CALENDAR

AND

EXAMINATION PAPERS

OF

Dalhousie College and University,

HALIFAX, NOVA SCOTIA.

SESSION 1867-8.

HALIFAX:
PRINTED FOR THE UNIVERSITY,
BY JAMES BARNES.
1867.

1867-8

CONTENTS.

CONTENTS.

Academic Year,

1867-8.

OCTOBER 1867.

1	Tu.	
2	W.	
3	Th.	
4	Fri.	
5	Sat.	
6	**Su.**	
7	Mo.	
8	Tu.	
9	W.	
10	Th.	
11	Fri.	
12	Sat.	
13	**Su.**	
14	Mo.	
15	Tu.	
16	W.	
17	Th.	
18	Fri.	Meeting of Governors.
19	Sat.	
20	**Su.**	
21	Mo.	
22	Tu.	
23	W.	Opening of Summer Session.
24	Th.	Matriculation Examination. Examination for Scholarships.
25	Fri.	Supplementary Examinations.
26	Sat.	
27	**Su.**	
28	Mo.	Matriculation and Registration take place. Lectures begin.
29	Tu.	
30	W.	
31	Th.	

NOVEMBER 1867.

1	Fri.	
2	Sat.	
3	**Su.**	
4	Mo.	Meeting of Senate.
5	Tu.	
6	W.	Final Matriculation and Supplementary Examinations.
7	Th.	
8	Fri.	
9	Sat.	
10	**Su.**	College opened, 1863.
11	Mo.	
12	Tu.	
13	W.	
14	Th.	
15	Fri.	
16	Sat.	
17	**Su.**	
18	Mo.	
19	Tu.	
20	W.	
21	Th.	
22	Fri.	
23	Sat.	
24	**Su.**	
25	Mo.	
26	Tu.	
27	W.	
28	Th.	
29	Fri.	
30	Sat.	

DECEMBER 1867.

1	**Su.**	
2	Mo.	Meeting of Senate.
3	Tu.	
4	W.	
5	Th.	
6	Fri.	
7	Sat.	
8	**Su.**	
9	Mo.	
10	Tu.	
11	W.	
12	Th.	
13	Fri.	
14	Sat.	
15	**Su.**	
16	Mo.	
17	Tu.	
18	W.	
19	Th.	
20	Fri.	
21	Sat.	Christmas vacation begins.
22	**Su.**	
23	Mo.	
24	Tu.	
25	W.	Christmas day.
26	Th.	
27	Fri.	
28	Sat.	
29	**Su.**	
30	Mo.	
31	Tu.	Last day for sending in Essays for the *Grant* prize.

JANUARY 1868.

1	W.	
2	Th.	Christmas Vacation ends.
3	Fri.	College re-opens.
4	Sat.	
5	**Su.**	
6	Mo.	Meeting of Senate.
7	Tu.	
8	W.	
9	Th.	
10	Fri.	
11	Sat.	
12	**Su.**	
13	Mo.	
14	Tu.	
15	W.	
16	Th.	College established, 1821.
17	Fri.	
18	Sat.	
19	**Su.**	
20	Mo.	
21	Tu.	
22	W.	
23	Th.	
24	Fri.	Meeting of Governors.
25	Sat.	
26	**Su.**	
27	Mo.	
28	Tu.	
29	W.	
30	Th.	
31	Fri.	

FEBRUARY 1868.

1	Sat.	
2	**Su.**	
3	Mo.	Meeting of Senate.
4	Tu.	
5	W.	
6	Th.	
7	Fri.	
8	Sat.	
9	**Su.**	
10	Mo.	
11	Tu.	
12	W.	
13	Th.	
14	Fri.	
15	Sat.	
16	**Su.**	
17	Mo.	
18	Tu.	
19	W.	
20	Th.	
21	Fri.	
22	Sat.	
23	**Su.**	
24	Mo.	
25	Tu.	
26	W.	
27	Th.	
28	Fri.	
29	Sat.	

MARCH 1868.

1	**Su.**	
2	Mo.	Meeting of Senate.
3	Tu.	
4	W.	
5	Th.	
6	Fri.	
7	Sat.	
8	**Su.**	
9	Mo.	
10	Tu.	
11	W.	
12	Th.	
13	Fri.	
14	Sat.	
15	**Su.**	
16	Mo.	
17	Tu.	
18	W.	
19	Th.	
20	Fri.	
21	Sat.	
22	**Su.**	
23	Mo.	
24	Tu.	
25	W.	
26	Th.	
27	Fri.	
28	Sat.	
29	**Su.**	
30	Mo.	
31	Tu.	

APRIL 1868.

1	W.	
2	Th.	
3	Fri.	
4	Sat.	
5	**Su.**	
6	Mo.	Meeting of Senate.
7	Tu.	Lectures close. The *Young* prize awarded.
8	W.	Examination in Latin,
9	Th.	Examination in Greek.
10	Fri.	Good Friday.
11	Sat.	
12	**Su.**	Easter Day.
13	Mo.	Examination in Mathematics.
14	Tu.	Examinations in Natural Philosophy and Rhetoric.
15	W.	Examination in Chemistry. Examination for Elocution Prize.
16	Th.	Examinations in Logic, Metaphysics, History, and French.
17	Fri.	Meeting of Governors. Examinations in Ethics and Political Economy, and German.
18	Sat.	
19	**Su.**	
20	Mo.	Examination for Prize in English Reading. Meeting of Senate.
21	Tu.	Results of Examinat'ns declared.
22	W.	Meeting of Convocation. Winter Session Ends.
23	Th.	
24	Fri.	
25	Sat.	
26	**Su.**	
27	Mo.	Opening of Summer Session.
28	Tu.	
29	W.	Lectures begin. College re-organized 1863.
30	Th.	

MAY 1868.

1	Fri.	
2	Sat.	
3	**Su.**	
4	Mo.	Meeting of Senate.
5	Tu.	
6	W.	
7	Th.	
8	Fri.	
9	Sat.	
10	**Su.**	
11	Mo.	
12	Tu.	
13	W.	
14	Th.	
15	Fri.	
16	Sat.	
17	**Su.**	
18	Mo.	
19	Tu.	
20	W.	
21	Th.	
22	Fri.	Foundation Stone of College laid in 1820.
23	Sat.	
24	**Su.**	Queen's Birthday.
25	Mo.	No Lectures.
26	Tu.	
27	W.	
28	Th.	
29	Fri.	
30	Sat.	
31	**Su.**	

JUNE 1868.

1	Mo.	Meeting of Senate.
2	Tu.	
3	W.	
4	Th.	
5	Fri.	
6	Sat.	
7	**Su.**	
8	Mo.	
9	Tu.	
10	W.	
11	Th.	
12	Fri.	
13	Sat.	
14	**Su.**	
15	Mo.	
16	Tu.	
17	W.	
18	Th.	
19	Fri.	Meeting of Governors. Lectures close.
20	Sat.	Accession of Queen Victoria.
21	**Su.**	Halifax settled year 1749.
22	Mo.	Examinations.
23	Tu.	Examinations continued.
24	W.	Summer Session ends.
25	Th.	
26	Fri.	
27	Sat.	
28	**Su.**	
29	Mo.	
30	Tu.	

AUGUST 1868.

1	Sat.	
2	**Su.**	
3	Mo.	
4	Tu.	
5	W.	
6	Th.	
7	Fri.	
8	Sat.	
9	**Su.**	
10	Mo.	
11	Tu.	
12	W.	
13	Th.	
14	Fri.	
15	Sat.	
16	**Su.**	
17	Mo.	
18	Tu.	
19	W.	
20	Th.	
21	Fri.	
22	Sat.	
23	**Su.**	
24	Mo.	
25	Tu.	
26	W.	
27	Th.	
28	Fri.	
29	Sat.	
30	**Su.**	
31	Mo.	

JULY 1868.

1	W.	
2	Th.	
3	Fri.	
4	Sat.	
5	**Su.**	
6	Mo.	
7	Tu.	
8	W.	
9	Th.	
10	Fri.	
11	Sat.	
12	**Su.**	
13	Mo.	
14	Tu.	
15	W.	
16	Th.	
17	Fri.	
18	Sat.	
19	**Su.**	
20	Mo.	
21	Tu.	
22	W.	
23	Th.	
24	Fri.	
25	Sat.	
26	**Su.**	
27	Mo.	
28	Tu.	
29	W.	
30	Th.	
31	Fri.	

SEPTEMBER 1868.

1	Tu.	
2	W.	
3	Th.	
4	Fri.	
5	Sat.	
6	**Su.**	
7	Mo.	
8	Tu.	
9	W.	
10	Th.	
11	Fri.	
12	Sat.	
13	**Su.**	
14	Mo.	
15	Tu.	
16	W.	
17	Th.	
18	Fri.	
19	Sat.	
20	**Su.**	
21	Mo.	
22	Tu.	
23	W.	
24	Th.	
25	Fri.	
26	Sat.	
27	**Su.**	
28	Mo.	
29	Tu.	
30	W.	

Dalhousie College and University,

HALIFAX.

GOVERNORS.

HON. WILLIAM YOUNG, Chief Justice of Nova Scotia, *Chairman.*

HON. CHARLES TUPPER, M. D., Provincial Secretary.

HON. J. W. RITCHIE, M. E. C., Solicitor General.

HON. S. L. SHANNON, M. P. P.

HON. JOSEPH HOWE.

REV. GEORGE M. GRANT, M. A.

JAMES F. AVERY, M. D.

ANDREW MACKINLAY, ESQ.

CHARLES ROBSON, ESQ.

JAMES THOMSON, ESQ., *Secretary and Treasurer.*

SENATE.

VERY REV. JAMES ROSS, D. D., *Principal.*

REV. WILLIAM LYALL, LL. D.

CHARLES MACDONALD, M. A., *Secretary.*

JOHN JOHNSON, M. A.

GEORGE LAWSON, Ph. D., LL. D.

JAMES DEMILL, M. A.

Dalhousie College and University.

HALIFAX.

GOVERNORS.

Hon. William Young, Chief Justice of Nova Scotia, Chairman.

Hon. Charles Tupper, M. D., Provincial Secretary.

Hon. J. W. Ritchie, M. E. C., Solicitor General.

Hon. S. L. Shannon, M. P. P.

Hon. Joseph Howe.

Rev. George M. Grant, M. A.

James R. Avery, M. D.

Andrew MacKinlay, Esq.

Charles Robson, Esq.

James Thomson, Esq., Secretary and Treasurer.

SENATE.

Very Rev. James Ross, D. D., Principal.

Rev. William Lyall, LL. D.

Charles Macdonald, M. A., Secretary.

John Johnson, M. A.

George Lawson, Ph. D., LL. D.

James DeMill, M. A.

Faculty of Arts.

PROFESSORS.

VERY REV. PRINCIPAL ROSS, D. D.,
Professor of Ethics and Political Economy.

REV. WILLIAM LYALL, LL. D.,
Professor of Psychology and Metaphysics.

CHARLES MACDONALD, M. A.,
Professor of Mathematics.

JOHN JOHNSON, M. A.,
Professor of Classics.

GEORGE LAWSON, Ph. D., LL. D.,
Professor of Chemistry and Mineralogy.

JAMES DEMILL, M. A.,
Professor of History and Rhetoric.

TUTOR.

JAMES LIECHTI, ESQ.,
Tutor of Modern Languages.

MR. BOYD, *Keeper of the College Buildings.*

Faculty of Arts.

§ I.—SESSIONS.

In each Academic Year there are two Sessions:—the first, a Winter Session, and the second a Summer Session.

The Winter Session for 1867–68 will commence on Wednesday, October 23rd, 1867, and end on Wednesday, April 22nd, 1868.

The Summer Session will commence on Monday, April 27th, 1868, and end on Wednesday, June 24th, 1868.

§ II.—ADMISSION OF STUDENTS.

Applicants for admission will present themselves at the College on the opening day of the Winter Session, at 3 P.M.

Students may enter either,

1st, as *Undergraduates*, with the intention of applying for the Degree of B.A. at the end of the course; or,

2nd, as *General Students*.

Students entering as Undergraduates of the First Year are required to pass the Matriculation Examination at the opening of the Winter Session, and to take the classes prescribed for the four years' course.

Students may also enter as Undergraduates of the Second Year, and take the three years' course by complying with the conditions specified under Section 4.

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

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

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

§ III.—MATRICULATION EXAMINATION.

FOR THE FIRST YEAR.

The subjects of examination for entrance into the First Year, are :—

I. In Classics.

Latin Grammar, Greek Grammar, one easy Latin, and one easy Greek Author.

The following Authors are recommended :

Latin.

Cæsar, one book; Virgil, one book; Cicero, two Orations; Horace, one book of Odes.

Gveek.

Xenophon, one book; Homer, one book; Lucian's Select Dialogues; New Testament, one Gospel.

II. In Mathematics.

Arithmetic; Euclid's Elements, Book I.

III. In English.

Grammar; History; Geography; Composition.

FOR THE SECOND YEAR.

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

1. In the *Classics* of the first year as specified in Section 11, or their equivalents.

2. In the *Mathematics* of the first year as specified in Section 11, or their equivalents.

3. In *English Grammar*, *English History*, *Geography* and *Composition*.

§ IV.—COURSE OF STUDY.

The Undergraduate course extends over either,

1. Four Winter Sessions, or,

2. The Winter and Summer Sessions of two Academic years, and an additional Winter Session.

In order to enter upon the latter course, Students must be able to pass the Entrance Examination of the second year, and must take the classes prescribed by the Senate in the Summer Session.

I. WINTER SESSION.

FIRST YEAR.

Classics, Mathematics and Rhetoric.

SECOND YEAR.

Classics, Mathematics, Chemistry, Logic and Psychology.

THIRD YEAR.

Classics, Metaphysics, Modern Languages, Natural Philosophy, Chemistry. Mathematics and Practical Chemistry *optional.*

FOURTH YEAR.

Ethics, Political Economy, History, Modern Languages, Natural Philosophy (Experimental Physics), and Classics or Mathematics.

In Modern Languages Undergraduates may select either French or German as part of their course, but they must take the same language in both years.

II. SUMMER SESSION.

Classes will be opened for instruction in the following subjects:

Classics.
Mathematics.
Logic.
Optics.
Mineralogy.
English Literature.
Modern Languages.

§ V.—FEES.

The Fee to each Professor, whose class or classes a Student enters, is *six dollars* for the Winter Session; and *four dollars* for the Summer Session; or *eight dollars* for both. Any Undergraduate who has paid fees twice, either to the Professor of Classics or to the Professor of Mathematics, may attend the classes of such Professor during the remainder of his Undergraduate course without paying an additional fee.

General Students pay a fee for every class they attend. (This rule does not apply to those General Students who entered previous to the Winter Session of 1866–67.)

Experimental Chemistry is an optional class, the fee for which is *six dollars.*

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

Matriculation or Registration tickets and Class tickets must be taken out on the first day of Lectures, as no Student is allowed to enter a Class without them.

The fees of Undergraduates who take the complete course in this University are as follows:

Classes of First Year, and Matriculation	.....	$20
" Second "	.....	24
" Third "	.....	12
" Fourth "	.....	6

§ VI.—GRADUATION IN ARTS.

DEGREE OF B. A.

The Degree of B. A. may be obtained by attending the prescribed courses of Lectures, extending over four Winter Sessions, or three Winter and two Summer Sessions, and by passing the following examinations, the Candidate maintaining throughout the period a good moral character :—

IN THE FOUR YEARS' COURSE.

1. Matriculation Examination at entrance.
2. Examination at the close of the first session, in Classics, Mathematics and Rhetoric.
3. Examination at the close of the second session, in Classics, Mathematics, Logic and Psychology, and Chemistry.
4. Examination at the close of the third session, in Classics, Natural Philosophy, Modern Languages, Metaphysics and Chemistry.
5. Final Examination for Degree, at the close of the fourth sessson, or subsequently in Modern Languages, Ethics, Political Economy, History, Natural Pnilosophy, and either Classics or Mathematics, at the option of the Candidate.

IN THE THREE YEARS' COURSE.

The Examinations specified aboue, except No. 2., and the Examinations at the close of each Summer Session in the subjects of the Session.

In no case shall a Student be entitled to a Degree who has not passed in every subject of the course.

The Fee for Diploma is *five dollars*, payable before the Final Examination.

DEGREE OF M. A.

Bachelors 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 on a literary. scientific, or professional subject.

Fee for Diploma *five Dollars*.

§ VII.—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 Examination, he will be allowed a Supplementary Examination on the first Friday of the following Winter Session, on giving notice to the Secretary of the Senate.

3. Failure in more than two subjects will involve the loss of the year. N. B.—In the application of this rule, Classics and Mathematics will *each* be reckoned as two subjects.

4. In all cases where a Student presents himself for Supplementary Examination, except on the day mentioned in Rule 2nd, he will be required to pay a fine of *two dollars.*

5. Students are forbidden to bring any books or manuscripts into the Examination Hall, unless by the direction of the Examiner, or to give or receive assistance at the Examinations. If a student violate this rule, he will lose his Sessional Examination, and it shall be at the discretion of the Senate whether he be allowed a Supplementary Examination.

6. Students who pass the Examination in the several subjects of their respective years, are arranged in three classes, according to the merit of their answers in these subjects.

7. A position in the First or Second Class will be considered honorable.

§ VIII.—SCHOLARSHIPS.

1. Halifax Schools.

A Scholarship entitling to free attendance on all the classes of the Undergraduate course, as long as the holder of it obtain a Certificate of Merit at the Sessional Examinations, is offered by the Professors for competition this year to the Pupils from the Halifax Schools;—the competition to take place at the Matriculation Examination.

Candidates must intimate to the Secretary of the Senate their intention of competing, on the opening day of the Session.

2. Prince of Wales College, Charlottetown, P. E. I.

A Scholarship of equal value, and to be held under the same conditions, is offered this year for competition to Pupils attending the Prince of Wales College; the award to be made after examination by the Principal of that College.

3. New Glasgow Academy.

A Scholarship of equal value, and to be held under the same conditions, is offered this year for competition to Pupils attending the New Glasgow Academy; the award to be made after examination by the Principal of that Academy.

These Scholarships can be competed for only by Pupils who have attended the schools from which they come, for a period of not less than one year previous to the competition. Candidates from the Halifax Schools must bring certificates of attendance from the Principals of their Schools.

4. Open Scholarship.

A vacant Scholarship of equal value, and to be held under

the same conditions, is offered this year for competition to Undergraduates entering the first year.

In all cases successful competitors must be able to pass creditably the Matriculation Examination of the College.

Should the Principal of an Academy to which a Scholarship has been assigned decline to examine, an examiner will be appointed by the Senate of Dalhousie College.

It is intended to offer Scholarships for competition next year to the pupils of the

HALIFAX SCHOOLS.
PICTOU ACADEMY.
LIVERPOOL ACADEMY.

§ IX.—PRIZES AND CERTIFICATES OF MERIT.

I. PRIZES.

1. UNIVERSITY PRIZES.

Prizes will be awarded to those Undergraduates who occupy the first place in the Sessional Examination in any of the following subjects, provided they stand in the First or Second Class, and pass in the other subjects of the year.

1. Classics.
2. Mathematics.
3. Ethics and Political Economy.
4. Logic and Psychology.
5. Metaphysics.
6. Chemistry.
7. Natural Philosophy.
8. History.
9. Rhetoric.
10. Modern Languages.

2. THE GRANT PRIZE.

A Prize of $20 is offered by the Rev. G. M. GRANT, M.A., for the best Essay on the following subject:

The Origin and Progress of the English Language.

Competition is open to all Students of the years 1866–7 and 1867–8.

The Essays are to be sent in before the first of January 1868, each signed with a motto, and accompanied by a sealed envelope containing the name of the writer.

3. THE YOUNG PRIZE.

The following Prizes are offered by the HON. THE CHIEF JUSTICE of Nova Scotia:

1*st Prize* $25 —To the most eminent Student of the Third and Fourth Years, to be awarded by the votes of the Students of those years.

2nd Prize $15.—To the most eminent Student of the First and Second Years, to be awarded by the votes of the Students of those years.

4. The following Prizes are offered this year by the Rev. David Roy, New Glasgow:

1. A Prize of £3 for English Reading, open to all Students.
2. A Prize of £2 for Elocution, open to Students of the Rhetoric Class.

CERTIFICATES OF MERIT.

Certificates of Merit of the First and Second Rank will be given to the Students who have obtained a first or second class standing in the aggregate of the branches of study proper to their year. N. B.—In the application of this rule *two* Modern Languages will be reckoned as one subject.

In publishing the names of the Students of the First and Second years who obtain Prizes and Certificates of Merit, mention will be made of the Schools in which they received their preliminary education.

§ X.—ATTENDANCE AND CONDUCT.

1. All Undergraduates and General Students attending more classes than one, are required to provide themselves with caps and gowns, and wear them in going to and from the College. Gowns are to be worn at Lectures, and at all meetings of the University.

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

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

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

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

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

7. Injuries to the Building or Furniture will be repaired at the expense of the party by whom they have been caused, and such other penalty will be imposed as the Senate may think proper.

8. While in the College, and going to it or from it, Students must conduct themselves in an orderly manner. Any Professor

observing any improper conduct in a Student will admonish him, and if necessary report to the Principal.

9. When Students are brought before the Senate and convicted of a violation of any of these rules, the Senate may reprimand privately or in the presence of all 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 service on Sunday.

§ XI.—COURSE OF STUDIES. WINTER SESSION.

CLASSICS.

Professor....JOHN JOHNSON, M.A.

LATIN.—(*First Year.*)—Cicero, *Orations against Cataline, I. IV.*—Virgil, *Æneid, Book VII.*—Prose Composition.

GREEK.—(*First Year.*)—Xenophon, *Anabasis, Book VI.*—Demosthenes, *Olynthiac I.*—History of Greece, (Smith's).

LATIN—.(*Second Year.*)—Livy, *Book XXII.*—Horace, *Select Satires and Epistles.*—Prose Composition.

GREEK.—(*Second Year.*)—Herodotus, *Book I.*—Homer, *Book IX.*—Prose Composition.—History of Greece.

LATIN.—(*Third Year.*)—Terence, *Adelphi.*—Plautus, *Miles Gloriosus.*—Horace, *Ars Poetica.*—Prose Composition.

GREEK.—(*Third Year.*)—Euripides, *Medea.*—Æschylus, *Prometheus Vinctus.*—Prose Composition.

LATIN.—(*Fourth Year.*)—Tacitus, *Agricola.*—Juvenal, *Satires III. X.*—Prose Composition.

GREEK.—(*Fourth Year.*)—Demosthenes, *Second Philippic.*—Plato, *Apologia Socratis.*—Comparative Philology.—Prose Composition.

ADDITIONAL FOR PRIZE. (*Fourth Year.*)

LATIN.—Tacitus, *Germania.*—Juvenal, *Sat. I. XIII.*

GREEK.—Demosthenes, *First Philippic.*—Plato, *Crito.*

MATHEMATICS.

Professor....CHARLES MACDONALD, M. A.

ALGEBRA.—(*First Year.*)—To the end of Progressions.

GEOMETRY.—(*First Year.*)—Six books of Euclid with deductions.

TRIGONOMETRY.—(*First Year.*)—Solution of Plane Triangles.

ALGEBRA.—(*Second Year.*)—Binomial Theorem, Investigation of Logarithms, Probabilities, Life Annuities, Properties of Numbers.

GEOMETRY.—(*Second Year.*)—Eleventh Book of Euclid, 21 Propositions.

TRIGONOMETRY.—(*Second Year.*)—Analytical Plane Trigonometry. (*Third Year.*)—(Optional.)—Spherical Trigonometry, with application to Astronomy. DeMoivre's Theorem and Angular Analysis. Conic Sections. Differential Calculus begun.

(*Fourth Year.*)—(Optional.)—Conic Sections; Differential Calculus; Integral Calculus, with application to Mechanics.

BOOKS RECOMMENDED.

* Young's Elementary course of Mathematics. Cassell's or Potts' Euclid.

Todhunter's, Colenso's, or Woods' Algebra.

Todhunter's, Colenso's, Snowball's, or Hymers' Trigonometry.

Todhunter's, Hymers', O'Brien's Conic Sections.

Todhunter's, Hall's, or Hind's Differential and Integral Calculus.

Galbraith and Haughton's Mechanics; Earnshaw's Statics and Dynamics, Potter's Mechanics. Galbraith and Haughton's, Webster's, or Miller's Hydrostatics.

The Books in Weale's Series on Trigonometry and Conic Sections.†

---

* Suffices for the course, except Geometry.

† For Students of the First Year. the Mathematical Books used in the Schools are for the most part sufficient.

The Books in Weale's Series are mentioned, principally for their cheapness.

ETHICS AND POLITICAL ECONOMY.

Professor.....Very Rev. Principal Ross, D. D.

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.—Wayland's Political Economy.

LOGIC, METAPHYSICS AND ESTHETICS.

Professor....Rev. William Lyall, LL.D.

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 Essay on the Nature and Principles of Taste.

CHEMISTRY.

Professor....George Lawson, Ph. D., LL. D.

Junior Chemistry.—(*Second Year.*)—*Text Book.* Chamber's Chemistry by Macadam.

Senior Chemistry.—(*Third Year.*)—*Text Book.* Fownes' Chemistry, (or Gregory's).

Practical Chemistry.—(*Third Year.*)—*Laboratory Books.* Fresenius's Qualitative and Quantitative Analysis.—Bowman's Medical Chemistry.

NATURAL PHILOSOPHY.

Experimental Physics.

Professor....Very Rev. Principal Ross, D. D.

(*Third Year.*)—*Text Book.* Lardner's Handbook.
(*Fourth Year.*)—*Text Book.* Lardner's Handbook.

Mathematical Physics.

Professor..Charles Macdonald, M. A.

(*Third Year.*)—*Text Books.* Galbraith and Haughton's Mechanics. Galbraith and Haughton's Hydrostatics.

HISTORY AND RHETORIC.

Professor.....James DeMill, M. A.

Rhetoric.—(*First Year-*)—*Text Books.* Whately's Elements of Rhetoric. Campbell's Philosophy of Rhetoric. Latham's Handbook of the English Language. Angus' English Language.

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

BOOKS RECOMMENDED.

Guizot's History of Civilization; Michelet's History of France; Hallam's Constitutional History.

MODERN LANGUAGES.

Tutor,.....JAMES LIECHTI, ESQ.

FRENCH.—(*Third Year.*)—Pujol's Grammar (first part)—Peschier's Entretiens Familiers.

GERMAN.—*Third Year.*)—Ahn's Grammar, (Meissner).—Adler's Reader.

FRENCH.—(*Fourth Year.*)—Pujol's Grammar, (second part)—Peschier's Causeries Parisiennes.

GERMAN.—(*Fourth Year.*)—Otto's Conversation Grammar.--Adler's Reader.—A Play of Schiller.

SUMMER SESSION.

CLASSICS.

Professor....JOHN JOHNSON, M.A.

LATIN.—(*First Year.*)—Virgil, *Bucolics.*

GREEK.—(*First Year.*)—Lucian, *Select Dialogues.*

LATIN.—(*Second Year.*—Horace, *Odes, Book IV.*

GREEK.—(*Second Year.*)—Homer, *Book XVIII.*

MATHEMATICS.

Professor....CHARLES MACDONALD, M.A.

THEORY OF EQUATIONS.—*First Year.*

ASTRONOMY.—*Second Year.*

BOOKS RECOMMENDED.

Todhunter's Theory of Equations. Loomis' Astronomy.

EXPERIMENTAL PHYSICS.

Protessor....VERY REV. PRINCIPAL ROSS, D.D.

OPTICS.—*Text Book*—Brewster's Optics.

LOGIC.

Professor....REV. WM. LYALL, LL.D.

Text Books.—Those used in the Winter Session.

ENGLISH LITERATURE.

Professor....JAMES DEMILL, M. A.

Text Books.—Chamber's Cyclopædia of English Literature.—Craik's English Literature.

MINERALOGY AND GEOLOGY.

Professor.....GEORGE LAWSON, PH. D., LL. D.

Text Book.—Nichol's, or Dana's Mineralogy. Dana's Manual of Geology.

Field Book.—Dawson's Acadian Geology.

MODERN LANGUAGES.

Tutor.....JAMES LIECHTI, ESQ.

FRENCH AND GERMAN.—*Text Books.*—Those used in the Winter Session.

Prizes and Certificates of Merit,

1867.

UNIVERSITY PRIZES.

FOURTH YEAR.

CLASSICS.....Alex. Ross.
ETHICS.....J. H. MacDonald.
HISTORY.....Aubrey Lippincott.
CHEMISTRY.....Alex. Ross.
MODERN LANGUAGES.....Aubrey Lippincott.

THIRD YEAR.

CLASSICS.....J. A. Creighton.
METAPHYSICS.....Thomas Christie.
NATURAL PHILOSOPHY....None given.

SECOND YEAR.

CLASSICS.....E. D. Miller.
MATHEMATICS.....None given.
LOGIC AND PSYCHOLOGY.E. D. Miller.

FIRST YEAR.

CLASSICS.....Arthur P. Silver, Halifax Gram. School.
MATHEMATICS.....Andrew W. H. Lindsay, Pictou Academy.
RHETORIC.....Arthur P. Silver.

CERTIFICATES OF GENERAL MERIT.

FOURTH YEAR.—*Class* 1.—Alexander Ross. *Class* 2.—J. H. MacDonald, Aubrey Lippincott, S. McNaughton.
THIRD YEAR.—*Class* 1.—None. *Class* 2.—Thomas Christie, James A. Creighton.
SECOND YEAR.—*Class* 1.—None. *Class* 2.—E. D. Miller.
FIRST YEAR.—*Class* 1.—Arthur P. Silver, Halifax Grammar School; Alex. C. McKenzie, Hugh Scott. *Class* 2.—Andrew W. H. Lindsay, Pictou Academy; Ernest Bayne, Pictou Academy.

THE GRANT PRIZE.

The Grant Prize of Five Pounds for the best Essay on *The Genius and Character of the Roman People,* was awarded to

Aubrey Lippincott.

THE YOUNG PRIZES.

The Young Prize of $25 was awarded by the Students of the Third and Fourth Years to

John Gow.

The Young Prizs of $15 was awarded by the Students of the First and Second Years to

Alexander C. McKenzie.

Examinations, 1866-67.

SCHOLARSHIP EXAMINATIONS, OCT. 1866.

Tne Scholarship offered for competition to pupils from Halifax schools, was gained by

Arthur P. Silver, Halifax Grammar School.

The Scholarship offered for competition to pupils from Pictou Academy, was gained by

A. W. H. Lindsay.

UNIVERSITY EXAMINATIONS, 1866--7.

The following Students have passed the University Examinations in the several years :—

SUPPLEMENTARY EXAMINATIONS, OCT. 1866.

For Degrree of B. A.—Joshua C. Burgess.
Third Year.—J. J. Cameron, Aubrey Lippincott, J. H. MacDonald, Robert Sedgewick, David Smith, Edwin Smiih.
Second Year.—James A. Creighton.
First Year.—George Murray.

SESSIONAL EXAMINATIONS, APRIL, 1867.

Final Examination for Degree of B. A.—Alexander Ross, J. H. MacDonald, Aubrey Lippincott, Robert Sedgewick, David Smith, J J. Cameron, Edwin Smith.
Third Year.—James A. Creighton, Thomas Christie, Aeneas Gordon, Kenneth McKay.
Second Year.—E. D. Miller, J. J. McKenzie, Joseph Annand.
First Year.—Arthur P. Silver, Andrew W. H. Lindsay, Alexander C. McKenzie, Hugh Scott, Ernest Bayne, Danl. McKay, John Wallace.

STANDING OF STUDENTS IN THE SEVERAL SUBJECTS.

CLASSICS.

Fourth Year.—*Class* 1.—Alex. Ross. *Class* 2.—J. H. McDonald, Aubrey Lippincott. *Class* 3.—Robt. Sedgewick, John Gow, David Smith, Edwin Smith, J. J. Cameron.
Third Year.—*Class* 1.—J. A. Creighton. *Class* 2.—Aeneas Gordon. *Class* 3.—Kenneth McKay, Thos. Christie, Isaac Simpson.
Second Year.—*Class* 1.—None. *Class* 2.—Ebenezer D. Miller. *Class* 3.—J. J. McKenzie, Joseph Annand, George Murray, J. M. Sutherland.
First Year.—*Class* 1.—A. P. Silver, A. C. McKenzie. *Class* 2.—James McGregor, Hugh Scott. A. W. H. Lindsay, Ernest Bayne. *Class* 3. —Walter Thorburn, Dan. McKay, Creighton Hamilton, J. Wallace.

MATHEMATICS

First Year.—*Class* 1.—Andrew W. H. Lindsay, Hugh Scott, Arthur P. Silver, Alex. C. McKenzie. *Class* 2.—Jcmes McGregor, J. Douglas Story, John Wallace. *Class* 3.—Hezekiah Murray, Daniel McKay, Creighton Hamilton, Samuel E. Bayne, Wm. Humphrey.

SECOND YEAR.—*Class* 1.—Ebenezer D. Miller, John J. McKenzie, Joseph Annand.

THIRD YEAR.—*Class* 3.—Samuel McNaughton.

ETHICS AND POLITICAL ECONOMY.

Class 1.—John H. McDonold, Alexander Ross, Aubrey Lippincott, Robert Sedgewick, John Gow, Samuel McNaughton, John J. Cameron. *Class* 2.—Edwin Smith, David H. Smith.

LOGIC AND PSYCHOLOGY.

Class 1.—E. D. Miller. *Class* 2.—J. J. McKenzie. *Class* 3.—Jos. Annand, J. Sutherland, Geo. Murray, Duncan Fraser.

METAPHYSICS AND ESTHETICS.

Class 1.—Thos. Christie, Arthur F. Carr, Aeneas G. Gordon. *Class* 2.—James A. Creighton, Kenneth McKay, James Forrest. *Class* 3.—Isaac Simpson.

NATURAL PHILOSOPHY.

Class 1.—A. F. Carr. *Class* 2.—T. Christie, J. H. Creighton *Class* 3.—K. McKay, A. Gordon, J. Forrest, I. Simpson.

CHEMISTRY.

SENIOR CHEMISTRY.—*Class* 1.—A. Ross. *Class* 2.—S. McNaughton, Edwin Smith, J. H. MacDonald, Robt. Sedgewick, David H. Smith. *Class* 3.—A. Lippincott, John J. Cameron.

JUNIOR CHEMISTRY.—*Class* 1.—Thos. M. Christie, E. D. Mill r, John J. McKenzie, Jos. Annand, A. F. Carr, Jas. A. Creighton. *Class* 2.—Duncan Fraser, James Forrest, J. Sutherland, Isaac Simpson. *Class* 3.—Gordon Campbell, Aeneas G. Gordon, Geo. Murray, K. McKay, Hezekiah Murray.

HISTORY.

FOURTH YEAR.—*Class* 1.—Lippincott, Cameron, McDonald. *Class* 2.—Sedgewick, Ross, Gow, Edw. Smith. *Class* 3.—McNaughton, D. Smith.

RHETORIC.

FIRST YEAR.—*Class* 1.—Silver, Scott, Bayne, McKenzie, McKay, Thorburn. *Class* 2.—Wallace. *Class* 3.—Hamilton, Lindsay, Abbinett, Humphrey, Sinclair.

FRENCH.

FOURTH YEAR.—*Class* 1.—Aubrey Lippincott, David Smith, Alex. Ross, Samuel McNaughton. *Class* 2.—Robt. Sedgewick. John H. McDonald. *Class* 3.—Edwin Smith.

THIRD YEAR.—*Class* 1.—James A. Creighton, Thomas Christie, James Forrest, Kenneth McKay, Arthur F. Carr. *Class* 2.—A. G. Gordon. *Class*.—I. Simpson.

GERMAN.

ELEMENTARY COURSE.—Thomas Christie, S. McNaughton.

ADVANCED COURSE.—Aubrey Lippincott, John J. Cameron.

Graduates and Undergraduates of the University, and General Students.

GRADUATES.

DEGREE OF B. A.

1866.

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

1867.

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

UNDERGRADUATES, 1866-7.

FOURTH YEAR.

Cameron, J. J. . . . . Georgetown, P. E. Island.
Lippincott, Aubrey . . . . . New Glasgow.
MacDonald, J. H. . . . . Cornwallis.
MacNaughton, Samuel . . . . . East River, Pictou.
Ross, Alexander . . . . . Roger Hill, Pictou.
Sedgewick, Robert . . . . . Middle Musquodoboit.
Smith, David H. . . . . Truro.
Smith, Edwin . . . . . Truro.

THIRD YEAR.

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

SECOND YEAR.

Annand, Joseph . . . . . Gay's River.
Fraser, Duncan . . . . . New Glasgow.
McKenzie, John J. . . . . Green Hill, Pictou.
Miller, E. D. . . . . Roger Hill, Pictou.
Murray, George . . . . . Do. do.
Sutherland, John M. . . . . West River, Pictou.

FIRST YEAR.

Bayne, S. Ernest . . . . . Pictou.
Lindsay, A. W. H. . . . . Pictou.
McKay, Daniel . . . . . Springville, Pictou.
McKenzie, Alex. C. . . . . Rustico, P. E. Island.
Scott, Hugh McD. . . . . Sherbrooke.
Seeton, A. P. . . . . Halifax.
Silver, Arthur P. . . . . Halifax.
Sinclair, Norman M. . . . . Halifax.
Thorburn, Walter M. . . . . Bermuda.
Wallace, John . . . . . Shubenacadie.

GENERAL STUDENTS.

NAME.	RESIDENCE.	CLASSES ATTENDED.
Abbinett, Arthur	Halifax.	Classics, Math. Rhetoric.
Cameron, A. H.	New Glasgow	Class., Math., Logic.
Cameron, W. D.	New Glasgow	Classics, Mathematics.
Campbell, John	Lake Ainslie, C. Breton	Rhet., Logic., Chemistry.
Campbell, David	East River, Pictou	Class., Logic, Chemistry.
Campbell, P. G.	Sherbrooke	Class., Math., Logic, Chem.
Campbell, Colin N.	Baddeck, Cape Breton	History.
Cox, Robinson.	Upper Stewiacke	Mathematics, Chemistry.
Cruickshank, W. G.	Middle Musquodoboit.	Classics, Rhetoric.
Fraser, Charles	Cavendish, P. E. Island.	Class., Meta., Hist., Chem.
Fraser, Peter G.	New Glasgow	Practical Chemistry.
Godkin, Charles M.	Halifax.	Latin, Math., Rhetoric.
Gow, John	Lunenburg	Class., Ethics, Hist., Chem.
Gunn, Samuel	East River	Class., Meta., Rhet., Chem.
Hamilton, C. L.	Gore, Hants Co.	Class., Mathem., Rhetoric.
Henry, H. McD.	Halifax	Do. do. do.
Humphrey, William	Halifax	Do. do. do.
Kent, Alex.	Halifax	Chemistry.
Logan, Hiram	East Boston, U. S.	Classics, Math., Rhetoric.
McDaniel, John H.	Halifax	Mathematics, Rhetoric.
McGillivray, John	New Glasgow	Class., Mathematics, Rhet.
McGregor, James G.	Halifax	Classics, Mathematics.
McKenzie, John A.	Green Hill, Pictou	Classics, Nat. Phil., Met. Chemistry, French.
McMillan, Peter H.	Pictou	Classics, Math., Rhetoric.
Mitchell, Frederick	Halifax	Do. do. do.
Murray, Hezekiah	Mabou	Class., Math., Logic, Chem.
Murray, John	Roger Hill, Pictou	Classics, Logic, Chemistry.
Nelson, Adam	Shubenacadie	Classics, Math., Rhetoric.
Stairs, John F.	Halifax	Chemistry.
Story, J. Douglas	Halifax	Classics, Mathematics.
Thompson, Alex. F.	Antigonishe	Class., Math., Logic, Bhem.
Waddell, Sherburne.	Sheet Harbour, Halifax	History.
Webster, Barclay.	Kentville	Class., Mathematics, Logic.

Graduates and Undergraduates of the University and General Students

GRADUATES
DEGREE OF B.A.
1887
EXAMINATION PAPERS, 1887
GENERAL STUDENTS.

NAME.	RESIDENCE.	CLASSES ATTENDED.
Ashbner, Arthur	Halifax	Classics, Math, Rhetoric.
Cameron, A. H.	New Glasgow	Class, Math, Logic.
Cameron, W. D.	New Glasgow	Classics, Mathematics.
Campbell, John	Lake Ainslie, C. Breton	Class, Logic, Chemistry.
Campbell, David	Earltown, Pictou	Class, Chemistry.
Campbell, P. R.	Shubenacadie	Class, Math, Logic, Chem.
Campbell, Colin K.	Baddeck, Cape Breton	History.
Cox, Robinson	Grey Rocks	Mathematics, Chemistry.
Crickshank, W. G.	Halifax, Armdale	Classics, Rhetoric.
Fraser, Charles	Greenfield, P. E. Island	Class, Math, Hist., Chem.
Fraser, Peter G.	New Glasgow	Practical Chemistry.
Geddes, Charles M.	Halifax	Latin, Math, Rhetoric.
Gow, John	Pomquet	Class, Ethics, Hist., Chem.
Gunn, Samuel	East River	Class, Math, Hist., Chem.
Hopkinson, C. L.	East Chester	Class, Mathematics, Rhetoric.
Henry, H. McHall	Halifax	do.
Humphreys, William	Halifax	do.
Kirk, Alex.	Halifax	do.
Logan, Hiram	East Boston, U. S.	Classics, Math, Rhetoric.
McDougall, John H.	Halifax	Metaphysics, Rhetoric.
McGillivray, John	New Glasgow	Class, Mathematics, Hist.
McGregor, James G.	Halifax	Classics, Mathematics.
McKenzie, John A.	Green Hill, Kings Co.	Classics, Nat. Hist., Mat.
		Chemistry, Botany.
McMillan, Peter H.	Pictou	Classics, Math, Rhetoric.
Mitchell, Frederick	Halifax	do. do.
Murray, Hezekiah	Halifax	Class, Math, Logic, Chem.
Murray, John	Lower Hill, Pictou	Classics, Logic, Chemistry.
Nelson, Adam	Stellarton	Classics, Math, Rhetoric.
Staples, John F.	Halifax	Chemistry.
Story, J. Douglas	Halifax	Classics, Mathematics.
Thompson, Alex. T.	Armdale	Class, Mathematics, Hist.
Wadhall, Sherburne	Shore, Durham, Halifax	Hist.
Webster, Barclay	Kentville	Class, Mathematics, Logic

EXAMINATION PAPERS, 1867.

FIRST YEAR.....LATIN.
GREEK.
HISTORY OF ROME.
MATHEMATICS.
RHETORIC.

SECOND YEAR...LATIN.
GREEK.
MATHEMATICS.
LOGIC AND PSYCHOLOGY.
CHEMISTRY.

THIRD YEAR....LATIN.
GREEK.
MATHEMATICAL PHYSICS.
EXPERIMENTAL PAYSICS.
METAPHYSICS.
FRENCH.
GERMAN.

FOURTH YEAR..LATIN.
GREEK.
COMPARATIVE PHILOLOGY.
ETHICS AND POLITICAL ECONOMY.
CHEMISTRY.
HISTORY.
FRENCH.
GERMAN.

EXAMINATION PAPERS, 1867.

FIRST YEAR.....LATIN.
GREEK.
HISTORY OF ROME.
MATHEMATICS.
RHETORIC.

SECOND YEAR...LATIN.
GREEK.
MATHEMATICS.
LOGIC AND PSYCHOLOGY.
CHEMISTRY.

THIRD YEAR.....LATIN.
GREEK.
MATHEMATICAL PHYSICS.
EXPERIMENTAL PHYSICS.
METAPHYSICS.
FRENCH.
GERMAN.

FOURTH YEAR...LATIN.
GREEK.
COMPARATIVE PHILOLOGY.
ETHICS AND POLITICAL ECONOMY.
CHEMISTRY.
HISTORY.
FRENCH.
GERMAN.

DALHOUSIE COLLEGE AND UNIVERSITY.

HALIFAX.

SESSIONAL EXAMINATIONS, 1887.

MORNING, APRIL 28, 9 A.M. TO 1 P.M.

LATIN.—THIRD YEAR.

CICERO: ORAT. PRO LEGE MANILIA—VIRGIL: AENEID, A. VII.

Professor Johnson, M.A.

I. Translate:

a. Etenim primum illud perei reiere, nos publicanis acidem vectigalia parva vicenia reoperaria; neque enim iudicia adiunctis iudicibus ut proprie publicanorum neque alia solutaria pecuniae timoris, Magnopere quod, nec eadem, Asia atque idem sicut Mithridates intio, belli, Asia, tot decem, certe, id quidem calamitate deon monuerit, reliquae sibimque Nam iuin quum in Asia ita nostros gerunt enim ceteris, scimus Romae solutione pecuniae tidem concidere. Nos enim pecunia nos in civitate multi res ne Romae, auctore at non plures eosque in modum indeat calamitatem. Cuv. Ave. A. M. C. L.

b. Quare nolim dolorem quis hunc aut eredatis eunis, qui inter eo amore nunc inveniens ei, quem, sicut in rebus eas, eum excusatio venias paulatim. Quod a necessitatibus hanc praesum. Quirites, continuandam pirata, est vobis auctor vir bellorum, omnium maximumque rerum praesumus. P. Servilius, cuius tantis ne vestis tota eximae existimat, quum de bello deliberetis, auctor vobis gravior nemo esse debeat; est C. Curio, summis vestris beneficiis, maximisque rebus gestis, summo vestro et praeclaris praeditus; est Cn. Lentulus, in quo omnes pro amplissimis vestros honoribus, summam consilium, summam gravitatem esse cognovistis; est C. Cassius, in quo omnes virtutes consulatus singulari. Cuv. Ave. A. M. C. L.

c. Tum autem Archias deinceps ortus ab omni

Certum oratores augeatur ad mortis vestis

In labor, tantis velatos. Pallasque omnes

Tonsaque ferri vino, pecoque expressere Teucris.

Haud mora, festinant laeti rapidique ferunur

Passibus. Ipse humili designat moenia fossa,

Moliturque locum, primaque in litore sedes

Castrorum in morem pinnis atque aggere cingit.

Iamque ier omnes iuvenes ac mora Latinorum

Arduae, cernebant iuvenes, muroque subibant.

Aute urbem pueri et primaevo flore iuventus

Exercentur equis, domitantque in pulvere currus,

Aut acres tendunt arcus, aut lenta lacertis

Spicula contorquent, cursuque ictuque lacessunt.

Aeneid vii. 153-165.

2. Parse the verbs in the sentence "Quare nolim" . . . (b.) giving the rules for mood and tense. Why are different moods used in (a.)

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

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

LATIN.—FIRST YEAR.

CICERO: ORAT. PRO LEGE MANILIA.—VIRGIL: AENEID, B. VII.

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

1. Translate:

a. Etenim primum illud parvi refert, nos publicanis amissa vectigalia postea victoria recuperare; neque enim iisdem redimendi facultas erit propter calamitatem neque aliis voluntas propter timorem. Deinde, quod nos eadem Asia atque idem iste Mithridates initio belli Asiatici docuit, certe id quidem calamitate docti memoria retinere debemus. Nam tum quum in Asia res magnas permulti amiserant, scimus Romæ solutione impedita fidem concidisse. Non enim possunt una in civitate multi rem ac fortunas amittere ut non plures secum in eandem trahant calamitatem. *Orat. Pro. L. M. C.* 7.

b. Quare nolite dubitare quin huic uni credatis omnia, qui inter tot annos unus inventus sit, quem socii in urbes suas cum exercitu venisse gaudeant. Quod si auctoritatibus hanc causum, Quirites, confirmandam putatis, est vobis auctor vir bellorum omnium maximarumque rerum peritissimus, P. Servilius, cujus tantæ res gestæ terra marique exstiterunt ut, quum de bello deliberetis, auctor vobis gravior nemo esse debeat; est C. Curio, summis vestris beneficiis, maximisque rebus gestis, summo ingenio et prudentia præditus; est Cn. Lentulus, in quo omnes pro amplissimis vestris honoribus, summun consilium, summam gravitatem esse cognovistis; est C. Cassius, integritate, virtute, consantia singulari. *Orat. Pro. L.M. c.* 23.

c. Tum satus Anchisa delectos ordine ab omni
Centum oratores augusta ad mœnia regis
Ire jubet, ramis velatos Palladis omnes,
Donaque ferri viro, pacemque exposcere Teucris.
Hand mora, festinant jussi rapidisque feruntur
Passibus. Ipse humili designat mœnia fossa,
Moliturque locum, primasque in litore sedes
Castrorum in morem pinnis atque aggere cingit.
Jamque iter emensi turres ac tecta Latinorum
Ardua cernebant juvenes, muroque subibant.
Ante urbem pueri et primævo flore juventus
Exercentur equis, domitantque in pulvere currus,
Aut acres tendunt arcus, aut lenta lacertis
Spicula contorquent, cursuque ictuque lacessunt.

Aeneid vii. 153-165.

2. Parse the verbs in the sentence "Quare nolite" . . (*b.*) giving the rules for mood and tense. Why are different moods used in (*a.*)

"quum . . . amiserant" and (*b.*) "quum . . . deliberetis"? When is *ut non* used to introduce a clause and when *ne*?

3. Give the rules for the cases of (*a.*) "parvi," "publicanis," "redimendi," "calamitate," "Romæ"—(*b.*) "mari," "ingenio," "integritate," (*c.*) "iter," "muro," "flore," "cursu."

4. *a.* Parse and conjugate the verbal forms in extract (*c.*)

b. Decline "mœnia," "viro," "locum," "castrorum," "aggere," "iter," "pulvere," "arcus," "lacertis."

c. What is the etymology of *prudentia, humilis, nemo, impedio, auspicium, fatidicus, Oenotria, bidens*?

5. Explain the allusions in these lines:—

a. Proxuma Circææ raduntur litora terræ.

b. Saturnus senex Janique bifrontis imago.

c. *Nec face tantum*
Cisseis prægnans ignes enixa jugales.

d. At non sic Phrygius penetrat Lacedæmona pastor.

6. *a.* Relate the circumstances which led to the proposal of the Le Manilia. Give the date of it. Was there any precedent for it? On what subject does Cicero chiefly dwell? He shews the importance of Asia Minor to Rome? What office did he hold at this time?

b. Describe the voyage of Aeneas to Latium. Illustrate the use of "Palladis" in line 155. What means did the Latins in the earliest times employ to obtain answers from the gods?

7. Scan lines 153–155, 160–163. What is meant by *metre, cæsura, synæresis, ecthlipsis, synalæpha.* Where is *cæsura* necessary in Hemamters? What endings of *Hexameter* lines should be avoided?

8. Distinguish:—*promitto, polliceor; aptus, idoneus; comes, socius, consors, sodalis; cæpi, incipio; simulo, dissimulo; similis tui, similis tibi; tibi consulere, te consulere, in te consulere; sanare, mederi; mihi deficere, a me deficre; ŏs, ōs; occīdo, occĭdo; pecus* (fem.), *pecus* (neut.)

9. Translate into Latin:—He wishes to come; he hopes to come; he orders me to come; he deserves to be praised; he says he will do it; I will not refuse to take it. It is of great importance to me that the army should know what prevented me from stripping the enemy of his baggage. He requests me to sell these thirty bushels of wheat at ten denarii the bushel and to ask at what price barley is selling. There are some persons who are never contented with their own lot in life, but are always envying that of others.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSSIONAL EXAMINATIONS, 1867.

TUESDAY, APRIL 16TH.

GREEK.—XENOPHON.—ANABASIS, BOOK V.

FIRST YEAR.

1. Translate the first or second, and the last of the following passages :—

a. Ἐπεὶ δὲ πάντα παρεσκεύαστο, καὶ οἱ λοχαγοὶ καὶ οἱ ὑπολοχαγοὶ καὶ οἱ ἀξιοῦντες τούτων μὴ χείρους εἶναι πάντες παρατεταγμένοι ἦσαν καὶ ἀλλήλους μὲν δὴ ξυνεώρων, (μηνοειδὴς γὰρ διὰ τὸ χωρίον ἡ τάξις ἦν·) ἐπεὶ δὲ ἐπαιάνισαν καὶ ἡ σάλπιγξ ἐφθέγξατο, ἅμα τε τῷ Ἐνναλίῳ ἠλάλαξαν καὶ ἔθεον δρόμῳ οἱ ὁπλῖται καὶ τὰ βέλη ὁμοῦ ἐφέρετο, λόγχαι, τοξεύματα, σφενδόναι καὶ πλεῖστοι δ' ἐκ τῶν χειρῶν λίθοι. ἦσαν δὲ οἳ καὶ πῦρ προσέφερον. Ὑπὸ δὲ τοῦ πλήθους τῶν βελῶν ἔλιπον οἱ πολέμιοι τά τε σταυρώματα καὶ τὰς τύρσεις· ὥστε Ἀγασίας Στυμφάλιος καὶ Φιλόξενος Πελληνεὺς καταθέμενοι τὰ ὅπλα ἐν χιτῶνι μόνον ἀνέβησαν, καὶ ἄλλος ἄλλον εἷλκε καὶ ἄλλος ἀναβεβήκει, καὶ ἡλώκει τὸ χωρίον, ὡς ἐδόκει.—*Chap. ii*, 13–15.

b. Οἱ δὲ Ἕλληνες διαρπάζοντες τὸ χωρίον ἐυρισκον θησαυροὺς ἐν ταῖς οἰκίαις ἄρτων νενημένων πατρίους, ὡς ἔφασαν οἱ Μοσσυνοίκοι· τὸν δὲ νέον σῖτον ξυν τῇ καλάμῃ ἀποκείμενον· ἦσαν δὲ ζειαὶ αἱ πλεῖσται. Καὶ δελφίνων τεμάχη ἐν ἀμφορεῦσιν εὑρίσκετο τεταριχευμένα καὶ στέαρ ἐν τεύχεσι τῶν δελφίνων, ᾧ ἐχρῶντο οἱ Μοσσυνοίκοι καθάπερ οἱ Ἕλληνες τῷ ἐλαίῳ. Κάρυα δὲ ἐπὶ τῶν ἀνωγαίων ἦν πολλὰ τὰ πλατέα, οὐκ ἔχοντα διαφυὴν οὐδεμίαν. Τούτων καὶ πλείστῳ σίτῳ ἐχρῶντο ἕψοντες καὶ ἄρτους ὀπτῶντες.—*Chap. iv*, 27–29.

c. Μετὰ ταῦτα Ξενοφῶν εἶπεν· Ὦ Σινωπεῖς, οἱ μὲν ἀνδρὲς ἤρηνται πορείαν ἣν ὑμεῖς ξυμβουλεύετε· οὕτω δὲ ἔχει· εἰ μὲν μέλλει πλοῖα ἔσεσθαι ἱκανὰ ἀριθμῷ ὡς ἕνα μη καταλείπεσθαι ἐνθάδε, ἡμεῖς δὲ πλέοιμεν ἄν· εἰ δὲ μέλλοιμεν οἱ μὲν καταλείψεσθαι οἱ δὲ πλεύσεσθαι, οὐκ ἂν ἐμβαίημεν εἰς τὰ πλοῖα. Γιγνώσκεμεν γὰρ ὅτι, ὅπου μὲν ἂν κρατῶμεν, δυναίμεθ' ἂν καὶ σώζεσθαι καὶ τὰ ἐπιτηδεῖα ἔχειν. εἰ δὲ που ἥττους τῶν πολεμίων ληφθησόμεθα, εὔδηλον δὴ ὅτι ἐν ἀνδραπόδων χώρᾳ ἐσόμεθα.—*Chap. vi*, 12, 13.

2. Write out the *subordinate* clauses in these passages and show their relation to other clauses.

Mention the *Moods* employed in them and give the corresponding constructions in Latin.

In what different ways is the *oratio obliqua* expressed in Greek? How in Latin? Translate into Latin the first two clauses of (*c*) as *oratio recta* and *obliqua*.

3. Parse the following sentences :—

In (*a*) οἱ ἀξιοῦντες τούτων μὴ χείρους εἶναι πάντες παρατεταγμένοι ἦσαν.—ἅμα τε τῷ Ἐνναλίῳ ἠλάλαξαν καὶ ἔθεον δρόμῳ οἱ πολῖται.

In (*b*) καὶ δελφίνων τεμάχη ἐν ἀμφορεῦσιν εὑρίσκετο τεταριχευμένα.—καθάπερ οἱ Ἕλληνες τῷ ἐλαίῳ.

In (*c*) οὕτω δε ἔχει.—ἐν ἀνδραπόδων χώρᾳ ἐσόμεθα. Translate the last two sentences into Latin.

4. Parse these verbal forms and give the principal parts of the verbs they come from:—

(*a*) παρεσκεύαστο, ἐφθέγξατο, προσέφερον, ἕιλκε, ἀναβεβήκει, ἡλώκει.

(*b*) νενημένων, ἔφασαν, ἔχοντα, ὀπτῶντες.

(*c*) καταλείψεσθαι, πλεύσεσθαι, σώζεσθαι, ληφθησόμεθα.

5. Write the Gen. and Voc. Sing. and Dat. Pl. of:—πολίτης, λοχαγός, παῖς, ποῦς, ἄναξ, ἀνήρ, πόλις, βασιλεύς, γυνή, λέων, πατήρ.

Give the general rules for determining the gender of Nouns of the Third Declin.

6. Compare these Adjectives:—μέγας, πολύς, μικρός, καλός, σοφός, δεινός, βαθύς, ταχύς, ῥαδίος.

Write the Nom. and Gen. in Sing. and Pl. of αὐτός, οὗτος, ὁ, ὅς, ἄλλος, ὅστις.

Distinguish ταὐτά, ταῦτα,—'αλλά, ἄλλα,—ἄλλοι, οἱ ἄλλοι,—αὐτός, ὁ αὐτός.

7. *a*. What is the essential difference between verbal forms of the first and second conjugations? *b*. Shew that it does not consist in the difference of termination or the reduplication of the rest. *c*. In which tense is the rest found in its simple form? *d*. Give the roots of the following verbs with examples of similar formations:—

λείπω, φεύγω, φαίνω, μανθάνω, γιγνώσκω, δίδωμι, ὄλλυμι, τύπτω, τάσσω, εἰμί.

8. *a*. Write the 2nd Aor. Act. Mid. and Pass., in all the Moods and Persons of:—

τρέπῶ, τείνω, δίδωμι, βαίνω, ἵημι.

b. Write the 2nd P. Dual of the 1st Aor. in all the Voices and Moods of:—

φαίνω, φιλέω, κρίνω, σπεύδω, τρέφω, ἵστημι.

c. Give the Dat. Pl. Mas. of all the Participles of these verbs:—

τιμάω, φαίνω, κτείνω, τρέφω, δηλόω, δίδωμι, εἰμί.

d. Write the Pres. Tense of all the Moods of the different Voices of:—

ἵστημι, ἵημι, εἶμι, εἰμί, κειμαι, οἶδα.

9. Give the etymology and meaning of these words:—λοχαγός, ψευδενέδρα, νεωκόρος, δεκατεύω, δορκάς, σφαιροειδής, στρωματόδεσμος, εὐώνυμος, Μοσσύνοικοι, σταθμός, ὑπήκοος, γνώμη, ὑπωπτεύω, ψηφίζω, χαράδρα, πεντηκόντορος, ναῦλος, στρατόπεδον.

10. Describe the route of the "Ten Thousand." What was the object of the expedition? Give the date of it. Write a brief account of Xenophon's life, and mention his principal works. Some doubt has been shown on the authorship of the *Anabasis?*

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 15, 3 TO 5.30 P. M.

HISTORY OF ROME.—FIRST AND SECOND YEARS.

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

1. On the evidence of language three races can be distinguished in Italy in early times? One of these comprised several tribes arranged in two large groups?

2. Explain the constitution of the Latin Confederation and the relations existing between it and Rome originally? How were these relations subsequently modified?

3. Distinguish clearly *populus, plebs* and *clientes* in early history. Describe the steps by which the differences between the first two were removed, giving dates.

4. Describe the changes in the constitution ascribed to Servius Tullius? Niebuhr and Mommsen assign different motives for them?

5. On what occasion were *Censors* first appointed? What were their duties? How did their tenure of office differ from that of other magistrates?

6. The siege of Veii was in several respects remarkable?

7. When was Rome taken by the Gauls? What was the cause of their attack? What legend is connected with their departure? How is its falsity shewn? Some Roman families derived their names from subsequent contests with them?

8. After what war did Rome become mistress of Italy? What means did she adopt to secure her conquests? Describe the principles of her government of them and enumerate the different classes of her subjects.

9. On what occasion did Rome first overstep the boundaries of Italy? The importance of this step was felt at Rome? Shew the serious consequences to which it led.

10. Mention the dates, causes and results of the three Punic Wars. What Roman generals distinguished themselves in each? Describe Hannibal's route to Italy. What was his policy when there? How was it defeated?

11. Give the names of the Roman Provinces 130 B. C. with the dates of their formation. How were they governed?

12. What powers did the Senate possess during the Republic? The *Equites* of early and later times differed? Describe the constitution and powers of the *Comitia.*

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 15, 3 to 5.30 P. M.

HISTORY OF ROME.—FIRST AND SECOND YEARS.

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

1. On the evidence of language three races can be distinguished in Italy in early times? One of these comprised several tribes arranged in two large groups?

2. Explain the constitution of the Latin Confederation and the relations existing between it and Home originally? How were these relations subsequently modified?

3. Distinguish clearly populus, plebs and clientes in early history. Describe the steps by which the differences between the first two were removed, giving dates.

4. Describe the changes in the constitution ascribed to Servius Tullius? Niebuhr and Mommsen assign different motives for them?

5. On what occasion were Censors first appointed? What were their duties? How did their tenure of office differ from that of other magistrates?

6. The siege of Veii was in several respects remarkable?

7. When was Rome taken by the Gauls? What was the cause of their attack? What legend is connected with their departure? How is its falsity shown? Some Roman families derived their names from subsequent contests with them?

8. After what war did Home become mistress of Italy? What means did she adopt to secure her conquests? Describe the principles of her government of them and enumerate the different classes of her subjects.

9. On what occasion did Rome first overstep the boundaries of Italy? The importance of this step was felt at Home? Show the serious consequences to which it led.

10. Mention the dates, causes and results of the three Punic Wars. What Roman generals distinguished themselves in each? Describe Hannibal's route to Italy. What was his policy when there? How was it defeated?

11. Give the names of the Roman Provinces 150 B. C. with the dates of their formation. How were they governed?

12. What powers did the Senate possess during the Republic? The Æquites of early and later times differed? Describe the constitution and powers of the Comitia.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1887.

WEDNESDAY, APRIL 17, 9 A.M. to 12 NOON.

MATHEMATICS.—SENIOR YEAR.

GEOMETRY AND MENSURATION.

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

1. If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base shall have the same ratio to one another that the other sides of the triangle have; and conversely.

2. Similar triangles are to one another in the duplicate ratio of their homologous sides.

3. In right-angled triangles the rectilineal figure described on the hypothenuse is equal to the similar and similarly described figures on the other two sides.

4. If three straight lines meet at a point and a straight line stand at right angles to each of them at that point, the three straight lines are in one and the same plane.

5. If two planes which cut one another be each of them perpendicular to a third plane, their common section shall be perpendicular to the same plane.

6. If chords in a circle pass through a common point, not the centre, the angents at their extremities will meet in a straight line, which is parallel to the chord that is bisected in the point.

7. If, the base of a triangle being fixed, the vertex move in a straight line, the point in which the lines drawn from the angles to bisect the opposite sides meet, shall also move in a straight line.

8. From a given triangle cut off an nth part by a line parallel to one of the sides.

9. If a, b are the parallel sides of a trapezoid and p the perpendicular breadth, prove $\text{Area} = \frac{p}{2}(a + b)$.

10. An arc of 60° in one circle is equal in length to an arc of 72° in another; compare the areas of the circles.

11. A mill-wheel has a radius of 10 ft., and the circumference moves at the rate of 10 ft. per second; find the circular measure of the arc described by a point in the circumference in an hour; and reduce it to angular measurement.

12. The radius of the base of a right cone is 3 inches, and the height $6\sqrt{2}$; find the surface and solidity of the cone.

13. In a given square another is inscribed, having its angles at the middle points of the side; in this another square is similarly inscribed, and so on for ever. The sum of the areas of the inscribed squares is equal to the area of the given square.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

WEDNESDAY, APRIL 17, 9 A.M. TO 12 NOON.

MATHEMATICS.—SECOND YEAR.

GEOMETRY AND MENSURATION.

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

1. If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base shall have the same ratio to one another that the other sides of the triangle have; and conversely.

2. Similar triangles are to one another in the duplicate ratio of their homologous sides.

3. In right-angled triangles the rectilineal figure described on the hypothenuse is equal to the similar and similarly described figures on the other two sides.

4. If three straight lines meet at a point and a straight line stand at right angles to each of them at that point, the three straight lines are in one and the same plane.

5. If two planes which cut one another be each of them perpendicular to a third plane, their common section shall be perpendicular to the same plane.

6. If chords in a circle pass through a common point, not the centre, the tangents at their extremities will meet in a straight line, which is parallel to the chord that is bisected in the point.

7. If, the base of a triangle being fixed, the vertex move in a straight line, the point in which the lines drawn from the angles to bisect the opposite sides meet, shall also move in a straight line.

8. From a given triangle cut off an nth part by a line parallel to one of the sides.

9. If a, b are the parallel sides of a trapezoid and p the perpendicular breadth, prove Area $= (a + b)\frac{p}{2}$.

10. An arc of 60° in one circle is equal in length to an arc of 72° in another; compare the areas of the circles.

11. A mill-wheel has a radius of 40 ft., and the circumference moves at the rate of 10 ft. per second; find the circular measure of the arc described by a point in the circumference in an hour; and reduce it to angular measurement.

12. The radius of the base of a right cone is 3 inches, and the height $6\sqrt{2}$; find the surface and solidity of the cone.

13. In a given square another is inscribed, having its angles at the middle points of the sides; in this another square is similarly inscribed, and so on for ever. The sum of the areas of the inscribed squares is equal to the area of the given square.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

WEDNESDAY, APRIL 17, 3 TO 5.30 P.M.

MATHEMATICS.—SECOND YEAR.

TRIGONOMETRY AND ALGEBRA.

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

1. Prove $\sin A = \sin(180° - A)$, $\cos A = -\cos(180° - A)$, $\sin A = -\sin(-A)$, and $\cos A = \cos(-A)$, and deduce the corresponding relations of the other four functions of A.

2. Prove $\operatorname{cosec} 2A + \cot 2A = \cot A$: and $\dfrac{\sin A + \sin 3A}{\cos A + \cos 3A} = \tan 2A$.

3. Prove $\sin(n+1)A = 2\sin nA \cos A - \sin(n-1)A$, and give the similar formula for $\cos(n+1)A$. Shew the practical importance of these expressions.

4. Given $2\sin^2 x - 5\cos x - 4 = 0$; find x.

5. Given two sides and the included angle of a plane triangle: prove the main formula on which the solution of this case depends, and apply it to find the other parts of the triangle.

6. If $A + B + C = 90°$, shew that $\sin A + \sin B + \sin C = 4\cos\frac{A}{2}\cos\frac{B}{2}\cos\frac{C}{2}$.

7. If a, b, c are the sides of a triangle, A, B, C being the angles opposite, prove $\cos A = \dfrac{b^2 + c^2 - a^2}{2bc}$.

8. In a piece of even ground, and with only a measuring line, a person wishes to find the distance of a visible but inaccessible object. How should he proceed?

9. The inscribed circle of a triangle touches the sides a, b, c in D, E, F. Join these points and investigate the area of the triangle D E F.

10. Expand by the Binomial Theorem $\left(\dfrac{b+x}{a}\right)^{\frac{1}{2}}$ and find the middle term of $\left(x^2 - \dfrac{1}{x^2}\right)^{10}$.

11. When n is a positive integer, the number of terms in the expansion of $(a+x)^n = n+1$: in other cases it is infinite.

12. The odd combinations of n things exceed the even combinations, whatever the value of n.

13. Three cents are to be tossed twice. Find the odds against their all turning up the same the second time as well as the first?

14. Find the present value of an annuity of £A, to last for n years, r being the rate per cent.

15. Prove that the difference between an odd number and its cube is divisible by 12, without remainder.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

WEDNESDAY, APRIL 17, 2 TO 5.30 P. M.

MATHEMATICS.—SECOND YEAR.

TRIGONOMETRY AND ALGEBRA.

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

1. Prove $\sin A = \sin(180° - A)$, $\cos A = -\cos(180° - A)$, $\sin A = -\sin(-A)$, and $\cos A = \cos(-A)$, and deduce the corresponding relations of the other four functions of A.

2. Prove $\cos 2A + \cos 3A = \cos A$; and $\dfrac{\sin A + \sin 3A}{\cos A + \cos 3A} = \tan 2A$.

3. Prove $\sin(n+1)A = 2\sin nA \cos A - \sin(n-1)A$, and give the similar formula for $\cos(n+1)A$. Show the practical importance of these expressions.

4. Given $2\sin^2 x - 3\cos x - 4 = 0$; find x.

5. Given two sides and the included angle of a plane triangle; prove the main formula on which the solution of this case depends, and apply it to find the other parts of the triangle.

6. If $A + B + C = 90°$, show that $\sin A + \sin B + \sin C = 4\cos\dfrac{A}{2}\cos\dfrac{B}{2}\cos\dfrac{C}{2}$.

7. If a, b, c be the sides of a triangle, A, B, C being the angles opposite, prove $\cos A = \dfrac{b^2 + c^2 - a^2}{2bc}$.

8. In a piece of even ground, and with only a measuring line, a person wishes to find the distance of a visible but inaccessible object. How should he proceed?

9. The inscribed circle of a triangle touches the sides a, b, c in D, E, F. Join these points and investigate the area of the triangle D E F.

10. Expand by the Binomial Theorem $\left(\dfrac{a}{x} + x\right)^{\frac{3}{2}}$ and find the middle term of $\left(x^2 - \dfrac{1}{x^2}\right)^{2n}$.

11. When n is a positive integer, the number of terms in the expansion of $(a+x)^n = n + 1$; in other cases it is infinite.

12. The odd combinations of n things exceed the even combinations, whatever the value of n.

13. Three coins are to be tossed twice. Find the odds against their all turning up the same the second time as well as the first?

14. Find the present value of an annuity of £A, to last for n years, r being the rate per cent.

15. Prove that the difference between an odd number and its cube is divisible by 12, without remainder.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 22, 9 A.M. TO 1 P.M.

RHETORIC.—FIRST YEAR.

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

1. Give derivation and definition of Barbarism and Solecism. What are obsolete words? From what sources do new words arise? Define Precision, and state how it is most commonly violated. Give the rules for Unity in sentences. (1)

2. Mention the steps to be observed in the construction of Analysis, and give an illustration from the subject—"War." (2)

3. What is the relative importance of Vivacity in style? What are the chief uses of Epithets? Define and illustrate Asyndeton,—Polysyndeton. (3)

4. Show the effect of passing from the general to the particular. Give examples of the variation of connectives. What is Climax? Define Alliteration, and explain the important position which it once had in Anglo-Saxon literature. (4)

5. Give the rules for the construction of Metaphors. Define and illustrate Allusion. What are the chief qualities that give vivacity to style? What is the difference between Personification and Apostrophe? (5)

6. What is the difference between Euphony and Elegance? How is Euphony violated? To what extent does Rhythm enter into Prose, and what difference may be seen among different subjects? Give some examples of resemblance between Sound and Sense. How does Rhetorical Harmony affect the formation of Analysis? (6)

7. What is the difference between direct Argument and indirect? In Arguments from Testimony what things are to be considered? Into how many classes may Arguments from Example be divided? Define and illustrate the Argument from Induction? Give an example of the Argument from Contraries. (7)

8. What is Taste? Mention the chief sources of the Beautiful. What is the difference between the Beautiful and the Picturesque? Show the origin of the Picturesque. Explain the departments of the Ridiculous. Define Burlesque, Parody, Satire. (8)

9. State the common opinion about the origin of the English language, and the objections which exist. Mention the earliest notice of the Teutonic race in Britain. Who may the Jutes have been? What is probably the native seat of the Angles? What is the origin of the name Anglo-Saxon? Mention the Saxon and Danish characteristics in the names of towns. What languages are represented in the English? Give an Historical Analysis of the English language, and state the difference between an Historical Analysis and a Logical. (9)

10. Give a definition of Poetry. What are the chief forms which Poetry has assumed among different nations? Define Accent, Rhyme, Rhythm, Foot, Metre. Illustrate the most common forms of the Iambic and Trochaic metres. (10)

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 22, 9 A.M. TO 1 P.M.

RHETORIC.—FIRST YEAR.

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

1. Give derivation and definition of Barbarism and Solecism. What are obsolete words? From what sources do new words arise? Define Precision, and state how it is most commonly violated. Give the rules for Unity in sentences.

2. Mention the steps to be observed in the construction of Analysis, and give an illustration from the subject—"War."

3. What is the relative importance of Vivacity in style? What are the chief uses of Epithets? Define and illustrate Asyndeton.—Polysyndeton.

4. Show the effect of passing from the general to the particular. Give examples of the variation of connectives. What is Climax? Define Alliteration, and explain the important position which it once had in Anglo-Saxon literature.

5. Give the rules for the construction of Metaphors. Define and illustrate Allusion. What are the chief qualities that give vivacity to style? What is the difference between Personification and Apostrophe?

6. What is the difference between Euphony and Idiomatic. How is Euphony violated? To what extent does Rhythm enter into Prose, and what difference may be seen among different subjects? Give some examples of resemblance between Sound and Sense. How does Rhetorical Harmony affect the formation of Analysis?

7. What is the difference between direct Argument and indirect? In Arguments from Testimony what things are to be considered? Into how many classes may Arguments from Example be divided? Define and illustrate the Argument from Induction? Give an example of the Argument from Contraries.

8. What is Taste? Mention the chief sources of the Beautiful. What is the difference between the Beautiful and the Picturesque? Show the origin of the Ridiculous. Explain the departments of the Ridiculous. Define Burlesque, Parody, Satire.

9. State the common opinion about the origin of the English language, and the objections which exist. Mention the earliest notice of the Teutonic race in Britain. Who may the Jutes have been? What is probably the native seat of the Angles? What is the origin of the name Anglo-Saxon? Mention the Saxon and Danish characteristics in the names of towns. What languages are represented in the English? Give an Historical Analysis of the English language, and state the difference between an Historical Analysis and a Logical.

10. Give a definition of Poetry. What are the chief forms which Poetry has assumed among different nations? Define Accent, Rhyme, Rhythm, Foot, Metre. Illustrate the most common forms of the Iambic and Trochaic metres.

Quam diu aucepe fuisse carnuen, et Sagunthis, quia parent spem
restiparent, crevissent animi, Tarenis, quia non vicissent, proruisto esset,
clamorem respexe opplaudant collium; hominepse in vulnus mun expellant:
inde impedimenque triplidimenque cuiudant; peripsemo tiorin degnamque
in mares voluptas. Interim ab Romo Romo lapsus, venisse nunciatum est;
quidus avitium ad inter pulsi ab Hannibale qui discessit, nec tuto eos
adhuc ter ter tale celerrimum pontium arma: nec Hannibali in tanto
discrimine rerum opere eos legatones audire: Livy xxi. 9.

6. Ut nunc est, in quibus vasum ab eo juventum divina spectat, qui ex
Jove dicere decum in Jovium Hannibal missum; profuse expectare, neque
vagans de vigilantes cerebo. Tarentio primo, nunquam circumspicientem
antecessionem; scenique; deinde cum humani ingressi, quum, quidnam id
esset, quod ne ceteris vultus esset, agitatat animo, temperare oculis nequi
visus; tum Tarentos post se, stupentem mira, nonquidque cum ingressi
adversus ac virgulorum arage fori, ac post inequi, cum fugere cogi
nihilum: tum, quia nocles ea, quidve publici esset, quaerentem audisse:
publicum Jovis esse; pervenit porro ea, nec vitae revertere, sacrifice Jove
in arguto esse: Livy xxi. 22.

Sed cessare, qui Cupus Romam petit inbre intopne
Aegyptus, volet in cumpona vivere; nec qui
Frugis collegit, turros et balnea laudat
Ut fortunatum placet praesentia vinum.
Sed si in vaidus locupeto Auster in alto,
Idcirco bavem trans Aegaeum mare vendas.
Incolumi Rhodos et Mytilene pulchra facit quod
Paenula solstitio, campestre nivalibus aura,
Per brumam Tiberis, Sextili mense caniculae.
Dum licet ac rutilum servat Fortuna benignum,
Romae laudatur Samos et Chios et Rhodos absens.
Tu, quamcumque deus tibi fortunaverit horam,
Grata sume manu, nec dulcia differ in annum,
Ut, quocumque loco fueris, vixisse fideatur
Te dives; nam si ratio et prudentia curas,
Non locus effusi late maris arbiter aufert,
Coelum non animum mutant qui trans mare currunt.
Strenua nos exercet inertia: navibus atque
Quadrigis petimus bene vivere. Quod petis hic est,
Est Ulubris, animus si te non deficit aequus. Hor. Epp. I. 11.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

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

LATIN.—SECOND YEAR.

LIVY: B. XXI. CHAP. 1-30. HORACE: SELECT EPISTLES.

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

1. Translate: the following easy sentences.

a. Quum diu anceps fuisset certamen, et Saguntinis, quia præter spem restiterunt, crevissent animi, Pœnus, quia non vicisset, pro victo esset, clamorem repente oppidami tollunt, hostemque in ruinas muri expellunt; inde impeditum trepidantemque exturbant; postremo fusum fugatumque in castra redigunt. Interim ab Roma legatos venisse nunciatum est; quibus obviam ad mare missi ab Hannibale qui dicerent, nec tuto eos adituros inter tot tam efferatarum gentium arma: nec Hannibali in tanto discrimine rerum operæ esse legationes audire. *Livy.* xxi. 9.

b. Ibi fama est, in quiete visum ab eo juvenem divina specie, qui *se ab Jove* diceret *ducem in Italian Hannibali missum: proinde sequeretur, neque usquam a se deflecteret oculos.* Pavidum primo, nusquam circumspicientem aut respicientem, secutum; deinde cura humani ingenii, quum, quidnam id esset, quod respicere vetitus esset, agitaret animo, temperare oculis nequivisse; tum vidisse, post se serpentem mira magnitudine cum ingenti arborum ac virgultorum strage ferri, ac post insequi cum fragore cœli nimbum: tum, quæ moles ea, quidve prodigii esset, quærentem audisse: *vastitatem Italiæ esse; pergeret porro ire, nec ultra inquireret, sineretque fata in occulto esse.* *Livy.* xxi. 22.

c. Sed neque, qui Capua Romam petit imbre lutoque
Adspersus, volet in caupona vivere; nec qui
Frigus collegit, furnos et balnea laudat
Ut fortunatam plene præstantia vitam.
Nec si te validus jactaverit Auster in alto,
Idcirco havem trans Aegæum mare vendas.
Incolumi Rhodos et Mytilene pulchra facit quod
Pænula solstitio, campestre nivalibus auris,
Per brumam Tiberis, Sextili mense caminus.
Dum licet ac vultum servat Fortuna benignum,
Romæ laudetur Samos et Chios et Rhodos absens.
Tu, quamcunque deus tibi fortunaverit horam,
Grata sume manu, neu dulcia differ in annum,
Ut, quocunque loco fueris, vixisse libenter
Te dicas; nam si ratio et prudentia curas,
Non locus effusi late maris arbiter aufert,
Cœlum non animum mutant qui trans mare currunt.
Strenua nos exercet inertia: navibus atque
Quadrigis petimus bene vivere. Quod petis hic est,
Est Ulubris, animus si te non deficit æquus. *Hor.* Epp. I. 11.

2. Analyse the sentence *(b.)* "deinde cura humani ingenii . . . . nequivisse," and parse the nouns and verbs, accounting for case and mood.

3. Explain the use of the subjunctive mood iu *(a.)* "crevissent animi," "quia non vicisset," "qui dicerent," *(b.)* "qui dicret," "proinde sequeretur," *(c.)* "navem . . . vendas."

4. Give the rules for the cases of *(a.)* "Saguntinis," "quibus," "operæ"; *(b.)* "specie"; *(c.)* "Capua," "solstitio," "Romæ," "Ulubris." Decline "imbre," "balnea," "cœlum," "quadrigis."

5. Turn the sentences "se ab Jove . . . . oculos" and "Vastitatem . . . . in occulto esse" into the form of *direct speech.*

6. Give the etymology of *anceps, Pœnus, Hannibal, discrimen, Jupiter, Italia, animus, serpens, bruma, prudentia, arbiter, cœlum, inertia,* "quadrigis."

7. Describe the geographical position of the places mentioned or referred to in the preceding extracts.

8. What was the *unit* of the Roman army? How many men were there in it according to Livy? Give a short account of its organization, equipment aud officers, both in early times and during the Punic Wars.

9. When and by whom was Carthage founded? What is the meaning of the name and the Greek form of it? Describe its constitution and the extent of its dominion at the beginning of the first war with Rome. What was the source of its prosperity and the cause of its weakness? What fact shews the rapid increase of its wealth after the second war with Rome.

10. When and where was Livy born? Over what period does his History extend? How much of it has come down to us? Enumerate the Roman Historians who preceded him. What author does he chiefly follow? He seems to have neglected many valuable sources of information which were within his reach?

11. Give a short sketch of Horace's life, with dates.

12. Translate into Latin:—Saguntum was taken with great booty in the eighth month after the commencement of the seige. Although a good deal of property had been designedly destroyed by its owners and in the assault anger had made scarcely any distinction of age, and captives were the prize of the soldiery, nevertheless it is well ascertained that a considerable sum of money was obtained from the price of the things that were sold, and that much valuable furniture and draperies were sent to Carthage.

2. Analyze the sentence (a.) "dicimus eum hominem esse nequitiosissimum," and parse the nouns and verbs, accounting for case and mood.

3. Explain the use of the subjunctive mood in (a.) "crevissent animi," "quia non viderant," "qui diceret," (b.) "qui diceret," "proinde sequeretur," (c.) "metuerit . . . . . vendant."

4. Give the rules for the cases of (a.) "Sacrumtinus," "quidnam," "opere"; (b.) "specie"; (c.) "Capua," "solstitio," "Romae," "Lilybaeo," Decline "inopes," "beatus," "eodem," "quadrigis."

5. Turn the sentences "at ab Arve . . . . . vocatur" and "Vasatisque . . . . . in oceanio esse" into the form of direct speech.

6. Give the synonyms of *aeque*, *Vasates*, *Uscanodi*, *diversus*, *Jupiter*, *India*, *dolere*, *aspere*, *bonus*, *prudentia*, *pilum*, *culus*, *inerte*, "quadrigis."

7. Describe the geographical position of the places mentioned or referred to in the preceding extracts.

8. What was the end of the Roman army? How many men were there in it according to Livy? Give a short account of its organization, equipment and discipline, both in early times and during the Punic Wars.

9. When and by whom was Carthage founded? What is the meaning of the name and the Greek form of it? Describe its constitution and the extent of its dominion at the beginning of the first war with Rome. What was the source of its prosperity and the cause of its weakness? What has been the rapid increase of its wealth after the second war with Rome.

10. When and where was Livy born? Over what period does his History extend? How much of it has come down to us? Enumerate the Roman Historians who preceded him. What author does he chiefly follow? He seems to have neglected many valuable sources of information which were within his reach.

11. Give a short sketch of Livy's life, with dates.

12. Translate into Latin:—Sagruntum was taken with great booty in the eighth month after the commencement of the siege. Although a good deal of property had been fraudulently diverted by its owners and in the assault anger had made scarcely any distinction of age, and captives were the prize of the soldiery, nevertheless it is well ascertained that a considerable sum of money was obtained from the prize of the things that were sold, and that much valuable furniture and draperies were sent to Carthage.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

TUESDAY, APRIL 16TH.

GREEK—HERODOTUS, BOOK I. 1-45.—HOMER, BOOK VI.

SECOND YEAR.

1. Translate:—

a. Γύγης δὲ τυραννεύσας ἀπέπεμψε ἀναθήματα ἐς Δελφοὺς οὐκ ὀλίγα. ἀλλ' ὅσα μὲν ἀργύρου ἀναθήματα ἐστι οἱ πλεῖστα ἐν Δελφοῖς· πάρεξ δὲ τοῦ ἀργύρου, χρυσὸν ἄπλετον ἀνέθηκεν ἄλλον τε καὶ, τοῦ μάλιστα μνήμην ἄξιον ἔχειν ἐστὶ, κρητῆρές οἱ ἀριθμὸν ἓξ χρύσεοι ἀνακέαται· ἑστᾶσι δὲ οὗτοι ἐν τῷ Κορινθίων θησαυρῷ, σταθμὸν ἔχοντες τριήκοντα τάλαντα. ἀληθέϊ δὲ λόγῳ χρεωμένῳ, οὐ Κορινθίων τοῦ δημοσίου ἐστὶν ὁ θησαυρὸς, ἀλλὰ Κυψέλου τοῦ Ἠετίωνος. Οὗτος δὲ ὁ Γύγης, πρῶτος βαρβάρων τῶν ἡμεῖς ἴδμεν, ἐς Δελφοὺς ἀνέθηκε ἀναθήματα μετὰ Μίδην τὸν Γορδίεω, Φρυγίης βασιλέα. ἀνέθηκε γὰρ δὴ καὶ Μίδης τὸν βασιλήϊον θρονον, ἐς τὸν προκατίζων ἐδίκαζε, ἐόντα ἀξιοθέητον. κεῖται δὲ ὁ θρόνος οὗτος ἔνθα περ οἱ τοῦ Γύγεω κρητῆρες. *Sec.* 14.

b. . . . εἴρετο ὁ Κροῦσος τάδε· "Ξεῖνε Ἀθηναῖε, παρ' ἡμέας γὰρ περὶ σέο λόγος ἀπῖκται πολλὸς, και σοφίης εἵνεκεν τῆς σῆς και πλάνης, ὡς φιλοσοφέων γῆν πολλὴν θεωρίης εἵνεκεν ἐπελήλυθας· νῦν ὦν ἵμερος ἐπείρεσθαί μοι ἐπῆλθε, εἰ τινα ἤδη πάντων εἶδες ὀλβιώτατον;" Ὁ μὲν, ἐλπίζων εἶναι ἀνθρώπων ὀλβιώτατος, ταῦτα ἐπειρώτα. Σόλων δὲ, οὐδὲν ὑποθωπεύσας, ἀλλὰ τῷ ἐόντι χρησάμενος, λέγει· "Ὦ βασιλεῦ, Τελλον Αθηναῖον" Αποθωυμάσας δὲ Κροῖσος τὸ λεχθὲν, εἴρετο ἐπιστρεφέως. "Κοίῃ δὴ κρίνεις Τέλλον εἶναι ὀλβιώτατον;" Ὁ δὲ εἶπε· "Τέλλῳ τοῦτο μὲν, τῆς πόλιος εὖ ἠκούσης, παῖδες ἦσαν καλοί τε κἀγαθοὶ, καὶ σφι εἶδε ἅπασι τέκνα ἐκγενόμενα, καὶ πάντα παραμείναντα· τοῦτο δὲ, τοῦ βίου εὖ ἥκοντι, ὡς τὰ παρ' ἡμῖν, τελευτὴ τοῦ βίου λαπροτάτη ἐπεγένετο· γενομένης γὰρ Ἀθηναίοισι μάχης πρὸς τοὺς ἀστυγείτονας ἐν Ελευσῖνι, βοήθησας, καὶ τροπὴν ποιήσας τῶν πολεμίων, ἀπέθανε κάλλιστα. και μιν Ἀθηναῖοι δημοσίῃ τε ἔθαψαν ἀυτοῦ τῇπερ ἔπεσε, καὶ ἐτίμησαν μεγάλως. *Sec.* 30.

c. Τὴν δ' ἠμείβετ' ἔπειτα μέγας κορυθαίολος Ἕκτωρ.
μή μοι οἶνον ἄειρε μελίφρονα, πότνια μήτερ.
μή μ' ἀπογυιώσῃς, μένεος δ' ἀλκῆς τε λάθωμαι.
χερσὶ δ' ἀνίπτοισι Διὶ λείβειν αἴθοπα οἶνον
ἄζομαι· οὐδέ πη ἐστὶ κελαινεφέϊ Κρονίωνι
αἵματι καὶ λύθρῳ πεπαλαγμένον εὐχετάασθαι.
ἀλλὰ σὺ μὲν πρὸς νηὸν Ἀθαναίης ἀγελείης
ἔρχεο σὺν θυέεσσιν, ἀολλίσσασα γεραιάς·
πέπλον δ', ὅστις τοι χαριέστατος ἠδὲ μέγιστος
ἔστιν ἐνὶ μεγάρῳ, καί τοι πολὺ φίλτατος αὐτῇ,
τὸν θὲς Ἀθηναίης ἐπὶ γούνασιν ἠϋκόμοιο,
καὶ οἱ ὑποσχέσθαι δυοκαίδεκα βοῦς ἐνὶ κηῷ
ἡνις ἠκέστας ἱερευσέμεν, αἴ κ' ἐλεήσῃ

ἄστυ τε καὶ Τρώων ἀλόχους καὶ νήπια τέκνα·
αἴ κεν Τυδέος υἱὸν ἀπόσχῃ Ἰλίου ἱρῆς,
ἄγριον αἰχμητὴν, κρατερὸν μήστωρα φόβοιο. 263–278.

2. There are two explanations of the construction of the sentence (*a*) ἀλλ' ὅσα μὲν ἀργύρου κ.τ.λ. What is the full force of the clauses (*a*) ἐς τὸν προκατίζων ἐδίκαζε,—(*b*) εἰ τινα ἤδη κ.τ.λ.?

3. Explain the construction of these sentences:—(*a*) ἀνέθηκεν ἄλλον τε καὶ .... κρητῆρες οἱ ἀριθμὸν ἐξ κ.τ.λ.—σταθμὸν ἔχοντα τριήκοντα τάλαντα. —ἀλήθεϊ δὲ λόγῳ χρεωμένῳ.—τῶν ἡμεῖς ἴδμεν. (*b*) Τέλλῳ τοῦτο μὲν, τῆς πόλιος εὖ ἠκούσης, παῖδες ἦσαν.—τοῦτο δὲ, τοῦ βίου εὖ ἥκοντι, κ.τ.λ.—(*c*) μή ... ἄειρε μή μ' ἀπογυιώσῃς, μένεος δ' .... λάθωμαι.—ἀπόσχῃ Ἰλίου.

4. Parse and give the Attic forms of the following nouns, adjec. and verbs with the principal parts of the latter:—(*a*) ἀνακέαται, ἴδμεν:—(*b*) εἴρετο, ἀπῖκται, πολλός, τῆπερ, ἔπεσε:—(*c*) πεπαλαγμένον, θυέεσσιν, θὲς, γούνασιν, ἱερεύσεμεν, ἱρῆς, φόβοιο. Write out the 2 Aor. Act. and Mid., and 1st Aor. Pass. in all the moods of these verbs:—τίθημι, ἵημι, ἄιρεω, ὅραω, φαίνω, ἔχω.

5. Derive (*a*) ἀργύρου, ἄπλετον, κρητῆρες:—(*b*) θεωρίης:—(*c*) κορυθαίολος, ἀνίπποισι, αἴθοπα, κελαινεφέϊ, ἡνις, ἡκέστας, νήπια, ἄγριον, μήστωρα.

6. Scan the first five lines of extract (*c*). Why is the final syllable of αἴθοπα not elided? Account for the quantities of the syllables—μαι, πη, (267), καὶ (272), καί οἱ (274).

7. What is the general rule for the accentuation of nouns of the third declin? Give a list of the *Atonics* and *Euclitics*. Why have καὶ (272) and καί (274) different accents? Mention some words which are distinguished only by their accent.

8. What are the rules for the use of *Mood* and *Tense* in prohibitions? By what *Tenses* may general statements be made? What force has the Article in Homer and Herodotus? It has sometimes the same force in Attic Greek? Distinguish πάντα τὰ θυσιμα, τὰ πάντα θυσιμα.

9. Under what conditions may the *Participle* be used predicatively after verbs (1) in the Nom., (2) in oblique cases? What construction in Latin corresponds to this? Mention the other relations expressed by the Participles. Distinguish αἰσχύνομαι ποιῶν, αἰσχύνομαι ποιεῖν.

10. Write a brief account of the life of Herodotus. What allusion does he make to Homer? Mention some of the objections against considering the Iliad and Odyssey to be the works of the same author. What poets completed the story of the Trojan war?

11. Translate into Greek:—Afterwards the Lydians came carrying the dead body; but behind it followed the murderer. Then standing in front of the corpse, he gave himself up to Croesus, stretching forth his hands and bidding him to kill him upon the body; mentioning both his former misfortune and that in addition to it he had destroyed his purifier.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

WEDNESDAY, APRIL 17, 9 A.M. TO 12 NOON.

MATHEMATICS.—SECOND YEAR.

GEOMETRY AND MENSURATION.

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

1. If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base shall have the same ratio to one another that the other sides of the triangle have; and conversely.

2. Similar triangles are to one another in the duplicate ratio of their homologous sides.

3. In right-angled triangles the rectilineal figure described on the hypothenuse is equal to the similar and similarly described figures on the other two sides.

4. If three straight lines meet at a point and a straight line stand at right angles to each of them at that point, the three straight lines are in one and the same plane.

5. If two planes which cut one another be each of them perpendicular to a third plane, their common section shall be perpendicular to the same plane.

6. If chords in a circle pass through a common point, not the centre, the tangents at their extremities will meet in a straight line, which is parallel to the chord that is bisected in the point.

7. If, the base of a triangle being fixed, the vertex move in a straight line, the point in which the lines drawn from the angles to bisect the opposite sides meet, shall also move in a straight line.

8. From a given triangle cut off an nth part by a line parallel to one of the sides.

9. If a, b are the parallel sides of a trapezoid and p the perpendicular breadth, prove Area $= (a + b)\frac{p}{2}$.

10. An arc of 60° in one circle is equal in length to an arc of 72° in another; compare the areas of the circles.

11. A mill-wheel has a radius of 40 ft., and the circumference moves at the rate of 10 ft. per second; find the circular measure of the arc described by a point in the circumference in an hour; and reduce it to angular measurement.

12. The radius of the base of a right cone is 3 inches, and the height $6\sqrt{2}$; find the surface and solidity of the cone.

13. In a given square another is inscribed, having its angles at the middle points of the sides; in this another square is similarly inscribed, and so on for ever. The sum of the areas of the inscribed squares is equal to the area of the given square.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

WEDNESDAY, APRIL 17, 3 TO 5.30 P. M.

MATHEMATICS.—SECOND YEAR.

TRIGONOMETRY AND ALGEBRA.

PROFESSORS C. MACDONALD, M. A. Roscoe.....*Examiners*

1. Prove $\sin A = \sin(180° - A)$, $\cos A = -\cos(180° - A)$, $\sin A = -\sin(-A)$, and $\cos A = \cos(-A)$, and deduce the corresponding relations of the other four functions of A.

2. Prove $\operatorname{cosec} 2A + \cot 2A = \cot A$: and $\dfrac{\sin A + \sin 3A}{\cos A + \cos 3A} = \tan 2A$.

3. Prove $\sin(n+1)A = 2 \sin nA \cos A - \sin(n-1)A$, and give the similar formula for $\cos(n+1)A$. Shew the practical importance of these expressions.

4. Given $2 \sin^2 x - 5 \cos x - 4 = 0$; find x.

5. Given two sides and the included angle of a plane triangle: prove the main formula on which the solution of this case depends, and apply it to find the other parts of the triangle.

6. If $A + B + C = 90°$, shew that $\sin A + \sin B + \sin C = 4 \cos \frac{A}{2} \cos \frac{B}{2} \cos \frac{C}{2}$.

7. If a, b, c are the sides of a triangle, A, B, C being the angles opposite, prove $\cos A = \dfrac{b^2 + c^2 - a^2}{2bc}$.

8. In a piece of even ground, and with only a measuring line, a person wishes to find the distance of a visible but inaccessible object. How should he proceed?

9. The inscribed circle of a triangle touches the sides a, b, c in D, E, F. Join these points and investigate the area of the triangle D E F.

10. Expand by the Binomial Theorem $\left(\dfrac{b+x}{a}\right)^{\frac{1}{2}}$ and find the middle term of $\left(x^2 - \dfrac{1}{x^2}\right)^{10}$.

11. When n is a positive integer, the number of terms in the expansion of $(a+x)^n = n+1$: in other cases it is infinite.

12. The odd combinations of n things exceed the even combinations, whatever the value of n.

13. Three cents are to be tossed twice. Find the odds against their all turning up the same the second time as well as the first?

14. Find the present value of an annuity of £A, to last for n years, r being the rate per cent.

15. Prove that the difference between an odd number and its cube is divisible by 12, without remainder.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1871.

WEDNESDAY, APRIL 12, 9 TO 12 A.M.

MATHEMATICS.—SECOND YEAR.

PROFESSOR C. MACDONALD, M. A. (Oxon.), ... Examiner.

1. Prove $\sin A = \sin(180° - A)$, $\cos A = -\cos(180° - A)$, $\sin^2 A = -\sin(-A)$, and $\cos A = \cot(-A)$, and deduce the corresponding solutions of the other four functions of A.

2. Prove $\cos 2A + \cos 3A = \cos A$; and $\dfrac{\sin A + \sin 3A}{\cos A + \cos 3A} = \tan 2A$.

3. Prove $\sin(n+1)A = 2\sin n A \cos A - \sin(n-1)A$, and give the similar formula for $\cos(n+1)A$. Show the practical importance of these expressions.

4. Given $2\sin^2 x - 5\cos x - 4 = 0$; find x.

5. Given two sides and the included angle of a plane triangle: prove the main formula on which the solution of this case depends, and apply it to find the other parts of the triangle.

6. If $A + B + C = 90°$, show that $\sin A + \sin B + \sin C = 4\cos\dfrac{A}{2}\cos\dfrac{B}{2}\cos\dfrac{C}{2}$.

7. If a, b, c are the sides of a triangle, A, B, C being the angles opposite, prove $\cos A = \dfrac{b^2 + c^2 - a^2}{2bc}$.

8. In a piece of even ground, and with only a measuring line, a person wishes to find the distance of a visible but inaccessible object. How should he proceed?

9. The inscribed circle of a triangle touches the sides a, b, c in D, E, F. Join these points and investigate the area of the triangle D E F.

10. Expand by the Binomial Theorem $\left(\dfrac{x}{a} + \dfrac{a}{x}\right)^7$ and find the middle term of $\left(x^4 - \dfrac{1}{2x}\right)^{10}$.

11. When n is a positive integer, the number of terms in the expansion of $(x + x')^n = n + 1$: in other cases it is infinite.

12. The odd combinations of n things exceed the even combinations, whatever the value of n.

13. Three coins are to be tossed twice. Find the odds against their all turning up the same the second time as well as the first?

14. Find the present value of an annuity of £A, to last for n years, r being the rate per cent.

15. Prove that the difference between an odd number and its cube is divisible by 12, without remainder.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 9 A.M.

LOGIC AND PSYCHOLOGY.—SECOND YEAR.

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

1. What faculties in Sir Wm. Hamilton's classification of the Mental Powers correspond with the Intuitions and the Laws of mind?

2. What functions do the Intuitions and the Laws of mind respectively fulfil in the mental processes?

3. How may the Percipient process be accounted for, or explained? What grand principle may be said to divide the theories that have been formed on the subject of Perception? What is Realism, and what Constructive or Cosmothetic Idealism?

4. What are the practical processes of mind? Give some account of them.

5. How is Logic divided as a Science?

6. Of what does "Stoicheiology" treat? Distinguish between the processes and the products of thought.

7. In what two quantities may Concepts be regarded?

8. What are Judgments as distinguished from Concepts?

9. What are the Quantity and Quality of Judgments? and by what symbols are they designated according to these?

10. What are Identical or Convertible Judgments, and of what kind of conversion do Judgments which are not identical admit? What takes place in conversion as respects subject and predicate?

11. Of what different parts does a Syllogism consist?

12. What are the containing and contained terms in a Syllogism in the different quantities, and how are the premises designated according to the position of the terms in them?

13. How are Syllogisms divided, and according to what fundamental laws of thought?

14. Give an example of the Disjunctive Syllogism in "modo ponente tollens," and in "modo tollente ponens." Give an example of the Hypothetical Syllogism in "modo ponente," and in "modo tollente."

15. State the object of the several figures of the Syllogism. Why must the conclusion in the second figure be negative, and in the third figure particular?

16. In what figure are the Syllogisms A. E. E., E. I. O., A. O. O., and how may they be reduced?

17. Enumerate the fallacies, "in dictione," and "extra dictionem."

18. What are the three attributes of Logical Perfection? Under what division of Logic are these treated?

19. What is Analysis, and what Synthesis, and how may they be viewed as convertible with each other?

20. What character of the Logical perfection of thought does Definition secure? What, Division? Give the rules of each.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1887.

THURSDAY, APRIL 28, 9 A.M.

LOGIC AND PSYCHOLOGY.—SECOND YEAR.

PROFESSOR WILLIAM LYALL, LL.D.....Examiner.

1. What functions in Sir Wm. Hamilton's classification of the Mental Powers correspond with the functions and the laws of mind?

2. What functions do the functions and the laws of mind respectively fulfil in the mental processes?

3. How may the Peripatetic process be mechanical for, or explained? What grand principle may be said to divide the theories that have been formed on the subject of Perception? What is Realism, and what Constructive or Cosmothetic Idealism?

4. What are the practical processes of mind? Give some account of them.

5. How is Logic divided as a Science?

6. Of what does "Sciniciology" treat? Distinguish between the processes and the products of thought.

7. In what two quantities may Concepts be treated?

8. What are Judgments as distinguished from Concepts?

9. What are the Quantity and Quality of Judgments? and by what symbols are they designated according to these?

10. What are Identical or Convertible Judgments, and of what kind of conversion do Judgments which are not identical admit? What takes place in conversion as respects subject and predicate?

11. Of what different parts does a Syllogism consist?

12. What are the containing and contained terms in a Syllogism in the different quantities, and how are the premises designated according to the position of the terms in them?

13. How are Syllogisms divided, and according to what fundamental laws of thought?

14. Give an example of the Disjunctive Syllogism in "modo ponens tollens," and in "modo tollens ponens." Give an example of the Hypothetical Syllogism in "modo ponens," and in "modo tollens."

15. State the object of the several figures of the Syllogism. Why must the conclusion in the second figure be negative, and in the third figure particular?

16. In what figure are the Syllogisms A. E. E., E. I. O., A. O. O., and how may they be reduced?

17. Enumerate the fallacies, "in dictione," and "extra dictionem."

18. What are the three attributes of Logical Perfection? Under what division of Logic are these treated?

19. What is Analysis, and what Synthesis, and how may they be viewed as convertible with each other?

20. What character of the Logical perfection of thought does Definition secure? What, Division? Give the rules of each.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

FRIDAY, APRIL 12, 9 A. M.

JUNIOR CHEMISTRY.

PROFESSOR GEORGE LAWSON, LL.D. DUNNE ... *Examiners*

1. Explain the precise meaning of the following terms: (1) Element, (2) Equivalent Number, (3) Oxide, (4) Acid, (5) Base, (6) Alkali, (7) Salt, (8) Metal, (9) Alloy, (10) Amalgam.

2. Find the equivalent numbers respectively of (CaO, SO_3), and (CaO, SO_3, 2 HO).

3. In what way are the following metals affected by Nitric Acid: Pb, Ag, Cu, Hg, Sn, Sb.

4. Describe Oxygen, (1) as to its discovery, (2) mode of preparation, (3) physical characters, (4) chemical properties, (5) in relation to animal life.

5. How much Phosphoric Acid is contained respectively in 25 grains of (3 CaO, PO_5); 25 grains of 2 MgO, NH_4O, PO_5 + 14 HO); 25 grains of (2 MgO, PO_5).

6. Describe the preparation and properties of Chlorine, and also of Hydrochloric Acid.

7. What is the chemical nature of the process of Respiration?

8. Point out the chemical differences between the following processes: (1) Eremacausis, (2) Putrefaction, (3) Fermentation, (4) Acetification.

9. Define Heat, Light, Electricity, Magnetism, Chemical Affinity, and Mechanical Force, and point out the mutual relations of different kinds of Force.

10. What are the properties of Hydrogen, and how is it prepared. Describe generally some of the more important compounds which it forms.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

FRIDAY, APRIL 12, 9 A.M.

JUNIOR CHEMISTRY.

PROFESSOR GEORGE LAWSON, LL.D., M.D., F.R.S.C.....Examiner.

1. Explain the precise meaning of the following terms: (1) Element, (2) Equivalent Number, (3) Oxide, (4) Acid, (5) Base, (6) Alkali, (7) Salt, (8) Metal, (9) Alloy, (10) Amalgam.

2. Find the equivalent numbers respectively of (CaO, SO_3), and (CaO, SO_3, $2\ HO$).

3. In what way are the following metals affected by Nitric Acid: Pb, Ag, Cu, Hg, Sn, Sb.

4. Describe Oxygen, (1) as to its discovery, (2) mode of preparation, (3) physical characters, (4) chemical properties, (5) its relation to animal life.

5. How much Phosphoric Acid is contained respectively in 35 grains of (a CaO, PO_5); 35 grains of ($2\ MgO$, NH_4O, $PO_5 + 14\ HO$); 35 grains of ($2\ MgO$, PO_5).

6. Describe the preparation and properties of Chlorine, and also of Hydrochloric Acid.

7. What is the chemical nature of the process of Respiration?

8. Point out the chemical differences between the following processes: (1) *Fermentation*, (2) *Putrefaction*, (3) *Fermentation*, (4) *Acetification*.

9. Define Heat, Light, Electricity, Magnetism, Chemical Affinity, and Mechanical Force, and point out the mutual relations of different kinds of Force.

10. What are the properties of Hydrogen, and how is it prepared. Describe generally some of the more important compounds which it forms.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX:

SESSIONAL EXAMINATIONS, 1897.

MONDAY, APRIL 19, 9 A.M. TO 1 P.M.

LATIN.—THIRD YEAR.

TERENCE: HEAUTONTIMORUMENOS.—HORACE: ARS POETICA.
VIRGIL: GEORGICS, BOOK I.

Professor JOHNSON, M.A., LL.B. ..... Examiner.

1. Translate:

a. Chremes. Incedit hoc jam: cessa palmare nutrix.
Vicini, petunto ex me ut scint sibi filium
Redisse? Hei adolescentem hoc nolle intelligi.
Verum quam videntur miserum hunc tam exercitarier,
Ejus nisi, cetera tuti inopertarum gaudium,
Cum illi peristi nihil ex indicio sient.
Haud freium: nam, quod potero, adjutabo eamem;
Ita ut filium meum amico atque equali suo
Video inservire, et socium esse in negotiis.
Nos quoque adeo est aequum omnibus obsequi.

Heaut. III. 1. 1-10.

b. Syrus. Nisi ea animus fallit, hodie procuratum a me aliquid intermittunt
Ita hoc res in angustum, quod de mea cogitant capiam;
Nisi aliquid video me esse animum hunc, quod ne velient
Nam quod de argento speram, aut pecu pecuniae me fallent,
Nihil est; triumpho et lirit me istaeq. esto absolvere.
Crucior, bolum tantum milii cogitum modo subito e bucellas
Quid agam? aut quid commiscam? ratio de integro incundata mihi:
Nihil tam difficile est quin quaerendo investigari possit.
Quid si hoc hunc sic incipiam? Nihil est. Quid si sic? Tantundem egero.
At sic opinor. Non potest. Ita opinor. Eugge, ita eo optimum.
Herculem hercle opinor ad me idem illud fortissimum accessurum tamen.

Heaut. IV. 2.

c. Carmine qui tragico vilem certavit ob hircum
Mox oleum ceciderat Satyros mulcavit, et caper
Incolumi gravitate jocum tentavit: ea quod
Illecebris erat et grata novitate morandis
Spectator, functusque sacris, et potus, et exlex.
Verum ita risores, ita commendare dicaces
Conversisse Satyros, ita vertere seria ludo,
Ne quisquam deus, quisquis adhibitus intervenit
Deseti consperatus in ambo nuper et oeuvre,
Migret in obscuras humili sermone tabernas;
Aut, dum vitat humum, nubes et inania captat.

A. P. 220-230.

d. Nec minus ex indi solos et aperta arenae,
Prospicere et certis potuit cognoscere signis:
Nam neque iam aliilis noies obtuses videtur,

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

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

LATIN.—THIRD YEAR.

TERENCE: HEAUTONTIMORUMENOS.—HORACE: ARS POETICA.
VIRGIL: GEORGICS, BOOK I.

PROFESSORS JOHNSON, M.ᶜ ARTHUR ..... *Examiners*

1. Translate:

a. *Chremes.* Luciscit hoc jam: cesso pultare ostium
Vicini, primum ex me ut sciat sibi filium
Redisse? Etsi adolescentem hoc nolle intelligo.
Verum quum videam miserum hunc tam excruciarier,
Ejus abitu, celem tam insperatum gaudium,
Cum illi pericli nihil ex indicio siet?
Haud faciam: nam, quod potero, adjutabo senem;
Ita ut filium meum amico atque æquali suo
Video inservire, et socium esse in negotiis;
Nos quoque senes est æquum senibus obsequi.

Heaut. III. 1. 1–10.

b. *Syrus.* Nisi me animus fallit, haud permultum a me aberit infortunuim:
Ita hac re in angustum oppido nunc meæ coguntur copiæ;
Nisi aliquid video ne esse amicam hanc gnati resciscat senex.
Nam quod de argento sperem, aut posse postulem me fallere,
Nihil est; triumpho si licet me latere tecto abscedere.
Crucior, bolum tantum mihi ereptum tam de subito e faucibus.
Quid agam? aut quid comminiscar? ratio de integro ineunda est mihi;
Nihil tam difficile est quin quærendo investigari possiet.
Quid si hoc hunc sic incipiam? Nihil est. Quid si sic? Tantundem egero.
At sic opinor. Non potest. Imo optime. Euge, habeo optimam.
Retraham hercle opinor ad me idem illud fugitivum argentum tamen.

Heaut. IV. 2.

c. Carmine qui tragico vilem certavit ob hircum
Mox etiam agrestes Satyros nudavit, et asper
Incolumi gravitate jocum tentavit; eo quod
Illecebris erat et grata novitate morandus
Spectator, functusque sacris, et potus, et exlex.
Verum ita risores, ita commendare dicaces
Conveniet Satyros, ita vertere seria ludo,
Ne quicunque deus, quicunque adhibebitur heros
Regali conspectus in auro nuper et ostro,
Migret in obscuras humili sermone tabernas;
Aut, dum vitat humum, nubes et inania captet. A. P. 220–230.

d. Nec minus ex imbri soles et aperta serena,
Prospicere et certis poteris cognoscere signis:
Nam neque tum stellis acies obtunsa videtur,

Nec fratris radiis obnoxia surgere Luna,
Tenuia nec lanæ per cœlum vellera ferri;
Non tepidum ad solem pennas in litore pandunt
Dilectæ Thetidi alcyones, non ore solutos
Immundi meminere sues jactare maniplos.
At nebulæ magis ima petunt campoque recumbunt,
Solis et occasum servans de culmine summo
Nequiquam seros exercet noctua cantus. Georg. I. 393–403.

2. Distinguish *pultat ostuim* from *crepat ostuim* and give the corresponding Greek terms. Explain the meaning of line 396 in extract (*c*) and the allusion in line 399. Write explanatory notes on A. P. lines 220–1, 224, 207–210.

3. *a.* Explain the construction of "Luciscit hoc," "celem," "illi pericli nihil," "quod . . sperem," "postulem fallere," "Quid agam,"—"potus"—"vellera ferri."

b. Account for these forms, *siet, faxit, excruciarier, perduint, opperibere.*

4. Give the etymology of "oppido," "argentum," "bolum"—"Satyros"—"Maniplos," "vellera," "stella,"—*Scilicet, Epol, eccum, vidua, sodes, sedulo, istic.*—*Scilicet* seems to be used in its original force in some passages in Terence?

5. Mention words in Greek akin to:—*Animus, gnatus, comminiscor, deus, nuper, humilis, cognoscere, frater, tenuis, nebulæ, magis, cœlum, sol.*

6. What is the earliest extant specimen of Latin? In what metre is it written? Distinguish *metrical* from *natural* accent and give the rules for the latter in Latin. What metres are chiefly used in Terence?

7. State the reasons for the belief that Latin was not generally spoken as it is written. This fact explains certain difficulties in the scansion of Terence's Plays?

8. Enumerate the different classes of Roman Plays. To which do the plays of Terence belong? What writers did he imitate and borrow from? Name his plays, giving the date of the first and the last. Horace mentions the time when the Greek drama was introduced at Rome?

9. Translate into Latin: Upon Socrates being asked whether he did not consider King Archelaus, the son of Perdiccas, who was held to be the most fortunate man of his time, a happy man, "I do not know," he replied, "for I have never conversed with him." "Can you not then say even of the great King of the Persians, whether he is happy?" "How can I," he replied, "when I do not know how good a man he is, or how learned?" "What! do you think a happy life consists in such qualities?" "Yes; I fully believe that the good are happy; the wicked miserable."

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSSIONAL EXAMINATIONS, 1867.

TUESDAY, APRIL 16TH.

GREEK.—{ EURIPIDES: HIPPOLYTUS.
AESCHYLUS: PROMETHEUS VINCTUS.

THIRD YEAR.

1. Translate :—

a. ΦΑ. *αἰαῖ·*
* *πῶς ἂν δροσερᾶς ἀπὸ κρηνῖδος*
καθαρῶν ὑδάτων πῶμ' ἀρυσαίμαν,
ὑπό τ' αἰγείροις ἐν τε κομήτῃ
λειμῶνι κλιθεῖσ' ἀναπαυσαίμαν.
ΤΡ. *ὦ παῖ, τί θροεῖς;*
οὐ μὴ παρ' ὄχλῳ τάδε γηρύσει,
μανίας ἔποχον ῥίπτουσα λόγον;
ΦΑ. *πέμπετέ μ' εἰς ὄρος· εἶμι πρὸς ὕλαν*
καὶ παρὰ πεύκας, ἵνα θηροφόνοι
στείβουσι κύνες,
βαλιαῖς ἐλάφοις ἐγχριμπτομένα·
πρὸς θεῶν, ἔραμαι κυσὶ θωύξαι,
καὶ παρὰ χαῖταν ξανθὰν ῥῖψαι
Θεσσαλὸν ὄρπακ', ἐπίλογχον ἔχουσ'
ἐν χειρὶ βέλος.
ΤΡ. *τί ποτ', ὦ τέκνον, τάδε κηραίνεις;*
[τί κυνηγεσίων καὶ σοὶ μελέτη;]
* *τί δὲ κρηναίων νασμῶν ἔρασαι;*
* *πάρα γὰρ δροσερὰ πυργοις συνεχὴς*
κλιτὺς, ὅθεν σοι πῶμα γένοιτ' ἂν.
ΦΑ. *δέσποιν' ἁλίας Ἄρτεμι Λίμνας*
καὶ γυμνασίων τῶν ἱπποκρότων,
* *εἴθε γενοίμαι ἐν σοῖς δαπέδοις,*
πώλους Ἐνέτας δαμαλιζομένα. *Hipp.* 209–231.

b. ΙΠ. *ἐγὼ δ' ἄκομψος εἰς ὄχλον δοῦναι λόγον,*
εἰς ἥλικας δὲ κώλίγους σοφώτερος.
ἔχει δέ μοῖραν καὶ τόδ'· οἱ γὰρ ἐν σοφοῖς
φαῦλοι παρ' ὄχλῳ μουσικώτεροι λέγειν.
ὅμως δ' ἀνάγκη, ξυμφορᾶς ἀφιγμένης,
γλῶσσάν μ' ἀφεῖναι. πρῶτα δ' ἄρξομαι λέγειν
ὅθεν μ' ἐπῆλθες πρῶτον ὡς διαφθερῶν,
* *κοὐκ ἀντιλέξοντ'. εἰσορᾷς φάος τόδε*
καὶ γαῖαν; ἐν τοῖσδ' οὐκ ἔνεστ' ἀνὴρ ἐμοῦ,
οὐδ' ἢν σὺ μὴ φῇς, σωφρονέστερος γεγώς.
ἐπίσταμαι γὰρ πρῶτα μὲν θεοὺς σέβειν,
φίλοις τε χρῆσθαι, μὰδικεῖν πειρωμένοις,
ἀλλ' οἴσιν ἀιδὼς μήτ' ἐπαγγέλλειν κακὰ
μήτ' ἀνθυπουργεῖν αἰσχρὰ τοῖσι χρωμένοις·
οὐκ ἐγγελαστὴς τῶν ὁμιλούντων, πάτερ,
ἀλλ' αὐτὸς οὐ παροῦσι κἀγγὺς ὢν φίλοις.

c. ΠΡ. ἐλαφρὸν ὅστις πημάτων ἔξω πόδα
ἔχει παραινεῖν νουθετεῖν τε τὸν κακῶς
πράσσοντ'· ἐγὼ δὲ ταῦθ' ἅπαντ' ἠπιστάμην·
ἑκὼν ἑκὼν ἥμαρτον, οὐκ ἀρνήσομαι·
θνητοῖς δ' ἀρήγων αὐτὸς ηὑρόμην πόνους.
οὐ μήν τι ποιναῖς γ' ᾠόμην τοίαισί με
κατισχνανεῖσθαι πρὸς πέτραις πεδαρσίοις,
τυχόντ' ἐρήμου τοῦδ' ἀγείτονος πάγου.
καί μοι τὰ μὲν παρόντα μὴ δύρεσθ' ἄχη,
πέδοι δὲ βᾶσαι τὰς προσερπούσας τύχας
* ἀκούσαθ', ὡς μάθητε διὰ τέλους τὸ πᾶν.
πίθεσθέ μοι, πίθεσθε, συμπονήσατε
τῷ νῦν μογοῦντι. ταὐτά τοι πλανωμένη
πρὸς ἄλλοτ' ἄλλον πημονὴ προσιζάνει. *Prom. V.* 263–276.

2. Two meanings have been given to ἔποχον (214) taken from different derivations? What is the force of καί (224). What is peculiar about κυνηγεσίων? A word required to give the proper meaning seems to be omitted in line 997? What is the obvious sense of the passage as it stands? τοῖσι χρωμένοίς may be translated in two ways? A different construction might have been expected in line 1001. What is the meaning of the different reading ἀπαγγέλλειν (998)?

3. Parse the lines marked with an asterisk, giving the rules for case and mood. Explain the construction of οὐ μὴ τάδε γηρύσει, and distinguish it from οὐ μὴ τάδε γηρύσῃς.

4. Give the rules for the use of the Moods in *Final clauses.* Account for the exceptions to the rules. Different Moods sometimes follow the same principal sentence; distinguish their meaning. Explain the use of the Moods in sentences introduced by ὅτι and that other constructions were employed in the same relation?

5. Distinguish the meanings of ὁς ποιεῖ, ὁς ποιῇ, ὁς ἂν ποιῇ, ὁς ἂν ποιήσῃ ὅςτις ποιεῖ. What is the difference between εἰ καί, καὶ εἰ? Distinguish ὥστε with Infin. and ὥστε with Indic.:—ὁ οὐ πιστεύων and ὁ μὴ πιστεύων.

6. Draw up a scheme of the Tragic Iambic Senarius. Which are the chief *caesuras* in this metre? When must the fifth foot be an Iambus? Scan lines 209–214, 986–990.

7. A Grecian tragedy consists of two distinct parts; point out and account for their differences. When were new tragedies only exhibited at Athens? What is meant by *Deus ex machina?* Describe the entrance of the chorus into the theatre. How was a Grecian play divided?

8. When and where was Aeschylus born? Name his extant plays. Three of them form a Trilogy? *Prometheus Vinctus* was the middle play of another? What improvements in the drama does Horace attribute to Aeschylus?

9. Translate into Greek:—During the reign of Croesus there came to Sardis Solon an Athenian, who having made laws for the Athenians at their request, absented himself for ten years, having sailed away under pretence of seeing the world, that he might not be compelled to abrogate any of the laws he had established: for the Athenians could not do it themselves, since they were bound by solemn oaths to observe for ten years whatever laws Solon should enact for them.

The E. S. J.

A. W. J. Lindsay.

A. W. J. Lindsay.

A. W. H. L. E E

ABCDEF

A. W. H. Lindsay.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 11, 9 A. M. to 1 P. M.

MATHEMATICAL PHYSICS.

PROFESSOR C. MACDONALD, A.M. & A. C. McKenzie, Examiners

1. If forces P and Q act at a point and R be their resultant, prove $R^2 = P^2 + Q^2 + 2\,PQ \cos(P,Q)$.

2. State and prove the *Polygon of forces.*

3. Find the direction and magnitude of any number of forces acting at a point in a plane, and deduce the conditions of equilibrium.

4. Show geometrically how to find the centre of gravity of any number of material particles.

5. A string stretched horizontally can never be pulled quite straight.

6. The arms of a lever of 1st kind, without weight, are 10 and 5 inches respectively, and their angle of inclination to each other 120°. A weight of 12 lbs. is attached to the end of the shorter: find what weight at the other end of the lever will keep the longer arm horizontal.

7. Explain the use of Atwood's machine. If $P = 33$, $Q = 31$, find f, and the space described in 3 seconds.

8. Prove that the spaces described in successive seconds by a body falling freely from rest, are as 1, 3, 5, . . $2n-1$.

9. Prove the formula for centrifugal force, in circular motion, $f = \frac{v^2}{r}$ and shew that at the Equator, $f = \cdot 11126$ ft. Compare this with the force of gravity there.

10. An elastic body dropped on a horizontal plane, rebounds so that the successive heights are in geometrical progression.

11. Find the centre of pressure of a rectangular flood-gate, the water being supposed to reach its upper edge.

12. 1 lb. of water at 212°, is mixed with 2 lbs. ice at 20° F.; find how much of the ice is melted.

13. The dimensions of a rectangular vat are a, b, c, ft. in length, breadth and depth, respectively. Compare the pressures on the bottom and sides.

14. A uniform beam (weight, W), leaning on a smooth vertical wall, rests on a rough level surface, (friction, m), and is kept from sliding, partly by friction and partly by the tension of a string, which breaks with the tension T, fastened to its lower end, and to the bottom of the wall directly under the point at which it leans. If x be the angle of the beam with the horizontal, prove tan. x greater than $\frac{W}{2(mW + T)}$

15. After n strokes of the piston in Smeaton's air pump, the height of the mercury in the gauge is h'. If h be the height of the Barometric column, v the cubic content of the barrel, and V that of the receiver, prove

$$\log\left(1 + \frac{v}{V}\right) = \frac{\log h - \log h'}{n}$$

16. Two bodies, A and B, with velocities V and V′ and whose mutual elasticity $e = \frac{1}{2}$, moving in opposite directions, make a direct impact, B's velocity being 3 times that of A. Prove that A will stop if its mass = 5 times that of B, and B will stop if their masses are equal.

A:B:C:D:E:F:H:K::L:M:N:O:P:Q:R:S:W::H:I

∴ AL = WH

A = $\frac{WH}{L}$

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1881.

TUESDAY, APRIL 12, 9 A.M. to 1 P.M.

MATHEMATICAL PHYSICS.

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

1. If forces P and Q act at a point, and R be their resultant, prove $R^2 = P^2 + Q^2 + 2PQ \cos(P,Q)$.

2. State and prove the Polygon of Forces.

3. Find the direction and magnitude of any number of forces acting at a point in a plane, and deduce the conditions of equilibrium.

4. Show geometrically how to find the centre of gravity of any number of material particles.

5. A string stretched horizontally can never be pulled quite straight.

6. The arms of a lever of 1st kind, without weight, are 10 and 3 inches respectively, and their angle of inclination is each other 120°. A weight of 12 lbs. is attached to the end of the shorter: find what weight at the other end of the lever will keep the longer arm horizontal.

7. Explain the use of Atwood's machine. If P = 33, Q = 31, find f, and the space described in 3 seconds.

8. Prove that the spaces described in successive seconds by a body falling freely from rest, are as 1, 3, 5, . . . 2 n—1.

9. Prove the formula for centripetal force, in circular motion, $f = \frac{v^2}{r}$, and show that at the Equator, $f = \cdot 11132$ R. Compare this with the force of gravity there.

10. An elastic body dropped on a horizontal plane, rebounds so that the successive heights are in geometrical progression.

11. Find the centre of pressure of a rectangular flood-gate, the water being supposed to reach its upper edge.

12. 1 lb. of water at 212°, is mixed with 2 lbs. ice at 32° F.; find how much of the ice is melted.

13. The dimensions of a rectangular vat are a, b, c, ft. in length, breadth and depth, respectively. Compare the pressures on the bottom and sides.

14. A uniform beam (weight, W), leaning on a smooth vertical wall, rests on a rough level surface, (friction, m), and is kept from sliding, partly by friction and partly by the tension of a string, which breaks with the tension T, fastened to its lower end, and to the bottom of the wall directly under the point at which it leans. If α be the angle of the beam with the horizontal, prove tan. α greater than $\frac{W}{2(mW + T)}$

15. After a stroke of the piston in Siemens's air pump, the height of the mercury in the gauge is h. If A be the height of the Barometric column, n the cubic contents of the barrel, and V that of the receiver, prove

$$\log\left(1 + \frac{n}{V}\right) = \frac{\log A - \log h}{n}$$

16. Two bodies, A and B, with velocities V and V' and whose mutual elasticity $e = \frac{1}{2}$, moving in opposite directions, make a direct impact, B's velocity being 3 times that of A. Prove that A will stop if its mass = 5 times that of B, and B will stop if their masses are equal.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 3 P. M.

EXPERIMENTAL PHYSICS.

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

1. What are the uses of hypotheses in Experimental Physics?
2. What is the first problem in Physical Science?
3. Explain the nature of Statical forces.
4. From what standard are units of mass, weight, and length, derived?
5. How can we determine the amount of matter contained in a body which weighs 1 lb.?
6. Explain the superposition of Equilibrium.
7. How can the centre of gravity be ascertained experimentally?
8. Explain the principle of Virtual Velocities.
9. What constitutes a Statical couple?
10. What are the qualities of a good balance, and how can they be ascertained?
11. By what method is it possible to weigh correctly with a false balance?
12. Explain the principle of the Differential Screw.
13. In what relation is force considered in the Science of Dynamics?
14. Explain the nature of the *vis viva* and give the law by which its amount is determined.
15. State the law of falling bodies discovered by Galileo.
16. What is the line of quickest descent between two points at different heights, and in different vertical lines?
17. In a rod of uniform thickness, at what point is the centre of percussion?
18. The dynamical effect of forces are proportional to their statical effects.
19. Prove Centrifugal Force to be a consequence of Inertia.
20. Give Kepler's third law of planetary motion.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1887.

THURSDAY, APRIL 14, 3 P.M.

EXPERIMENTAL PHYSICS.

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

1. What are the uses of hypotheses in Experimental Physics?
2. What is the first problem in Physical Science?
3. Explain the nature of Statical force.
4. From what standard are units of mass, weight, and length, derived?
5. How can we determine the amount of matter contained in a body which weighs 1 lb.?
6. Explain the superposition of Equilibrium.
7. How can the centre of gravity be ascertained experimentally?
8. Explain the principle of Virtual Velocities.
9. What constitutes a Statical couple?
10. What are the qualities of a good balance, and how can they be ascertained?
11. By what method is it possible to weigh correctly with a false balance?
12. Explain the principle of the Differential Screw.
13. In what relation is force considered in the Science of Dynamics?
14. Explain the nature of the six rules and give the law by which its amount is determined.
15. State the law of falling bodies discovered by Galileo.
16. What is the line of quickest descent between two points at different heights, and in different vertical lines?
17. In a rod of uniform thickness, at what point is the centre of percussion?
18. The dynamical effect of forces are proportional to their statical effects.
19. Prove Centrifugal Force to be a consequence of Inertia.
20. Give Kepler's third law of planetary motion.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 9 A.M.

METAPHYSICS AND ESTHETICS.—THIRD YEAR.

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

1. What is the special department of Metaphysics?

2. To the solution of what question were the earliest speculations of Greece directed?

3. Into what three great schools did Philosophy divide itself previous to the time of Socrates?

4. What direction did Philosophy take after his time?

5. With what questions chiefly were the Schoolmen occupied?

6. What may be said to be the grand problem of Metaphysics, or of Ontological Science? Is this determinable, or how may it be determined, if determinable at all?

7. Show how the question of Perception belongs to the former question, and the transition from the Ontological, in speculation, to the Psychological.

8. What lines of divergence are seen in Philosophy from the earliest times, and what two modern divisions of thought still obtain in Philosophy?

9. What was Berkeley's ideal theory? What Hume's?

10 Into what does Stuart Mill resolve Mind, and into what Matter, in our ultimate analysis or belief? What paradox is he obliged to admit in the case of Mind, in such ultimate analysis?

11. What is the ground of validity in all such questions?

12. What are the three generic ideas according to which the Emotions may be classified? Classify them accordingly. How else have they been classified?

13. What is the Esthetic Emotion? To which class does it belong?

14. State Cousin's theory of the Beautiful. Enumerate the constituent elements of the Beautiful, and the Sublime, respectively, according to Burke. State Alison's theory, and show how it may coincide with that of Cousin.

15. Classify the Desires according to the Emotions. Analyse the desire of worth or value, and show its importance among the Desires.

16. What is the moral Judgment? State some of the views on this subject. How may Conscience be distinguished from the moral judgment simply?

17. What is pre-eminently the Active Power?

18. In what sense may it be said to be free? What different views have been held on this subject?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1864.

THURSDAY, APRIL 14, 9 A.M.

METAPHYSICS AND ETHICS.—THIRD YEAR.

Professor Wallace, LL.D.

1. What is the special department of Metaphysics?

2. To the solution of what questions were the earlier speculations of Greece directed?

3. Into what three great schools did Philosophy divide itself previous to the time of Socrates?

4. What direction did Philosophy take after his time?

5. With what questions chiefly were the Scholmen occupied?

6. What took its rise by the great problem of Metaphysics, or of Ontological Science? Is this determinable, or how may it be determined, if determinable at all?

7. Show how the question of Freewills belongs to the former question, and the question from the Historical, to precedence, to the Psychological.

8. What three of Hegelian are even in Philosophy from the earliest times, and what even modern difficulties of theology still obtain in Philosophy?

9. What was Berkeley's ideal theory? What Hume's?

10. Into what does Simple Mill resolve Life?, and into what Matter, in one ultimate analysis or below? What paradox is he obliged to admit in each case, in each ultimate analysis?

11. What is the ground of validity in all such questions?

12. What are the three generic ideas according to which the Emotions may be classified? Classify those accordingly. How else have they been classified?

13. What is the Religious Emotion? To which class does it belong?

14. State Cousin's theory of the Beautiful. Enumerate the constituent elements of the Beautiful, and the Sublime, respectively, according to Burke. State Alison's theory, and show how it may coincide with that of Cousin.

15. Classify the Desires according to the Emotions. Analyze the desire of wealth or value, and show its importance among the Desires.

16. What is the moral Judgment? State some of the views on this subject. How may Conscience be distinguished from the moral judgment simply?

17. What is pro-eminently the Active Power?

18. In what sense may it be said to be free? What different views have been held on this subject?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 22, 9 TO 12, A.M.

FRENCH.—THIRD YEAR.

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

Translate into English: "Les peuples les plus grossiers (1) et les plus barbares entendent (2) le language des cieux (3) Dieu les a établis (4) sur nos têtes comme des hérauts célestes, qui ne cessent (2) d'aunoncer (5) à tout l'univers sa grandeur: leur silence majestueux (1) parle la langue de tous (6) les hommes et de toutes les nations; c'est une voix entendue (4) partout où la terre nourrit des habitants. Qu'on parcoure jusqu'aux extrémités les plus reculées de la terre et les plus désertes: nul lieu dans l'univers, quelque caché qu'il soit (7) au reste des hommes ne (8) peut se dérober (5) à l'éclat de cette puissance qui brille (2) au-dessus de nous dans les globes lumineux qui décorent le firmament." "MASSILON."

1. Form the Fem. of the adj.: *grossiers* and *majestueux;* mention a few others with irreg. fem., and give an ex. for the agreement of adj. with nouns of different genders.

2. Write the Inf. and Participles of: *entendent, établis, cessent, brille.*

3. Give the sing. and second plural of *cieux:* when are they to be used; mention some examples.

4. Explain the agreement of the two p. parts. "*établis* and *entendue.*"

5. How do you account for the Infinitives: *annoncer* and *dérober.*

6. Illustrate by short examples the different forms in which "*tout*" may occur.

7. In what mood and tense is "*soit,*" and why in this form.

8. Account for the "*ne;*" mention other words used with "*ne.*"

9. State by exs. the place of personal pron. either as direct or indirect objects, and what tense forms an exception to this rule.

10. Correct the following sentences: Les voyageurs ont bieu dormis Mes amis sont parti. Les lettres que nous avons reçu sont fort importantes. Etiez-vous à la soirée qui sést donné hier chez le maire. Explain in full the agreement of p. parts.

11. Show by short examples how the auxiliaries: would, should, ought to, (2 forms) can, could, may and might, are to be translated. Conjugate the verb "*neiger.*"

12. Translate: There are many poor people *(gens).* There is the man, whose son died *(mourut)* this morning. This is magnificent. Here is something better. How many years have you been in this country? *(pays).* He intends *(avoir l'intention de)* going to England, and thence *(de là)* to Paris, to his relations *(parents).* He speaks French much better than his brother. Here it is; the best work *(ouvrage)* I have read *(lu).* My friend left *(partit)* on the 3rd of March. A thousand times. 96 miles. The 18th of April, 1867 (in letters.)

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 22, 9 TO 12, A.M.

FRENCH.—THIRD YEAR.

JAMES LITCHITT, ESQ.....Examiner.

Translate into English: "Les peuples les plus grossiers (1) et les plus barbares entendent (2) le langage des cieux (3) Dieu les a établis (4) sur nos têtes comme des héraults célestes, qui ne cessent (2) d'annoncer (5) à tout l'univers sa grandeur: leur silence majestueux (1) parle la langue de tous (6) les hommes et de toutes les nations; c'est une voix entendue (4) partout où la terre nourrit des habitants. Qu'on parcoure ensuite avec exactitude les plus reculées de la terre et les plus désertes: nul lieu dans l'univers, quelque caché qu'il soit (7) au reste des hommes ne (8) peut se dérober (5) à l'éclat de cette prédication qui brille (2) au-dessus de nous dans les globes lumineux qui décorent le firmament." "MASSILON."

1. Form the Pres. of the adj.: grossiers and barbares; mention a few others with irreg. fem., and give an ex. for the agreement of adj. with nouns of different genders.

2. Write the Inf. and Participles of: entendent, établis, cessent, brille.

3. Give the sing. and second plural of cieux: when are they to be used; mention some examples.

4. Explain the agreement of the two p. parts, "établis and entendue."

5. How do you account for the Infinitives: annoncer and décorer.

6. Illustrate by short examples the different forms in which "tout" may occur.

7. In what mood and tense is "soit," and why in this form.

8. Account for the "ne;" mention other words used with "ne."

9. State by exs. the place of personal pron. either as direct or indirect objects, and what tense forms an exception to this rule.

10. Correct the following sentences: Les voyageurs ont bien dormis Mes amis sont parti. Les lettres que nous avons reçu sont fort importantes. Rétablissons à la soirée qui sèr donné hier chez la marie. Explain in full the agreement of p. parts.

11. Show by short examples how the auxiliaries: would, should, ought to, (2 forms) can, could, may and might, are to be translated. Conjugate the verb "mériter."

12. Translate: There are many poor people (pers). There is the man, whose son died (mourir) this morning. This is magnificent. Here is something better. How many years have you been in this country? (pays). He intends (compt l'intention de) going to England, and thence (de là) to Paris, to his relations (parents). He speaks French much better than his brother. Here it is; the best work (ouvrage) I have read (lu). My friend left (partir) on the 3rd of March. A thousand times. 96 miles. The 18th of April, 1867 (in letters.)

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 9 TO 12, A.M.

GERMAN.—THIRD YEAR. ELEMENTARY COURSE.

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

Translate: *a. "Mignon's Song,"* from Goethe's *"Wilhem Meister."*

b. Wallenstein hatte über eine Armee (1) von beinahe hunderttausend Mann zu (2) gebieten, von denen (3) er angebetet nurde (4) als das Urtheil der Absetzung ihm angekündigt werden sollte. Die meisten Offiziere waren seine (5) Geschöpfe, seine Winke Aussprüche des Schicksals für den gemeinen Soldaten. Grenzenlos war sein Ehrgeiz (6) unbeugsam sein Stolz; sein gebieterischer Geist nicht fähig, eine Kränkung ungerochen zu erdulden (7). "SCHILLER."

1. Decline: *"die grosse Armee"* in all its forms. What is the agreement of adjs. following the nouns? Give an example.

2. How do you account for the Prepos. *"zu?"* Name the exceptions.

3. What part of speech is *"denen?"* Give the 4 cases, sing. and plur.

4. Explain the position of *"wurde."* Show by two ex. how the passive voice is expressed in German.

5. Which is the absolute possessive pron; how many forms has it; and what is the declension of each form?

6. Name the compounds of this Subst., and how the gender of such nouns is determined. Account for the place of this word.

7. Form the p. part. of this verb, and state which verbs reject the syllable *"ge."* How are the past part. of compound verbs formed?

8. Write the Comparative and Super. of: *Hoch, gut, nahe, viel, gern, bald.* Explain by ex. the use of *"der stärkste, and am stärksten."*

9. Give the plural of: *Land, Wind, Haus, Nebel;* and the nom. sing. with the def. Art. of: *Wagen, Schlachten, Schiffe, Deutsche.*

10. What is *"wer;"* give the 4 cases sing.; show by short ex. of what meanings this word is susceptible. Translate: That (viz. Book) which I am reading now *(eben)*. That which is fine is not always good.

11. Write the 3 pers. sing. of the present, the 1st pers. of the Impf. Indicative, and the past part. of: *geben, stehen, thun, helfen, kommen.* Give in the most concise form: *Ich würde sein. Ihr würdet gehabt haben. Er würde nicht weggegangen sein. Du würdest es thun.*

12. Translate: I have seen many flowers in the field *(Felde)*. There will be many people *(Leute)* going to Paris this summer. The Paris Exhibition *(Ausstellung)* has been opened *(eröffnet)* on the 1st of April, 1867. While *(als)* I was in Dresden, I frequently *(oft)* went to hear *(anzuhören)* the fine music in the chapel of the court *(Hofcapelle)*. Have you been able to read *(lesen)* the letter? I might *(could)* have read it. Which of these authors has written most?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 9 TO 12, A.M.

GERMAN.—THIRD YEAR. ELEMENTARY COURSE.

JAMES LIECHTI, Esq.....Examiner.

Translate: a. "Mignon's Song," from Goethe's "Wilhelm Meister."

b. Wallenstein hatte über eine Armee (1) von beinahe hundertausend Mann zu (2) gebieten, von denen (3) er angebetet wurde (4) als das Urbild der Abgestumpfheit (5) geschöpft, seine Winke Ausspriche des Schicksals für den gemeinen Soldaten. Grenzenlos war sein Einfluss (6) unbeugsam sein Stolz; sein gebieterischer Geist nicht fähig, eine Kränkung ungerochen zu erdulden (7). "SCHILLER."

1. Decline: "die grosse Armee" in all its forms. What is the agreement of adjs. following the nouns? Give an example.

2. How do you account for the Dropping "zu?" Name the exceptions.

3. What part of speech is "denen?" Give the 4 cases, sing. and plur.

4. Explain the position of "wurde." Show by two ex. how the passive voice is expressed in German.

5. Which is the absolute possessive pron; how many forms has it; and what is the declension of each form?

6. Name the compounds of the Subst., and how the gender of such nouns is determined. Account for the place of this word.

7. Form the p. part. of this verb, and state which verbs reject the syllable "ge." How are the past part. of compound verbs formed?

8. Write the Comparative and Super. of: Alt, gut, hoch, viel, gern, bald. Explain by ex. the use of "der stärkere, und am stärksten."

9. Give the plural of: Land, Haut, Mann, Vater; and the nom. sing. with the def. Art. of: Wagen, Schlachten, Schlüssel, Dampfe.

10. What is "ser;" give the 4 cases sing.; show by short ex. of what meaning this word is susceptible. Translate: That (viz. Book) which I am reading now (dem). That which is fine is not always good.

11. Write the 3 pers. sing. of the present, the 1st pers. of the Imp. Indicative, and the past-part. of: gehen, stehen, thun, helfen, kommen. Give in the most concise form: Ich würde sein. Ihr würdet gehabt haben. Er würde nicht engegangen sein. Ich würdest es thun.

12. Translate: I have seen many flowers in the field (Feld). There will be many people (Leute) going to Paris this summer. The Paris Exhibition (Ausstellung) has been opened (eröffnet) on the 1st of April, 1867. While (als) I was in Dresden, I frequently (oft) went to hear (anzuhören) the fine music in the chapel of the court (Hofkapelle). Have you been able to read (lesen) the letter? I might (could) have read it. Which of these authors has written most?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

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

LATIN.—FOURTH YEAR.

TACITUS. ANNALS, BOOK I.

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

1. Translate:

a. Aggerebatur nihilo minus cespes, jamque pectori usque accreverat, cum tandem pervicacia victi inceptum omisere. Blæsus multa dicendi arte, *Non per seditionem et turbas desideria militum ad Cæsarem ferenda,* ait, *neque veteres ab imperatoribus priscis neque ipsos a divo Augustô tam nova petivisse; et parum in tempore incipientes principis curas onerari. Si tamen tenderent in pace tentare quæ ne civilium quidem bellorum victores expostulaverint, cur contra morem obsequii, contra fas disciplinæ vim meditentur? decernerent legatos, seque coram mandata darent.* Acclamavere, *ut filius Blæsi tribunus legatione ea fungeretur, petereteque militibus missionem ab sedecim annis: cetera mandaturos, ubi prima provenissent. Chap.* xix.

b. At Romæ, nondum cognito qui fuisset exitus in Illyrico, et legionum Germanicarum motu audito, trepida civitas incusare Tiberium, *quod, dum patres et plebem, invalida et inermia, cunctatione ficta landificetur, dissideat interim miles, neque duorum adolescentium nondum adulta auctoritate comprimi queat. Ire ipsum et opponere majestatem imperatoriam debuisse cessuris, ubi principem longa experientia eundemque severitatis et munificentiæ summum vidissent. An Augustum fessa ætate totiens in Germanias commeare potuisse; Tiberium vigentem annis sedere in senatu, verba patrum cavillantem? Satis prospectum urbanæ servituti: militaribus animis adhibenda fomenta, ut ferre pacem velint. Chap.* xlvi.

c. Igitur Romanus qui aderat exercitus, sextum post cladis annum, trium legionum ossa, nullo noscente alienas reliquias an suorum humo tegeret, omnes ut conjunctos, ut consanguineos, aucta in hostem ira, mæsti simul et infensi condebant. Primum exstruendo tumulo cespitem Cæsar posuit, gratissimo munere in defunctos et præsentibus doloris socius. Quod Tiberio haud probatum, seu cuncta Germanici in deterius trahenti, sive exercitum imagine cæsorum insepultorumque tardatum ad prœlia et formidilosiorem hostium credebat, neque imperatorem, auguratu et vetustissimis cærimoniis præditum, attrectare feralia debuisse. *Chap.* lxii.

2. *a.* Explain the construction of (*a*) "cur . . . meditentur," "decernerent," "acclamavere ut . . . fungeretur, . . . cetera mandaturos;" (*b*) "cognito," "invalida et inermia," "An Augustum potuisse;" (*c*) "ossa," "omnes."

b. Point out some unusual constructions in the preceding chapters.

3. Write explanatory notes on the following passages:

a. Consules primi *in verba Tiberii Cæsaris juravere.*

b. Mari Oceano aut amnibus longinquis septum imperium.

c. Denis in diem assibus animam et corpus æstimari; . . . Nec

aliud levamentum quam . . . ut *singulos denarios* mererent; . . . ne ultra *sub vexillis* tenerentur.

d. In Germanias commeare potuisse.

e. Tunc contractos *in principia* monet.

f. Decreta eo anno *triumphalia insignia* A. Cæcinæ.

g. Censuit ut *libri Sibyllini* adirentur.

h. Quia divus Augustus *immunes verberum histriones* quondam responderat.

4. Describe the events alluded to in the following lines:

a. Libertatem et consulatum L. Brutus instituit.

b. Bruto et Cassio cæsis nulla jam publica arma.

c. Ut quondam nimiis studiis funus divi Julii turbassent.

d. Quod idem dies accepti quondam imperii princeps et vitæ supremus.

e. Sextum post cladis annum trinm legionum ossa . . . condebant.

Imprimis

5. What title did Augustus adopt as ruler of the state? What were his reasons for choosing it? On whom had it been conferred previously? What privilege did it give?

6. Enumerate the different offices held by Augustus, and shew clearly the powers which each gave him.

7. Name the Provinces in the time of Augustus. They were divided into classes for the purposes of administration? Tacitus gives instances of provinces being transferred from one class to the other? What was the reason of the change? How does Tacitus account for the submission of the Provinces to the Cæsars?

8. What expenses was the State liable for and by what means did it defray them? What is the origin of the term *salary*?

9. Translate into Latin:—Whilst Pericles was transacting public business in the forum a worthless and impudent fellow kept railing at him and abusing him. When Pericles bore it quite patiently, and said not a word in reply, he kept it up the whole day long. In the evening Pericles returned home with countenance and gait alike unruffled, the varlet still following and heaping every kind of obloquy upon him. As he was about to enter his house, it being now dark, he ordered one of his servants to light a lamp, attend the man and take him home.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

TUESDAY, APRIL 16TH.

GREEK.—DEMOSTHENES: DE COBONA.

FOURTH YEAR.

1. Translate :—

a. Ἐγὼ μὲν γὰρ προὔλεγον καὶ διεμαρτυρόμην καὶ παρ' ὑμῖν ἀεὶ καὶ ὅποι πεμφθείην· αἱ δὲ πόλεις ἐνόσουν τῶν μὲν ἐν τῷ πολιτεύεσθαι καὶ πράττειν δωροδοκούντων καὶ διαφθειρομένων ἐπὶ χρήμασι, τῶν δὲ ἰδιωτῶν καὶ πολλῶν τὰ μὲν οὐ προορωμένων, τὰ δὲ τῇ καθ' ἡμέραν ῥᾳστώνῃ καὶ σχολῇ δελεαζομένων, καὶ τοιουτονί τι πάθος πεπονθότων ἁπάντων, πλὴν οὐκ ἐφ' ἑαυτοὺς ἑκάστων οἰομένων τὸ δεινὸν ἥξειν, ἀλλὰ διὰ τῶν ἑτέρων κινδύνων τὰ εαυτῶν ἀσφαλῶς σχήσειν, ὅταν βούλωνται. Εἶτ' οἶμαι συμβέβηκε τοῖς μὲν πλήθεσιν ἀντὶ τῆς πολλῆς καὶ ἀκαίρου ῥᾳθυμίας τὴν ἐλευθερίαν ἀπολωλεκέναι, τοῖς δὲ προεστηκόσι καὶ τἄλλα πλὴν ἑαυτοὺς οἰομένοις πωλεῖν πρώτους ἑαυτοὺς πεπρακόσιν αἰσθέσθαι· ἀντὶ γὰρ φίλων καὶ ξένων, ἃ τότε ὠνομάζοντο, ἡνίκα ἐδωροδόκουν, νῦν κόλακες καὶ θεοῖς ἐχθροὶ καὶ τἄλλ' ἃ προσήκει πάντ' ἀκούουσιν.

b. ΝΟΜΟΣ.

Ὅσους στεφανοῦσί τινες τῶν δήμων, τὰς ἀναγορεύσεις τῶν στεφάνων ποιεῖσθαι ἐν αὐτοῖς ἑκάστους τοῖς ἰδίοις δήμοις, ἐὰν μή τινας ὁ δῆμος ὁ τῶν Ἀθηναίων ἢ ἡ βουλὴ στεφανοῖ· τούτους δ' ἐξεῖναι ἐν τῷ θεάτρῳ Διονυσίοις ἀναγορεύεσθαι.

Ἀκούεις, Αἰσχίνη, τοῦ νόμου λέγοντος σαφῶς, πλὴν ἐάν τινας ὁ δῆμος ἢ ἡ βουλὴ ψηφίσηται· τούτους δὲ ἀναγορευέτω. Τί οὖν, ὦ ταλαίπωρε, συκοφαντεῖς; τί λόγους πλάττεις; τί σαυτὸν οὐκ ἐλλεβορίζεις ἐπὶ τούτοις; ἀλλ' οὐδ' αἰσχύνει φθόνου δίκην εἰσάγων, οὐκ ἀδικήματος οὐδενὸς, καὶ νόμους τοὺς μὲν μεταποιῶν, τῶν δ' ἀφαιρῶν μέρη, οὓς ὅλους δίκαιον ἦν ἀναγιγνώσκεσθαι τοῖς γε ὀμωμοκόσι κατὰ τοὺς νόμους ψηφιεῖσθαι; ἔπειτα σὺ τοιαῦτα ποιῶν λέγεις ἃ δεῖ προσεῖναι τῷ δημοτικῷ, ὥσπερ ἀνδριάντα ἐκδεδωκὼς κατὰ συγγραφὴν, εἶτ' οὐκ ἔχοντα ἃ προσῆκεν ἐκ τῆς συγγραφῆς κομιζόμενος, ἢ λόγῳ τοὺς δημοτικοὺς, ἀλλ' οὐ τοῖς πράγμασι καὶ τοῖς πολιτεύμασι γιγνωσκομένους. Καὶ βοᾷς ῥητὰ καὶ ἄρρητα ὀνομάζων, ὥσπερ ἐξ ἁμάξης, ἃ σοὶ καὶ τῷ σῷ γένει προσεστιν, οὐκ ἐμοί.

c. Ἑσπέρα μὲν γὰρ ἦν, ἧκε δ' ἀγγέλλων τις ὡς τοὺς πρυτάνεις ὡς Ἐλάτεια κατείληπται. Καὶ μετὰ ταῦτα οἱ μὲν εὐθὺς ἐξαναστάντες μεταξὺ δειπνοῦντες τούς τ' ἐκ τῶν σκηνῶν τῶν κατὰ τὴν ἀγορὰν ἐξεῖργον καὶ τὰ γέρρα ἐνεπίμπρασαν, οἱ δὲ τοὺς στρατηγοὺς μετεπέμποντο καὶ τὸν σαλπικτὴν ἐκάλουν· καὶ θορύβου πλήρης ἦν ἡ πόλις. Τῇ δ' ὑστεραίᾳ ἅμα τῇ ἡμέρᾳ οἱ μὲν πρυτάνεις τὴν βουλὴν ἐκάλουν εἰς τὸ βουλευτήριον, ὑμεῖς δ' εἰς τὴν ἐκκλησίαν ἐπορεύεσθε,

καὶ πρὶν ἐκείνην χρηματίσαι καὶ προβουλεῦσαι πᾶς ὁ δῆμος ἄνω καθῆτο. Καὶ μετὰ ταῦτα ὡς εἰσῆλθεν ἡ βουλὴ καὶ ἀπήγγειλαν οἱ πρυτάνεις τὰ προσηγγελμένα ἑαυτοῖς καὶ τὸν ἥκοντα παρήγαγον κἀκεῖνος εἶπεν, ἠρώτα μὲν ὁ κῆρυξ "τίς ἀγορεύειν βούλεται;" παρῆει δ' οὐδείς.

2. Explain the construction of (*a*) *πρώτους ἑαυτοὺς πεπρακόσιν ἀισθέσθαι.* A phrase similar to *κολακες ακουουσιν* occurs in Horace. Discuss the contradictory statements of Demosthenes and Aeschines respecting the law quoted in extract (*b*).

8. Write explanatory notes on (*b*) *ἐλλεβορίζεις,—τοῖς γε ομωμοκόσι,—ὥσπερ ἐξ ἁμάξης.*—(*c*) *ὡς Ἐλάτεια κατείληπται,—οἱ μὲν πρυτάνεις τὴν βουλὴν ἐκάλουν εἰς τὸ βουλευτηριον, πᾶς ὁ δῆμος ἄνω καθῆτο.*

4. Relate fully the circumstances which led to the delivery of this speech (giving dates). Discuss the defence adopted in it and mention its effect.

5. On what grounds have the public documents quoted in it been rejected as not genuine?

6. Describe the political state of Greece at Philip's accession. How far did Demosthenes overcome the obstacles to a common resistance of the Greeks to Philip?

7. Give an account of the constitution and objects of the Amphictyonic Council. When was it first employed for political purposes?

8. Give the dates of the three Sacred Wars and mention the causes and results of each.

9. What prevented the Athenians from defending Thermopyláe against Philip towards the close of the second Sacred War?

10. Describe the duties of a *τριήραρχος*, and the changes introduced by Demosthenes. The *τριηραχία* was one of several similar offices comprehended under one general name?

ADDITIONAL FOR PRIZE.

Translate into English:—De Corona. Sec. 320–322, Aesch. adv. ctes. sec. 73–75. Translate into Greek Prose:—But if I had the choice, I should prefer our fortune to Philip's, would you but moderately do your duty. For I see you have many more claims to the divine favour than he has. But we sit doing nothing; and a man idle himself cannot require even his friends to act for him, much less the gods. No wonder then that he, marching and toiling in person, present on all occasions, neglecting no time or season, prevails over us delaying and voting and inquiring I marvel not at that; the contrary would have been marvellous, if we doing none of the duties of war had beaten one doing all.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY, APRIL 15, 3 TO 5.30 P. M.

LATIN.—FOURTH YEAR. ADDITIONAL FOR PRIZES.

JUVENAL: SATIRES, I. III. X. XIII.—COMPARATIVE PHILOLOGY.

PROFESSOR JOHNSON, A.M. & A.W.H. LINDSAY, *Examiners*

1. Translate *a.* Sat. I. 81–96.
   b. Sat. X. 133–150.

2. By whom was the first European Grammar written? What was the author's object? How much did owe to predecessors?

3. What serious mistake long impeded the progress of the Science of Language? Who first pointed out this mistake and the true method of studying the science? When was the key of it found?

4. Different tests are employed for establishing (1) a general and (2) a more intimate relationship between languages? Do all languages admit of the latter test?

5. Enumerate the *Classes* of languages in the Aryan Family. How are they connected together? Why has the name *Aryan* been given to them?

6. What is meant by "Phonetic Decay"? Give examples of it in Latin, in French as compared with Latin, and in English as compared with Anglo-Saxon, French and Latin.

7. Shew by a table the forms which an *aspirated hard check* in Greek assumes in the other languages of the same Family. How have the differences been accounted for?

8. Give the *roots* of the following words and mention others *akin* to them in Greek and English: *gigno, anser, heri, hortus, nobilis, ut, tam, uter;* illustrate the differences by other examples

9. The personal terminations of the verbs in Sanskrit are divided into two classes; compare with them the terminations in Latin, Greek (1st and 2nd Conj.) and English.

10. Explain the formation of the Future Tense in French and Latin; the Imperfect in Greek and Latin. The Latin Perfect is formed in *three* ways? Account for the weak and strong Præterites in English, e. g. *moved, held, taught, sat.*

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MORNING, APRIL 18, 9 TO 12.30 P. M.

LATIN.—FOURTH YEAR. ADDITIONAL FOR PRIZES.

JUVENAL: SATIRES, I. III. X. XIII.—COMPARATIVE PHILOLOGY.

Professor JOHNSON, M.A., LL.D., Examiner.

1. Translate a. Sat. I. 81–86.

b. Sat. X. 183–190.

2. By whom was the first European Grammar written? What was the author's object? How much did owe to predecessors?

3. What serious mistake long impeded the progress of the Science of Language? Who first pointed out this mistake and the true method of studying the science? When was the key of it found?

4. Different tests are employed for establishing (1) a general and (2) a more intimate relationship between languages? Do all languages admit of the latter test?

5. Enumerate the Classes of languages in the Aryan Family. How are they connected together? Why has the name Aryan been given to them?

6. What is meant by "Phonetic Decay"? Give examples of it in Latin, in French as compared with Latin, and in English as compared with Anglo-Saxon, French and Latin.

7. Show by a table the forms which an aspirated dental check in Greek assumes in the other languages of the same Family. How have the differences been accounted for?

8. Give the roots of the following words and mention others akin to them in Greek and English: ἄγνυμι, ἄκρος, ἄκος, ἀνήρ, ἀνέμος, ἀστήρ, ἀστράπτω, ἀστυ, ἀστέρ; illustrate the differences by other examples.

9. The personal terminations of the verbs in Sanskrit are divided into two classes; compare with them the terminations in Latin, Greek (1st and 2nd Conj.) and English.

10. Explain the formation of the Future Tense in French and Latin; the Imperfect in Greek and Latin. The Latin Perfect is formed in three ways? Account for the weak and strong Preterites in English, e. g. moved, held, fought, sat.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY APRIL 22, 9 A.M. TO 1 P.M.

ETHICS AND POLITICAL ECONOMY.

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

1. Why should the study of the Intellect and of the Emotions precede the study of Ethics?

2. Classify the active principles in man's nature.

3. Shew the importance of the principle of Emulation, and point out the evils to which it leads when not properly regulated.

4. State the opinions of the Epicureans, of the Stoics, and of the Pythagoreans, respecting the *Summum Bonum.*

5. What special difficulties beset the attempt to construct a system of Ethics from man's moral constitution?

6. Give Dr. Paley's definition of *Virtue,* and point out its defects.

7. State the Cartesian argument in proof of the existence of the Deity, and shew wherein it fails.

8. Upon what ultimate principle is the *a posteriore* argument for the being of God based?

9. What advantages does the *a posteriore* argument possess over the *argumentum a priori?*

10. Classify the hypotheses which have been adopted to account for the active power displayed in the phenomena of the material world.

11. Give the several steps in the process of reasoning by which the immortality of the soul has been attempted to be proved from its immateriality.

12. What indications of His Will, apart from supernatural Revelation, has the Deity given us, respecting the future of the soul?

---

1. What is the difference between *money* and *wealth?*

2. Explain the nature and function of Capital.

3. Upon what does the increase of Wealth depend?

4. What evils result from the public provision for the poor which exists in many countries; and how may they be obviated?

5. What is the natural limit to exchange?

6. Does the introduction of labor-saving machinery into a country injure or benefit the laborer? Explain how.

7. What is the minimum at which wages can continue for any considerable length of time?

8. Why does a Surgeon receive for an operation which is performed in a few minutes, a fee equal in value to the wages which a laborer receives for a month's work.

9. State the advantages and disadvantages of small and of extensive properties in land.

10. Under what circumstances will a reduction of duties tend to the increase of the revenue; and under what circumstances will the opposite results ensue?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

MONDAY APRIL 22, 9 A.M. TO 1 P.M.

ETHICS AND POLITICAL ECONOMY.

A. W. H. Lindsay

VERY REV. PRINCIPAL [illegible]

1. Why should the study of the Intellect and of the Emotions precede the study of Ethics?

2. Classify the active principles in man's nature.

3. Show the importance of the principle of Emulation, and point out the evils to which it leads when not properly regulated.

4. State the opinions of the Epicureans, of the Stoics, and of the Pythagoreans, respecting the Summum Bonum.

5. What special difficulties beset the attempt to construct a system of Education from man's moral constitution?

6. Give Dr. Paley's definition of Virtue, and point out its defects.

7. State the Cartesian argument in proof of the existence of the Deity, and show wherein it fails.

8. Upon what ultimate principle is the a posteriori argument for the being of God based?

9. When advantage does the a posteriori argument possess over the argument a priori?

10. Classify the hypothesis which have been adopted to account for the active power displayed in the phenomena of the material world.

11. Give the several steps in the process of reasoning by which the immortality of the soul has been attempted to be proved from its immaterially.

12. What indications of His Will, apart from supernatural Revelation, has the Deity given us, respecting the future of the soul?

---

1. What is the difference between money and wealth?

2. Explain the nature and function of Capital.

3. Upon what does the increase of Wealth depend?

4. What evils result from the public provision for the poor which exists in many countries; and how may they be obviated?

5. What is the natural limit to exchange?

6. Does the introduction of labor-saving machinery into a country injure or benefit the laborer? Explain how.

7. What is the minimum at which wages can continue for any considerable length of time?

8. Why does a Surgeon receive for an operation which is performed in a few minutes, a fee equal in value to the wages which a laborer receives for a month's work.

9. State the advantages and disadvantages of small and of extensive properties in land.

10. Under what circumstances will a reduction of duties tend to the increase of the revenue; and under what circumstances will the opposite results ensue?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

FRIDAY, APRIL 12, 9 A.M.

SENIOR CHEMISTRY.

PROFESSOR GEORGE LAWSON, LL.D.....*Examiner.*

1. Explain the principle involved in Spectrum Analysis. What is a Spectrum? Describe the Solar Spectrum. Describe the Spectra of Cs, Rb, K, Na, Li, Sr, Ca, Ba.

2. Explain the principle of the Thermometer. Does it indicate the amount of Heat, or what? What are the scales used by different nations, and upon what are they founded? Define what is meant by the terms (1) Latent Heat, (2) Specific Heat, (3) Temperature, (4) Intensity of Heat, (5) Quantity of Heat, (6) Zero. What fallacy is covered by the term last mentioned?

3. What metals are usually present in an English shilling? Show the way in which you would separate them and estimate the weight of each.

4. Describe the chemical changes involved in the manufacture of Soda from Common Salt.

5. When Limestone is burned, what chemical change takes place? Find by calculation the loss in weight upon 2000 lb of pure (CaO, CO_2) by perfect burning. What chemical change takes place during the process of slacking. Find the increase in weight caused by that process on the amount of material obtained by the first process.

6. What is the composition and what are the properties and principal compounds of Cyanogen.

7. Describe a few of the more important Derived Radicles obtained from the series $Cn\ Hn + 1$.

8. Point out the differences between Sucrose, Lactose and Glucose, enumerate the various compounds obtainable from them by the action of acids and fermentation, and explain the precise chemical nature of the changes which lead to the production of such compounds.

9. Describe the processes of Digestion and Assimilation in the Animal, explaining the nature of the chemical action exerted by the Saliva, Gastric Juice, Pancreatic and Intestinal Secretions.

10. What is the theoretical or typical constitution of the Vegetable Alkaloids.

11. Describe briefly the chemical processes involved in (1) Bleaching, (2) Dyeing, (3) Calico Printing.

12. Describe Chloroform: (1) as regards its actual composition, (2) its theoretical constitution, (3) its chemical properties, (4) its physical characters, (5) its physiological action, (6) its mode of preparation.

13. What are the sources respectively of Bone Material, Muscle and Fat in the animal, and how are they produced?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1877.

FRIDAY, APRIL 13, 9 A.M.

SENIOR CHEMISTRY.

PROFESSOR GEORGE LAWSON, LL.D.....Examiner.

1. Explain the principle involved in Spectrum Analysis. What is a Spectrum? Describe the Solar Spectrum. Describe the Spectra of Cs, Rb, K, Na, Li, Sr, Ca, Ba.

2. Explain the principle of the Thermometer. Does it indicate the amount of Heat, or what? What are the scales used by different nations, and upon what are they founded? Define what is meant by the terms (1) Latent Heat, (2) Specific Heat, (3) Temperature, (4) Intensity of Heat, (5) Quantity of Heat, (6) Zero. What Sidney is covered by the term last mentioned?

3. What metals are usually present in an English shilling? Show the way in which you would separate them and estimate the weight of each.

4. Describe the chemical changes involved in the manufacture of Soda from Common Salt.

5. When Dimestone is burned, what chemical change takes place? Find by calculation the loss in weight upon 100 lb of pure (CaO, CO_2) by perfect burning. What chemical change takes place during the process of slacking. Find the increase in weight caused by that process on the amount of material obtained by the first process.

6. What is the composition and what are the properties and principal compounds of Cyanogen.

7. Describe a few of the more important Derived Radicles obtained from the series $C_n H_{2n} + 1$.

8. Point out the differences between Sucrose, Lactose and Glucose, enumerate the various compounds obtainable from them by the action of acids and fermentation, and explain the precise chemical nature of the changes which lead to the production of such compounds.

9. Describe the processes of Digestion and Assimilation in the Animal, explaining the nature of the chemical action exerted by the Saliva, Gastric Juice, Pancreatic and Intestinal Secretions.

10. What is the theoretical or typical constitution of the Vegetable Alkaloids.

11. Describe briefly the chemical processes involved in (1) Bleaching, (2) Dyeing, (3) Calico Printing.

12. Describe Chloroform: (1) as regards its actual composition, (2) its theoretical constitution, (3) its chemical properties, (4) its physical characters, (5) its physiological action, (6) its mode of preparation.

13. What are the sources respectively of Bone Material, Muscle and Fat in the animal, and how are they produced?

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

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

HISTORY.—FOURTH YEAR.

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

1. What were the causes which led to the *division of the Roman Empire?*

2. Enumerate the tribes that conquered *Spain.* State the causes of the Mohammedan conquest of that country. Trace the course of the decline of the Mohammedan power, and its final downfall.

3. Describe the *Lombard Invasion* of Italy. How long did the Lombard kingdom last? What were the circumstances that led to its overthrow?

4. State the causes that led to the establishment of the *Western Empire* under Charlemagne. What was the character of the *Holy Roman Empire,* and its relation to the Spiritual power? Give a brief account of the struggle between Hildebrand and Emp. Henry 4th.

5. Who were the *Norsemen?* What were their most important exploits? Give a short account of the Norman settlement in Sicily.

6. Give an outline of the history of *Provence.* What were the political causes of the Crusade against the Albigenses? What was the origin of the Inquisition?

7. Give a sketch of the *Mongol conquests* under Genghis Khan.

8. Give an account of the *Feudal System.*

9. Give an outline of the *Swiss War of Independence.*

10. Give brief biographies of the following,—*Dante, Petrarch, Boccaccio.*

11. Classify the *14th and 15th centuries* among the great historical periods, and enumerate the chief inventions and discoveries by which they were marked.

12. Point out the influence of *Constantinople* over the West, and mention the chief events which diffused the knowledge of Greek learning.

13. Give a brief account of the *Discovery of America.*

14. Enumerate the causes which led to the *German Reformation.* Give brief biographies of the following,—Luther, Calvin, Zwingle.

15. Give an account of the rise and progress of the *Jesuits.*

16. Enumerate the chief events of the *Parliamentarian War* and state what you suppose to be its greatest political results.

17. Consider the *Thirty Years War* by periods. State its causes and write a brief account of the War.

18. Describe the chief political measures of the reigns of *Charles 2nd,* and of *William and Mary,* and show the changes which they made in the British Constitution.

19. What were the causes that led to the *downfall of Poland,* and by whom was its dismemberment effected?

20. Give an account of the *French Revolution.*

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1857.

THURSDAY, APRIL 16, 9 A.M. to 1 P.M.

College

HISTORY.—FOURTH YEAR.

Professor DeMille, M. A.....Examiner.

1. What were the causes which led to the division of the Roman Empire?

2. Enumerate the tribes that conquered Spain. State the causes of the Mohammedan conquest of that country. Trace the course of the decline of the Mohammedan power, and its final downfall.

3. Describe the Lombard Invasion of Italy. How long did the Lombard kingdom last? What were the circumstances that led to its overthrow?

4. State the causes that led to the establishment of the Western Empire under Charlemagne. What was the character of the Holy Roman Empire, and its relation to the Spiritual power? Give a brief account of the struggle between Hildebrand and King Henry 4th.

5. Who were the Normans? What were their most important exploits? Give a short account of the Norman settlement in Sicily.

6. Give an outline of the history of Provence. What were the political causes of the Crusade against the Albigenses? What was the origin of the Inquisition?

7. Give a sketch of the Mongol conquests under Genghis Khan.

8. Give an account of the Feudal System.

9. Give an outline of the Swiss War of Independence.

10. Give brief biographies of the following,—Ivan, Petrarch, Boccaccio.

11. Classify the 14th and 15th centuries among the great historical periods, and enumerate the chief inventions and discoveries by which they were marked.

12. Point out the influence of Constantinople over the West, and mention the chief events which diffused the knowledge of Greek learning.

13. Give a brief account of the Discovery of America.

14. Enumerate the causes which led to the German Reformation. Give brief biographies of the following,—Luther, Calvin, Zwingle.

15. Give an account of the rise and progress of the Jesuits.

16. Enumerate the chief events of the Parliamentarian War and state what you suppose to be its greatest political results.

17. Consider the Thirty Years War by periods. State its causes and write a brief account of the War.

18. Describe the chief political measures of the reigns of Charles 2nd, and of William and Mary, and show the changes which they made in the British Constitution.

19. What were the causes that led to the downfall of Poland, and by whom was its dismemberment effected?

20. Give an account of the French Revolution.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 9 TO 12, A. M.

FRENCH.—FOURTH YEAR.

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

1. Quand la forme verbale en *ant* est-elle participe présent, et quand adjective verbal? Ecrivez correctement: "il n'y a que les âmes aimant qui soient propres à l'étude de la nature. La politesse est comme l'eau courant qui rend unis et lisses les plus durs cailloux. Il y a des peuples qui vivent errant dans les déserts."

2. Comment le part. présent anglais doit-il etre rendu en français? Traduisez: More glory is acquired by maintaining peace than by carrying on war. Ha was found sleeping. I hear him talking. He is very wrong in complaining of my not having answered. Walking will do him good.

3. "Parlez-moi des jours que vous avez souffert." Quelle est la règle d'accord pour le part. *souffert.*

4. Les part. passés des verbes impersounels sont-ils variables ou non? Ecrivez en français: Yesterday's rain has spoiled *(gâté)* the roads. The sums which I wanted *(falloir)*.

5. "Les avocats que j'ai entendu plaider. Les prisonniers que j'ai entendu condamner. Les demoiselles que j'ai vu dessiner. Les fleurs que j'ai vu dessiner." Dounez le corrigé de ces phrases, et expliquez l'accord du part. passé d'un verbe trans. précédé d'un régime direct et suivi d'un infinitif.

6. Qu'est ce qu'il y a ā dire par rapport aux participes *dû, pu, voulu*? Traduisez: I have made all the efforts I possibly could. We have established the rules *(réglements)*, that we should. He has given me all the answers he would.

7. Quelle est l'accord du part. passé précédé de la locutiou "*le peu de*"? Ecrivez en francçais: The few friends that he had left *(conserver)*, abandoned him at the news of this accident. The little confidence you have shown me has given me great pain.

8. Expliquez pourquoi la construction est louche dans les phrases suivantes, et écrivez-les correctement: "Les maitres qui grondeut ceux qui les servent avec emportement, sont les plus mal servis. Croyez-vous ramener ces esprits égarés par la douceur. Je connais et me sers de mes avantages. Il aime l'étude et à jouer.

9. Traduisez en Français: "To substitute the idea for the image, to cause noble, great and even somewhat austere sentiments to force their way through the witticisms of fashion, to invent the poetry of passion, and of reason, such was Corneille's literary part. For this reason he is truly the national poet. Thanks to him. France, having escaped from Italy and Spain, recovered herself, dignified and elevated by the genius of a man.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

Thursday, April 18, 9 to 12, A.M.

FRENCH.—FOURTH YEAR.

James Lincoln, Esq. ..... *Examiner.*

1. Quand la force verbale en eut est-elle participe présent, et quand adjective verbal? Revive correctement: "il n'y a que les âmes aimant qui soient propres à l'étude de la nature. La politesse est comme l'eau courante qui rend unis et lisses les plus durs cailloux. Il y a des peuples qui vivent étant dans les déserts."

2. Comparent le part. passé anglais doit-il être rendu en français? Traduisez: More glory is acquired by maintaining peace than by carrying on war. He was found sleeping. I hear him talking. He is very wrong in complaining of my not having answered. Walking will do him good.

3. "J'aurais-mot des joies que vous avez souffert." Quelle est la règle d'accord pour le part. soufert.

4. Les part. passés des verbes impersonnels sont-ils variables ou non? Revive en français: Yesterday's rain has spoiled (gâté) the roads. The sums which I wanted (désiré).

5. "Les avocats que j'ai entendu plaider. Les prisonniers que j'ai entendu condamner. Les demoiselles que j'ai vu danser. Les fleurs que j'ai vu décoiner." Donnez le corrigé de ces phrases, et expliquez l'accord du part. passé d'un verbe trans. précédé d'un régime direct et suivi d'un infinitif.

6. "Qu'est ce qu'il y a à dire par rapport aux participes dû, pu, voulu?" Traduisez: I have made all the efforts I possibly could. We have satisfied the rules (règlements), that we should. He has given me all the answers he would.

7. Que le part. accord du part. passé précédé de la locution "le peu de"? Revive en français: The few friends that he had left (conservés), abandoned him at the close of this accident. The little confidence you have shown me has given me great pain.

8. Expliquez pourquoi la construction est toujoûs dans les phrases suivantes, et corrigez les correctement: "Les maîtres qui grondent ceux qui les servent avec emportement, sont les plus mal servis. Croyez-vous raisonnez, ces enfants élevés par la douceur. Je connais et me sers de mes serviteurs. Ils aime l'étude et à jouer.

9. Traduisez en Français: "To substitute the idea for the image, to cause noble, great and even somewhat austere sentiments to force their way through the wrinkles of fashion, to invent the poetry of passion, and of reason, such was Corneille's literary part. For this reason he is truly the national poet. Thanks to him, France, having escaped from Italy and Spain, recovered herself, dignified and elevated by the genius of a man.

DALHOUSIE COLLEGE AND UNIVERSITY,

HALIFAX.

SESSIONAL EXAMINATIONS, 1867.

THURSDAY, APRIL 18, 9 TO 12, A.M.

GERMAN.—THIRD YEAR. ADVANCED COURSE.

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

Translate into English: *a.* The 8, 9 and 10th verses from Schiller's Ballad "*The Diver.*"

b. So sprach der freundliche Engel des Schlummers. Der Todesengel sah ihn mit stiller Wehmuth an, und eine Thräne, wie sie die Unsterblichen weinen, stand in seinem grossen, dunkeln, Auge. "Ach, "sprach er," dass ich nicht, wie du, des fröhlichen Dankes mich freuen kann; mich nennt die Welt ihren Feind und Freudenstörer!"—"O mein Bruder," erwiederte der Engel des Schlafes, "wird nicht auch, beim Erwachen, der Gute in dir seinen Freund erkennen und dankbar dich segnen? Sind wir nicht Brüder und Boten *eines* Vaters?" "KRUMMACHER."

1. Give the meaning, genders and plurals of the following nouns of double gender: *Band, Chor, Hut, See, Thor. Verdienst.*

2. State in full what verbs reject the syllable "*ge*" in the p. part. Mention some. Name those verbs, which, though regular in their termination, change their *root-vowel* in the Impf. and Past Part.

3. How is the passive voice of active verbs, governing the *dative*, formed? Express in two ways: I am allowed; I have been allowed.

4. "Er, sie, es." By what other words may they be replaced in order to avoid misunderstanding? Translate: He has not received them. Am I to give him the letter? Yes give it to him.

5. "*Kaum hatte er dies Wort gesprochen. Sprechen sie laut, damit ich sie verstehe. Nachdem er studiert hatte, ging er spazieren.* Account in full for the position of the Subject and the verb. Write the seven words which cause no alteration of the construction.

6. What influence on the position of the verbs have adverbs of interrogation in indirect question? Render into German: "Do you know, whence he is coming? I don't know why he has not received my letter."

7. Illustrate by examples how the English Present Part., expressing *reason, cause* or *time*, is to be rendered in German.

8. Translate into German: "What is the name of those Books? They are Gœthe's and Schiller's works, and were published (*herausgegeben*) at Leipsic. Has any one spoken of them? If I only had a good translation (*Uebersetzung*) of the best German authors (*Dichter*). Why are you astonished at his being able to speak so well? It is by studying that one acquires knowledge (*Kenntuisse erlangen*). Seeing is believing. It is not healthy to sleep in a room in which there is fire. Whatever may be his object, (*Absicht*), I believe him to be doing right."

A. H. & L.

Dominus Domini

W. M. Thorburn I

W. M. Thorburn

H. McD. Scott

Or Andrews. W. K. Lindsay

Dominus Auburn Lippincott.

Dno Scott.

Arthurius P. Silver

Wentworth E. Rosser