glauco et Panopeae et Inoo Melicertae.

DALHOUSIE COLLEGE AND UNIVERSITY.

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

MONDAY, APRIL 17TH.—9 A. M. TO 1 P. M.

B. A. HONOUR EXAMINATIONS IN CLASSICS.

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

(*N. B.—Two questions only in each group are to be answered.*)

CLASSICAL LITERATURE.

A. 1. The Elegy: the origin of the name, its metre, mode of recitation, subjects, and principal writers in early times.

2. Distinguish the two schools of Grecian Lyric poetry: give some account of the chief writers in each school with dates.

3. Greek Comedy: meaning of the name, origin of comedy, its subjects in different periods, chief writers in each period, and its remains.

B. 1. Athens was specially adapted for the cultivation of Oratory. Demosthenes and his contemporaries.

2. Buclolic poetry and its authors.

3. The three great Tragedians of Athens are connected with the battle of Salamis. Differences between Actors and Chorus. Divisions of a tragedy. Changes introduced by Euripides.

C. 1. Saturnian Verse.—Fabulae Atellanae.—Histriones.—Improvements of Livius.

2. Classification of Latin Comedies: their scenes, subjects, metre, accompaniment, chief writers.

3. Roman Satire: origin of name, subjects and chief writers with dates.

COMPARATIVE PHILOLOGY.

A.—1. Illustrate the principles, (*a*) that the same word takes different forms in the same language, (*b*) that different words take the same form in the same language.

2. State Grimm's Law in a general form. How does Prof. Max Müller account for the changes? Point out exceptions to the law.

3. Write notes on: *Septentriones* and its equivalents in Sanskrit, Greek and English; walnut; minstrel; age; *viginti* and its equivalents in Greek and Sanskrit.

B.—1. Compare the methods of expressing degrees of comparison in Latin, Greek, and English.

2. Point out remains of (*a*) an Instrumental case in English, (*b*) an Ablative in Greek, and (*c*) a Locative in Latin and Greek.

3. (*a*) Trace the following words to their originals: oui, aucun, même, je serai, tête, hiver, foudre, gré.—(*b*) What words in French come from these: comes, status, causa, castellum, leporem, scandulum, caput, magis.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

SATURDAY, APRIL 15TH:—9 A.M. TO 1 P.M.

B.A. HONOUR EXAMINATIONS IN CLASSICS.

GREEK. { ÆSCHYLUS: PROMETHEUS VINCTUS.
SOPHOCLES: ŒDIPUS REX.
HOMER: ILIAD, BOOKS XVIII, XXIV.

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

1. Translate the following passages:—

(*a*) Prom. Vinct., vss. 484–507;

beginning, *τὰ λοιπά μου κλύουσα θαυμάσει πλέον—*
ending, *ἐξωμμάτωσα πρόσθεν ὄντ' ἐπάργεμα.*

(*b*) Œdip. Rex, vss. 1412–1433;

beginning, *καὶ σοὶ γ' ἐπισκήπτω τε καὶ προτρέψομαι—*
ending, *ψαῦσαι μ' ἐασον κἀποπλαύσασθαι κακά.*

(*c*) Iliad, XVIII, vss. 550–572;

beginning, *Ἐν δὲ τίθει τέμενος βαθυλήϊον· ἔνθα δ' ἐριθοι.*

2. Name mood, tense and voice of the following verbal forms, and give their chief parts in use:—*γέντο, πιφαύσκων, φῦ, πέπρωται, ἐελμένον, δάμεν, μάρναντο, μέμονε, πεφιδήσεται, οὔνεσθ', ἀποδάσσομαι, ἄλτο, παρμέμβλωκεν.*

3. Translate and write grammatical notes on thes passages:—

(*a*) *ἀλλ' ἡ τέκνων ὀῆτ' ὄψις ἦν ἐφίμερος*
βλαστοῦσ' ὅπως ἔβλαστε προσλεύσσειν μοι.

(*b*) *ἰὼ Κιθαιρών, τί μ' ἐδέχου; τί μ' οὐ λαβὼν*
ἔκτεινας εὐθύς, ὡς ἔδειξα μήποτε
ἐμαυτόν ἀνθρώποισιν ἐνθεν ἢ γεγώς

(*c*) *οὐκ εἰ σύ τ' οἴκους, σύ τε, Κρεων, κατὰ στέγας,*
καὶ μὴ τὸ μηδὲν ἄλγος εἰς μέγ' οἴσετε;

(*d*) *θέλοντι κἀμοὶ τοῦτ' ἂν ἦν.*

(*e*) *κοὐ μὴ στερηθῆς γ', ἐς τοσοῦτον ἐλπίδων*
ἐμοῦ βεβῶτος.

4. Mention words in any other languges, that you know, akin to the following:—*ἔρεξε, μάρναντο, νιφόεις, λάθρα, φῦ, δάμεν, ὗιος, θυμός, ἄλτο, δῖα, εἵματα, δάκρυ, ἔδειξα, ἀνήρ, ἄσκοπος, δόμος, μεσημβρίαν, χάμαζε.*

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 20TH:—3 P.M. TO 6 P.M.

B.A. HONOUR EXAMINATIONS IN CLASSICS.

GREEK. { THUCYDIDES: BOOK II.
DEMOSTHENES: DE CORONA.
PLATO: PHÆDO.

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

1. Translate:—

(*a*) Thucyd. Book II., chap. 41.

(*b*) Demosth: De Corona, secs. 69–72;

beginning, Ἃ μὲν διώκει τοῦ ψηφίσματος—
ending, ὥστε καὶ τὰς ἀποδείξεις ἐκ τούτων δίκαιός εἰμι ποιεῖσθαι.

(*c*) Plato: Phædo, chap. 30.

2. (*a*) Show clearly the connection of clauses in the sentence Ἐὰν δὲ γὲ, οἶμαι..... and account for the construction of εἰθισμένη. (extract *c*).

(*b*) Explain the syntactical construction of the Infinitives in the sentences in extract (*b*):—τοῦ μὲν γράψαι * * * νομίζω. τὸ δὲ μὴ προσγράψαντα * * * τούτῳ.

(*c*) Supply ellipses where required in extract (*a*).

3. Write notes on some points of Syntax in these sentences:—

(*a*) ἐφυγον διὰ τῆς πόλεως, ἄπειροι ὄντες οἱ πλείους.....
.....ἐμπείρους δὲ ἔχοντες τοὺς διώκοντας τοῦ μὴ ἐκφεύγειν
ὥστε διαφθείροντο πολλοί.

(*b*) πᾶσι γὰρ ἐν τοῖς ὄμμασι καὶ ἐν τῷ παραυτίκα
ὁρᾶν πάσχοντάς τι ἀηθες ὀργή προσπίπτει.

(*c*) Ὦ μακάριε Σιμμία, μὴ γὰρ οὐκ αὕτη ἡ ὀρθὴ πρὸς ἀρετὴν ἀπαλλαγή,
ἡδονὰς πρὸς ἡδονὰς καταλλάττεσθαι.

4. (*a*) Give an account of the method of reckoning time at Athens.
(*b*) Under what circumstances was the oration *De Corona* delivered?

DALHOUSIE COLLEGE AND UNIVERSITY,

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SESSIONAL EXAMINATIONS, 1876.

WEDNESDAY, APRIL 12.—3 P.M.

HONOUR MATHEMATICS.—I.

PROFESSOR MACDONALD,.....*Examiner.*

1. Shew that the equation $Ax + By + C = 0$, represents a straight line, and find the intercepts of the axes.

2. Draw the lines represented by the equation, $y^2 - 2xy \sec\alpha + x^2 = 0$, and find the angle between them.

3. Find the distance of the point (x, y) from the line $x\cos\alpha + y\sin\alpha - p = 0$. Hence find the equation to the line which bisects the angle between two given lines.

4. Explain the abridged notation, $\alpha \pm l\beta = 0$: and shew that if the sides of a triangle are represented by $\alpha = 0, \beta = 0, \gamma = 0$, the line joining the centres of the inscribed and circumscribed circles is $\alpha(\cos C - \cos B) + \beta(\cos A - \cos C) + \gamma(\cos B - \cos A) = 0$.

5. Trace the circle whose equation is $a(x^2 + y^2) + b^2(x + y) = 0$, and find the equation to a circle referred to oblique axes inclined at angle ϕ.

6. Shew that, c being the radius and l the line from the pole S to the centre, the polar equation to a circle is $c^2 = r^2 + l^2 - 2lr\cos(\phi - \alpha)$. Hence deduce the propositions of Euc. III, 35, 36.

7. The chord of contact of two tangents to a circle passes through a fixed point. Shew that the locus of the point (h, k) from which the tangents are drawn is a straight line.

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8. If $\alpha + \beta + \gamma +$ &c., $= s$, shew that the product of the factors $(\cos\alpha + \sqrt{-1}\sin\alpha)(\cos\beta + \sqrt{-1}\sin\beta)\ldots = \cos s + \sqrt{-1}\sin s$.

9. Find the exponential values for $\cos\alpha$, $\sin\alpha$, $\tan\alpha$, viz:

$$\cos\alpha = \tfrac{1}{2}\left(\varepsilon^{\alpha\sqrt{-1}} + \varepsilon^{-\alpha\sqrt{-1}}\right), \text{ \&c.}$$

10. Manipulate one of your results in the above to shew

$$\tan^{-1}x = x - \tfrac{1}{3}x^3 + \tfrac{1}{5}x^5 - \text{\&c.}$$

11. Resolve $\sin\phi$ into factorials, $\phi\left(1 - \frac{\phi^2}{\pi^2}\right)\left(1 - \frac{\phi^2}{2^2\pi^2}\right)\cdots\cdots$

and prove, by comparing this with another series for $\sin\phi$,

$$\frac{\pi^2}{6} = \frac{1}{1^2} + \frac{1}{2^2} + \frac{1}{3^2} + \text{\&c.}$$

12. Sum the series, $\sin\phi - \frac{1}{2}\sin 2\phi + \frac{1}{3}\sin 3\phi -$ &c. to infinity. Derive from it (1) a series by differentiation, (2) by intregation.

13. Shew the relations of the sides and angles of a spherical triangle to those of its polar triangle; and from the value of cos A, by means of the relations you have found, deduce $\cos a$.

14. Given the latitude of the place, and the declination and altitude of the sun; to find the time of the day.

DALHOUSIE COLLEGE AND UNIVERSITY,
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SESSIONAL EXAMINATIONS, 1876.

MONDAY, APRIL 17.—9 A.M.

HONOUR MATHEMATICS.—II.

PROFESSOR MACDONALD,.....*Examiner.*

1. Find the equation to the tangent to a central conic, (1) by the Geometrical method, (2) by the method of the Calculus, and shew that the results agree.

2. Determine the intercepts on the axes of X and Y made by the normal in the ellipse, at the extremity of the *latus rectum*.

3. The locus of the middle points of parallel chords in a parabola is a line paralled to the principal diameter.

4. Solve these problems by means of the equation to the tangent, $y = mx + \sqrt{m^2 a^2 + b^2}$; (1) the perpendicular from the centre on the tangen to an ellipse intersects it in the curve, $(x^2 + y^2)^2 = a^2 x^2 + b^2 y^2$. (2) the locus of the intersection of tangents to an ellipse, which are at right angles to each other, is a circle.

5. PS p is a focal chord of an ellipse. Take SQ, along SP, a mean proportional between SP and S p, and prove that the locus of Q is an ellipse, whose centre is S.

6. CP and CD are conjugate semi-diameters, a and b the semiaxes; prove $CP^2 \pm CD^2 = a^2 \pm b^2$, according as the curve is ellipse or hyperbola.

7. Solve the general equation of the second degree for y, and determine the nature of the curve from considering the values of $b^2 - 4ac$. (The equation is, $ax^2 + bxy + cy^2 + dx + ey + f = 0$.)

8. Refer to its centre and principal axes the curve

$$3x^2 + 2xy + 3y^2 - 16y + 23 = 0.$$

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9. If $u = \frac{P}{Q}$, where P and Q are each a function of x, find $\frac{du}{dx}$ and apply the result to differentiate, $u = \frac{(1-x^2)^{\frac{2}{3}}}{x^4}$.

10. Differentiate $\log \frac{\sqrt{x^2+1} + \sqrt{x^2-1}}{\sqrt{x^2+1} - \sqrt{x^2-1}}$, and $\sin^{-1} \frac{x}{\sqrt{1+x^2}}$.

11. Prove that if $u = f(x, y)$, $du = \left(\frac{du}{dx}\right) dx + \left(\frac{du}{dy}\right) dy$, and from this deduce the total second differential coefficient, $d^2 u$.

12. If $y = a \sin x + b \sin 2x$, eliminate the constants a and b, shewing that $\frac{d^4 y}{dx^4} + 5 \frac{d^2 y}{dx^2} + 4y = 0$.

13. Cut the greatest cylinder out of a given sphere.

14. Find the greatest isosceles triangle that can be inscribed in a given ellipse, having its vertex at the extremity of the minor axis.

DALHOUSIE COLLEGE AND UNIVERSITY.

HALIFAX.

SESSIONAL EXAMINATIONS, 1876.

THURSDAY, APRIL 20.—3 P.M.

HONOUR MATHEMATICS.—III.

1. Take the ordinate on the upper side of the axis of X, and shew that a curve is concave or convex to the axis of X, according as $\frac{d^2y}{dx^2}$ is negative or positive.

2. The curve, $y^3 = x^3 - ax^2$, has asymptotes; find them. The curve, $ay^2 = x^3 - bx^2$, has no asymptotes: shew that it is wholly on the right side of the origin, and symmetrical with respect to the axis of X; and find the angles at which it cuts that axis.

3. Integrate the following: $\frac{(x+b)\,dx}{x^2+2bx}$, $\frac{x^3\,dx}{1+x^2}$, $\sqrt{\frac{1+x}{1-x}}.\,dx$: and find *formulae of reduction* for the integration of $\frac{x^m\,dx}{\sqrt{1-x^2}}$, and $\sin^n\phi\,d\phi$.

Write also the integrals of the forms, $\sqrt{a^2 \pm x^2}$, $\frac{1}{a^2 \pm x^2}$.

4. Find expressions in the notation of the Integral Calculus for a plane area, a surface of revolution, a solid of revolution. (Rectangular co-ordinates.)

5. Explain "integration between limits," and find the area of the Lemniscate, $(r^2 = a^2 \cos 2\phi)$, from 0 to π.

6. Find the radius of curvature of the parabola, and shew that at the vertex, it is $= 2a$. $(y^2 = 4ax)$

7. Find the centre of gravity of a paraboloid of revolution.

8. The attraction being $\propto \frac{1}{(\text{dist.})^2}$, prove that the attraction of a material line of indefinite length on an external particle is $\propto \frac{1}{\text{dist:}}$.

9. Find the line of quickest descent from the focus of a parabola (axis vertical and vertex at the top,) to the curve. (It is equal in length to the *latus rectum*).

10. If the substance of the earth were homogeneons, and a straight tunnel existed from pole to pole, shew that a body dropped in at one end would swing from the one pole to the other, and find the time of an oscillation.

11. Find the differential equation to a central orbit, $\frac{d^2u}{d\phi^2} + u - \frac{P}{h^2u^2} = 0$, and shew that under the known law of gravitation, a planet describes a conic section, the sun being in one of the *foci*.

12. If a particle revolve in a circle, the centre of force being in the circumference, the force is proportional to $\frac{1}{(\text{dist:})^5}$.