

## 2 ḾaILL UNIVERSITY LIBRARY


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## ANIUAL CALENDAR

## MoGILL COLLEGE

 ANDUNIVERSITY

## MONTREAL.



FOUNDED BY BEQUET OF THE HON. JAMES MCGILL, IN 1811 ; ERECTED INTO A UNIVERSITY BY ROYAL CHARTER IN 1821; AND RE-ORGANIZED BY AN ANENDED CHARTER IN 1852.

SEISSION OE 1874-5.

MONTREAL:
Printed for the Jniversity by J. C. 乃ecket, St, James St.

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The Forty-second Session of this University, being the Twenty-second under the amended charter, will commence in the Autumn of 1874.

By Virtue of the Royal Charter, granted in 1821 and amended in 1852, the Governors, Principal and Fellows of MeGill College, onstitute the Corporation of the University ; and, under the statutes framed by the Board of Governors, with approval of the Visitor, have the power of granting degrees in all the Arts and Faculties, in McGill College, and Colleges affiliated thereto.

The Statutes and Regulations of the University have been framed on the most liheral principles, with the view of affording to all classes of persons the greatest possible facilities for the attainment of mental culture and professional training. In its religious character the University is Protestant, but not denominational: and while all possible attention will be given to the character and conduct of students, no interference with their peculiar religious views will be sanctioned.

## I. MaGILL COLLEGE.

The Faculty of Arts.-The complete course of study for the Degree of B. A. extends over four Sessions, of eight months each; and includes Classics and Mathematics, Experimental Physics, English Literature, Logic, Mental and Moral Science, Natural Science, and one Modern Language, or Hebrew ; all of which subjects are imperative in the first two years of the Course ; but in the third and fourth years options are allowed in favour of the Honcur Courses in Classics, Mathematics, Mental and Moral Science, Natural Science, and English Literature. Certain exemptions are also allowed to Professional Students.
The Depabtment of Applimd Scienge in the Faculty of Arts provides professional instruction in Civil Engineering, Mining Engineering and Assaying, and Practical Chemistry, leading to the Degree of Bachelor of Applied Science.
The Faculity of Medioine.-The complete course of study in Medicine extends over four Sessions, of six months each, and leads to the degree of M. D., C. M.
The Faculty of Law. - The complete course in Law extends over three Sessions. of six months each, and leads to the degrees of B. C. L. and D. C. L.

## II. AFFILIATED COLLEGES.

Students of these Colleges are matriculated in the University, and may pursue their course of study wholly in the affiliated College, or in part in McGill College, and may come up to the University Examinations on the same terms with the Students of MeGill College.
Morrin Collegr, Quebec.-Is affiliated in so far as regards degrees in Arts and Law.
[Detailed information may be obtained from Rev. John Cook, D.D., Principal] St. Francis Collegr, Richmond, P. Q.-Is atfiliated in so far as regards degrees in Arts.
[Detailed information may be obtained from C. W. Parkin, Esq., Principal.]

## III. AFFILIATED THEOLOGICAL COLLEGES.

The Congregational College of British North Amertca, Montreal.
The Presbyterian Collige of Montreal, in connection with the Canada Presbyterian Church.
Affiliated Theological Colleges have the right of obtaining for their Students the advantage, in whole or in part, of the course of study in Arts, with such facilities in regard to exemptions as may be agreed on.

## IV. AFFILIATED SCHOOLS.

The McGill Norval School provides the training requisite for Texchers of Elementary and Model Schools and Academies. Teachers trained in this School are entitled to Provincial Diplomas.
The Modrl Schools of the McGill Normal School are Elementary Schools, divided into a Boys' Department, (Firls' Department and Primary School.

I. ORIGINAL ENDOWMENT, 1811.

THE HONOURABLE JAMES McGILL, by his last Will and Testament, under date 8 th. January, 1811, bequeathed the Estate of Burnside, situated near the City of Montreal, and containing forty-seven acres of land, with the Manor House and Buildings thereon erected, and also the sum of ten thousand pounds, in money, unto the "Royal Institution for the Adrancement of Learning." constituted by Act of Parliament in the Forty-first Year of the Reign of his Majesty, King George the Third, to erect and establish a University or College for the purpose of Education and the advancement of learning in the Province of Lower Canada, with a competent number of Professors and Teachers to render such Establishment effectual and beneficial for the purposes intended, requiring that one of the Colleges to be comprised in the said University, should be named and perpetually be known and distinguished by the appellation of "McGill College."
The value of the above mentioned property was estimated at the date of the bequest at
$\$ 120,000$,

## II. WILLTAM MOLSON HALL.

In 1861 the "William Molson Hall," being the west wing of the McGill College buildings, with the Museum Rooms, and the Chemical Laboratory and Class Rooms, was erected threngh the munificent Donation of the founder whose name it bears.

## III. ENDOWED CHAIRS.

The Molson Chatr of Eiglish Laneuage and Literaturr, in 1856, by the Honourable John Molson, Thomas Molson Esq., and William Molson, Esq.$\$ 20,000$.
The Peter Redpath Chatr of Natural Philosophy, in 1871, by Peter Redpath, Esq.- $\$ 20,000$.
The Logan Chatr of Grology, in 1871, by Sir W. E. Logan, LL.D., F.R.S. and Hart Logan, Esq.- $\$ 20,000$.
The John Frothingham Chatr of Mental and Moral Philosophy, in 1873, by Miss Louisa Frothingham, $-\$ 20,000$.

## IV. EXHIBITIONS AND SCHOLARSHIPS IN ARTS.

The Jane Redpath Exhibition, $\$ 100$ annually,-founded in 1868 by Mrs Redpath of Terrace Bank, Montreal, and endowed with the sum of $\$ 1667$.
The Governors' Sohotarship of $\$ 100$ to $\$ 120$ annually-founded by subscription of members of the Board of Governors in 1869.
The McDonald Scholarships and Exhibitions, 10 in number-founded in 1871, by William C. McDonald, Esq.-Annual value, $\$ 1,250$.
The Charles Alexaxder Soholarship for Classics,-founded in 1871 by C. Alexander Esq. Annual value $\$ 120$
The Taylor Scholarship-founded in 1871, by T. M. Taylor Esq.-Annual value $\$ 100$.
The Soott Exhibition,-founded by the Caledonian Society of Montreal, in commemoration of the Centenary of Sir Walter Scott, and endowed in 1872 with the sum of $\$ 1100$ subseribed by members of the Society, and other citizens of Montreal. The Exhibition is given annually in the Department of Practical and applied science.

## V. ENDOWMENTS OF MEDALS.

In 1856 Henry Chapman, Esq., founded a gold medal to be named the 'Chapman gold Medal," to be given annually in the graduating class in Arts. This Medal was endowed by Mr. Chapman in 1874 with the sum of $\$ 700$.
In 1860 the sum of $\mathcal{L} 200$ presented to the College by H. R H. the Prine of Wales was applied to the foundation of a Gold Medal, to be called the 'Prince of Wales Gold Medal," which is given in the graduating class for Honur Studies in Mental and Moral Philosophy.
In $186 t$ the "Anne Molson Gold Medal," was founded and endowid by Mrs. John Molson of Belmont Hall, Montreal, for an Honour Course in Mithematies and Physical Science.
In the same year the 'Shakespeare Gold Medal," for an Honour Coune to comprise and include the works of Shakespeare and the Literature of Enfland from his time to the time of Addison, both inclusive, and such other accessory subjects as the Corporation may from time to time appoint,-was fornded and endowed by citizens of Montreal, on occasion of the three hundredth maiversary of the birth of Shakespeare.
In the same year the "Logan Gold Medal; "far an Honour Course n Geolegy and Natural Science, was founded and endowed by Sir William E imind Logan LL.D., F. R. S., F. G. S., \&c.
In 1865 the " Elizabeth Torrance Gold Medal," was founded and eidowed by John Torrance, Esq , of St. Antoine Hall, Montreal, in memory of thi late Mrs. John Torrance, for the best student in the graduating class in law and more especially for the highest proficiency in Roman Law.
In the same year, the "Holmes Gold Medal, "was founded by the Medeal Faculty, as a memorial of the late Andrew Holmes, Esquire, MD., LL.D., late Dean of the Faculty of Medicine, to be given to the best student in the ;raduating class in Medicine, who shall undergo a special examination in all thi branches, whether Primary or Final.
In 1874 a Gold and a Silver Medal were given by His Excellency be Earl of Dufferin, Governor General of Canada, for competition in the Facult; of Arts
VI. SUBSORIPTIONS TO THE GENERAL ENDOWMENJ.
1856.

John Gordon McKenzie, Esq. $\$ 2000$
Ira Gould, Esq. . . 2000
John Frothingham, Esq. $\quad 2000$
John Torrance, Esq. . . 2000
James B. Greenshields. Esq. $\quad 1200$
William Busby Lambe, Esq. 1200
Sir George Simpson, Knight. $\quad 1000$
Henry Thomas, Esq,. 1000
John Redpath, Esq . 1000
James McDougall, Esq. 1000
James Torrance, Esq. . 1000
Honourable James Ferrier 1000
John Smith, Esq. . 1000
Harrison Stephens Esq. 1000
James Mitchell, Esq. . 1000
Henry Chapman, Esq. . 600
Honourable Peter MeGill 600
John James Day, Esq. . 600
Thomas Brown Anderson, Esq. 600
Peter Redpath, Esq,
Thomas M. Taylor, Esq.
Toseph McKay, Esq.
Donald

| Honourable John Rose |  | 600 |
| :--- | :--- | :--- |
| Charles Alexander, Esq. | 600 |  |
| Moses E. David, Esq. | 600 |  |
| Wm. Carter, Esq. | 600 |  |
| Thomas Paton, Esq. | 600 |  |
| Wm. Workman, Esq. | 600 |  |
| Honourable Sir A. T. Galt | 600 |  |
| Honourable Luther H. Hoton | 600 |  |
| Henry Lyman, Esq. | 600 |  |
| David Torrance, Esq. . | 600 |  |
| Fdwin Atwater, Esq. | 600 |  |
| Theodore Hart, Esq. | 600 |  |
| William Forsyth Grant, Eqq. | 600 |  |
| Robert Campbell, Esq. | 600 |  |
| Alfred Savage, Esq. | 600 |  |
| James Ferrier, Jr., Esq. | 600 |  |
| William Stephens, Esq. | 600 |  |
| N.S. Whitney, Esq. | 600 |  |
| WVilliam Dow, Esq. | 600 |  |
| William Watson, Esq. | 600 |  |
| Edward Major, Esq. | 600 |  |
| Honourable Charles Dewe: Day | 600 |  |
| John R. Esdaile, Esq. | 200 |  |
|  | 200 |  |

1871

William Molson, Esq. William C.McDonald, Esq. Thomas Workman, Esq. John Frothingham, Esq. $\$ 5,000$ $\$ 5,000$
5,000 5,000 5,000 J. H. R. Moson, Esq. 2,000
Honourable F. W. Torrance. 1,000

1,000
$\begin{array}{ll}\text { John McLennan, Esq. } & 1,000 \\ \text { B. Gibb, Esq. }\end{array}$
$\begin{array}{ll}\text { John McLenran, Esq. } & 1,000 \\ \text { B. Gibb, Esq. } & 600\end{array}$
B. Gibb, Esq.
W. Notman, Esq. 600
T. W. Ritchie, Esq. . 600
A. \& W. Robertson, Esqs. 600

Messrs, Sinclair, Jack \& Co. 250
John Reddy, Esq.M. D. . 100
Wm. Lunn, Esq. . 100
Kenneth Campbell, Esq. 100
R. A. Ramsay, Esq. . 100

William Rose, Esq. 50
VII. ENDOWMENT FOR DEPARTMENT OF PRACTICAL SCIENCE:
1871.

| aniel Torrance, Esq., | \$5000 |
| :---: | :---: |
| George Moffatt, Esq. | 1000 |
| Charles J. Brydges, Esq. | 1000 |
| Robert J. Reekie, Esq. | 1000 |
| Hon. James Ferrier (per annum for 7 years) | 100 |
| Donald Ross, Esq., (per annum for 5 years), | 50 |
| Peter Redpath, Esq., do | 400 |
| John It. R. Molson, Esq., do | 400 |
| George H. Frothingham, Esq., do. | 400 |
| T. James Claxton, Esq., (per annum), | 100 |
| Charles Gibb, B. A., Donation for Apparatus |  |

## VIII. SUBSCRIPTIONS FOR SPECIAL OBJECTS.

## Sulscriptions for the purchase of Philosophical Apparatus, 1867.



Subscriptions for the erection of a Fire pronf Building for the Carpenter Collection of Shells, 1868.

Peter Redpath, Esq., . $\$ 500$ | Wm. Dow, Esq., . . . 100 William Molson, Esq., . . 500 Thomas Rimmer, Esq., . 100
Harrison Stephens, Esq. . 100
Robert J Reekie, Esq., . . 100
John H. R. Molson, Esq., . 100
Sir William E. Logan, F. P. S. 100 John Molson, Fsq. . . 1 n0
Thomas Werkman, Esq., M. P. 100
George H. Frothingham, Esq., 100

Wm. Dow, Esq.,.$\quad$. $\quad 100$
Thomas Rimmer, Esq., . 100
Andrew Robertson, Esq., . 100
Mrs. Redpath, . . 100
Benaiah Gibb. Esq., . . 50
Honourable John Rose, . . . 30

Subscriptions for the Erection of the Lodge and Gates.

| Tilliam Molson, Esq., | \$100 | James A. Mathewson, Esq., | 100 |
| :---: | :---: | :---: | :---: |
| John H. R. Molson Esq., | 100 | Peter Redpath, Esq., | 100 |
| William Workman, Esq. | 100 | G. H. Frothingham, Esq., | 100 |
| Joseph Tiffin, Jr., Esq., | 100 | G. D. Ferrier, Esq., | 100 |
| Thos. J. Claxton, Esq., | 100 | Geo. W. Warner, Esq , | 100 |
| James Linton, Esq., | 100 | John Smith, Esq | 100 |
| William MeDougall, Esq.: | 100 | Charles Alexander, Esq., | 100 |
| Charles J. Brydges, Esq., | 100 | J. Evans, Esq., . . | 100 |
| George Drummond, Esq., | 100 | Henry Lyman, Esq., | 100 |
| Thomas Rimmer, Esq., | 100 |  |  |
| William Dow, Esq., | 100 |  | \$2050.00 |
| John Frothingham, Esq., | 100 |  |  |

## Library and Museum Funds and Subscriptions.

Mrs. G. H. Frothingham, for the arrangement of Dr . Carmenter's Collection of Mazatlan Shells
T. J. Clayton, Esq. £50 Sterling for additions to the Mu um. . . . . $\$ 250$

Wm. Molson, Esq., for Library Fund. . . $\$ 4000$ Wm. Molson, Esq., for Museum Fund.
$\$ 2000$
John Thorburn, M. A., for the
Library.
$\$ 90$

Miscellaneous.

Hon. C. Dunkin, M. P., in aid of the chair of Practical Chemistry
Principal Dawson, in aid of the
same

T. M. Thomson, Esq., $\$ 250$ for two Exhibitions in September, $1871, \$ 200$ for two exhibitions in 1872
Rev. Colin C. Stewart for the "Stewart Prize in Hebrew." $\$ 20$, annually.

## XI. ENDOWMENT, HELD IN TRUST BY THE BOARD OE ROYAL. INSTITUTION.

The "Hannah Willard Lyman Memorial Fund" contributed by subscription of former pupils of Miss Lyman, and invested as a permanent Endowment, to furnish annually a Scholarship or Prize in a College for Women affiliated to the University, or in Classes for the Higher Education of Women approved by the University. The amount of the fund is at present $\$ 1007$,

## SPECIAL COLLECTIONS OF BOOKS PRESENTED TO THE LIBRARY.

1. The Peter Redpath Collection of Historical Books-Presented by Peter Redpath Esq., of Montreal. 1129 Volumes.
2. The Robson Collection of works in Archaeology and general Literature, Presented by Dr. John 反̌obson of Warrington, England: 3436 Volumes.
3. The Charles Alexander Collection of Classical Works, presented by 0. Alexander of Montreal. 221 Volumes.


## GOVERNING BODY OF THE UNIVERSITY.

## VISITOR:-

His Excellency The Rtght Hon. Thb Earl of Dufferin, Viscount and Baron Clandeboye Governor General of Canada, \&e.

## GOVERNORS :-

[Being the Members of the Royal Institution for the Advancement of Learning.]
The Hon. Charles Deway Dat, LL.D., D.C.L. President and Chancellor of the University.

The Hon. Jas. Ferrier senator, M.L.C. Annrew Robertson, M.A. Q.C the Hon, Christopher Dunkin, M.A., D.C.L.

Wm Molson, Eisq.

- ir John Rose, Bart. K.C.M.G., (Q.C. Charless J. Brydges, Esq.

Peter Redpath, Esq.
Davíd Torrance, Esq,
George Moffatt M.A.
John H. R. Molson, Esq.
The Hen Frederigk W Torrance M.A., B.C L.

Sir Alexander T. Galt. K.C.m.G.

## PRINCIPAL:-

Joun William Dawson, Ll.D., F.R.S., F.G.S., Vice-Chancellor.

## FELLOWS : -

Ven Archdeacon Leach D.C.L. LL D, Vice-Principal and Dean of the Faculty of Arts. Henry Aspinwall Howe, LL. D.
The Hon. J J. C. Abbott, D.C.L., Q.C. M.P.. Dean of the Faculty of Law. fir William E. Logan, LL.D., F.R.S , F.G S.
George W Campbell, M.A., M.D., Dean of the Faculty of Medicine.
Rev. John Cook, D D., Principal of Morrin College, Quebec.
Alexander Joínson, LlL.D:, Professor of Mathematics and Natural Philosophy, MeGill University.
Rbv. Ghorge Cornish. LIL D., Profassor of Classica? Literature, McGill University.
Rev. Henry Wilkes, M.A., D.D., LL.D.. Principal and Professor of Theology and Chureh History in the Congregational College of British North America.
Rev, D. H MoVicar, LL.D., Principal and Professor of Theology in the Presbyterian College of Montreal.
R. A. Ramsay. M A. B.C L , Representative Fellow in Arts. John Reddy. M.D., Representative Fellow in Medicine.
William H. Hicks, Esq., Principal of McGill Normal School.
Rey. John Jenkins, D. D.. Chairman of the Protestant Board of School Commissionexs for the City of Montreal.
C. P. Davidson, M.A:, B.C.L., Representative Fellow in Arts.
J. J. McLaren, M.A., B.C.L., Representative Fellow in Law.

Edward Holfon, B.C.L., Representative Fellow in Law.
Charles W-Parkin, Esq., Principal of St Francis College, Richmond.
Gonsalive Doutre, D.C.L., Professor of Civil Procedure.
D. C. McCallum, M.D., Professor of Midwifery.

George A. Baynes, M.D., Representative Fellow in Medicine.
[The Governors, Principal and Fellows, constitute under the Charter, the Corporation of the University.]

## SECRETARY, REGISTRAR AND BURSAR:

[And Secretary of the Royal Institution.]
Wiliam Craig Baynes, B.A. Residence, East Wing, MeGill College. Office, Burnside Hall. Office hours, 10 to 2.
Assistant Secretary, Edward A tifred Baynes, B C. L.

## OFFICERS OF INSTRUCTION.

## PROPESSORS.

John William Dawson, LL.D., F R.S., F.G.S-Principal; Logan Professor of Geology and Professor of Natural History
Ven. Archdeacon Leach. D.C-L., LL D ,-Vice Principal, Dean of the Faculty of Arts and Molson Professor of English Literature
Henky Aspinwall Howe, LL.D - Emeritus Professor of Mathematics and Natural Philosophy.
Hon. J. J C. Abbotr, D.C L - Dean of the Faculty of Law and Professor of Commercial Law.
George W Campbell, M.A. M.D - Dean of the Faculty of Medicine and Professor of surgery.
William Sutherland, M.D -Emeritus Professor in the Faculty of $\}$ Medicine.
William E. Scott, M.D.,-Professor of Anatomy.
Whliam Wright, M D.-Professor of Materia Medica and Phamacy Robert P. Howard. M. D.-Professor of the Theory and Practice of $\}$ Medicine
Rev. A. DeSola. LL-D.-Professor of Hebrew and Oriental Literature:
Hon William Badgeley D.O.L.-Professor of Public and Criminal - Law.

P R Lafrenaye, D.C.L.-Professor of Legal History.
R. G. Laflamme, D.C L.-Professor of the Law of Real Fistate.

Charlas F. A Mahkgraf, M.A.-Professor of German Language and $\{$ Literature.
D. C. MeCatium, M. D.-Professor of Midwifery and Diseases of $\{$ Women and Children
Alexander Johnson, LL D., Professor of Mathematics, and Redpath Professur of Natural Philosophy.
Rev. George Cornish, LI D.- |rofessor of Classical Literature.
Pierbe J. Darey, M.A. B C. L.-Professor of French Langtaage and Literature
Robert Cratk. M. D.-Professor of Chemistry.
Edward Carter, Q.C. B C.l. - Associate Professor of Criminal Law G. E Fenwick, M.D.-Professor of Clinical Surgery and Medical Jurisprudence
Joserfi M. Drake, M D. - Professor of the Institutes of Medicine.
N. W - Trenholme, M.A., B.C.L.-Professor of Roman Law.
J. S. C. W Urtible, B.C.L.-Associate Professor of Commercial Law. Wilhiam H Kerr, D.C L.-Professor of International Law. Gongative Doutre, D.C.L.-Professor of Civil Procedure Gkorge F Armstrong, M.A., C.E.. F.G.s.-Professor of Civil Engineering and Applied Mechanics. Gilbert P. Girdwood, M D.-Professor of Practical Chemistry.
Rev. J. Clafk Murray, LL.D.-Professor of Logic, and John Fro thingham. Professor of Mental and Moral Plilosophy.

George Ross, M A., M.D.-Professor of Clinical Medicine.
Bernard I. Harringtov, B.A., Ph, D-Professor of Assaying and Mining, and Lecturer on Chemistry.

## TECTURERS :-

John S. Archibaid, B A., B.C.L -Lecturer in Criminal Law,
Thomas G. Rodick, M D , Demonstrator of Anatomy.
C. H. Mcheod, Bachelor of Applied science, Superintendent of ) Meteorological Observatory.
Chrtetorube Georprton, B.C L. Lecturer in Roman Law
Epmond Lazeay, B.C-L., Lecturer in Legal History.

John Andrew, Instructor in Elocution
Frederick S. Barnjum, Instructor in Gymanastics.

East Wing McGil College.
Lachine Road.

916 Sherbrooke Street
707 sherbrooke Street.
219 Dorchester Street.
43 Beaver Hall Terrace. - 21 Mance St.

73 McGill Col. Av 61 McGill College Avedue.
91 Upper st. Urbain -1 Cornwall Place 348 Dorchester Street.

784 Craig Streot. 4 Place St Sophie MeGill Col Av.
[ 147 Mi etcalfe Street, 39 McGill College Avenue.
-2 Phillips Square.

- 31 Cadieux >t,

24 Beaver Hall Terrace.
19 Beaver Hall Ferrace.
$\{32$ Radegonde street.
406 St . Antoine s

- 387 Sherbrooke.

37 Mackay Street.
$\left\{\begin{array}{c}28 \text { Beaver Hall } \\ \text { Terrace. }\end{array}\right.$
21 Lorne Avenue.
31 Notre Dame St. 19 Place D'Armes Hill.
23 Beaver Hall T'errace.
-3 Place D'Armes - 5 5̄ 7 Dorchester st.

- College Building -117 St. Denis. - 21 St. George Hypolite.
- 19 Courville Stree
-7 Torrance Ter.


## fantulty of ants.

The Principal (ex-officio).
Professors :-Leach.
De Sola.
Dawson.
Markgraf.
Johnson.
Cornish.
Darey.
Armstrong.
Murray.
Lecturer :-Harrington.
Dean of the Faculty :-Ven. Archdeacon Leach, D. C. L., L.L. D. Librarian :-Professor Markgraf.
[Contents.-Course of Study, §I.; Matriculation, \&c., §II. ; Exhibitions, \&c., §III. ; Examinations, \&c., §IV. ; Exemptions, \&c., §V. ; Medals, \&c., §VI. ; Attendance, \&c., §VII. ; Library, \&c., §VIII. ; Fees, \&c., §IX. ; Courses of Lectures, §X.]

The next Session of this Faculty will commence on September 15 th, 1874, and will extend to April 30th, 1875.

## §I. COURSE OF STUDY.

1. Undergraduates are arranged according to their standing, as Students of the First, Second, Third and Fourth Years; and are required to attend all the Courses of Lectures appointed for their several years, under the Regulations as to attendance and conduct stated in §VII. The only exceptions are those in favour of Honour and Professional Students, stated in $\S V$.

ORDINARY COURSE FOR THE DEGREE OF B.A.
First Year.-Classics; French or German ; English Language and Literature ; Pure Mathematics : History ; Elementary Chemistry.
Second Year.-Classics ; French or German ; Logic ; Pure Mathematics ; Botany. Third Year:-Classics ; Rhetoric ; Mental and Moral Philosophy ; Mixed Mathematics ; Experimental Physics; Zoology.
Fourth Year.-Classics ; English Literature; Mental and Moral Philosophy ; Mixed Mathematics ; Experimental Physics ; Mineralogy and Geology. Undergraduates are required to study either French or German for two years, [viz., in the First and Second Years] taking the same language in each year. Any

## 14

Student failing to pass the Examination at the end of the Scond Year, will be required to pass a Supplemental Examination, or to take an arditional Session in the Language in which he has failed. In addition to the olligatory, there are other Lectures, attendance on which is optional.

The Lectures in Modern Languages will be so arransed that Students competent and desirous to take in the same years the Lecturs in French and in German, may do so.

Students who intend to join any Theological School, on gving written notice to that effect at the beginning of the First Year, may take Hebrew instead of French or German.

The Faculty may permit any Student to take Spanish intead of French or German.
2. At the examination for the Degree of B. A., Honours are given in the following subjects, for which special Honour Courses are provided:-[For details see under $\S \mathrm{X}$.]

1. Classical Languages and Literature.
2. Mathematics and Physics.
3. Logic and Mental and Moral Philosoplyy.
4. English Language, Literature and History.
5. Geology and other Natural Sciences.

Students taking B. A. Honours in any of the above Courses may omit two of the ordinary subjects in the Degree Examination, under otle conditions stated in §IV., 4.

In Mathematics and Physics, Honours are also given in the First, Second, and Third Years, and in the other subjects in the Third Year.

## § II. MATRICULATION AND ADMISSION.

1. Candidates for Matriculation as Undergradutes are required to present themselves to the Dean of the Faculty, on the 15 th of September, for examination; they may, however, entr after the commencement of the Session, if, on examination, foundqualified to join the classes.

The subjects of examination for entrance into the First Year, are Classics, Mathematics, and English.
In Classics.-Latin Grammar, Greek Grammar, and one easyLatin and one easy
Greek author. The authors recommended are Cæsa; Sallust; Virgil
(Æneid, B. I.) ; Xenophon (Anabasis, B. I.) ; Homer (Iiad, B. I.)
In Mathematics.-Arithmetic ; Algebra, to Simple Equations, inclusive ; Euclid's Elements, Books, I., II., III. In English.-Writing from Dictation.
2. Candidates not matriculated in the University $m$ iy be
admitted to the standing of students of the Second Year, provided that they pass the Sessional Examinations of the First Year, or an examination in the following subjects at the beginning of the Second Year :-

In Classics.-Greek.-Homer, Book VI. ; Xenophon, Anabasis, Book I. ; Grammar, and Prose Composition.
Latin.-Virgil, Æneid, Book VI. ; Cicero, Orations against Catiline ; Grammar and Prose Composition.
In Mathematics. -
Euclid.-Books I., II., III., IV., VI., with defs. of Book V. (omitting propositions 27, 28, 29, of Book VI.)
Algebra. -To end of Quadratic equations (Colenso's Alg.)
Trigonomeiry.-Galbraith and Haughton's Trigonometry, Chaps. 1, 2, $3,4,6$, to beginning of numerical solution of plane triangles.
Arithmetic.-Ordinary rules.-Proportion, Interest, Discount, \&c., Vulgar and Decimal Fractions, Square Root.
In English Literature. - English Grammar and Composition.
In French or German.-Grammar and easy Translation.
[Candidates who are unable to pass the entrance Examination of the Second Year in Modern Languages, may be allowed to enter, but will be required to take additional lectures in one Modern Language in the Second Year, or to take the subject in both the Second and Third Years.]

Students of other Universities may be admitted, on the production of Certificates, to a like standing in this University, after examination by the Faculty.

Candidates for Matriculation as Partial students, taking three or more Courses of Lectures, or as students in any Special Course, will be examined in the subjects necessary thereto, as may from time to time be determined by the Faculty.

Persons desirous of taking one or two Courses of Lectures as Occasional students, may applyto the Dean for entry in his Register, and may procure from the Secretary tickets for the Lectures they desire to attend.

Every student is expected to present, on his entrance, a written intimation from his parent or guardian, of the name of the minister of religion, under whose care and instruction it is desired that the student shall be placed, who will thereupon be invited to place himself in communication with the Faculty on the subject. Failing such intimation from the parent or guardian, the Faculty will endeavour to establish such relations:

## § III. SCHOLARSHIPS AND EXHIBITIONS.

1. A Scholarship is tenable for two years. An Exhibition for one year.
2. Scholarships are open for competition to Students who have passed the University Intermediate Examination, provided that not
more than three Sessions have elapsed since their Matriculation ; and also to candidates who have obtained what the Faculty may deem equivalent standing in some other University.
3. Scholarships are divided into two classes:-[1] Science Scholarships; [2] Classical and Modern Language Scholarships. The subjects of Examination for each are as follows :-

Science Scholarships.-Differential and Integral Calculus; Analytic Geometry; Plane and Spherical Trigonometry; Higher Algebra and Theory of Equations; Pure Mathematics, as in Ordinary Course ; Botany ; Chemistry ; Logic.

Classical and Modern Language Scholarships.-Greek ; Latin ; English Composition; English Language and Literature; French.
4. Exhibitions are assigned to the First and Second Years.

First Year Exhibitions are open for competition to candidates for entrance into the First Year.

Second Year Exhibitions are open for Competition to students who have passed the First Year Sessional Examination, provided that not more than two Sessions have elapsed since their Matriculation; and also to candidates for entrance into the Second Year.

The subjects of Examination are as follows:-
First Year Exhibitions.-Classics, Mathematics, English.
Second Year Exhibitions.-Classics, Mathematics, English Language, Chemistry, French.
5. The First and Second Year Exhibition Examinations will, for Candidates who have not previously entered the University, be regarded as Matriculation Examinations.
6. No Student can hold more than one Exhibition or Scholarship at the same time; but four of the First Year Exhibitioners will be granted exemption from the Sessional fees throughout their College Course, under Presentation Scholarships from the Governor General. (See below.)
7. Exhibitions and Scholarships will not necessarily be awarded to the best answerers at the Examinations. Absolute merit will be required.
8. If in any one College Year there be not a sufficient number of Candidates showing absolute merit, any one or more of the Exhibitions or Scholarships offered for competition may be transferred to more deserving Candidates in another Year.
9. A successful Candidate must, in order to retain his Scholarship or Exhibition, proceed regularly with his College Course, to the satisfaction of the Faculty.

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10. The annual ineome of the Scholarships or Exhibitions will be paid in four instalments, viz. :-in October, December, February and April.
11. The Examinations will be held at the beginning of every Session.

## Exhibitions and Scholarships to be Offered in 1874.

There are at present fourteen Scholarships and Exhibitions.
The Jane Redpath Exhibition, founded by Mrs. Redpath, of Terrace Bank, Montreal, value, \$100 yearly.
The McDonald Scholarships and Exhibitions, ten in number, established by W. C. McDonald, Esq., Montreal. Value, $\$ 125$ each, yearly.
The Governors' Scholarship, established by the Board of Governors. Value, \$Izo yearly.
The Charles Alexander Scholarship, founded by Charles Alexander, Esq., for the encouragement of the study of Classics and other subjects. Value, \$Izo yearly.
The Taylor Scholarship or Exhibition, established by T. M. Taylor, Esq., Value, \$120 yearly.
The following will be offered at the Examinations commencing September 15 th, 1874 , under the regulations stated.

## First Year.

Four Eximbitions. -Two of $\$ 125$, two of $\$ 100$. The examinations will be on the following Subjects.
Greek.-Homer, Iliad, bk. I. ; Xenophon, Anabasis, bk. I. ; Lucian, Charon.
Latin.-Cicero, Pro Lege Manilia; Livy, bk. V., chap. I.-XXV. ; Horace, Odes, bk. I.

Text Books.-Hadley's Elements of Greek Grammar.-Arnold's Greek Prose Composition, Exercises I to 25. Dr, Wm. Smith's Smaller Latin Grammar, and Principia Latina, Part IV.
Mathematics.-Euclid, bk. I., II., III., IV., Algebra to end of Harmonical Progression (Colenso). Arithmetic.
English.-English Grammar and Composition.-(Bain's Grammar, as far as Derivation.) Special exercises in Grammar and Composition.

## Second Year.

Four Exhibitions.-Two of $\$ 125$ each, and one of $\$ 100$. The Examinations will be in the following subjects :-
Greek.-Homer, Hiad, bk. VI., and Odyssey, bk. IX. ; Xenophon, Hellenics, bk. I. ; Arrian, bk. III,

Latin.—Virgil, Eneid, bk. VI.; Livy, bk. V., chapp. XXVI.-LV. ; Horace, Odes, bk. III. ; Cicero, Select Letters, Pritchard \& Bernard, (Clarendon Press Series).
Text Books.-Dr. Wm. Smith's History of Greece. Liddell's History of Rome. Hadley's Greek Grammar. Smith's Student's Latin Grammar. Arnold's Greek Prose Composition. Smith's Principia Latina, Parts IV. and V.
Mathematics.-The Mathematics (Ordinary and Honour) of the First Year.
English Literature.-Bain's Grammar ;-Latham's Hand-Book, Prosody ;-Special exercises in Grammar and Composition.
Chemistry.-The Metallic Elements, as in Wilson's Elementary Chemistry,
French.-Moliere, l'Avare, les Femmes savantes, le Misanthrope. De Fivas' Grammaire des Grammaires (up to Syntax). Easy translation from English into French.

## Third Year.

Four Scholarships. - Three of $\$ 125$ yearly, and one of $\$ 120$.
Two of these will be given on Examinations in Science, as follows : one in Mathematics and one in Natural Science:-

1. Mathematics.-Differential Calculus (Hall), Chaps. I to 8 inclusive, Chaps. 12 and 14 Integral Calculus (Hall, chaps. I to 6 inclusive). Analytic Geometry. (Salmon Conic Sections). Hind's Plane and Spherical Trigonometry. Salmon's Modern Higher Algebra, (first six chapters). Todhunter's Theory of Equations. All the pure Mathematics of Ordinary Course with remainder of Drew's Conic Sections and of Colenso's Algebra [Part. I.]. With Logic as in Whately's Logic, Books II. and III.
2. Natural Science.-Botany, as in Gray's Structural and Systematic Botany. Canadian Botany, including a practical acquaintance with all the orders of Phaenogams and Acrogens. Chemistry. as in Wilson's Elements. Logic. as in Whately's Logic, Books II. and III.

Two will be given on an Examination in Classics and Modern Languages, as follows:-
Classics.-Greek.-Euripides, Medea; Demosthenes, the Olynthiacs; Xenophon, Hellenics, bk. I. ; Herodotus, bk. VIII. ; Thucydides, bk. I.
Latin.-Horace, Satires, bk. I., and Epistles, bk. I. ; Virgil, Georgics, bk. I. ; Terence, Adelphi ; Tacitus, Annals, bk. I. ; Cicero, Select Letters. [Vol, I. Teubner Series.] Greek and Latin Prose Composition.
History.-Text Books:-Rawlinson's Manual of Ancient History ; Smith's Greece; Liddell's Rome.

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English Language and Literature.-Spalding's English Literature; Bacon's Essays; Klipstein's Anglo-Saxon Grammar; Trench's Study of Words ; Trench's English, Past and Present.
Englisk Composition.-(High marks will be given for this subject, in order to encourage the practice of it, after the models of the best writers.)
French.--Racine, Britannicus, Andromaque, Iphigenie. De Fivas' Grammaire des Grammaires. Translation from English into French.

## EXEMPTIONS FROM FEES UNDER PRESENTATION SCHOLAR. SHIPS, \&C.

A number of these are in the gift of Benefactors, and entitle the students holding them to Exemption from the Sessional Fees in the Faculty of Arts. Sixteen have been placed by the Governors at the disposal of His Excellency the Governor General. Candidates must pass the usual Matriculation Examination.
[By command of His Excellency four of these Exemptions will be offered for competition in the First Year Exhibition Examinations of the ensuing session.]

Eight Exemptions from fees may be granted by the Board of Governors, from time to time, to the most successful students who may present themselves as candidates. By order of the Board one of these is given annually to the Dux of the High School, and of any other Academy or High School sending up in one year three or more candidates competent to pass creditably the Matriculation Examination.

In the event of any Academy or High School in the Province of Quebec offering tor competition among pupils an Annual Bursary in the Faculty of Arts, of not less than $\$ 80$, the Governors will add the amount of the fees of tuition thereto.

An Exemption from fees may be given annually to any teacher holding the Model School or Academy Diploma of the McGill Normal School, recommended by the Principal and Professors of the School, and passing creditably the Matriculation Examination in Arts.

## §IV. EXAMINATIONS. <br> COLLEGE EXAMINATIONS.

1. There are two Examinations in each year; one at Christmas, and the other at the end of the Session. In both of these, students will be arranged according to their answering, as 1st Class, 2nd Class, and 3rd Class.

In the Fourth Year only, the University Examination for B. A. takes the place of the Sessional Examination.
2. Students who fail in any subject in the Christmas Examinations, are required to pass a Supplemental Examination in that subject beore admi-sion to the Sessional Examinations.
3. Students who fail in one subject in the Sessional Examinations are required to pass a Supplemental Examination in that subject. Should they fail in this, they will be required in the following Session to attend the Lectures and pass the Examination in the subject in which they have failed, in addition to those of the Ordinary Course, or to pass the Examination alone without attending Lectures, at the discretion of the Faculty.
4. Failure in two or more subjects at the Sessional Examinations involves the loss of the Session. The Faculty may permit the Student to recover his standing by passing a Supplemental Examination at the beginning of the ensuing Session. For the purposes of this Regulation, Classies and Mathematies are each regarded as two subjects.
5. The time for the Supplemental Examination will be fixed by the Faculty; and such Examination will not be granted at any other time except by special permission of the Faculty, and on payment of a fee of $\$ 5$.

## UNIVERSITY EXAMINATIONS,

1. FOR THE DEGREE OF B. A.

There are three University Examinations :-The Matriculation, at Entrance ; the Intermediate, at the end of the Second Year; and the Final, at the end of the Fourth Year.

1. The subjects of the Matriculation Examination are stated in Section II.
2. In the Intermediate Examination, the subjects are Classics and Pure Mathematics, Logic, and the English language, with one other Modern language, or Botany. 'Theological Students are allowed to take Hebrew instead of a Modern language. The subjects for the Examination of 1875 are as follows :-

Classics.-Greek.-Lysias $\left\{\begin{array}{l}\text { Oratio Funebris. } \\ \text { In Eratosthenem. }\end{array}\right.$
Latin.-Valerius Maximus.-Book III.
Latin Prose Composition.
Mathematics.-Arithmetic.
Euclid, Books I., II., III., IV., VI., and defs. of Book V, Algebra to Quadratic Equations, inclusive.
Trigonometry, including use of Logarithms,
Logic. - Whately's Logic, Books II. and III.
English.-Spalding's History of English Literature.
An English Essay.
With one of the following :-
I. Botany and Vegetable Physiology. -Structural and Systematic Botany, as in Gray's Text-book, omitting the Descriptions of the Orders.
2. French.-Moliere, Misanthrope; Racine, Britannicus, Athalie, Phedre; History of the French Literature of 17th and 18th centuries; Translation into French.
3. German.-Schmidt's German Guide. Adler's Reader. Translation into German.
4. Hebrew. -Grammar to the end of the Irregular Verbs. Translation from the Book of Genesis. Exercises,-Hebrew into English, and English into Hebrew.
3. For the Final Examination six subjects are appointed, na-mely:-[1] Classics, [2] Mixed Mathematics, [3] Mental and Moral Philosophy, [4] Natural Science, [5] Nixperimental Physies, [6] One Modern Language and Literature (or Hebrew), with History. Every candidate must pass in four of these, namely ;-Classios and Mixed Mathematics; which are obligatory; and any two of the remaining sub. jects, at his option. The subjects for 1875 are as follows :-
I. Classics.-Greek.-Sophocles.-The Electra. Demosthenes. -The Olynthiacs.
Latin.-Tacitus. -The Annals, Book I.
Juvenal.-Satires. VIII, and X.
Latin Prose Composition.
General Paper in Grammar and History.
2. Mathematics.-Mechanics.

$$
\left.\begin{array}{l}
\text { Hydrostatics } \\
\text { Optics } \\
\text { Astronomy }
\end{array}\right\} \begin{array}{r}
\text { As treated in Galbraith and Haughton's } \\
\text { Manuals. }
\end{array}
$$

[Except in the case of Exemptions to Professional Students as stated in § V.]
3. Mental and Moral Philosophy.-Murray's Outline of Hamilton's Philosophy, Stewart's Outline of Moral Philosophy, Pt. II.
4. Natural Science.-Geology and Mineralogy, as in Dana's Geology and Manual of Mineralogy. - The Zoology, Botany and Chemistry necessary to the study of the books above named; or as in Dawson's Hand-book of Zoology ; Gray's Structural and Systematic Botany, and Wilson's Inorganic Chemistry.
5. Experimental ${ }^{3}$ Physics.-Electricity :-Statical and Dynamical; including Electro-Magnetism,-Magneto-Electricity,-Diamagnetism,-Electric Mea-surements,-Practical ${ }^{1 / 2}$ Applications to Telegraphy, \&c.-Magnetism. -Acoustics:-Theory of Undulations,--Production and Propagation of Sound, -Vibrations of Rods and Plates, -Vibrations of fluids.-Musical Sounds.
6. History and English Literature.-Smith's Student's Gibbon.-Smith's Student's Hume.-Marsh's Hand-book of the English Language and Collier's History of English Literature.
Or instead of History and English, candidates may take one of the following:-
(a) History and French.-History as above. The course of French for the Fourth Year.-Bossuet, Discours sur l'Hisoire Universelle ; Boileau, Art poetique ; Translation into French, and French Composition.
(b) History and German.-History as above. Schiller, Geschichte des 30 jahrigen Krieges ; Goethe, Iphigenie auf Tauris ; General Paper on Grammar ; Translation into German, and German Prose Composition.
(c) History and Hebreze.-(Theological Students only.) History as above. Hebrew Grammar ; Translation from first fcur chapters of Isaiah ; any three of the Psalms ; the Chaldaic portions of the Scriptures ; Targum of Onkelos on Genesis. Chap. I. ; Modern Hebrew Pottry, Halevi or Gabirol.

Exemptions for Candidates for Honours in the Third Year.
Candidates for Honours who, at the Sessional Examination of the Seoond Year, have passed in the First Class in the subjects in which they propose to take Honours, and not below Scoond Class, in the others may on application to the Faculty be allowed the following exemptions :-

They may in the Lectures and Examinations of the Third Year omit any one of the following subjects not immediately connected with that in which they study for Honours:-(1) Greek, (2) Latin, (3) Optics and Astronomy, (4) Rhetoric, (5) Mental and Moral Philosophy, (6) Experimental Physics, (7) Zoology.
The particular exemption desired must be stated to the Faculty in the application of the candidate, and no change can be made subsequently.

The candidate must pursue the Honour course selected to the satisfaction of the Professor, and must pass the Examination therein.

The above exemptions shall be granted only with reference to Honour subjects in which regular courses of Lectures are delivered in the Third Year.

Exemptions for Candidates fo: B. A. Honours.
4. Candidates for B. A. Honours who at the Third Year Sessional Examinations have been placed in the 1st or 2nd Class in any two of the six subjects appointed for the Final Examination, are entitled to the following privileges:-
[1] They may claim to have the Third Year Examination in these two subjects regarded as a B. A. Examination in the same. [This amounts to exemption at the ordinary B. A. Examination from two of the subjects required above.]
[2] They are required to attend the Ordinary Lectures of the Fourth Year in two subjects only. These must be the subjects in which they are to pass the ordinary B. A. Examination, if Lectures are delivered in them ; if not, the choice is left to the Candidate.

No Student shall be entitled to the above privileges unless his attendance on Lectures in the Fourth Year, and progress in the subject in which he is a Candidate for Honours, shall be satisfactory to the Professor ; nor unless he shall have obtained a certificate of creditable answering in the Honour Examinations.

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## 2. FOR THE DEGREE OF M. A.

Bachelors of Arts, of at least three years' standing, are entitled to the degree of Master of Arts, after such examination an lexercises as may be prescribed by the Coporation. The Regulation at present is, that the Candidate shall prepare a Thesis on some literary, scientifio or professional subject, approved by the Faculty. Such Thesis shall be reported on by the Faculty to the Corporation before the granting of the Degree.

## § V. SPECLAL PROVISIONS FOR PROFESSIONAL STUDENTS.

## 1. LAW and medical students.

1. Students of the Third and Fourth Years, matriculated in the Faculties of Law or Medicine of this University, are entitled to the following exemptions :-

In the Third Year they may onit the Lectures and Examinations in Astronomy and Optics, and in any one of the following subjects :-Zoology, Experimental Physics or Rhetoric.

In the Lectures of the Fourth Kear, they may omit Greek ; and also Geology or Experimental Physics. At the Christmas Examinations of the Fourth Year, they may omit Astronomy and Optics.

In the Ordinary B. A. Examnation, they may, in Classics, pass in Latin alone ; and in Mixed Mathematics, in Mechanics and Hydrostatics alone.
2. To be allowed these privileges in either year, they must give notice at the commencement of the Session to the Dean of the Faculty of their intention to claim exemptions as Professional Students, and must produce at the end of the Session Certificates of attendance on a full course of Professional Lectures during the year for which the exemptions are claimed.

## 2. STUDENTS OF AFFILIATED THEOLOGICAL COLLEGES.

1. Such Students, whether entered as Matriculated or Occasional, are subject to the regulations of the Faculty of Arts, in the same manner as other students.
2. The Faculty will make formal reports to the Governing body of the Theological College, to which any such Students may belong, as to :-[1] their conduct and attendance on the classes of the Faculty; and [2] their standing in the several examinations, such reports to be
furnished after the Christmas and Sessional Examinations, severally, if called for.
3. Matriculated Students are allowed no exemptions in the course for the degree of B. A., till they have passed the Intermediate Examination; but they may take Hebrew in the First and Second Years, instead of Modern languages.
4. In the Third and Fourth Years they are allowed exemptions from the following subjects:-

In the Third Year, they may omit Astronomy and Optics, and_Rhetoric, with Experimental Physics or Zoology.

In the Fourth Year, they may omit English Literature with Experimental Physics or Zoology.
5. Certificates of attendance on the full course of lectures in the Theological College, during the year for which the exemptions are claimed, must be produced by Students who avail themselves of these exemptions, before presenting themselves for Examination.
[No Student will be allowed in the same session both Professional and Honour Exemptions.]

## § Vı. MEDALS, HONOURS, PRIZES AND CLASSING.

1. Gold Medals will be awarded in the B. A. Honour Examinations to Students taking the highest Honours of the First Rank in the subjects stated below, and who shall have passed creditably the Ordinary Examinations for the Degree of B. A.

[^0]3. Certificates of High General Standing will be granted to those Matriculated Students, who are placed in the First Class in the aggregate of the studies proper to their year.
4. Prizes or Certificates, to those Matriculated Students who may have distinguished themselves in the studies of a particular class, and have attended all the other classes proper to their year.
5. The Stewart Prize of $\$ 20$, established by the Rev. Colin C. Stewart, M. A.; is open to all Undergraduates, and also to Graduates of this or any other University studying Theology in any College affiliated to this University, under the following rules:-
I. The prizes will not be given for less than a thorough examination in Hebrew Grammar, passed in the First Class, in reading and translating the Pentateuch, and such poetic portions of the Scriptures as may be determined.
2. In case competitors should fail to attain the above standard, the prize will be withheld and a prize of Forty Dollars will be offered in the following year for the same.
[Course for the present year :-Hebrew Grammar (Gesenius) ; Translation and analysis of the first ten chapters of Genesis ; the prophet Habakkuk (the whole book) ; and the first five Psalms.]
3. There will be two Examinations of three hours each, one in Grammar, and the other in Translation and Analysis.
6. The names of those who have taken Honours, Certificates, or Prizes, will be published, in the order of merit ; and-with mention, in the case of Students of the First and Second Years, of the schools in which their preliminary education has been received.

## § VII. ATTENDANGE AND CONDUCT.

All Students shall be subject to the following regulations for attendance and conduct :-
I. A Class-book shall be kept by each Professor and Lecturer, in which the presence or absence of Students shall be carefully noted ; and the said Class-book shall be submitted to the Faculty at all their ordinary meetings during the Session.
2. Professors shall note the attendance immediately on the commencement of their Lectures, and shall omit the names of Students entering thereafter, unless satisfactory reasons are assigned. Absence or tardiness, without sufficient excuse, or inattention or disorder in the Class-room, if persisted in after admonition by the Professor, shall be reported to the Dean of Faculty, who may reprimand the student, or refer to the Faculty, as he may think proper. He may also suspend from Classes until the next meeting of the Faculty.
3. The number of times of absence, from necessity or duty, that shall disqualify for the keeping of a Session, shall in each case be determined by the

Faculty. [Under this rule attendance on at least two-thirds of the lectures will in all cases be required.]
4. While in the College, or going to and from it, Students are expected to conduct themselves in the same orderly manner as in the Class-rooms. Any Professor observing improper conduct in the College-building or grounds, may admonish the Student, and if necessary report him to the Dean.
5. Every student is required to attend regularly the religious services of the denomination to which he belongs, and to maintain, without, as well as within, the walls of the College a good moral character.
6. When Students are brought before the Faculty under the above rules, the Faculty may reprimand, report to parents or guardians, disqualify from competing for prizes and honors, suspend from Classes, or report to the Corporation for expulsion.
7. Any student injuring the furniture or building will be required to repair the same at his own expense, and will in addition, be subject to such other penalty as the Faculty may see fit to inflict.
8. All cases of discipline involving the interests of more than one Faculty, or of the University in general, shall be immediately reported to the Principal, or, in his absence, to the Vice-Principal.
§ VIII. LIBRARY AND MUSEUM.
r. The books in the Library consists of two divisions :-rst, those which may be lent ; 2nd, those designated by the general term "Books of Reference," which may not, under any circumstances be removed from the Library.
2. Students may borrow books from the Library on depositing the sum of four dollars with the Librarian, and signing a receipt for the books ; such deposit to be returned to the Student on his returning the books uninjured.
3. Students may borrow not more than three volumes at one time, except on special recommendation of a Professor, and must return them within two weeks, on penalty of a fine of one shilling for the first week of detention, and two shillings and sixpence for each subsequent week.
4. A Student incurring a fine will be debarred the use of the Library until the fine has been paid.
5. Any volume or volumes lost or damaged by a student shall be paid for by him, at such rates as the Faculty may direct, having reference to the value of the book and of the set to which it may belong.
6. Students may read in the Library at such hours as may be determined by the Faculty.
7. Professors and Lecturers may borrow any books required by them for their duties in the College, not exceeding ten volumes at any one time. Books so borrowed must be returned at or before the end of each Session.
8. Graduates in any of the Faculties, on making a deposit of four dollars, are entitled to the use of the Library, subject to the same rules and conditions as students, but they are not required to pay the Annual Library Fee.

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9. Members of the McGill College Buok Club are, by a regulation of Corporation, entitled to the use of the Library on the same conditions as Graduates.
10. Persons not connected with the College may consult books in the Library, on obtaining an order from any of the Governors, or from the Principal, the Dean of Faculty, or any of the Professors; and donors of books or money to the amount of Fifty Dollars may at any time consult books on application to the Librarian.
ri. The Library will be open from $10 \mathrm{a} . \mathrm{m}$. to 4 p . m., daily, except Saturdays, during the Session, and in the months of May and June. On Saturday it will be open from I to $4 \mathrm{p} . \mathrm{m}$.
11. No one is allowed to enter the alcoves or to take down books from the shelves, except the Governors, Members of Corporation, Professors, the Librarian and his assistants, or those whom any of the above may accompany personally.
. 13. A person desiring to read or to borrow a book, which he has ascertained from the Catalogue to be in the Library, will fill up one of the blank forms provided for Readers and Borrowers respectively, and hand it to the Librarian, who will thereupon procure him the book.
12. Readers must return the books they have obtained to the Librarian before leaving the Library.
13. No conversation that can disturb Readers is permitted in the Library.
14. The time and conditions of study in the Museum will be arranged by the Professor of Natural History.

## § IX. FEES AND RESIDENCE.

Matriculation Fee for the First Year (to be paid in the Year of Entrance only), ..... $\$ 400$
For the Second Year, (exigible from students who enter in the Second Year, and also from those who have failed in the First Year and reenter in the Second Year on

    Examination, - - - - 600
    Sessional Fee, - . . . . . . . 2000
Library Fee, - - - . . . . . . . 400
Gymnasium $F_{\epsilon e}$, - . . . . . . . . . . 200

Undergraduates and Students in Special Courses are required to pay all the above Fees.

Partial Students are required to pay the Matriculation, Library and Gymnasium Fees, and $\$ 5$ for each Class which they attend, or $\$ 20$ for all the courses.

Occasional Students, or those taking one or two courses of Lectures only, and not Matriculated, are required to pay $\$ 5$ per Session for each course.

The Matriculation, Library and Gymnasium Fees are exigible from students holding exemptions from Sessional Fees,

Graduates in Arts are allowed to attend without payment of fees all lectures, except those noted as requiring a special fee.

The fees must be paid within a fortnight after the commencement of attendance in each session. In case of default, the Student's name will be removed from the College books, and can be replaced thereon only by permission of the Faculty and on payment of a fine of $\$ 2$.

## §X.COURSES OF LECTURES, I. ORDINARY COURSE.

I. CLASSICAL LITERATURE AND HISTORY.

Professor, Rev. G. Cornish, LL.D.
GREEK.
First Year.-Homer.-Iliad, Book VI.
Xenophon.-Hellenics.-Book I.
Greek Prose Composition.
Second Year.-Lysias.- $\left\{\begin{array}{l}\text { Oratio Funebris. } \\ \text { In Eratosthenem }\end{array}\right.$
Euripides.-Medea.
Third Year.-Demosthenes. -The Olynthiacs.
Æschylus.-Septem Contra Thebas.
Fourth Year.-Sophocles.-Electra.
LATIN.
First Year:-Virgil.-Aneid, Book VI.
Cicero.-Epistolae Selectae.
Latin Prose Composition.
Second Year:-Horace.-Epistles, Book I.
Valerius.-Maximus.-Book III.
Latin Prose Composition.
Third Year.-Juvenal.-Satires VIII. and X.
Terence.-Adelphi.
Latin Prose Composition.
Fourth Year.-Tacitus.-Annals, Book I.
Latin Prose Composition.
In the work of the Class the attention of the Student is directed to the collateral subjects of History, Antiquities and Geography ; also to the Grammatical structure and affinities of the Greek and Latin Languages ; and to Prosody and Accentuation.
2. ENGLISH LITERATURE.-(MOLSON PROFESSORSHIP:)

Professor, Ven. Archdeacon Leach, D.C.L,, LL.D.
First Year.-English Language and Literature.-Anglo-Saxon Grammar. (Text-Books-Bain's English Grammar; Spalding's History of English Literature ; Klipstein's Anglo-Saxon Grammar.)
Third Year.-Rhetoric.-Text-Book-Whately's Rhetoric, I., II., III., Fourth Year:-English Literature.-Text-Book-Marsh's Hand-Book.

## 3. LOGIC, MENTAL AND MORAL PHILOSOPHY. . <br> Professor, Rev. J. Clark Murray, LL. D.

Second Year.-Elementary Psychology. Text-Book-Stewart's Outlines of Moral
Philosophy, Part. I.-Logic. Text-Book-Whately's Logic.
Third Year.-Moral Philosophy. Text-book-Stewart's Outlines, Part. II.
Fourth Year.-Psychology. Text-book-Murray's Outline of Hamilton's
Philosophy.

## 4. FRENCH LANGUAGE AND LITERATURE.

Professor, P. J. Darey, M. A., B. C. L.
First Year.-De Fivas Grammaire des Grammaires.
Moliere, Les Fourberies de Scapin. Racine, Esther.
Dictation. Colloquial exercises.
Second Year:-De Fivas Grammaire des Grammaires.
Moliere, l'Avare. Racine, Britannicus.
Translation into French; Dr. Johnson, Rasselas.
History of the French Literature-Bonnefon, Ecrivains célèbres de la France, (to the eighteenth century).
Dictation. Parsing. Etymology. Colloquial exercises.
Third Year.-Poitevin, Grammaire élémentaire.
Emile Souvestre, Un philosophe sousles toits. Corneille, Le Cid.
Translation into French; GoLDSmith, Vicar of Wakefield.
French Composition. Dictation.
History of the French Literature of the 18th and 19th centuries. Bonnefon, Ecrivains modernes.
Fourth Year.-Moliere, Le Misanthrope. Racine, Les plaideurs.
Lectures on French Literature.
Translation into French; Goldsmith, Vicar of Wakefield.
French Composition. Dictation.
The Lectures in the Third and Fourth Years are given in French.

## 5. GERMAN LANGUAGE AND LIT'ERATURE.

Professor, C. F. A. Markgraf, M. A.

First and Second Years-Ordinary Course:-This Course comprises Grammar, Reading and Analysis, Translations oral and written, and Dictation. Special regard is had to the affinities of the German with the English. TextBooks ; Schmidt's German Guide (Ist and 2nd Course); Adler's Progressive Gẹman Reader.

First Year.-Advanced Course:-Text Books;-Schmidt's German Guide (Ist and 2nd Course) ; Adler's Progressive German Reader.

Second and Third Years.-Advanced Course:-Text Books.-Schmidt's Cerman Guide (3rd Course) ; Select Readings in German Prose and Poetry (the

Books to be used will be made known at the commencement of the Session). Translations from English writers and Composition.

During this Course a series of Lectures will be delivered on the History of German Literature, from the earliest periods down to the classical age of Goethe and Schiller ; closing with a brief notice of the state of German Literature at the present day.
6. HEBREW AND ORIENTAL LITERATURE.

Professor, Rev. A. De Solä, LL.D.
Elementary Course. - (For Students of the First and Second Years.)-Grammar; -Text-Book, Gesenius' Hebrew Grammar, with exercises in Orthography and Etymology. Reading,-Translation and Grammatical Analysis of Historical Portions of the Scriptures-Syntax-Mishlé Shualim-Fables, \&ce.

Advanced Course. - (For Students of the Second, Third and Fourth Years.) Introduction to the study of Hebrew Poetry-its spirit and characteristics. Lowth and Sarchi as Text-Books. Translation from the Psalms, Lamentations and Isaiah. Ancient compared with Modern Hebrew Poetry; the productions of Halevi, Gabirol, \&c. Grammar, Exercises, \&c., continued.
ihe Chaldee Language:-Grammar, Mebo Halashon Aramith of J. Jeitteles, The Chaldee portions of Scripture. Targum of Onkelos and T. Yerushalmi.

The Syriac Language:-Grammar (Uhlemann's), and Translation,
The course comprises lectures on the above Languages and their Literature in particular, with a general notice of the other Oriental Languages, their genius and peculiarities. Comparative Philology, affinity of roots, \&c., also receive due attention, while the portions selected for translation will be illustrated and explained by reference to Oriental manners, customs, History, \&c.
7. SPANISH LANGUAGE AND LITERATURE.

Rev. Professor De Sola.
(Extra Fee for this Class, $\$ 5.00$.)
The study of the Spanish Language on this continent, being generally pursued with special reference to commercial purposes, it will be sought to impart in this course, a practical knowledge of the Castilian, the richest and most harmonious of the Peninsular languages, as well as an acquaintance with its Literature.

Ollendorf's Spanish Grammar, by Velazquez and Simmone, and the Reader of Velazquez, are the Text-Books employed in the Junior Class, who will also be exercised in composition by both written and oral exercises. In the Senior Class, Fernandes' Exercises, continuation of Grammar and Composition, Cervantes' Don Quixote, Quintana, Vida del Cid, and Mariana's Historia will Le the subjects of study. Besides a special comparison with the Portuguese Languase, a general notice, literary and historical, of the Bascuence and other dialects, will be given.

## 8. MATHEMATICS AND NATURAL PHILOSOPHY.

## (PETER REDPATH PROFESSORSHIP OF NATURAL PHILOSOPHY.)

Professor, Alexander Johnson, M.A., LL.D.
Mathematics.-(First Year-Arithmetic.-Euclid, Books, 1, 2, 3, 4, 6, with Definitions of Book 5 (omitting proposition 27, 28, 29, of Book 6). -Todhunter's Edition.-Colenso's Algebra, part I, to end of Quadratic Equations. Galbraith and Haughton's Plane Trigonometry, to end of solution of Plane Triangles. -Nature and use of Logarithms.

Mathematics. -(Second Year)-Arithmetic, Euclid, Algebra, and Trigonometry, as before. $\sim$ Remainder of Galbraith and Haughton's Plane Trigonometry. -Conic Sections treated Geometrically ; (the Parabola as in Drew's Conic Sections,) the definitions of the Ellipse and Hyperbola, with the fundamental properties of their tangents; Euclid, Book XI., Props. I to 21 ; Book XII. Props. I, 2.

The course for the Intermediate University Examination consists of the Mathematics for the first two years, except Conic Sections and Solid Geometry.

Mathematical. Physics and Astronomy. - (Third Year)-Galbraith and Haughton's Mechanics (omitting chap. 5 of Statics), Hydrostatics, Optics and Astronomy.

At the Ordinary Examinations, answers to questions in Mechanics, on the Chapters on Friction, Collision of Bodies and Projectiles, will be taken into account only in determining the relative positions of those whose other answers shall entitle them to be placed in the First Class.

Experimental Physics.-(Third and Fourth Years)-1.-Light.-Theories.-Reflection.-Refraction.-Dispersion.-Interference and Diffraction. -Double Refraction.-Polarisation. 2.-Heat.-Dilatation of Solids, Liquids and Gases.-Specific and Latent Heat.-Radiation and Conduction. Mechanical Theory of Heat. 3.-Electricity. -Statical and Dynamical ; including Electro-Magnetism-Magneto-Electricity. -Thermo-Electricity.-Diamagnetism.-Electric Measurements. - Practical Applications to Telegraph, \&c. 4.-Magnetism. 5.-Acoustics. - Theory of Undulations.-Production and Propagation of Sound. -Vibration of Rods and Plates. -Vibrations of Fluids.-Musical sounds. (Text-Books-Ganot's Treatise translated by Atkinson, and Tyndal on Heat.) This Course extends over two years.

The Subjects for the Session $1874-75$ are Electricity, Magnetism, and Acoustics,

The Lectures in Mathematical and Experimental Physics will be illustrated by Apparatus,

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elementary tissues and organs, and investigation of its functions of nutrition and reproduction. (2) Systematic and Descriptive Botany, with special notices of the Flora of Canada and instructions for collecting and determining Plants, and for the use of the Microscope. (3) Geographical Botany.

Text-Book.-Gray's Structural and Systematic Botany.
A prize of $\$ 20$ will be given for the best collection of plants, and the greatest proficiency in their determination. The prize collections or duplicates of them to remain in the College Museum. Candidates must be students in Botany of the previous session. *
II. Zoology and Comparative Physiology. (Third Year).
(I) General Zoology, including the Elements of the Histology, and Comparative Anatomy and Physiology of Animals, with the Principles of Classification and the division of the Animal Kingdom into Provinces or Sub kingdoms. (2) Descriptive, Zoology, including the character of the Classes and Orders of the Animal Kingdom, illustrated by typical examples, and as far as possible by Canadian species.

Text-Book.-Dawson's Hand-book of Zoology, with books of reference.
III. Mineralogy and Geology. (Fourth Year).
(1) Mineralogy.-Chemical and Physical characters of Minerals including Crystallography, the methods of determining species, and Descriptive Mineralogy ; with special reference to those species most important to Geology, or useful in the Arts.
(2) Physical Geology.-Composition of Rocks and their structure on the small scale, Classification of Rocks. Arrangement of Rocks on the large scale ; stratification, elevation and disturbances, denudation.
(3) Chronological Geology and Palcontology.-Data for determining the relative ages of formations. Classification according to age. Fauna and Flora of the successive periods. Geology of British America.

Text-Books.-Dana's Manuals of Mineralogy and Geology, with Lyell's Student's Manual.

The Lectures in Natural History will be accompanied with demonstrations in the Museum. Students in Natural History are also entitled to tiekets of admission to the Museum of the Natural History Society of Montreal.

Lecturer, B. I. Harrington, B. A., Ph. D.

First Year.-A course of Elementary Chemistry preparatory to the course itl Natural Science and Practical Science.

Text-Book.-Wilson's Lessons in Elementary Chemistry:

## 11. METEOROLOGY.

Superintendent of Observatory, C. H. McLeod, B. A. Sc.
Instruction in Meteorological Observations will be given in the Observatory, at hours to suit the convenience of the senior students.

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## 12. ELOCUTION.

Mr, JOHN Andrew, Instructor.
Students are recommended by the Faculty to avail themselves of the instructions of Mr. Andrew, who will make arrangements for evening classes to meet during the Session.

## II. HONOUR COURSES.

## 1. CLASSICS.

## B. A HONOURS, BEING THE HONOUR COURSE FOR STUDENTS

 OF THE THIRD AND FOURTH YEARS.Candidates for B. A. Honours in Classics, will be examined in the following subjects :
I. GREEK,
I.-Greek Philosophy.

Plato.-Republic, Books I. and II.
Aristotle.-Nicomachean Ethics, Books I. and II,
11.-Greek History.

Herodotus.-Books VIII. and IX.
Thucydides.-Book I.
Xenophon.-Hellenics, Books I. and II.
III.-Greek Postry.
a. Epic.-Homer.-Odysscy, Books I. II. and III.

Hesiod. - Works and Days.
6. Dramatic.-Eschylus.-Prometheus Vinctus.

Seven against Thebes,
Sophocles.-Antigone. Euripides.-Hippolytus.
Aristophanes.-The Frogs.
c. Lyric and Bucolic.-Pindar.-Olympic Odes.

Theocritus.-Idyls I. to VI.
IV.-Greek, Ordtory.

Demosthenes. - De Corona.
Eschines.-Contra Ctesiphontem.

> II. LATIN.
1.-Roman History.

Livy.-Books XXI., XXII. and XXIII.
Tacitus.-Annals, Books I and II.
Histories, Book I.
II.-Roman Poetry.
a. Epic.-Virgil.—Æneid, Book I to IV.
b. Dramatic.-Plautus.-Aulularia.

Terence,-Adelphi.
c. Satiric.-Horace.-Satires, Book I.

Juvenal. -Satt. VIII. and X.
Persius. - Satt. V. and VI.
III.-Roman Oratory and Philosophy.

Cicero. - De Imperio Cn. Pompeii. De Officiis.
III. HISTORY OF GREECE AND ROME.

Text Books:-

1. Grote's History of Greece.
2. Arnold's History of Rome.

87ACI 3. Mommsen's History of Rome.

> IV. COMPOSITION.

2acivi. Composition in Greek and Latin Prose.
2. General paper on Grammar, History and Antiquities.

The Examination for B. A. Honours will extend over four days, in the morning from 9 to 12 , and the afternoon from 2 to 5 .
2. LOGIC, MORAL PHILOSOPHY, AND MENTAL PHILOSOPHY.
b. A. HONOUR COURSE.

Third Year.-History of Ancient Philosophy.
Fourth Year.-History of Modern Philosophy.
Candidates for B. A. Honours in the department of Philosophy will be examined on the following works, in addition to the subjects treated in the Lectures.

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Mill's Logic, Book III.
Thomson's Outline of the Laws of Thought, Parts. I., II., and III,
Schwegler's History of Philosophy.
Locke's Essay on the Human Understanding,
Kant's Critique of Pure Reason.
Kant's Metaphysic of Ethics.
Plato's Theretetus (in English).
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3. ENGLISH LANGUAGE, LITERATURE AND HISTORY,
B. A. HONOUR COURSE,
I. Language:-

Klipstein's Anglo-Saxon Grammar.
Thorpe's Analecta Anglo-Saxonica.
Marsh's Lectures on the English Language, by Smith.
Craik's Outlines of the History of the English language.
Tyrwhitt's Essay on the Language and Versification of Chaucer.
Trench's Study of Words.
Trench's English, Past and Present.
Trench's Glossary.

## II. Literature:-

Required from the Student a general acquaintance with the works of the English Classical.Authors, and a more minute study of the following portions of English Literature.

Shakespeare's Plays.
Chaucer.-Canterbury Tales; The Prologue and the Knight's Tale; the Flower and the Leaf; the House of Fame.
Flower and the Leaf; the House of Fame.
Spencer.-Fairie Queen; Books I. and II.
Marlowe. -Faustus and Jew of Malta.
Milton.-Paradise Lost ; Comus; Lycidas ; L'Allegro.
Dryden.-Absalom and Achitophel ; Annus Mirabilis; Dedications to his Translations of Virgil's 厄neid and the Satires of Juvenal.
Pope.-Dunciad; Essay on Criticism; Rape of the Lock; Eloisa and Abelard; Prefaces to his Translations of Homer's Iliad and Odyssey. Bacon.-Essays.
Required to be read in connection with this part of the Course :- 11 math Craik's History of English Literature.
Hallam's Literary History of Europe the parts relating to English Literature ;
Johnson's Lives of the Poets.
Dunlop's History of Fiction.

## III. History:-

Required a general acquaintance with the History of England to the year 1714, and a more minute knowledge of the Anglo-Saxon period, of the 13th and 14th centuries, and of the period from the accession of Elizabeth to that of George I.

1011 40 Kemble's Saxons in England.
Lappenberg's England under the Anglo-Norman Kings. 7
Longman's Life and times of Edward III.

Froude's History of England.
Macaulay's History of England.
Clarendon's History of the Rebellion.
Hallam's Constitutional History of England.

## 4. MATHEMATICS AND PHYSICS. <br> HONOUR COURSE.

Mathematics. - (First year)-McDowell's Exercises on Modern Geometry, \&c. Wood's Algebra.
Mathematics.-(Second Year)-Todhunter's Theory of Equations.-Hind's Plain and Spherical Trigonometry,-Salmon's Conic Sections, first thirteen chap-ters.-Hall's Calculus.-Chapters I, 2, 3, 4, 6, 7, of Diff. Cal. ; Chapters 1, 2, 3, 4, 5. of Integ. Cal.

Mathematical Physics. - (Third Year)-Todhunter's Statics, fomitting Chapter 13).-Tait'\& Steele, Dynamics of a particle. -Besant's Hydromechanics, Chaps, 1, 2, 3, 5.- Walton's Mechanical and Hydrostatical Problems.-Parkinson's Optics. Main's Practical and Spherical Astronomy (selected course).
B. A. HONOUR COURSE.

Pure Mathematics.-Hind's Plane and Spherical Trigonometry.-Todhunter's Theory of Equations.-Hall's Differential and Integral Calculus.-Boole's Differential Equations (selected course).-Gregory's Examples of the Calculus (omitting the last two Chapters). Salmon's Conic Sections. - Salmon's Geometry of Three Dimensions (selected course).

Mechanics.-Todhunter's Statics.-Tait \& Steele, Dynamics of a Particle.Routh's Dynamics of a Rigid Body.-Besant's Hydromechanics.-Walton's Mechanical Examples. - Walton's Examples in Hydrostatics.

Astronomy.-Main's Astronomy.-Sir John'Herschel's Outlines of Astronomy (Part II. on the Lunar and Planetary Perturbations).-Godfray's Lunar Theory. Newton's Principia, Lib. I., Sects. 1, 2, 3, 9 and 11.
Light.-Lloyd's Wave Theory of Light.
$\left.\begin{array}{l}\text { Heat, } \\ \text { Electricity, } \\ \text { Magnetism, } \\ \text { Acoustics, }\end{array}\right\}$
The examination for B. A. Honours will continue four days.
The examinations for honours in the other years will continue two days.
Engineering students may be candidates for honours.
Course for the Anne Molson Mathematical Prize.
The Mathematical Physics of the Honour Course in the Third year, together with Airy's Magnetism. Lloyd's Wave Theory of Light and Maxwell on Heat, Hall's Differential and Integral Calculus, Boole's Differential Equations (selected course) and Salmon's Geometry of Three Dimensions (selected course).

The value of the prize is about $\$ 64$. It is open to competition for Students commencing the Fourth Year in Arts, in September 1874.
5. NATURAL HISTORY AND GEOLOGY.
B. A. HONOUR COURSE.

Third Year. Mineralogy and use of the Blowpipe. Lithology. Elementary course in Chronological Geology. Text Books. Dana's Mineralogy and Synopsis by the professor.

For the best examinations in this Course, together with the Zoology of the Third Year, a prize of $\$ 25$ will be given from the surplus income of the Logan Medal Fund.

Fourth Year. The Lectures will include :-

1. An advanced course in General Geology and Palæontology, in connection with which the Students will be required to read Dana's Geology and Lyell's Student's Elements.
2. Methods of observation and of conducting Geological Surveys. Practical applications of the science. Excursions for Field Work will be undertaken when practicable.
3. Canadian Geology, in connection with which the student will read Logan's Report of the Geological Survey of Canada, and Dawson's Acadian Geology.
4. Practical Palæontology and determination of species, with books of reference from the College Library, and specimens from the Museum. Textbook, Nicholson's Manual of Palæontology.

In addition to the above, the student is required to pass an examination in any one of the following subjects:-
I. The systematic part of Botany, as in Gray's "Text-book" and "Manual," and specimens illustrative of these books from the Museum.
2. Huxley's Elements of Comparative Anatomy and Dawson's Hand-book of Zoology, and specimens illustrative of the latter.
3. Dana's Mineralogy and specimens illustrative thereof from the Museum.

Candidates for Honours will be expected to attain to such proficiency as to be able to undertake original investigations in some at least of the subjects of study,
 SESSION 1874－5．

| HIRST YKAR。 |  |  |  |  | Fridat： |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hours． | Monday． | Tuesday． | Wednesday． | Thursday． |  |
| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \\ 1 \end{array}$ | Classics， <br> Mathematics， <br> English， <br> Elementary Chemistry． | $\dagger$ Mathematics，（a） Classies， <br> ＊French， <br> ＊German，＊Hebrew． | ＊French， Classics， English， Mathematics． | $\dagger$ Mathematics，（a） Classics， <br> ＊French， <br> ＊German，＊Hebrew． | Mathematics， <br> Classies， <br> English， <br> Elementary Chemistry． |
| SHCOND YWA R． |  |  |  |  |  |
| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \\ 1 \\ \hline \end{array}$ | $\dagger$ Nathematics， Classics． <br> Logic， <br> ＊French， <br> ＊German． | Mathematies，（b） Botany， Classics， <br> ＊Hebrew． | Logic， <br> ＊German， <br> + Mathematics， <br> ＊French． | Mathematics，（b） <br> Botany， <br> Classics， <br> ＊Hebrew． | ＊German， <br> ＊French， Classics， Logic． |
| THIRD XHAK。 |  |  |  |  |  |
| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \\ 1 \\ \hline \end{array}$ | French－（c） <br> German．（c） <br> Mathematical Physics， Classics， | Classies， <br> $\dagger$ Math．Phys．$\dagger$ Men．Phil． Zoology， <br> （§）Experimental Phys． Hebrew，（c） | ＋Classics，＋Geology Mathematical Physics． Moral Philosophy， Rhetoric． | Classics， <br> Mathematical Physics， Zoology，† Math．Phys： Hebrew，（c） | + Classics， <br> Moral Philosophy， French，（c） <br> § Experimental Physics， German，（c） |
| HOURTE YKAR。 |  |  |  |  |  |
| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \\ 12 \end{array}$ | $\dagger$ Geology， Geology， Classics． <br> $\dagger$ Mental Philosophy， German，（c） | French．（c） German，（c） Mental Philosophy， （§）Experimental Phys． | $\dagger$ Classics，$\dagger$ Math．Phys． English Literature， Cla－sics， <br> $\ddagger$ Geology． | French，（c） German，（c） Mental Philosophy， Hebrew，（c） | $\dagger$ Geology， Geology， Ment．Phy．+ Math．Phy： § Experimental Physics． |
| （a）During cecond Term： （c）Optional． <br> （b）＂First The Student may take at his option French or German in the first two <br> years，or if a Theological Student，Hebrew． §or Candidates for Honou <br> §rom November 1st．  |  |  |  |  |  |

$\begin{array}{ll}\text {（a）During Second Term：（c）Optional．} & \text { For Candidates for Honours．}\end{array}$
Classes at 1 P．M．，may be changed to other hours．years，or if a Theological Student，Hebrew．$\ddagger$ For Practical worle：
Classes at 1 P. M．，may be changed to other hours．
Library open every day except Saturday， 10 to 4 ；Saturday， 1 to 4 ．The Museum will be open as arranged by the Professor of Natural History．

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in the faculty of arts.

[^3]The courses of study in this Departement are designed to afford a complete preliminary training of a Technical as well as a Theoretical nature, for such students as are preparing to enter any of the various branches of the Professions of Engineering, and Surveying, or are destined to be engaged in Assaying, Practical Chemistry, and the Higher forms of Manufacturing Art.

Three distinct courses of study are provided, each of which extends over three, or under certain conditions ( $\S$ I) two years, and is specially adapted to the prospective pursuits of the student.
(1) Civil and Mechanical Engineering.
(2) Assaying and Mining.
(3) Practical Chemistry.

The Degrees conferred by the University upon such Undergraduates of this Department as shall fulfil the conditions and pass the examinations hereinafter stated ( $\S[V$ ) will be, in the first instance, "Bachelor of Applied Science," mention being made in the Diploma of the particular course of study pursued; and subsequently the degree of "Master of Engineering" on those who have pursued Course 1st, and of "Master of Applied Science" on those who have pursued either of the remaining Courses [2 and 3.]
§ I. MATRICULATION AND ADMISSION.
I. Candidates for Matriculation must present themselves for examin ation on the 15 th September, 1874. They may, however, be admitted at a later period of the Session upon special application, and if prepared to take their places in the classes in progress.
For Entrance into the Junior Year, the subjects for Examination will be:-

Mathematics.-Arithmetic; Algebra, to Simple Equations inclusive ; Euclid's Elements, Books I., II., III. English.-Writing from Dictation.
2. Candidates may enter in the Second or Middle year, and so reduce the course necessary for the Degree in Applied Science, from three to two years, if competent to pass a satisfactory examination in the following subjects, or if they have passed in Class 1st or 2nd in the said subjects in the Intermediate Examination of the University. In addition to this, those who intend to pursue Course 1st, must satisfy the Professor of Engineering that they possess a reasonable knowledge of the elements of Surveying and Levelling and of Linear Drawing, as in Cassels' Text Book of Surveying and Davidson's Linear Drawing.

Mathematics. -
Euclid.-Books I., II., III., IV., VI., with Defs. of Book V. (omitting propositions 27, 28, 29. of Book VI.)
Algebra. - To end of Quadratic Equations (Colenso's Alg.).
Trigonometry.-Galbraith and Haughton's Trigonometry, Chaps. I, 2, $3,4,6$, to beginning of numerical solution of plane triangles.
Arithmetic.-Ordinary Rules.-Proportion, Interest, Discount, \&c., Vulgar and Decimal Fractions, Square Root.
English.-Writing from dictation.
Chemistry.-Inorganic, as in Wilson's Elements, (or the Student must take this subject in the Middle Year).
Candidates must be prepared to pass in one or other of the above Examinations at the beginning of the session. Students who have passed in Class Ist or and in the above subjects, in the Intermediate Examination of the University, may be admitted without further examination in such subjects.
3. Occasional Students may be admitted to the Technical Classes upon payment of special fees (§VIII.).

## § II. EXHIBITIONS AND PRIZES.

THE SCOTT EXHIBITIONS.
Founded by the Caledonian Society of Montreal in commemoration of the centenary of Sir Walter Scott.

Two exhibitions on this Endowment will be offered for competition at the opening of the session of 1874-5.

## One Exhibition of $\$ 66$, to Students entering the Middle Year.

Subjects:-Mathematics.-Ordinary and Honour of the Junior Year. English of the Junior Year and Student's Hume. Engineering and Surveying of First Year. Chemistry, as in Wilson's Text-book.

## One Exhibition of $\$ 66$, to Students entering the Senior Year.

Subjects:-All the pure Mathematics of Ordinary Course of the first two years, with remainder of Drew's Conic Sections and of Colenso's Algebra [Part 1]. The Engineering and Surveying of the two preceding years, with a Report on some Engineering work. English Grammar-Bain's. English Composition. History of England-Smith's Student's Hume. Hallam's Middle Ages, chaps. VIII.,-IX.-English Literature,-Collier and Johnson's Lives of the Poets.-Zoology,-Dawson's Hand-book, Invertebrates, and more especially Fossil Animals.
3. Prizes will be awarded after each Sessional Examination to such Matriculated Students as have passed the Examinations in all the subjects of one of the regular courses of study, and have taken the first rank in the Examinations in one of the subjects.

## § III. COURSES OF STUDY.

The following are the courses of study arranged for the approaching Session, 1874-5 ;-

## 1. COURSE OF CIVIL ENGINEERING AND SURVEYING.

Funior Year.-Ordinary Mathematics of the first year in Arts, (with Honour Mathematics as far as practicable) ; Chemistry ; English Language and Literature ; French or German ; Linear Drawing ; Surveying and Mensuration, with use of Instruments.
Middle Year. - Ordinary Mathematics and Mathematical Physics of the Second and Third Years in Arts (with Honour Mathematics of the Second Year as far as practicable); Experimental Physics; Zoology ; French or German; Drawing-Orthographic and Isometrical Projection ; Levelling ; Art of Construction.

Sexior Year.-Mathematical Physics (Honour Course of Third year in Arts, optional.) Experimental Physics; Geology and Mineralogy; French or German; Applied Mechanics and Principles of Mechanism ; Drawing-Constructive and Mechanical ; Construction ; Designing and Estimates.
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## 2. COURSE OF MINING ENGINEERING AND ASSAYING.

Funior Year.-Same as Junior Year of Civil Engineering Course.
Middle Year.-Ordinary Mathematics and Mathematical Physics of 2d and 3d Years in Arts ; Experimental Physics; Zoology, Geology and Mineralogy ; French or German ; Drawing-Orthographic and Isometric Projection ; Levelling ; Construction (in part) ; Use of Blowpipe ; Assaying.
Senior Year.-Geology (Honour Course) ; French or German ; Experimental Physics ; Drawing of Geological Maps and Sections, and plans of Mines; Mining and Mineral Surveying; Metallurgy ; Applied Mechanics and Principles of Mechanism.

## 3. COURSE OF PRACTICAL CHEMISTRY AND ASSAYING.

Funior Year.-Same as above (with Botany).
Middle Year:-Ordinary Mathematics of Second Year in Arts ; Experimental Physics; Botany (unless taken in the Junior Year) ; Zoology ; French or German ; Practical Chemistry.
Senior Yexr.-Mathematical Physics; Experimental Physics; Geology and Mineralogy ; French or German ; Metallurgy ; Assaying.

OBSERVATORY,
Undergraduates taking any of the above courses may receive instruction in Meteorological observations from Mr. C. H. McLeod, B.A.Sc., in the College Observatory.

## § IV, EXAMINATIONS. college examinations.

There will be a Sessional Examination at the end of each year, and also a Christmas Examination, in the same manner as provided for Undergraduates in Arts ; but supplemental examinations will not be allowed to students failing in the Professional subjects, or in the Mathematical subjects of the Middle and Senior years, except by special permission of the Faculty of Arts.

## UNIVERSITY EXAMINATIONS.

## I. FOR THE DEGREE OF BACHELOR OF APPLIED SCIENCE.

Candidates must pass the Sessional Examinations of the Junior and Middle years, or if admitted in the Middle year, of that year only. They must also pass a Final Examination at the end of the Third Year, in all the subjects of that year, in addition to a special examination in Mathematies, in case of those who graduate in the course of Civil and Mechanical Engineering.

Graduates in Civil Engineering of this University may obtain this Degree and a Diploma in exchange for that which they at present hold, upon application to the Corporation through the Registrar, and upon payment of a fee of $\$ 3$.

## II. for the degree of master of englineering.

Candidates must be Bachelors in Applied Science of at least three years' standing, and must produce satisfactory certificates of having been engaged during that time upon bona fiae work in either the Civil or Mechanical Branch of Engineering.

They must pass with credit an examination which will extend over the general Theory and Practice of Engineering, ia which papers will be set having special reference to that particular branch upon which they have during the three preceeding years, been engaged.

The examination will be held once in each year, in the second week of the month of December, and will be partly written and partly viva voce.

Notice of the intention of a Candidate to offer himself at any examination for this degree must be sent in, together with the necessary Certificates and Fees, not less than two calendar months before such Examination is to be held.

## III. FOR the degree of master of applied science.

Candidates must be Bachelors of Applied Science of at least three years' standing, must present certificates of having been employed during that time under competent guidance in some branch of Scientific Work, and must pass with credit an examination in the Theory and Practice of those Branches of Scientific Work in which they may have been engaged. The other conditions as under the

IV. FOR THE DEGREE OF B. A. WITH THAT OF BAC日ELOR OF APPLIED SCIENCE.

Undergraduates in Arts who have passed the Intermediate Examination may (if qualified under $\S_{1}$ ), take the Middle and Senior years of either of the courses in Practical Science along with the Third and Fourth in Arts, and may in the third and fourth year omit Mental and Moral Philosophy, and may substitute French and German for Latin and Greek. Spanish may be taken instead of French or German.

In addition to the subjects of the Science Course, they will be required to satisfy the Examiners in the following subjects ; viz.:Mathematics, Natural Science, Experimental Physics and Modern Languages.

Students in Arts desirous of availing thenselves of these privileges are required to take a preliminary course of Linear Drawing in the second year.

Students proceeding to the double degree, vill enjoy all privileges with reference to Scholarships, Exhibitions, Prizes and Honours, in the same manner as Students in Arts.

Such Students may by permission of the Faculty be candidates for B. A. Honours, and may be allowed to take the Examination for B. A. in their fourth year in Arts, and to take the Examination for the degee in Practical Science in the following year ; or they may graduate in the Scence course alone in the fourth year, and graduate in Arts in the following yea:. In the latter case they shall not compete for medals with the regular Students of the year.

Undergraduates in Arts of the third or fourth years, or Graduates of any University, entering the Department of Practical Science, may at the discretion of the Professors be exempted from such lectures in that Department as they may have previously attended as Students in Arts, but must pass all of the examinations.

## § V. ATTENDANCE AND CONDUCT.

The regulations under this head are in all respects similar to those in force for Undergraduates in Arts.

## § VI. LIBRARY AND MUSEUM.

Students in this Department will have the same privileges with reference to the Library and Museum, with Undergraduates in Arts.

## § VIII. FEES.

In the Course of Enginering.-Classes in Arts, \$20; Classes in Engineering, Survesing and Drawing, $\$ 25$; Library, $\$ 4$. In all $\$ 49$ for each Session.
In the Course of Minizg Engineering.-Classes in Arts, \$20; Professional Classes, Junior Year, \$25; Middle and Senior Years, \$35; Librar, \$4. In all $\$ 49$ to $\$ 59$ for each Session.
Matriculation Fee:- (In the first year only,) \$4.
Fee for Degree of Bachetor of Applied Science.-\$10.
Fee for Master of Enginering or Master of Applied Science. - \$50.
Occasional Students may be admitted to the Lectures in Civil Engineering or Assaying ; but will be required to pay an extra fee of $\$ 20$, in addition to the fee of $\$ 25$ in Engineering, and $\$ 5$ for entrance and use of the Library.

Laboratory Students are required to purchase their own chemicals, \&c. The larger articles of apparatus will be supplied by the Laboratory, the Students paying $\$ 6$ per Session for their use, and being responsible for breakage.


## § IX. COURSES OF LECTURES.

[For the Lectures in Mathematics, Physics, Natural Science, Modern Languages \&c., see undeı Faculty of Arts, ante.]

## Tu bimary Tive and Mechanical Engineering.

Professor.-G. F. Armstrong, M. A., C.E., F.G.S.
Asistant.-C. H. McLeod, B. A.Sc.

## I. Surveying and Levelling.

The object aimed at $n$ this course is to afford the Student such instruction as will cause him to be of immediate service upon entering the office of the Engineer or the Surveyo; and the Lectures embrace the general principles of this important branch of Engineering, discussed under the heads of Chain and Trigonometrical Surveying, as applied to ordinary as well as special operations in the Field.

The construction, adjustment, and use of the various angular and levelling instruments are fully descibed and illustrated.

In addition to the Lectures, and commencing early in September, a thorough course of Engineering Field-work, in accordance with the subjoined scheme, is undertaken by the class inder the guidance of Mr. McLeod, during which the practical operations of the engineer in the field are actually carried out by the students.
For the two Senior Years. - (I) The rumning of trial Levels, and making of preliminary surveys between fixed points for a proposed line of Railway, incidentally illusrating the system of location from contours, and the 44 23. method of road raversing. (2) The setting out and grading of the line previously located.
For the Yunior Year.-General triangulation and field surveying.
II. Geometrical Drawing.

Funior Year.-The course of instruction comprises, ( I ) the Elementary parts of the Geometrical construction of plane figures, and the principles of the Ellipse, Cycloids, Involutes and such other curves as occur in the Mechanical Arts;-in Gearing, Arches and the like:-(2) Similar constructions in solid Geometry, or the projections in plan and elevation of various objects, and their developments.
Middle Year.-(1) The interpenetration of solids, and the delineation of objects in Isometrical Projection:-(z) Perspective Projection, based upon its geometrical principles, as far as the elements of Angular Perspective. Senior Year. - The more advanced parts of Perspective Projection and Descriptive Geometry.
III. Construction.

The subjects of the Lectures may be summed up as follows:-The strength and fitness of materials : the Engineering of Earth-work, Masonry, Carpentry, Structures in Iron, Common-Roads, Railways, Bridges and Viaducts, Tunnels, Canals, Works of Drainage, Irrigation and Water supply, Lighthouses, River, Harbour and Sea Works.
IV. Practical Mechanics.

In this course of study the analytical principles of Statics and Dynamics are applied to the determination of the conditions of the equilibrium and stability of structures in general, and to the investigation of the motion of rigid bodies ; particular attention being paid to the estimation of stress in roofs and bridges, the resistance of dams and retaining walls, and to the theory of work and the motion of machines.
V. Principles of Mechanism.

The Lectures in this subject are designed to afford the Student an insight, ( I ) intothe principles of the various elementary contrivances employed by mechanicians to communicate and convert motion of one kind into another, apart from the consideration of force; and (2) into the mode of combining such simple forms in the construction of different machines, as exemplified in the Steam Engine, Lathe, Drill, Planing Machine, \&c.,

The Lectures are illustrated by means of a collection of working models.
VI. Designing and Estimates.

The instruction given under this head is intended to enable the Student to apply practically such knowledge as has been obtained from the different Courses of Lectures ; and consists in the design, specification, and estimating for such works as are usually undertaken by the Engineer.

Each Student works independently, under the personal supervision of the Professor, and makes such drawings and calculations as would be needed were the structure designed to be actually carried out.

## 2. Assaying, Mining and Metallurgy.

Professor.-B. J. Harrington, B.A., Ph.D.

## I. Use of the Blowpipe and Assaying.--(Middle Year.)

Use of the Blowpipe.-The object of this course is to enable Students, by means of the blowpipe and a few simple reagents, to detect the nature of various minerals or ores. On account of the small amount of apparatus required, and the rapidity with which accurate results may be arrived at, a knowledge of this subject will be found most useful to those engaged in geological or other field-work.
Assaying. - The course in Assaying includes lectures and practical work. Assays are made, by various methods, of gold, silver, copper, lead, iron and other ores. Examinations are also made of coal, peat, clay, \&c.

## II. Mining and Metallurgy.-(Senior Year.)

Mining--Among the more important subjects taken up in this Course, the following may be mentioned:-Blasting and the nature and use of different Explosives; Quarrying; Hydraulic Mining and Sluicing; Boring and Boring Machinery ; Sinking, Timbering and Tubbing of Shafts Driving and Timbering of Levels ; Underground Conveyance and Hoistino; Drainage and Pumping; Lighting and Ventilation of Mines ; Special Methods of Exploitation employed in the working of Metalliferous Deposits or of Coal-seams ; Dressing of Ores by means of hammers, stamps, rollers, riddles, buddles, \&c.
Metallurgy.-A short course of lectures, illustrated by a series of Ores and Metallurgical Products. The general properties of the metals and the nature of fuels. fire-clays, \&c., are first discussed; and afterwards, the more important metals and the methods of obtaining them from their ores, by wet or dry processes, taken up in detail.

## 3. Practical Chemistry.

## Professor.-Gilbert P. Girdwood, M.D.

This Course will be conducted in the large and commodious Laboratory recently constructed for the Medical Faculty. It will include a general Course of Qualitative and Quantitative Analysis,, adapted to the previous training of the Student ; leading in the latter part of the Course to special studies adapted to his future pursuits.

# § X. LIST OF TEXT-BOOKS AND BOOKS RECOMMȨNDED FOR REFERENGE. 

COURSE OF CIVIL AND MECHANICAL ENGINEERING.
1.-Text-books, required for the Classes.

First Year, Surveying and Levelling:-Castle's "Elementary Text-Book," and

Baker＇s＂Rudimentary Treatise on Land and Engineering Surveying．＇ Drawing．－Davidson＇s＂Linear Drawing，＂（Cassel＇s Technical Manuals．）
Second Year，Construction．－Rankine＇s＂Civil Engineering，＂－Davidson＇s＂Ele－ ments of Building Construction．
Drazing．－Davidson＇s＂Orthographic and Isometrical Projection．＂ Third Year，Applied Mechanics．－Twisden＇s＂Practical Mechanics．＂－Goodeve＇s ＂Elements of Mechanism．＂
Drawing．－Davidson＇s＂Practical Perspective＂and＂Drawing for Machinists．＂
2．Books of Reference，recommended for reference，but not necessary for the Classes．
Railway Construction．－＋Haskoll＇s＂Assistant Engineer＇s Railway Guide，＂－ Dempséy＇s＂Practical Railway Engineer．＂
Hydraulics．－Stevenson＇s＂Harbours，＂－Rennie＇s Harbours，Stevenson＇s＂Sker－ ryvore Lighthouse，＂－Humber＂On the water supply of Cities and Towns，＂－Hughes＇＂Water supply of Cities and Towns，＂－Burnell＇s ＂Hydraulic engineering，＂－Moncrief＂On Irrigation，＂－Neville＇s Hydraulic Tables，＂－t Haskoll＇s＂Engineering Field－work．＂
Girders，Bridges and Roofs．－Latham＇s＂Girder Bridges，＂－Unwin＇s＂Iron Bridges and Roofs，＂－Shield＇s＂Strains on Iron Work Structures，＂－May－ nard＇s＂Bridges and Roofs，－Campin＇s Roofs，＂一 † Humber＇s＂Practical Treatise on cast and wrought Iron Bridges．＂
Strength of Materials．－Barlow＇s Treatise the strength of Materials，＂（Humber）－
＋Tredgold and Hodkinson＂On the strength of cast Iron．＂
Specifications and Estimates．－1 Donaldson＇s＂Handbook of Specifications，＂－ Haskoll＇s＂Civil Engineers，－Estimate and Price Book，＇－Graham＇s
＂Manual on Earthwork，＂－Bidder＇s＂Tables on Earthwork．＂
Surveying and Levelliug：－＋Butler Williams＇＂Practical Geodesy，＂－＊Castle＇s
＂Engineering Field－work，＂－† Gillespie＇s＂Land Surveying，＂－† Simm＇s
＂Principles and Practice of Levelling，＂－† Bruff＇s＂Engineering Field－ work．＂
Mechanical Engineering－Campin＇s＂Treatise on Mechanical Engineering，＂－ Rankine＇s＂Prime Movers，＂－Fairburn＂On Boilers，＂－＋Willis＇ ＂Principles of Mechanism，＂－Grantham＇s＂Iron－Ship Building，＂ ＋Fairburn＇s＂Iron－Ship Building．＂
General．－＂中Transactions of the Institute of Civil Engineers of Great Britain．＂ －Weale＇s＂Series of Rudimentary Treatises＂（Classes of Engineering and Architecture，）－＊Humber＇s＂Series of Modern Engineering，＂ ＋Moseley＇s＂Mechanical Principles of Engineering，＂－＋＂Spon＇s Dictionary of Engineering，＂－＋Smeaton＇s＂Reports，＂－+ Simm＇s＂Tun－ nelling，＂－Buck＇s＂Oblique Bridges，＂－怆redgold＇s＂Carpentry，＂－ Nicholson＇s＂Carpenters＇Guide，＂Reid＇s＂Portland Cement，＂－Moles－ worth＇s＂Pocket Book of Engineering Formulæ，＂+ Sopwith＇s＂Isome－ trical Projection．＂
＊Expensive or out of Print．+ In the College Library．

## Course of Mining, Metallurgy and Assaying.

Books of Reference on Mining and Ore Dressing:-
(1) Traite du Gisement et de la Recherche des Mineraux Utiles. -Burat.
(2) Ponson's Traité de la Houille.
(3) Coal and Coal-mining.-Warrington Smyth.
(4) Transactions of the North of England Institute of Mining Engineers.
(5) Greenwell's Mine Engineering.
(6) Concentration and Chlorination.-Kustel.
(7) Rittinger's Aufbereitung.

Text-book on Metallurgy.-
Metals : their Properties and Treatment. Bloxam.
Books of Rejerence on Metallurgy.-
Percy's Metallurgy. Crooke's and Röhrig's Metallurgy. Bauerman's Metallurgy of Iron.
Books of Reference on Assaying.-
Mitchell's Manual. Kerl's Metallurgische Probirkunst,
Text-book on Blowpipe Analysis.-
Elderhorst's Blowpipe Analysis.

 SHSSION 1874-5.

JUNIOR Y HAR.

| Hours. | Monday. | Tuesday. | Wednesday. | Thursday. | Friday. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \\ 1 \\ 2 \end{array}$ | Elem. App. Mechs., (b) <br> Mathematics, <br> English, <br> Elementary Chemistry, <br> Drawing, to 4.30 . | $\dagger$ Mathematics, (a) Surveying, <br> * French, <br> * German, Plotting, to 4.30 . | * French, <br> English, Mathematics, Field Work, to 5. | $\dagger$ Mathematics, (a) Surveying, <br> * French, <br> * German, <br> Drawing, to 4.30. | Math $\in$ matics. <br> Elem. App. Mechs., (b) <br> English, <br> Elemeatary Chemistry, <br> Plotting to 4.30 . |

MIDDLE YHAR.

| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \end{array}$ | $\dagger$ Mathematics, <br> * German, $\ddagger$ Geology, <br> Mathematical Physics, <br> * French, <br> $\ddagger$ Assaying, Field Work, to 5. (c) | Mathematics, (b) <br> Surveying, <br> Zoology, <br> Experimental Physics, | * German, Construction, <br> $\dagger$ Mathematical Physics, <br> Mathematics, <br> $\ddagger$ Geology, * French, | Mathematics (b) Math. Physics, Zoology, Surveying, | * German, <br> * French, $\ddagger$ Geology, Mathematical Physics, Experimental Physics |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }_{3.30}^{1}$ |  | Plotting, to 4.30. | $\ddagger$ Assaying, Drawing, Levelling. | Drawing, to 4.30 | Plotting, or $\ddagger$ Assay's., Construction. |



* Students may take either French or German.
+ Optional.
(a) Second Term only
$\ddagger$ To Students in Mining Engineering and Assaying:
Students in Practical Chemistry will take that subject at 2 P. M. in the middle year, and Assaying at 2 P. M. in the senior year, and will take the Lectures in
Botany in the Junior or Middle year. The Classes in Practical Science and Experimental Physics commence on Nov. 1st, except the Field Work under the Botany in the Junior or Middle year. The Classes in Practical Science and Experimental Physics commence on Nov. 1st, except the Field Work under the
Assistant in Engineering, which begins, with the other Classes, on Sept. 15th.


## faculty of eztedicinr.

The Principal, (ex-officio.)
Professors.-Campbell.
Scotr.
Wright.
Howard.
McCallum.
Craik.
Fenwick.
Drake.
Girdwood.
Ross.
Dean of the Faculty.-G. W. Campbell, A. M., M.D.
Registrar.-R. Craik, M.D.
Demonstrator.-T. G. Roddick, M.D.
Matriculation Examiner of the Faculty.-Professor H. Aspinwall Howe, LL. D
The forty-second Session of the Medical Faculty of McGill University will be opened on Thursday, October, 1st 1874, with a general Introductory Lecture at $11 \mathrm{a} . \mathrm{m}$. The regular lectures will commence on Friday the 2nd Oct., at the hours specified in the time table, and will be continued during the six months following.

It affords the Faculty much pleasure to be able to announce that the beautiful and commodious new building erected by the Governors of the University for the use of the Medical Faculty, has been completed and is now occupied by the Faculty.

The class tickets for the various courses are accepted as qualifying candidates for examination before the Universities and Colleges of Great Britain and Ireland, the Medical Boards of the Army and Navy, and the College of Physicians and Surgeons of Ontario.

To meet the circumstances of General Practitioners in British North America, where there is no division of the profession into Physicians and Surgeons exclusively, the degree awarded upon graduation is that of "Doctor of Medicine and Master of Surgery." This designation is also appropriate, as it agrees with the general nature and character of the previous curriculum demanded of the candidates for this double rank, as is fully specified hereafter. The degree is received by the College of Pbysicians and Surgeons of Lower Cana,da,

To intending students desirous of information upon the best manner of pursuing their studies, the following suggestions are made by the Faculty:-

Exclusive of general education, professional reading for some time previous to matriculation, is advised as a preparation, whereby familiarity with technical terms will be gained, and an insight obtained into the subjects to be brought under notice during lectures.

The student is advised to pass the Matriculation Examination in March, so that his four years of pupilage may expire at the close of a winter session. A certificate of having passed such examination before the examiners appointed by the College of Physicians and Surgeons of Ontario will be accepted by this University.

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

Attention is recommended to be given during the First Session to the primary branches only; during the Second Session an increase is proper, and two of the final courses may be profitably conjoined with such of the primary as are required; while during the remaining period the curriculum is to be completed.

As daily bed-side instruction is essential to the student of medicine, the undergraduate is earnestly advised to spend at least the last two summers in availing himself of the opportunities afforded by the large hospitals-general and lying-in-of our city, in which, moreover, dresserships should be obtained.

Enregistration is necessary every Session, it is required upon entrance, or as soon afterwards as possible, and always before any class tickets are procured. The time fixed for closing the Register is annually on the 30 th of November.

Class tickets are payable in advance, and if not taken out during the current session, will not be granted after its expiration.
A Medical Session or annus medicus, consists of enregistration and attendance upon at least two six months' courses or one six months' and two three months' courses.

## COURSES OF LECTURES.

1. Anatomy. - [Prof. Scott.] The importance of Anatomy, both descriptive and in its relations to Medicine and Surgery, is duly considered by the Professor, who employs chiefly the fresh subject in the illustration of the lectures, aided, however, by dried preparations, wax models, plaster casts of dissections, plates, \&c., the full size of life.

The Dissecting Room, which is open from 8 a.m. to 10 p.m.-is large, well ventilated and supplied with every convenience, such as gas, water, \&ce., \&c. It is under the direct supervision of the Professor of Anatomy aided by the Demonstrator. The Demonstrator is constantly in attendance during certain hours every day, to direct and instruct students in Practical Anatomy, and the Professor also daily visits the Room to superintend and examine Students engaged in dissection. Abundance of fresh material for dissection will be provided.
2. Chemistry.-[Prof. Craik]-Inorganic Chemistry is fully treated : and a large portion of the course is devoted to Organio Chemistry and its relations to Physiology. The branches of Physies bearing upon or connected with Chemistry also engage the attention of the class. For experimental illustration, abundant apparatus is possessed by the Professor, among which may be enumerated, a powerful Air Pump-Oxy-Hydrogen Microscope-Polariscope-extensive series of Orystal Models-Electrical and Galvanic apparatus, Steam engine, \&c., \&c.
3. Materia Medica. - [Prof. Wright]-This course is illustrated from a cabinet of Pharmacological objects ; by plates of Medicinal Plants [Wagner, Roque, Stevenson and Churchill]; by dried specimens ; by carefully prepared Microscopical objects, \&c., \&c ; Analytical experiments with the ordinary reagents are also shown, and diagrams with other illustrations are used.
4. Institutes of Medicine.-[Prof. Drake]-This course comprises Histology, Physiology, General Pathology and Therapeutics. The lectures are illustrated by apparatus, diagrams, plates, and Microscopic preparations of the various tissues, and by Pathological specimens from the Museum.
5. Pratice of Medicine.-[Prof. Howard.]-The extensive series of plates contained in the Library, (Lebert, Cruveilhier, Carswell, Hope, Alibert, Willan, Bateman, \&c.,) will be employed; also Morbid preparations and models of diseased parts.
6. Sukgery.-[Prof, Campbell.]-Divided into Principles and Practice, including Surgical Anatomy and Operative Surgery, exhibited on the subject. The various surgical instruments and apparatus exhibited, and their uses and applications explained and practically illustrated.
7. Midwifery.-[Prof. McCallum.]-Including diseases of females and infants ; illustrated by a series of drawings on a large scale, by humid preparations; by models in wax; by the use of the artificial Pelvis, and by cases in the wards of the Lying-in Hospital.
8. Medical Jurisprudence.-[Prof. Fenwick.]-Includes Toxicology. The modes of testing for poisons are exhibited, and postmortem appearances illustrated by plates. Insanity, Public Hygiene and Medical Police also form part of the course.
9. Clinical Surgery.-[Prof. Fenwick.]-The lectures in this course are in illustration of Surgical cases under observation in the Wards of the General Hospital. Bed-side instruction is followed up daily and all operations are performed in the presence of the class. The lectures are illustrated by cases under surgical treatment, by plates, surgical apparatus, morbid specimens, models and the use of the microscope.
10. Clinical Medieine.-[Prof. Ross.]-Taught by lectures and at the bed-side-Physical Diagnosis is taught practically, and each pupil required to take part in it. Examination of the urine, chemical and microscopical, explained and illustrated.
11. Botany and Zoology.-[Prof. Dawson.]-The course in Botany is illustrated by specimens, diagrams, models, and the microscope, and special instruction will be given in microscopical examination of tissues. Students have access without any additional fee to the lectures in Zoology in the Faculty of Arts, and to the Natural History Museum of the University and the Museum of the Natural History Society of Montreal.

Prizes will be awarded at the end of each Session, to Students in Botany of the class of the previous Session, for the best Named Collections illustrative of the Flora of Canada. The collections, or duplicates of them to remain in the College Museum.
12. Practical Chemistry.-[Prof. Girdwood.]-Thorough instruction is given in the different departments of Practical Chemistry in the splendid new Laboratory of the Faculty under the personal
supervision of the Professor; and the course includes blowpipe manipulations, qualitative and quantitive analysis, toxicological investigation, \&c., \&c.

Summer Course of Practical Chemistry.-For the convenience of those students who pass the summer months in the city, a summer course of Practical Chemistry has been arranged, consisting of the same number of lectures and demonstrations, and being in every way equivalent to the usual winter course.

SUMMER COURSE OF CLINICAL INSTRUCTION.
In order that Medical Students may avail themselves of the unusual opportunities for the practical study of disease afforded by the Hospitals of this city, the special course of Clinical instruction during the Summer months will be continued, and all Hospital Students will be permitted to attend it without charge. In addition to the above, daily bed-side instruction will be given during the months of July, August and September in the wards of the General Hospital by the attending Physicians, Professors Wright and McCallum.

The above course of Clinical instruction does not form a necessary part of the curriculum, but has been established to allow the student facilities for acquiring practical knowledge of disease, when his time is not otherwise occupied in attendance upon lectures.

## COURSE OF LECTURES UPON HYGIENE.

A course of twelve lectures upon Hygiene and Public Health will be delivered this summer by T. G. Roddick, M. D. They will commence during the first week in July, and as it is hoped that they may prove of much value to Medical Students all who may have the opportunity of attending are recommended to do so.

## LIBRARY AND MUSEUM.

The Library contains upwards of 4,000 volumes, including the most useful books of reference, as well as the most elementary ; the works of the older authors as well as the most recent. It is open to Students without charge, under necessary regulations for the care of the books. The Museum contains a large number of preparations, chiefly Pathological; also wax and papier-mache models.

## HOSPITALS.

The Montreal General Hospital affords ample means for the instruction of Students in Clinical Medicine and Surgery. The daily
number of beds occupied by patients averages from 130 to 140 , and during epidemic visitations has reached a much higher number. In addition to the Hospital proper, which is devoted to Medical and Surgical cases, there is a detached Hospital in which the several forms of Fever may be studied. The Governors have erected an hospital for children, contiguous to the Reid Wing of the present building; so that the students have an opportunity of becoming familiar with nearly all the diseases of suffering humanity, and with the peculiarities imparted to them by infancy, adolescence, maturity and declining age.

The large number of out-door patients that are treated in the Hospital, averaging from sixty to seventy daily-supply illustrations of most of the diseases of infants and children, of very many of the eye and skin, and of those chronic and ill.defined ailments, which, as they do not require admission to the wards of an hospital, would not otherwise come under the observation of the student, although, on account of their variety and frequency, of great importance to the Physician.

The shipping contributes a great many examples of accidents and surgical cases.

The fee for a six months' ticket is Eight Dollars ; for a perpetual ticket Twenty Dollars.

The Operating Room (used also for a lecture room) is so constructed as to suit the convenience of the students in obtaining a good view of the operations.

The University Lying-in Hospital is under the direction of the Professor of Midwifery. Students who have already attended one course of his lectures, are furnished with cases in rotation; and they are advised to attend this Institution as much as possible during the Summer, when as there are as many patients and not so many pupils as in winter, a larger proportion of cases falls to the share of each: Moreover, in this way more attention can be given to their duties during the winter. The fee for a six months' ticket is Five Dollars.

By the kindness of the authorities of the Grand Trunk and other Railways, arrangements have been made by which certified students of this University will be granted return tickets from Montreal to any part of their lines at greatly reduced rates; the said tickets to hold good from the close of one session to the beginning of the next. Return tickets will also be granted for the Christmas vazation.

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## PAST SESSION.

The total number of students attending the Lectures of this Faculty during the past session was 130 , of whom there were from:

Ontario, 71,
Quebec, 50,
Nova Scotia, 3,

United States, 2,
Newfoundland, 1 ,
West Indies, 1,

## New Brunswick, 2.

The following gentlemen, 33 in number, have passed their primary examinations on the following subjects Anatomy and Physiology, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine, and Botany and Zoology, their names are as follows:

| names. | Residence. |
| :--- | :--- |
| Bain, Hugh U., B. A., Perth, Ont. |  |
| Benson, Joseph B., | Chatham, N. B. |
| Bomberry, Geo. Ed., | Brantford, Ont. |
| Brossard, Jean-Bpte., | Laprairie, Q. |
| Burland, Wm. Henry, Montreal, Q. |  |
| Christie, Jno. H., B. A., Lachute Q. |  |
| Clarke, Fincastle, G. B., Collingwood, O. |  |
| Coyle, Henry W., | Berthier, Q. |
| Craig, Thornton, | Glengarry, O. |
| Dickinson, Salter M., | Cornwall, O. |
| Dorland, James, | Adolphastown. |
| Dowling, John F., | Appleton, O. |
| Duncan, George C., | Port Dover, O. |
| Falls, Samuel K., | Carp, O. |
| Farley, James T., | St. Thomas, O. |
| Gilbert, Henry L., | Sherbrooke, Q. |

Graham, Kenneth D., Ottawa, Ont.
Hanington, Erst. B. C., Shediac, N. B.
Hanover, William, Yakenham, Ont.
Jamieson, Thos. A., Lancaster, O.
Kearney, Wm. Jos., Montreal, Q.
Langlois, Onesime X., Windsor, O.
MacDonald, Alex. R., Texas, U.S.A.
McArthur, John A., Lobo. O.
McDermid, William, Martintown, O. Mattice, Ira Richard, Moulinette, O. Meek, James A., Canning, N.S. Nelles, James M., Brantford, O. Scott, William F., Hull, Q. Tunstall, S. J., B. A., Montreal, Q. Ward, Michael O'B., Montreal, Q. Woods, Edmund J. J., Aylmer, Q. Goodhue, Perkins J., Danville, Q.

The following gentlemen, 31 in number, have passed their Final Examination on the following subjects: Theory and Practice of Surgery; Theory and Practice of Medicine, Obstetries and Diseases of Women and Children; Medical Jurisprudence and Hygiene, and also clinical examinations in Surgery and Medicine conducted at the bed-side in the Hospital. These exercises entitle the successful candidate to the degree of M.D., C.M.

The names of the Candidates, their residences and the subjects of their Theses are as follows:

NAME. RESIDENCE.
THESIS.
Cameron, James C,.....Montreal, Que. ....... Clinical Reports.
Cline, John D., B. A.,..Cornwall, Ont. . ..... . Treatment of Aneurism.
Harvey, William A.,.. Newbridge, " .......Intermittent Fever.
Henderson, Edward G., Belleville, " ...... Acute Rheumatism.

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## NAME. <br> RESIDENCE.

THESIS.
Hickey, Samuel A., B. A. Aultsville, " ........ Acute Bronchitis.
Hockridge, Thos. G. . . Bradford, " ........Tetanus.
Jones, Charles R. .... Hastings, " ... .... Spina Bifida.
Jones, George Nelson.St. Andrews, Q...... Surgical treatment of Hemorrhage.
Macdonald, Roderick A. Cornwall, O.......... Puerperal Fever.
McBain, John ........ Williamstown, O .... Enteric Fever.
McCormick, Andrew G. Durham, Q........... Anæmia.
McDonell, Alex. R.... Loch Garry, O ....... Acute Pneumonia.
McMillan, Æneas J... Edwardsburg, O ...... Hospital Reports.
McQuillen, James .... Marquette, Mich., U. S. Diphtheria.
Mines, William W .... Montreal, Q......... Gangrene.
Molson, William A.... Montreal, Q.......... Clinical Reports.
Moore, Charles S. .... London, O ........... Puncture of Bladder.
Moore, Jehiel T........Holbroke, O......... Clinical Reports.
Norton, Thomas ...... Montreal, Q......... . Typhoid Fever.
Pattee, Richard P..... Hawkesbury, O....... \{ Concussion and Compression of
Phelan, James . . . . . . . . Stratford, O ......... . Spermatorrheen
Prosser, Wm. O . . . . . Lunenburg, O. . . . . . . Bronchitis.
Rattray, James C..... Portage du Fort, Q... Pleurisy.
Reddick, Robert . . . . . Prescott, O . . . . . . . . . . Uterine Hæmorrhage.
Ritchie, John L...... Halifax, N.S ........ \{ Immovable Apparatus in Frac-
Rogers, Amos . . . . . . . Bradford, O. . . . . . . . . Hosp. Reports, Dis. Chest.
Sinclair, Coll ........ St. Thomas, O....... Acute Bronchitis.
Speer, Andrew M .... Richmond, Q........ Puerperal Fever.
Sutherland, Walter. . . . Helena, Q........... Morbilli.
Wales, Benjamin N. . .St. Andrews, Q ...... Cerebro-Spinal Men'gitis.
Wallace, Isaac W .... Milton, Q............ . Chemistry as allied to Medicine.
One of the above-named Gentlemen, Mr. E. G. Henderson, has not yet completed his twenty-first year, and, on that account, cannot graduate this year. He has, however, passed all the examinations, and fulfilled all the requirements, and only awaits his majority to receive his Diploma.

> EXAMINATIONS IN BOTANY AND ZOOLOGY.

BOTANY.
Class I.-Washburn (Prize), Cotton, (2nd Prize), Campbell, Fortin, Creant, Stevenson.

Class 11.-Bell, Eberle, Fraser, Hickey, Cameron, Brodie, Miner, Johnson, Greer, Dettmers.

Class III.-Hervey, Cannon, Munro, Park, Storrs, Prevost, Baker, Elliott, Meek, Quigley, Mulloy.

ZOOLOGY.
Class 11.- Johnson,

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## PRIZES.

The Medical Faculty's Prizes are three in number :
1st. - The Holmes Gold Medal, (founded by the Faculty in memory of their late Dean) awarded to the graduate who receives the highest aggregate number of marks for both Primary and Final Examinations, and for an inaugural Thesis.

2nd.-A Prize in Books awarded for the best examination-written and oral-in the Final branches. The gold medallist is not permitted to compete for this prize.

3rd.-A Prize in Books awarded for the best examination-written and oral-in the Primary branches.

The Holmes Medal was awarded to Joun D. Cline, B.A., Cornwall, Ont.

The Prize for the Final examination was awarded to James C. Cameron, Montreal, Que.

The Prize for the Primary Examination was awarded to Simon J. Tunstall, B.A., Montreal, Que.

The following gentlemen, arranged in the order of merit deserve honourable mention :

In the Final Examination, Messis. Sincratr, Molson, Mines, Ritchie, Sutherland.

In the Primary Examination, Messrs. Benson, Hanington, Burland, Bain, Scott, Brossard and Langlois.

Professors' Prizes.<br>BOTANY.<br>First Prize............... W. Washburn | Second Prize....... C. L. Cotton. Prize for collection of Plants.............. C. McL. Lang.

## PRACTICAL CHEMISTRY.

Prize . . . . . . . . . . . . . . ................................ C. S. Sinclair.
PRACTICAL ANATOMY.
Senior Prize :-Smith. Junior Prizes :-Campbell, Murray.

## EXTRACTS FROM THE REGULATIONS.

## § 1. Courses of Lectures, Fees, \&c.

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

2nd. Each Lecture shall be of one hour's duration.

3rd. Every Professor shall occasionally examine his class upon the subjects treated of in his preceding Lectures; and every such examination shall be considered a Lecture.
$4^{\text {th. A roll }}$ of the names of the Students attending each class shall be called from time to time.

5 th. All tickets which have not a certificate of attendance attached, shall be rejected when presented as testimonials previous to examination, unless the omission shall be satisfactorily accounted for.
6 th. The Fee for each class shall be $\$ 12$, with the following exceptions; for that of Medical Jurisprudence, $\$ 10$; for those of Clinical Medicine and Clinical Surgery, $\$ 6$ each : for Botany and Zoology, $\$ 5$; Practical Anatomy \$5. The class-fees are payable in advance.

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

Sth. The courses of all the classes, except those of Clinical Medicine, Clinical Surgery and Medical Jurisprudence, shall be of six month's duration, the classes of Clinical Medicine and of Clinical Surgery of three month's duration, Medical Jurisprudence of three months, in which case Five Lectures a week shall be given ; or of six months, in which case only three Lectures a week shall be required.

9th. The courses shall commence on the first week of October, and with the exception of a vacation at Christmas, shall continue to the end of March.
roth. The Matriculation Examination shall be that recommended by the Council for Medical Education and Registration of Great Britain. Examinations in conformity therewith, will be held the first Saturday in October and the last Saturday in March of each year. Applications may be made to the Registrar of the Faculty till the evening of the previous day. The requirements of the standard for matriculation are :- "Compulsory-English Language, including grammar " and composition ; Arithmetic, including vulgar and decimal fractions: Algebra, " including simple equations; Geometry, first two books of Euclid; Latin "translation and grammar ; and one of the following optional subjects:-Greek,
"French, German, Natural Philosophy, including mechanics, hydrostatics, and "pneumatics.

Graduates in Arts of recognized Universities are not required to submit to the Matriculation Examination, and a certificate of having passed this Examination before the College of Physicians and Surgeons of Ontario will be accepted by this University.

## § 2. Quatifications and Studies of Siudents and Candidates for the Medical Degree.

I. All Students desirous of attending the Medical Lectures, shall at the commencement of each Session, enrol their names and residences in the Register of the Medical Faculty, and procure from the Registrar a ticket of Enregistration, for which each Student shall pay a fee of $\$ 2$; excepting in the Clinical Classes, in which enregistration for students of other Schools shall not be compulsory.
2. The said Register shall be closed on the last day of November, in each year, and no tickets obtained from any of the Professors shall be received without previous enregistration.
3. No one shall be admitted to the Degree of Doctor of Medicine and Master of Surgery, who shall not either :-rst, have attended Lectures for a period of at least four sessions in this University, or some other University, College, or School of Medicine, approved of by this University ; or 2ndly, have studied Medicine during at least four years, and during that time have attended Lectures for a period of at least three Sessions, either in this University, or some other University, College, or School of Medicine, approved of by this University.
4. Candidates for the final Examination shall furnish Testimonials of attendance on the following branches of Medical Education, viz :-

| Anatomy. Chemistry. |  |
| :---: | :---: |
| Materia Medica and Pharmacy. |  |
| Institutes of Medicine. | Of which two Courses will be |
| Principles and Practice of Surgery. | required, each of six months' |
| Midzrifery and Diseases of Women and Children. | duration. |
| Theory and Practice of Medicine. |  |
| Practical Anatomy. |  |
| Clinical Medicine. | Of which two Courses will |
| Clinical Surgery. | be required each of three |
|  |  |
| Medical Furisprudence. Botany and Zoology. | Of which one Course will be required, of threc |
| Practical Chemistry. | months' duration. |

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

5 th. The Candidate must give proof by ticket of having attended during twelve months the practice of the Montreal General Hospital, or that of some other Hospital approved of by this University.

6 th. He must also give proof by ticket of having attended for at least six months the practice of the University or other Lying-in Hospital approved of by this University, and of having attended at least six cases of accouchement.

7 th. No one shall be permitted to become a Candate for examination who shall not have attended at leaet One Session of this University, and during that Session one full course of all the branches included in its curriculum.

8th. Courses of less length than the above will only be received for the time over which they have extended.
9th. Every Candidate for the Degree must on or before the Fifteenth of February present to the Dean of the Medical Faculty testimonials of his qualifications, entitling him to an examination, and also a Thesis or Inaugural Dissertation, written by himself, on some subject connected with Medical or Surgical Science, in the Latin, English or French Language. He must at the same time deliver to the Dean of the Faculty the following Certificate: -

Montreal, 18 -
I, the undersigned, being desirous of obtaining the Degree of Doctor of Medicine and Master of Surgery, do hereby declare that I have attained the age of twenty-one years, or (if the case be otherwise,) that I shall have attained the age of twenty-one years before the next graduation day, and that I am not (or, shall not be at that time) under articles as a pupil or apprentice to any Physician, Surgeon, or Apothecary.
[Signed,]
A. B.

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

These examinations will be divided into Primary and Final, the former comprehending Anatomy, Chemistry, Materia Medica, Institutes of Medicine, and Botany or Zoology ; the latter-Practice of Medicine, Surgery, Midwifery, and Medical Jurisprudence. It will be optional with the student to present himself for the Primary Examination at the end of the Third Session or the Third Year. Inth. - The following Oath or affirmation, will be exacted from the Candidate before receiving his Degree.

SPONSIO ACADEMICA.

## 1. In Facultate Medicinæ Universitatis McGill.

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

12th. The Fee for the Degree of Doctor of Medicine and Master of Surgery shall be twenty dollars, to be paid by the successful candidate immediately after examination, together with a Registration Fee of one dollar.

13th. The money arising from the Fees of Graduation, as well as those of Enregistration, shall be applied to the enlargement of the Medical Library and Museum, and to defraying their expenses.

## BOOKS RECOMMENDED TO STUDENTS.

Anatomy.-Gray, Wilson, Ellis, Dublin Dissector, Sharpey and Quain. Chemistry. - Fownes, Miller, Roscoe.
Practical Chemistry.-Odling, Galloway, Frezenius.
Materia Medica. - Pereira's Manual by Farre, Bentley and Warrington.
Institutes of Medicine.-Physiology. - Kirke's Hand-book, Dalton Carpenter, Flint, Huxley. Pathology.-Williams' Principles of Medicine. Jones \& Sieveking.

Surgery.-Holmes' Surgery, Miller's do, Erichsen's do, Druitt's do.
Practice of Medicine.-Aitken, Wood, Watson, Barlow, and Flint.
Medical Jurisprudence. - Orfila Medicine egal, Taylor's Jurisprudence Guy's Forensic Medicine.
Midwifery.-Churchill, Ramsbotham, Cazeux.
N.B.-Boarding may be obtained at from twelve to sixteen Dollars per month


|  | Monday. | Tuesday. | Wednesday. | Thursday. | Friday. | Saturday. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INSTITUTES OF MEDICINE, - | 9 | 9 | 9 | 9 | 9 |  |  |
| MEDICAL JURISPRUDENCE, - | 9 |  | 9 |  | 9 |  |  |
| SURGERY, - - - - - | 10 | 10 | 10 | 10 | 10 |  | ¢ A.M. |
| BOTANY* _ _ _ _ - |  | 10 |  | 10 |  |  |  |
| MIDWIFERY, - - - - | 11 | 11 | 11 | 11 | 11 |  | J |
| HOSPITAL, - - - - - | 12 | 12 | 12 | 12 | 12 | 12 |  |
| CLINICAL LECTURES, - - |  |  | 12 |  |  | 12 | $\}$ NOON. |
| ANATOMY, - - - - - | 2 | 2 | 2 | 2 | 2 |  |  |
| PRACTICAL CHEMISTRY, - - |  | 2 |  | 2 |  | 2 |  |
| materia medica, - _ - | 3 | 3 | 3 | 3 | 3 |  | P.M. |
| PRACTICE OF PHYSIC, - - | 4 | 4 | 4 | 4. | 4 |  |  |
| CHEMISTRY, -. - - - - | 5 | 5 | 5 | 5 | 5 |  | ) |

*With microscopic work at separate hours.

The Principal (Ex officio.) Professors.-Abbott. Lafrenaye. Laflamme. Carter. Trenholme. Wurtele. Kerr. Doutre. Rainville. Lecturers.-Archibald.

Geoffrion. Lareau.
Dean of the Faculty.-Hon. J. J. C. Abbott, Q.C., D. C. L. Registrar of the Faculty-J. S. Archibald, B. A,, B. C. L. Matriculation Examiners of the Faculty-Lecturers, John S. Archibald, B.A., B. C. L, and Edmond Lareau, B. C. L.

The Classes in Law will commence on Thursday the First of October, 1874, and will extend to March 31st, 1875.

The Lecture Rooms of the Faculty are situated in the Molson's Bank Chambers in St. James Street.

The complete course of study in this Faculty extends over three years; but it may be shortened to two years, when the student matriculates in the third year of his indentures.

Students who avail themselves of the privilege of attending two years only, will nevertheless be required to pass an examination in the subjects comprised in the three years' course.

Matriculated Students who do not take the whole course are classed as Partial Students, and are not entitled to proceed to the Degree of B. C. L.

Occasional Students will be received without matriculation, for attendance on any particular series of Leetures.

Students who have completed their course of three years,-or of two years, if they have commenced in the third year of their indentures, and have passed a satisfactory examination, will be entitled, upon the certificate and recommendation of the Faculty to the Degree of Bachelor of Civil Law.

## COURSE OF STUDY.

 FIRST YEAR.|  |  |
| :---: | :---: |
| Legal History | Lecturer Lareau. |
| Civil Law:- |  |
| Persons.. <br> Property <br> Professor Rainville. <br> Ownership |  |
| Roman Law:- |  |
| Institutes of Justinian, Gaius, C. I........... Maine, Chapters I to I | Lecturer Geoffrion. |
| Civil and Commercial Lazu:- |  |
| Obligations. | Pofessor Wurtele. |
| Civil Procedure, (Introduction).............. | Professor Doutre, |
|  |  |
| Legal Bibliography.................................... ${ }^{\text {Civil Law:- }}$ ) |  |
| Rents | Lecturer Lareau. |
| Transacti Suretyshi |  |
| Civil Law:- |  |
| Usufruct <br> Real Servitudes. <br> Gifts and Wills $\qquad$ Professor Rainville. <br> Substitutions. $\qquad$ |  |
|  |  |
|  |  |
|  |  |
| International Law: Civil and Commercial Law:- $\qquad$ <br> Sales. $\qquad$ Professor Kerr. |  |
|  |  |
| Roman Law: - |  |
| Institutes of Justinian, B. 2 and B. 3 to Title I4..) Maine, Chapters V to VIII. . . . . . . . . . . . . . . . . . . . . |  |
| Commercial Law : - |  |
|  |  |
| Civil Procedure (1st Part.) Professor Doutre. Constitutional Laze $\qquad$ Lecturer Archibald. |  |
|  |  |


Commercial Law:-
Commercial Law:-
Carriage of Persons
Carriage of Persons
Insurance
Insurance
Bottomry and Respondentia
Bottomry and Respondentia
Roman Law:-
Roman Law:-
Institutes of Justinian, B. 3 from Title 14.........
Institutes of Justinian, B. 3 from Title 14.........
Maine, Chapters IX and X.. ......................
Maine, Chapters IX and X.. ......................
Civil Law.
Civil Law.
Lecturer Geoffrion.
Lecturer Geoffrion.
Mandate
Mandate
Loan.
Loan.
Pledge
Pledge
Evidence.
Evidence.
Commercial Lazw :-

Civil Procedure (2nd Part.)
Criminal Laze and Procedure.

Professor Doutre.
Lecturer Archibald.

## FACULTY REGULATIONS

I. Any person desirous of becoming a Matriculated Student shall apply to the Dean of the Faculty for examination and for entry in the Register of Matriculation, and shall procure tickets of Matriculation and of admission to the Lectures for each Session of the Course. (Students are requested to call on the Registrar who will furnish them with the necessary forms.)
2. Candidates for Matriculation shall be examined in Latin, in English and in French, the standard being such, as to be determined by regulation of the Faculty, approved by the Corporation.
3. Students in Law shall be known as of the First, Second and Third Years, and shall be so graded by the Faculty. In each year, Students shall take the studies fixed for that year and those only, unless by special permission of the Faculty.
4. The Register of Matriculation shall be closed on the Ist of November in each year, and return thereof shall be immediately made by the Dean to the Registrar of the University. Candidates applying thereafter may be admitted on a special examination to be determined by the Faculty; and if admitted; their names shall be returned in a supplementary list to the Registrar.
5. Persons desirous of entering as Occasional Students shall apply to the Dean of the Faculty for admission as such Students, and shall obtain a ticket, or tickets, for the class or classes they desire to attend.
6. Students who have attended Collegiate courses of study in other Universities for a number of terms or sessions, may be admitted, on the production of certificates, to a like standing in this University, after examination by the Faculty.
7. All Students shall be subject to the following regulations for attendance and conduct:-
(I) A Class-book shall be kept by each Professor and Lecturer, in which the presence or absence of Students shall be carefully noted; and the said Class-
book shall be submitted to the Faculty at a meeting to be held between the close of the lectures and the commencement of the examinations ; and the Faculty shall, after examination of such class-books, decide what students shall be deemed to have been sufficiently regular in their attendance to entitle them to proceed to the examinations in the respective classes.
(2) Punctual attendance on all the classes proper to his year is required of each student. Professors will note the attendance immediately on the commencement of their lectures, and will omit the names of Students entering thereafter, unless satisfactory reasons are assigned. Absence or tardiness, without sufficient excuse, or inattention or disorder in the Class-room, if persisted in after admonition by the Professor, will be reported to the Dean of the Faculty, who may reprimand the student or report to the Faculty, as he may decide. While in the building, or going to or from it, students are expected to conduct themselves in the same orderly manner as in the Class-rooms. Any Professor observing improper conduct in the Class-rooms, or elsewhere in the building, will admonish the student and, if necessary, report him to the Dean.
(3) When Students are reported to the Faculty under the above rules, the Faculty may reprimand, report to parents or guardians, disqualify from competing for prizes or honours, suspend from classes, or report to the Corporation for expulsion.
(4) Any Student injuring the furniture or building, will be required to repair the same at his own expense, and will, in addition, be subject to such penalty as the Faculty may see fit to inflict.
(5) The number of times of absence, from necessity or duty, that shall disqualify for the keeping of a Session, shall in each case be determined by the Faculty.
(6) All cases of discipline involving the interests of more than one Faculty, or of the University generally, shall be reported to the Principal, or, in his absence. to the Vice-Principal.
8. At the end of every Session there shall be a general examination of all the Classes, under the Superintendence of the Professors, and of such other Examiners as may be appointed by the Corporation, which examination shall be conducted by means of printed questions, answered by the students in writing, in the presence of the Examiners. The result shall be reported as early as possible to the Faculty, which shall decide the general standing of the Students accordingly.
9. Each Professor shall deliver at least two Lectures in each week; each Lecture shall be of one hour's duration ; but the Professors shall have the right from time to time to substitute an examination for any of such Lectures.
ro. No Student shall be considered as having kept a Session, unless he shall have attended regularly all the courses of Lectures, and shall have passed the Sessional Examinations to the satisfaction of the Faculty, in four classes in the 1st and 2nd years, and in five in the 3 rd year.
II. The Faculty shall have the power, upon special and sufficient cause shown, to grant a dispensation to any Student from attendance on any particular Course or Courses of Lectures, but no distinction shall, in consequence, be made between the Examinations of such Students, and those of the Students regularly attending

Lectures. No Student shall pass for the degree of B. C. L. unless he has prepared a Thesis either in French or English which shall have been approved by the Faculty.
12. The subject of such Thesis shall be left to the choice of the Student, but it must fall within the range of study of the Faculty, and shall not exceed twenty pages of thirty lines each. Each student shall on or before the first day of February forward such Thesis to the Registrar of the Faculty, marked with the nom de plume which he shall adopt, and accompanied with a sealed envelope bearing the same nom de plume on it, and containing inside his name and the subject of his Thesis, and these envelopes shall be opened in the presence of the Faculty after the final decision shall be given on the respective merits of the said Thesis.
13. The Elizabeth Torrance Gold Medal, in the Faculty of Law, shall be awarded to the Student who being of the Graduating Class, having passed the final examination, and having prepared a Thesis of sufficient merit in the estimation of the Faculty to entitle him to compete, shall take the highest marks in a special Examination for the Medal, which Examination shall include the subject of Roman Law.
14. Every candidate before receiving the Degree of B. C. L., shall make the ollowing declaration. :-
Ego-polliceor, me, pro viribus meis, studiosum fore communis hujus Univeritatis boni, operamque daturum ut decus ejus ac dignitatem amplificem, et officiis omnibus ad Baccalaureatus in Jure Civili gradum pertinentibus fungar.
15. The Fees exigible in this Faculty are as follows:-

Matriculation Fee............................................ \$ 500
Sessional Fee by Ordinary Students............................. 2000
Sessional Fee by Occasional or Partial Students, for each course.. 500
Graduation Fee, including Diploma and Case.................... $8 \infty$
All of which Fees shall be paid in advance. But Students already on the Books of the University shall not be required to pay any Matriculation Fee,

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## TABLE OF LECTURES.

MONDAY :-
Professor Wurtele at 4, to 1st Year.
Lecturer Geoffrion at 4, to 2nd and 3rd Years.
Professor Doutre at 5 , to 1 st Year.
TUESDAY:-
Legturer Geoffrion at 4, to 1st Year.
Professor Wurtele at 4, to 2nd and 3rd Years.
" Doutre at 5, to 2nd and 3rd Years.

## WEDNESDAY:-

Lecturer Lareau at 4, to 1st Year.
Professor Ratnville at 4, to 2nd and 3rd Years.

## THURSDAY:-

> Professor Rainville at 4 , to 1 st Year.
> Lecturer Lareau at 4, to 2nd and 3rd Years.
> Professor Kerr at 5, to 2nd Year.
> Lecturer Archibald at 5, to 3rd Year.

FRIDAY:-
Professor Kerr at 5 , to 3 rd Year.
Lecturer Archibald at 5, to 2nd Year.
N.B.-1st. The Lectures will be given in the Faculty Rooms over Molson's Bank, and will commence on Thursday the 1st of October 1874 by an Introductory Lecture (in the Room of the Court of Appeals, at 4 o'clock P.M., by Mr. Justice Torrance, ) and will finish on the 12th of March 1875.

2nd. The examinations will be as follows:-15th of March, Wurtele; 16th, Kerr ; 17th, Doutre ; 18th, Rainville; 19th, Archibald ; 22nd, Geoffrion ; and 23rd, Lareau.

3rd. The Christmas Holidays will commence on the 19 th of December 1874 and will finish on the 10th of January 1875.

4 th. No lectures will be given on legal Holidays.
5th. The Convocation for conferring degrees in Law will be on the 31st of March 1875, in the William Molson Hall.

# Yrixas, ezonouss and standing. 

## Session 1873-4.

## FACULTY OF LAW.

Third Year or Graduating Class.
Elizabeth Tcrrance Gold Medal, and First Prize.-David W. R. Hodge, B. A., Second Prize, given for the best Thesis.-Michael F. Hackett.
Third Prize, or Second place in General Proficiency.-Henrt Archambault.

> In the Second Year.

First Prize, Lugustine Hurd.
Second Prize, Edouard Couillard.
In the Third Year.
First Prize, Jimes N. Greenshields.
Second Prize, Steadman N. Lebourveau.

> GENERAL PROFICIENCY.
> 3RD vRar or GRaduating class.
> (In order of relative Standing.)

David W. R. Hodge, B. A; Henri Archambault; Frangois Xavier Choquette; M. T. Adolphe Labadie; Edouard A. Panet; O’Hara Baynes; John B. Abbott; George E. Jenkins; Willian G. Waleer; Míhael F. Hackett; Y. A. Odlon Labadie; Felix E. Poutré; Joseph Lariviere; Emile Robillard ; Join J. R. Spona;

## Second Year.

Augustine Hurd; Edouard Coutllard; John S. Hall; Rev. A. R. Chambers ; Russ Wocd Huntington ; Rev. Wullam Galbratth; Rodolphe Des Rivieres; Stephen 2. Mackay; Charles Henry Stephens; Damase Messier;

> First Year.

James N. Grienshields; Steadman N. Lebourveau; Charles J. Doherty; Paschal Caché; Dionts L. Desaulniers; Samuel Hutchinson; Francois Joseph Bibaillon; Auguste M. Lemire ; James M. Glass ; Odilon Desmarats. A. Gelinaz, John Small McDokald; William Soallon ; Narcisse Perodault; Giorge Capsey.

## CLASS EXAMINATIONS.

Commerciai Law. -The Dean of the Faculty, Honorable J. J. C. Abbott, Q. C., D. C. L., and Profeissor Wurtele, Q. C., B. C. L.

Graduating Class.
First, Hodae and Hackett, equal.
Second, Walkir.

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Second Year.
First, Hurd.
Second, Couillard and Galbratth, equal.

## First Year.

First, Greenshields and Doherty, equal.
Second, Lebourveau.
LEGAL HISTORY.-Professor Lafrenaye, D. C. L., and Lecturei Larrau, L. L. B., (Victoria.)

Graduating Class.
First, Hodge.
Second, Baynes.
Second Year.
First, Couillard.
Second, Hurd.

> First Year.

First, Greenshields.
Second, Taché.
LAW OF REAL ESTATE.-Professor Laflamme, Q. C., D. C. L., ad Professor Rainville, L. L. B., (Laval)

Graduating Class.
First, Hodge.
Second, Abbott, Panet and Walker, equal.
Second Year.
First, Hurd.
Second, DesRivieres.

## First Year.

First, Greenshields.
Second, Doherty and Lebourveau.
CRIMINAL LAW.-Professor Carter, Q. C., D. C. L., (Bishop's Joll,) and Lecturer Archibald, B. A., B. C. L., Graduating Class.
First, Hodge.
Second, Archambaulit.

> Second Year.

First, Hurd.
Second, Chambers.
INTERNATIONAL LATV.--Professor Kerr, Q. C., D. C. I.
Graduating Class.

First, Hodge.
Second, Jenkins.

## ay (ina

Second Year.

## First, Hurd.

## Second, Hall.

ROMAN LAW.-Professor Trenholme, M. A., B. C. L., and Lectirer Geofis-

$$
\mathrm{N}, \mathrm{~B}, \mathrm{C} . \mathrm{L} .
$$

First, Baynes.
Second, Hodge and Robiliard, equal.
Second Year.
First, Hurd.
Second, Hall.
First Yenr.
First, Greenshields and Scallon, equal.
Second, Desaulaiers.
CIVIL PROCEDURE.-Professor Doutre, D. C. L.
Graduating Class.
First, Hodge.
Second, Choquette.
First, Couillard.
Second, Hurd.
First, Lebourveau.
Second, Scallon.
Second Year.

First Year.

FACULTY OF MEDICINE.
John D. Cline, B. A. Cornwall, Ontario, for Thesis and Best Examination in all the branches of Study.-Holmes Gold Medal.
James C. Cameron, Montreal, Quebec, Prize for the best Examinationlin the Final Branches.
Students deserving Honourable mention in the Final Branches :-Messrs. Sinclatr, Molson, Mines, Ritchie, Sutherland.
Simon T. Tunstall, B. A. Montreal, Quebee, Prize for the best Examination in the Primary Branches.
Students deserving Honourable Mention in Primary Branches:-Messrs. Benson, Hanington, Burland, Bain, Scott, Brossard and Langlois.
C. S. Sinclatr, Professor's Prize in Practical Chemistry.
W. Washburn, First Prize in Botany. C. L. Cotton, Second Prize.
C. MoL. Lang, Prize for Collection of Plants.

Smith, Senior Prize for Practical Anatomy.
Campbefli and Murray, Junior Prizes in Practical Anatomy.
examinations in botany and zoology.
Botany.
Class 1.
Washburn, (Prize) ; Cotton, (2nd Prize) ; Campbell ; Fortin ; Cream; Stevenson.
Class $I I_{0}$
Bell; Eberlit; Fraser; Hickey; Cameron; Brodie; Miner; Johnson ; Grier; Dettmers.

Clas8 III.
Hervey; Cannon ; Munro; Park; Storrs; Preyost; Baker; Elliott ; Meek; Quigley; Mulloy.

## FACULTY OF ARTS

## Graduating Class.

B. A. Honours in Classics.

George B. Ward.-First Rank Honours and Chapman Gold Medal.
Archibald D. Taylor.-First Rank Honours.

## B. A. Honours in Natural Seience.

William B. Dawson.-First Rank Honours and Logan Gold Medal. John Allan.-First Rank Honours, and Special Logan Prize.

## B. A. Honours in Mental and Moral Philosophy.

Kutusoff N. McFee.-First Rank Honours and Prince of Wales Gold Medal.
John 0. McLennan.-First Rank Honours.
Finlay MoN. Dewey.-Second Rank Honours.

## B. A. Honours in English Literature.

Henry W. Thomas.-First Rank Honours and Shakspere Gold Medal.

> THIRD YEAR.
G. S. Stewart.-First Rank Honours in Mental and Moral Philosophy. George H. Chandler.-First Rank General Standing; Prize in Moral Philosophy Prize for Collection of Plants.
William M. McKibbin.-Prize in Zoology. Henry K. Wioksteed,-Prize in German.

PASSED THE SESSIONAL EXAMINATIONS.
Chandler, Stewart, MoKibbin, Ritchie, Wicksteed.

> SECOND year.

Hugh Prdley.-(Vietoria College)-First Rank General Standing ; Prize in Botany. Prize in English History.
Henty H. Lyman.- (High School)-First Rank General Standing; Prize in Logic ; Prize in Botany. Prize in English History.
Archibald McGoun.-First Rank General Standing.
Alindus J. Watson.-First Rank General standing.
A.C. Morton.-Prize in English Literature.

PASSED THE SESSIONAL EXAMINATIONS.
Pedley ;-MoGoun, and Lyman, equal;-Watson, Crothers ; Cox, and Morton equal; Duffy, Graham, Phinney, Mc0uat, Gray.

FIRST YEAR.
Eugene Lafleur (High School, Montreal).-First Rank Honours in Mathematics and Prize ; First Rank General Standing ; First Prize in Classios ; Prize in History; Prize in French; Prize in German; Prize for English Essay .
J. H. Graham (Huntington Academy).-Second Rank Honors in Mathematics.

Charles H. Gould (High School, Montreal).-First Rank General Standing; Second Prize in Classios ; Prize in French.
William H. Warriner.-First Rank General Standing; Prize in Hebrew ; Prize in Chemistry ; Prize in English and Prize for Essay.
Sydney C. Chubb (Southampton College).-Prize in Chemistry.

PASSED THE SESSIONAL EXAMINATIONS.
Lafleur, Gould, Warriner, Scott, Robertson, Graham, Atwater, Russell, Anderson, McGibbon, McGregor, Chubb, Walker.

## DEPARTMENT OF PRACTIGAL AND APPLIED SCIENCE.

 SENIOR YEAR.Joseph Willlam Spencer.-First Rank Honours in Geology and Mineralogy. Charles .J. Harvey. - Prize in French.

MIDDLE YEAR.
Arthur E. Hill.-Prize in Engineering.
PASSED THE SESSIONAL EXAMINATIONS.
Hill, Burchell, Hawley, Ross, Page, Wilson, Rodger.
JUNIOR YEAR.
Frederick Hetherington.-(High School, Quebec) ; Prize in Engineering.
PASSED THE SESSIONAL EXAMINATIONS.
Thomas, Ewing, Hetherington, Reed, Rogers.

## CHRTSTMAS EXAMINATIONS, 1873.

## GREEK.

First Year.-Class I.-Lafleur, Gould, Graham (Jno. H.), Scott ;-Warriner and Anderson, equal. Class II.-McGibbon, Robertson, McFarlane, Atwater, Russell,. Class III.-MoDougall, Walker, Burwash, MeLennan, Papineau McLeod.
Second Year.-Class 1.-McGoun, Pedley, Watson, Crothers. Class II.-Campbell and Lyman, equal ;-Jenkins, Cox. Class III.-Matheson; Gray and Morton, equal ;-McOuat and Phinney, equal ;-Graham (Jno.), Duffy.
Third Year.-Class I.-Chandler, Ritchie. Class II.-MeKibbon. Class III.Wellwood and Stuart, equal.

## LATIN.

First Year.-Class I.-Lafleur, Gould, Scott, Graham (J. H.), Warriner. Class II.-MoGibbon and Robertson, equal ;-Anderson, McFarlane ;-McDougall and Atwater, equal;-Russell. Class III.-McLeed, Chubb, Burwash, Papineau, McLennan, Walker.
Second Year.-Class I.-MeGoun, Pedley;-Lyman and Watson, equal;-Crothers and Jenkins, equal. Class II.-Campbell, Graham (Jno.), Cox ;Duffy and Phinney, equal. Class III.-McOuat, Gray, Morton, Joseph, Matheson.
Third Year.-Class I.-Chandler, Ritchie ;-McKibbin and Stuart, equal, Class II.-Wellwood. Class III.-None.

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## ELEMENTARY PSYCHOLOGY.

Second Year.-Class I.-Lyman, McGoun, Campbell, Jenkins, Pedley ; Crothers and Graham, equal. Class II.-Watson, McOuat, Rutledge, Morton, Cox, Duffy. Class III.-Matheson, Gray, Schram, Joseph, Millyard;-Knowles and Knox, equal ; -Whiteside, Phinney and Dorion, equal ; -MacDonald.

## MORAL PHILOSOPHY.

Third Year.-Class I.-Chandler, Stuart, Wellwood, Rutledge. Class II.McIntyre, Cossar, McKibbin, McIntosh. Class III.-Schram, Knox;Ritchie and Millyard, equal ;-Knowles, Whiteside.

## MENTAL PHILOSOPHY.

Fourth Year.-Class I.-McFee and McLennan, equal. Class II.-Harvey (A.), Dewey, Taylor (E.), Hall, Craig, Black, Greenshields, McIntosh. Class III.-None.

## ENGLISH LANGUAGE AND LITERATURE.

First Year.-Class I.-Lafleur and Warriner, equal;-Russell, Gould, Scott. Class II.-MacFarlane, Robertson, Atwater, Graham, McLennan (Finlay), Chubb, McDougall, McGibbon, Papineau, Howe, Walker. Class III.Burwash, Cossar, Anderson.
Third Year.-Class I.-Chandler. Class II.-Wellwood, Stuart, Ritchie.
Fourth Year.-Class I.-Thomas. Class II.-Hall, Harvey (A. J.), Craig, Greenshields.

## FRENCH.

First Year.-Cluss I.-Lafleur, Gould, Atwater, Graham, MeDougall. Class II.-Reid, Scott;-Papineau and Burwash, equal;-Chubb, McGibbon. Class III.-Robertson, Howe.
Sedond Year.-Olass I.-McGoun. Class II.-Lyman, Crothers, Watson. Class III.-McOuat, Jenkins, Morton.

Fourth Year.-Class I.-Harvey, C. Class II.-None. Class III.-None.
GERMAN.
Fourth Year.-Class I.-Harvey (Chas.). Class 1I.-Stevenson.
First Year. Class 1.-Lafleur. Class II.-None. Class III.-Chubb, MeLennan, Palliser.

## HEBREW.

First Year.-Class I.-Warriner, Whiteside, Pedley, Amaron, Scott, McLeod, Burwash, Anderson. Class II.-Pelletier, MacFarlane;-Russell and Walker, equal. Class III.-MacDonald.
Second Year.-Class I.-Campbell, Matheson, MacRae, Cox. Class II.-Gray, McLennan. Class HI.-Yughes, Hamilton, Holiday, Brouillette.

## MATHEMATICS.

First Year.-Class I.-Lafleur, Graham, Warriner, Gould, Scott. Class II.None. Class III.-Anderson and Russell, equal;-McGibbon, Burwash, Robertson, Walker, Atwater, Chubb, McLeod, Howe.
Second Year.-Class I.-Watson, Phinney, Lyman. Class II.-McGoun. Class III.-Crothers (R. A.) ;-Campbell and Jenkins, equal;-Morton, Duffy, Pedley, Cox, Graham, Gray.

## MATHEMATICAL PHYSICS

Third Year.-Class I.-Chandler. Class II.-None. Class III.-McKibbin Stuart.
Fourth Year.-Class I.-Harvey (A. J.), Harvey (C. J.), Taylor (A. D.). Class II.-Greenshields, Thomas, Hall. Class III.-Empson, Dewey, Oraig, Taylor (E. M.), Ward, Stevenson, Black.

## EXPERIMENTAL PHYSICS.

Third Year.-Class I.-Chandler. Class II.-Wellwood. Class III.--Ritohie, Stuart.
Fourth Yeah.-Class I.-Greenshields, Dawson, Harvey (C. J.), Allan. Class II.-None. Class III.-Thomas;--Craig and Empson, equal ;--Hall.

## NATURAL SCIENCE.

First Year.-(Chemistry)-Class I.-Lafleur, Chubb, Warriner, Scott, Gould, Graham, Walker, Atwater. Class II.-Anderson, Robertson, Russell, Class III.-McDougall, McLeod, Howe, Papineau, McGibbon, Burwash. MacFarlane.
Segond Year.-(Botany)--Class I.-Crothers, Lyman, Campbell, Jenkins, Cox, Morton, McGoun, Pedley, Duffy, Watson. Class II.-Graham, McOuat. Whiteside (oc.), Rutledge (oc.), Phinney, Matheson, Gray, Millyard (oc.), Class III.-Schram (oc), Joseph, Dorion (oc), Knox (oc).
Third Year.- (Zoology)-Class I.--Chandler, Wellwood, Routledge (oc), Stuart MeKibbin, Whiteside (oc). Class II.-Millyard (oc), Ritchie, Schram, (oc), Knox (oc).
Fourth Year.--(Geology)--Class I.-Dawson, Allen, McFee. Class II.--Harvey (C.), Craig, Harvey (A.). Class III.-Greenshields, Empson, Black.

## DEPARTMENT OF PRACTICAL SCIENCE.

## ENGINEERING.

Junior Year.- (Drawing and Surveying)-Class I.---Thomas, Hetherington, Belanger. Class II.-Ewing and Palliser, equal;-Reid. Class III.McLennan (D.), Fleming.
Middle Year.-(Drawing, Levelling, Constriction)-Class I.-Burchell. Class II.-Hill, Page, Wilson, Hawley ;-MacDonald and Frothingham, equal. Class III.--None.

- Senior Year.-(Drawing, Construction, Applied Mechanics)-Class I.-None. Class II.-McLean, Hawley, Robertson, Boswell. Class III.-None.
Sienior Year.-(Mining) (Drawing, Applied.Mechanics) Class I.--Wicksteed and Spencer, equal. Class II.--None. Class III.-None.
Occasional Students. (Construetion) Class I.--Dawson. (Drawing and Construction.) Class II-Batcheller. (Drawing and Surveying) Class III.-Atwater.


## MATHEMATICS.

Juniob Year.-Class I.-None. Class II.-Ewing and Reid, equal. Class III.Thomas (A. C.), Belanger, Palliser, McLennan (D.), Fleming.
Middle Year.-Class I.-Hawley, Wilson. Class II.-McDonald. Class III.Hill, Burchell, Page, Frothingham,

## MATHEMATICAL PHYSICS.

Middle Year.-Class I.-None. Class II.-Page, Burchell. Class III.-Wilson MacDonald, Hawley, Batcheller.
Sentor Year.-Class I.-McLean, Harvey (C. J.). Class II.-Robertson. Class III.-Boswell.

## EXPER1MENTAL PHYSICS.

Middle Year.-Class I.-None. Class II.-None. Class III.-Hawley and Page, equal ;-Hill, Burchell, Batcheller, Frothingham, MacDonald.
Senior Year.-Class I.-Harvey (C. J.). Class II.-Spencer. Class 1II.McLean, Boswell, Robertson.

CHEMISTRY.
Junior Year.-Class I.-Hetherington, Reid. Class II.-Ewing, Thomas. Class III.-Fleming, Palliser, McLennan, Belanger.

## MINING.

Senior Year.-Class I.-Wicksteed, Spencer. Class 1I.-Stevenson. Class III.-None.

USE OF THE BLOWPIPE AND ASSAYING.
Middle Year.-Class I.-None. Class II.-Wicksteed. Class III.-None.

## ZOOLOGY.

Middle Year.-Class I.-Page, Hawley, Burchell, Frothingham. Class II.Wilson, Hill, McDonald.

## GEOLOGY.

Senior Year.-Class II.-McLean. Class III.-Robertson, Boswell.

## ENGLISH.

Junior Year.-Class I.-None. Class II.-Belanger. Class III.-Hetherington; Fleming, Ewing, Palliser, Thomas (A.C.)

FRENCH.
Junior Year,-Class I.-Belanger. Class II.-Thomas. Class III.-Palliser; Ewing, McLennan.
Middle Year.-Class I.-None. Class II.-Burchell, McDonald, Hawley. Class III.-Hill, Frothingham.
Senior Year.-Class I.-None. Class II.-McLean, Wicksteed, Robertson. Class III.-Stevenson, Spencer, Boswell.

## GERMAN.

Senior Year.-Class I.-Harvey (Chas.). Class II.-Stevenson.
First Year.-Class $I_{0}$-Wieksteed. Class II.-None. Class III.-Hetherington.

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## MoGILL COLLEGE.

## SESSIONAL EXAMINATIONS, 1874.

## ORDINARY COURSE IN ARTS.

GREEK.
B. A. Ordinary.-Class I.-Taylor (A. D.), Ward. Class IT.-Black, Greenshields, Craig, Empson. Class III.-None.
Third Year.-Class I.-Chandler. Class II.-McKibbiu and Ritchie, equal Stuart. Class III.-None.
Intermediate.-Class 1.-McGoun, Pedley, Crothers, Watson. Class II.-Lyman. Cox;-Matheson and Phinney, equal. Class III.-Graham (Jno.) and Gray and McOuat, equal ; Duffy and Morton, equal.
First Year.-Class I.-Lafleur First Prize in Classies; Gould, Second Prize in Classics;-Graham, (J. H.), Warriner;-Anderson and Scott, equal. Class II.-Bobertson, MeGregor, MeGibbon, Atwater, Russell. Clase III.-Walker, McLeod, McLennan, (F), Burwash, Papineau.

## latin.

B. A. Ordinary.-Class I.-Ward, Taylor (A. D). Class II.-Empson, Greenshields ;-Hall and Harvey (A) equal. Class III.-Craig, Black.
Third Year.-Class I.-Chandler. Class II.-Ritchie, Stuart, MeKibbin. Class III.-None.

Intermidiate.-Class I.-McGoun and Crothers, equal ;-Pedley, Watson, Lyman Class II.-Cox;-Duffy and Joseph, equal;-Graham (j). Class III.-Gray and Matheson and McOuat, equal ;-Phinney, Morton.

First Year.-Class 1.-Lafleur, Gould, Scott;-Graham (J. H.) and Warriner, equal ;-Robertson. Class Il.-McGibbon, Anderson, MeGregor; Atwater and Russell, equal ;-Chubb. Class III.-McLeod, McLennan.

> HISTORY.

First Yfar.-Class I.-Lafleur (Prize) ; Scott. Class II.-Atwater and Robertson and Russell,equal ; -Anderson ;-Gould and McDougall and W alker, equal:--Chubb and Warriner, equal. Class III.-Graham (John) and MeGibbon, equal ;-McGregor.
B. A. Ordinary.-Class I.-Thomas. Class II.-Nono. Class III.-None.
logic, and mental and moral philosophy.
Fourth Year.-(Mental and Moral Philosophy). Class I.-McFee. Class II.Dewey and Harvey (A), equal ;-Hall, McLennan, Black, McIntyre, Clas8 III.-Craig, Greenshields.
Third Year.- (Moral Philosophy.) Class I.-Chandler (prize); Rutledge, McIntyre, Stuart. Class II.-VcKibbin, Millyard, Knox, Cossar, Ritchie. Class III. - Whiteside, Knuwles, Schram, Dorion.
Skcond Year.-(Logic) Class I.-Lyman (prize) ; McGoun, Pedley, and Watson, equal ;--McIntyre. Class II.-Whiteside, Rutledge, Crothers, P'hinney. Duffy;-Graham and Millyard, equal;-Cox, Knox, Schrain, Horton, Class III.-Dorion, MoOuat, Matheson, Knowles, Gray, Horiday.
english literature.
B. A. Ordinary.-Class I.-Thomas.

Third Year.-(Rhetoric) Class I.-Chandler, Stuart. Class II.-None. Class III.-Ritchie.

Second Year.-Clabs I.-Morton(prize);-McGoun, Pedley, Lyman, Cox, Watson, Crothers. Class II. None. Class III.-Duffy, Gray, Joseph, Graham, Phinney.
First Year.-Class 1.-Warriner (prize; and prize for Essay); Lafleur (prize for Essay) Gould, Russell, Scott, Atwater, Robertson. Class II.M:Lennan (F). Class III.-McDougall, Chubb, Graham, MeLeod, McGibbon, McGregor, Anderson, Walker, Papineau.

FRENCH.
Fourth Year.-Class I.-Harvey, (Prize). Class II.-Stevenson. Class III.None.
Third Year.-Class I.-Stuart, Wieksteed. Class II.-None. Class III.-None. Second Year.-Class I.-None. Class 1I.-McGoun, Watson, Lyman. Class 1II.-Crothers.
First Year.-Class I.-Lafleur (Prize); Gould (Prize). Class II.-Atwater and McDougall, equal ;-Papineau, Chubb. Class III.-McGibbon;Graham and Robertson, equal.

## GERMAN.

B. A. Ordinary.-Class I.-Harvey (Chs). Class II.-Stevenson. Class III.None.
Third Year.-Class I.-Wicksteed (prize). Class II.-None. Class III.-None. First Year.-Class I.-Lafleur (prize). Class II.-None. Class III..-None.
herrew.
Junior Class.-Warriner (prize);-Pedley and Scott, equal ; Russell, Amaron, McLeod, Anderson, Pelletier, Walker.
Senior Class.-Cox, Matheson, Gray, McLennan (F.), Holiday.

## MATHBMATICAL PHYSICS.

B. A. Ordinary.-Class I.-Harvey, (C.J.). Class II.-Thomas, Harvey (A. J.). Greenshields. Class III.--Taylor (A. D.), McLennan (J. S.), Hall, Black, Dewey, Ward, Empson, Stevenson, Craig.
Third Year.-Class I.-Chandler. Class II.-None. Class III.-Stuart, McKibbin, Ritchie.

## mathematics.

Second Year.-Class I.-Morton, Lyman, Pedley. Class II.-Watson, MeGoun, Crothers. Class III.-Duffy, Phinney, McOuat;-Graham and Matheson, equal;-Cox, Gray.
First Year.-Class I.-Lafleur, Scott. Class II.-Robertson, Gould, Graham, Warriner. Class III.-Russell Atwater and Walker, equal ;--MeGregor, Anderson, McGibbon, Chubb, McLennan, (Finlay.)

EXPERTMANTAL PHYSIOS.
B. A. Ordinary.-Class I.-Allan, Dawson, Harvey, (C. J.). Class II.-None. Class III.-Greenshields;-Craig and Stevenson, equal ;--Empson, Hall,
Third Year.-Clasa I.-Chandler. Class II.-None. Olass III.-Stuart, Ritchie.
natural soience.
B. A. Ordinary.-(Geology)-Class I.-Allan and Dawson, equal; MoFee. Class II.-Harvey (A.), Harvey (C.), Class III.-Empson, Black.
Third Year.-(Zoology)-Class I.-McKibbin (prize). Class II.-Routledge, (0c.), Whiteside, (Oc.). Class III.-Knox, (Oc.), Ritchie.
Second Year.-(Botany)-Class I.-Lyman (prize); Pedley (prize); Crothers. Watson, MeGoun, Cox, Morton. Class II.-Graham, Duffy, Routledze, Joseph, McOuat. Class III.-Matheson, Whiteside, Gray, Knox, Phinney.
First Year.-(Chemistry)-Class I-Warriner (prize) ; Chubb (prize) ; Lafleur, Gould.-Class II.-Robertson. Class III.-Scott, Anderson, Atwater, Walker; Graham and Russell, equal;-Papineau, McLennan, (F), MoGregor.

## DEPARTMENT OF PRACTICAL AND APPLIED SCIENCE.

## surveying and levelling.

Middle Yrar.-Class I.-Hill, Burchell, Page. Class II.-Ross, Hawley, Wilson, Frothingham. Class III.-Rodger,
Junior Year.-Class I.-None. Class II.-Ewing ;-Hetherington and Thomas, equal; Palliser, Reid. Class III.-Fleming, Rogers, McLennan, Lebel, Leprohon.
drawing.
Senior Year.-Class I.-None. Class II.-Robertson, McLean. Class III.Harvey (C. J.), Boswell.
Middle Year.-Class 1.-Hill. Class II.-Burchell. Class III.--Frothingham, Rodger, Page, Hawley, Wilson, Ross.
Junior Yrar.-Class I.-Hetherington, Thomas, Ewing, Palliser. Class II.Reid, Fleming. Class III.-McLennan, Rogers, Lebel.
construction.
Senior Year.-Class I.-Harvey (C.J.), McLean, Class II.-Boswell, Robertson, Class III.-None.
Middle Year.-Class I.-Hill ; Page and Burchell, equal. Class II.-Ross and Frothingham, equal. Class III.-Hawley and Rodger, equal ; Wilson.
applied mechanics.
Senior Year.-Class I.-None. Class II.-Harvey (C.J.), McLean. Class III.Boswell, Robertson, Spencer.

PRINCIPLES OF MECHANISM.
Sknior Yrar.-Class I.-Harvey (C.J.). Class II.-Boswell, McLean. Class III، -Robertson, Spencer, Stevedson.

DESIGNING AND ESTIMATES.
Senior Year.-Class 1.-McLean. Class II.-None. Class III.-Robertson; Harvey (C.J.) and Boswell, equal.

MINERAL SURVEYING AND DRAWING.
Sentor Year.-Class I.-Wioksteed. Class II.-None. Class III.-Spencer, Stevenson.

## AGGREGATE Class LISTS. <br> Engineering Course.

Senior Year.-(B. A. Sc. Degree) Class I.-None. Class II.-McLean, Harvey. Class III.-Boswell, Robertson.
Middle Year.-Class I.-Hill (prize); Burchell. Class II.-Page. Class III.Frothingham, Hawley, Rodger, Ross, Wilson.
Junior Year.-Class 1.-Hetherington, (prize) ; Thomas and Ewing, equal, Class II.-Palliser, Reid, Fleming. Class III.-McLennan, Rogers, Lebel (occ).

MINING.
Senior Year.-Class 1.-None. Class II.-Spencer, Wieksteed. Class III,Stevenson.

METALLURGY.
Senior Year.-Class I.-Spencer. Class II.-Wioksteed. Class III.-Stevenson, ASSAYING.
Middle Year.-Class I.-None. Class II.-Wicksteed. Class III.-None.
BLOWPIPE ANALYSIS.
Class I.-None. Class II.-Wicksteed. Class III.-None.
MATHEMATICAL PHYSICS.
Senior Year.-Class I.-Harvey (C. J.). Class II.-None. Class III.Boswell, McLean, Robertson.
Middle Year.-Class I-.None. Class II.-Page, Wilson. Class III.-Burchell, Hill, Frothingham and Ross, equal ;-Rodger, Hawley.
mathematics.
Middle Year.-Class I.-Page, Hawley. Class II.-None. Class III.-Hill and Wilson, equal ;-Rodger, Ross, Burchell.
Junior Year.-Class I.-None. Class II.-None. Class 1II.-Ewing, Thomas, (A. C.), Hetherington, Reid, Rogers.

EXPERIMENTAL PHYSICS.
Senior Year.-Class I.-None. Class II.-None. Class III.-MoLean, Spencer, Robertson, Boswell.
Middle Year.-Class I.-None. Class II.-Burchell. Class III.-Hill, Hawley, Wilson ; Ross and Page, equal;-Frothingham.

CHEMISTRY.
Junior Year.-Class I.-None. Class II.-Hetherington, Thomas. Clabs III.Ewing, Ross, Reid,-Palliser, Rogers, MeLennan.
english literature.
Senior Year.-Class I.-Wicksteed.
Junior Year.-Class II.-Ewing, Hetherington. Class III.-Palliser, Thomas Reid, McLennan, Fleming, Rogers,

Senior Year.-Class I.-Harvey. Class 11.-Stevenson. Class III.-MoLean, Robertson, Boswell, Spencer.
Middle Year.-Class I.-None. Class II.-Burchell, Hawley. Class III.Frothingham, Hill, Rodger, Ross.
Junior Year.-Class I.-None. Class II.-Thomas. Class 1II.-Reid, Ewing, Rogers.

GERMAN.
Senior Year.-Class I.-Harvey (Chs.), Wicksteed. Class II.-Stevenson, Class III.-None.
Junior Year.-Class I.-None. Class II.-None. Class III.-MoLennan (D.) Palliser, Hetherington.

GEOLOGY.
Senior Year.-(Mining Course) - Class I.-Spencer. Class II.-Wicksteed, Class III.-Stevenson.
Senior Year.-(Engineering Course)-Class I.-None.-Class II.-McLean. Class Il I.-Boswell, Robertson.
ZOOLOGY.

Middle Year.-Class I.-None. Clabs II.-Hill, Hawley, Burchell, Frothingham. Class III.--Page, Wilson, Rodger, Ross.

STUDENTS ENTITLED TO CERTIFICATES FOR METEOROLOGICAL OBSERVATION.
John S. MoLennan, St. George J. Boswell, Charles J. Harvey, Alfred J. Harvey, George S. Robertson.

## Schalarllips and Waxthibitions. $^{2}$

$-\infty+\infty$<br>Session 1873-74.<br>SCHOLARSHIPS (Tenable for Two Years.) ${ }^{\circ}$

| Year of ment. | Name of Soholar. | Subject of Examination. | Annual <br> Value. | Founder or Donor. |
| :---: | :---: | :---: | :---: | :---: |
| 1872 | Dawson, W. B... | Scienc | \$125 | W. C. MacDonald, Esq. |
| 1872 | Allan, John...... | Do | \$100 to 120 | The Governors. |
| 1872 | W ard, G. B...... | Class. \& Mod. Lan. | \$125 | W. C. MacDonald, Esq. |
| 1872 | Harvey Charles. |  | \$120 | Chas. Alexander, Esq. |
| 1873 | Chandler, G. H... | Science. | \$125 | W. C. MacDonald, Esq- |
| 1873 | Ritchie, W. F. | Class. \& Mod. Lan. | \$125 | W. C. MacDonald, Esq. |

EXHIBITIONS (Tenable for One Year.)
Second Year.

| Name of Exhibitioner. | Annual Value. | Founder or Donor. |
| :---: | :---: | :---: |
| Watson, Alindus J Campbell, D. | $\begin{aligned} & \$ 125 \\ & \$ 125 \end{aligned}$ | W. C. MacDonald, Esq. W. C. MacDonald, Esq. |
| First Year. |  |  |
| ,Name of Exhibitioner. | Annual Value. | Founder or Donor. |
| Lafleur, Eugene............. | \$125 | W. C. MacDonald Esq. |
| Gould, Charles H............. | \$125 |  |
| Jackson, Charles A. | \$100 | Mrs. Jane Redpath. |
| Robertson, Robert............. | \$100 | T. M. Taylor, Esq. |

Two Prizes, each being half the amount of the remaining, MacDonald Exhibition, were awarded to Atwater, Albert W., and Anderson, James A.

# Students of the alnixursity. <br> Session 

## McGILL COLLEGE.

## FACULTY OF LAW.

Abbott, John Bethune, Montreal Q $\dagger$ Archambault, Henri, l'Assomption, Q - Bayues, 0'Hara, Bisaillon, Joseph, Capsey, George, Chambers, A. Rusteed, $\dagger$ Choquette, Frs. X., Couillard, Edouard, Desmarais, Odilon, Desaulniers, Dionis, Des Rivieres, Rodolphe, Doherty Charles J., Gelinas, A., Glass, James, M., Greenshields, James N., $\dagger$ Hackett, Michael, F., Galbraith, William, Hall, John, S., Huntington, Russ Wood, Hurd, Augustine, $\dagger$ Hodge, David, W. K., Lapreirie, Q Bedford, Q Ireland, Varennes, Q Montreal, Q Joliette, Q Yamachiche, Q Montreal, Q Montreal, Q
Trois Riviéres, Q Montreal, Q Danville, Q Eaton, Q Montreal, Q Lachine, Q Montreal, Q Montreal, Q

Hutchinson, Samuel, $\dagger$ Jenkins, George E., + Labadie, Marie T. A., + Labadie, Josef A. O., † Lariviére, Joseph, Lebourveau, Steadman, A. Lemire, Auguste, l'Assomption, Q Major, David, Montebello, Q Messier, Damase, Ste. M., de Monnoir, Q McDonald, John, S., P. E.I Norris, John Francis; Montreal, Q $\dagger$ Panet, Edouard, A., Beauharnois, Q Patterson, William, J. B., Montreal, Q Perodeault, Narcisse, Montreal, Q $\dagger$ Poutre, Felix, E., Montreal, Q $\dagger$ Robillard, Emile, St. Francois du Lac,Q Scallan, William, Joliette,, Q $\dagger$ Spong, John J. R., Montreal, Q Stephens, Chas. Henry, Taché, Paschal, Taché, Paschal,
$\dagger$ Walker, William, S., $\quad$ Brantford, 0

Montreal, Q Montreal, $Q$
Montreal, $Q$ Montreal, Q Montreal, Q Eaton, Q $\dagger$ † Walker, William, S., $\dagger$ B. C. L. 1874.

## FACULTY OF MEDICINE

| J | Montreal, Q |  | Cowansville, |
| :---: | :---: | :---: | :---: |
| Armstrong, George, E., | , Montreal, Q | Coyle, Henry, W | Berthier, |
| Bain, Hugh, U., | Perth, 0 | Craig, Thornton, | lengarry, |
| Beers, Wm. G., | Montreal, Q | Cream, Thos. M., | Quebec, |
| Bell, James, | North Gower, 0 | Crothers, Wm. | Clarenceville, |
| Benson, Joseph, B., | Chatham, N. B | Dettmers, O. U. G | Montreal, |
| Bomberry, Geo. E | Tuscarora, 0 | Dickinson, S. M., | Cornwall, |
| Brodie, John, North | th Georgetown, Q | Dorland, James, | Adolphustown, 0 |
| Brossard, J. B. J., | Laprairie, Q | Dowling, John, | Appleton, 0 |
| Brown, Newell, J., | Stanstead, Q | Duncan, George, | Port Dover, 0 |
| Burland, Wm. H., | Montreal, | Eberlé, Henry | Morpeth, |
| Caldwell, Wm., | Brantford, | Elliott, Wm. B | Iroquoi |
| Cameron, Duncan, H., | Perth, | Falls, Samue | Huntle |
| Cameron, James, | ara Falls, | Farley, James, | St. Thomas, |
| Campbell, James, | London, 0 | Fortier, Alex. I | River David, |
| Cannon, Gilbe | Ramsay, 0 | Fraser, Alex. | Wallaceburg, |
| Christie, John, H., | Lachute, Q | Gilbert, Henry, | Sherbrooke, |
| Clarke, | Ilingwood, 0 | Go | Danville, |
| Cline, J. D., B. A | Cornwall, 0 | Graham, Kenneth D., | Ottawa, |
| Iquhoun, Geo., | illiamsburg, 0 | Grane | Heckston, |
| ooke, Wm, H., D | Drummondville, Q | Greaves, Henry, C., | Millpoint, |
| Cook, Guy, R., | Aultsville, 0 | Greer, Thos. A., | Colborn |

Hanington, E. B. C., Hanover, Wm., $?$ Harvey, Alfred, J., $\dagger$ Harvey, W. A., $\dagger$ Henderson, Ed. G., Hickey, S. A. (B. A.) Hickey, Wm. R., $\dagger$ Hockridge, Thos. G., Howey, Wm. H., Hume, Wm. L., Hunt, Henry, Jamieson, Thos. A., Johnson, Jas. B., $\dagger$ Jones, Chas. K., † Jones, George, N., Kearney, Wm. J., Lang, C. M. Langlois, 0. , Levi, Reuben, Livingstone, Jas., $\dagger$ MacDonald, R. A., MeDonnell, Richd. L., McArthur, John, A., $\dagger$ McBain, John, † MoCormick, A. G., McDermid, Wm. McDonald, Alex. R., $\dagger$ McDonnell, Alex. R., Mcllmoyl, Henry, A., MeKay, George, McLaren, John, R., MeMillan, A. D. $\dagger$ McMillan, A. J., † MoQuillen, J., Marquette, Mich. U. S McRae, George, Mattice, Rich. A., Meek, Jas. A., Metcalfe, Henry, J., Miner, Frank, L., $\dagger$ Mines, W. W., + Molson, Wm. A., Monk, Geo. H.,

+ Moore, Chas. S.,
$\dagger$ Moore, J. T.,

Edwardsburg, o
Shediac, N. B Packenham, 0 St. Johns, N. F Newbridge, 0 Belleville, 0 Aultsville, 0 Aultsville, 0 Bradford, 0 Windham, 0 Leeds, $Q$ Notfield, 0
Glengarry, 0 Weston, 0
Hastings, 0
St. Andrews, $Q$
Montreal, Q
Sydenham, 0
Windsor, 0
Montreal, Q
Hamilton, 0
Cornwall, 0
Montreal, Q Lobo, 0
Williamstown, 0
Durham, Q
Martintown, 0
Texas, U. S
Glengarry, 0
Iroquois, 0
Laquene, Q
Montreal, Q
Dundee, Q

Renfrew, 0
Moulinette, 0
Cornwallis, N. S
Riceville, 0
Abercorn, 0
Montreal, Q
Montreal, Q
Montreal, Q
London, 0
Holbrook, 0

Munro, Alex., Murray, Chas. H., Nelle!, Jas. M., $\dagger$ Norton, Thomas, Park, George, A., $\dagger$ Patiee. Richard,
$\dagger$ Phelan. Jas. B., $\dagger$ Phelan. Jas. B., Powel, Kobt. N., $\dagger$ Prosser, Wm. 0., Quigley, Dan. J., Quincnes, E., Rattray, Jas. C., Recdick, Robt., Reddy, Herbert, L., Ritchie, Arthur, F., $\dagger$ Rithhie, John, L., Robe:tson, Stephen, J., $\dagger$ Rogers, Amos, Ross, Wm. D., Scott. Wm. F., Hull, Secoid, Levi, + Sinolair, Coll. St. Smiti, Allan, S., Smiti, Wm., Snider, Fred. S., $\dagger$ Spier, Andrew, M., Stevenson, Chas. N., Stevenson, Sabin, Storis, Arthur, Strotd, Chas. S., $\dagger$ Suiherland, Walter,

Montreal, Q
Montreal, Q
Brantford, 0
Montreal, Q
St. Martha, $Q$
Hawkesbury, 0
Stratford, 0
Montreal, Q
Ottawa, 0
Lunenburg, 0
Lochiel, 0
Porto Rico, W. I
Portage du Fort, Q
Prescott, 0
Montreal, Q
Montreal, Q
Halifax, N. S
Brantford, 0
Bradford, 0
Ottawa, 0
Brantford, ${ }_{0}^{\mathrm{Q}}$
Thomas, 0 Rawdon, 0 Lachute, Q Simcoe, 0
Richmond, Q Sarnia, 0 Cayuga, 0
Cornwallis, N. S Montreal, Q Helena, Q Tunstall, Simon, J., (B. A.) Montreal, Q $\dagger$ Wsles, Benjamin, N., St. Andrews, Q - Willace, Isaac, W., Milton, $Q$ Warl, Michael, 0., Montreal, Q W asiburn, Wm., Wigle, Hiram, Wools, John, J. E., Woolway, C. J., St. Yonker, James, R., Young, Philip, R.,

Hull, Q
Kingsville, 0
Aylmer, Q
Mary's 0
Thurlow, 0
Clarenceville, Q
$\dagger$ M. D., 1874.

## FACULTY OF ARTS.

## (1 Undergraduates.)

$\dagger$ Allan, John,
Anderson, James, A., Atwater, Albert, W., $\dagger$ Black, James, R., Burwash, Adam, E., Campbell, D.,
Chandler, George H.,
$\dagger$ Craig, James,
Cox, Jacob Whitman,
Crothers, Robert, A., Chubb, Sydney, C., $\dagger$ Dewey, Finlay, MoN.,
Duffy, Thomas,
$\dagger$ Dawson, William, B.,
Empson, Rev. John,

Leeds, Q Ottawa, 0
Montreal, Q Rochester, U. S Hawkesbury, 0 Bristol, Q Brome, Q
Arnprior, $Q$ Cornwallis, N. S Venice, Q
Brooklyn, U. S St. Remi, Q
Durham, Q
Montreal, Q
Montreal, Q

Gouid, Charles, H., Gralam, John, H., Gray, William, H., Gralam, John, $\dagger$ Greenshields, Samuel, $\dagger$ Hıll, John, S.,
$\dagger$ Hzrvey, Alfred $\dagger$ Harvey, J., Charles, St Howe, Henry S. A., Jaclson, Charles, A., Jenlins, Stewart R. W., Joseph, Henry, Laflıur, Eugene, Lyman, Henry Herbert,

Montreal, Q
Ormstown, Q
Fleurant, Q
Kemptrille, 0 Montreal, Q Lachine Q
St. John's N. F. t. Johns, N. F. Montreal, Q Waterloo, Q Montreal, Q Montreal, Q Montreal, Q
Montreal, Q

Maloolm, Finlay, $\dagger$ MoFee, Kutusoff, ${ }^{\prime \prime}$., Beauharnuis, $Q$ MeGibbon, Robert, D., Montreal, Q McFarlane, Alex. H., McLeod, John, R., McGregor, Arohibald, E., MeGoun, Archibald, MnKibbon, Wm. M., $\dagger$ McLennan, John S., MoOuai, John L., Malcolm, Finlay, Morton, Alfred Clarence, Matheson, John,
Pedley, Hugh, Phinney, Guy C., Ritchio, W. F.,

Knowlton, Q
Brome, Q Manilla, 0 Montreal, Q Montreal, Q Montreal, Q Lachute, Q Seotland, 0 King, 0 Skye, 0 Cold Spring, 0 Wilmot, N. S Montreal, Q

Russell, W. D., Robertson, Robert, $\dagger$ Stevenson, S. C., Stuart, Gustavus $G$., Scott, Matther, H., $\dagger$ Taylor, Archibald D., Taylor, Ernest M.,
$\dagger$ Thomas, Henry W., Ward, George B., Boundary Line, $Q$ Watson, Alindus J., Huntingdon, Q Wellwood, James, Wicksteed, Henry K.,
Warriner, William H., Walker, George F.,

Mon

Peterborongh, 0
Broughton, N. 8 Montreal, Q Quebec, Q Eramosa, 0 Montreal, Q Potton, $Q$ Gananoque, 0 Ottawa, 0 Montreal, Q Waddington, 0

## DEPARTMENT OF PRACTICAL AND APPLIED SCIENOE.

 †Ba. Ap. Sc., 1873.

Partial and Oecasional.

Amaron, Calixe, E.,
Bennet, J.,
Brouillette, C.,
Capsey, George,
Carmichael, Rev. J., M. A.
Cossar, Andrew,
Dey, W. J., B. A.
Dorion, Charles, H.,
Gibson, Rev. J. M., M. A.
Hamilton, R.,
Holiday, Charles,
Holiday, Thomas,
Knox, W.,
Knowles,
Laing, Rev. R., B. A.
Meagher, Hugh A.,
Millyard, R.,

McDonald, NeiI,
McDougall, J. M.,
McIntyre,
McLennan, Finlay,
McRae, Donald,
MeIntosh, W.,
McLeod, N.,
McPhee, Norman,
McQueen, John,
Papineau, B. J.,
Pelletier, E.,
Rutledge, W. S.,
Ritchie, A. F., B. A.
Schran, G. A.,
Silcox, J. B.,
Thornton, Rev. R., M. A.
Whiteside, A. W.,

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## MORRIN COLLEGE

Session 1874.

## FACUULTY OF ARTS.

(1) Undergraduates.

Donaldson, James B., Quebec Elliott, Adam J., Oliver, Stewart, Stirling" " Patterson, J. T,

Q MoDonald, Simon, Quebeo, McLimont, John C., " Sloane, William P., Toronto Wilkie, Arthur, Quebec,

Besides 160 Occasional Students, attending Classes in Chemistry, Modern Languages, \&c.

## SUMMARY.

Students in Law, MoGtill Collego, - . . - - . . . 42


> Undergraduates Occasional,4

* " Morrin College, $\{$ Undergraduates, ..... 8
Ocoasional, ..... 160

Deduct entered in two Faculties,5
Total number of Students, ..... 457
Teachers in Training in Normal School ..... 115
Pupils in Model Schools, ..... 354
Total.Students and Pupils, ..... 926

# क力ased the alnotroity ©xamimations. 

$$
\text { Session } 18734 .
$$

FACULTY OF LAW.
PASSED FOR THE degree of b. C. L.

David W. K. Hodge, B. A.,
Henri Archambault,
Francois Xavier Choquette, M. T. Adolphe Labadie, Edouard A., Panet, O'Hara Baynes,
John Bethune Abbott, George E., Jenkins,

William G., W alker, Miohael F., Hackett, Y. A. Odilon Labadie, Felix E., Poutre, Joseph Lariviere, Emile Robillard, John J. R., Spong.

> BACHELORS OF CIVIL LAW PROCEEDING TO THE DEGREE OF D. C. L.
> Desiré Girouard, B. C. L., | James Kirby, M. A., B. C. L.,
> FACULTY OF MEDICINE.

PASSED FOR THE DEGREE OF M. D., C. M. *
Cameron, James C., Cline, John D. B. A, Harvey, William A.,

Montreal, Q|Moore, Charles S., Cornwall, 0 Moore, Jehiel T., Nend Newbridge, O Norton, Thomas Hickey, Samuel A., B. A. Aelleville, O Pattee Richard P. Hockridge, Thos. G., Jones, Charles, R.,

Aultsville,
Bradford, 0
Prosser, William 0., Hastings, 0 Ratray Lunenburg, 0 Jones, George Nelson, St. Antra, Po du Fort, Q Jones, George Nelson, St. Andrews, Q Reddick, Robert MacDonald, Roderick A., Cornwall, 0 Ritchie, John L., McBain, John Williamstown, 0 Rogers, Amos McCormick, Andrew G., Durham, Q Sinclair, Coll McDonell, Alex. R., Loch Garry, 0 Speer, Andrew M., McMillan, Aneas J. Edwardsburgh, O Sutherland, W alter McQuillan, James Marquette, Mich. U.S Wales, Benjamin N., $\begin{array}{ll}\text { Mines, William W., } & \text { Montreal, Q Wallace, Isaac W., } \\ \text { Molson, William A., } & \text { Montreal, Q }\end{array}$ London, 0 Holbroke, 0 Montreal, Q Hawkesbury, 0 Stratford, 0 Lunenburg, 0
age du Fort, $Q$ Prescott, 0 Halifax, N. S
Bradford, 0 St. Thomas, 0 Richmond, Q

Helena, Q

PASSED THH PRTMARY EXAMINATION. *
Bain, Hugh U., B. A. Benson, Joseph B., Bomberry, Geo. Ed., Brossard, Jean-Bpte:,

Perth, O|Graham, Kenneth D.
Chatham, N. B Hanington, Erst. B. C., Brantford, 0 Hanover, William Burland, Wm. Henry Laprairie, Q Jamieson, Thos. A., Christie, John H., B. A. Montreal, Q Kearney, Wm. Jos., Clarke, Fincastle G. B., Collinowie, Q Langlois, Onesime X., Coyle, Henry W., Craig, Thornton Dickinson, Salter M., Dorland, James Dowling, John F., Duncan, George C., Falls, Samuel K., Farley, James T.,
Gilbert, Henry L.,
Goodhue, Perkins J., ollingwood, 0 MacDonald, Alex. R., Berthier, Q McArthur, John A.,
Glengarry, O McDermid, William
Cornwall, O Mattice, Ira Richard
Adolphustown, O Meek, James A., Appleton, O Nelles, James M.,
Port Dover, 0 šcott, William F.,

Carp, $0 |$| Cunstall, S. J., B. A., |
| :--- | :--- |

St. Thomas, 0 Ward, Michael O'B.,
Sherbrooke, Q Woods, Edmund J. J., Danville, G|

[^4]Ottawa, 0 Shediac, N. B Pakenham, 0 Lancaster, 0
Montreal, Q
Windsor, 0
Texas, U. S.
Lebo, 0
Martintown, 0
Moulinette, 0
Canning, N. S
Brantford, 0
Hull, Q
Montreal, Q
Montreal, Q
Aylmer, $Q$

## 89

## FACULTY OF ARTS.

PASSED FOR THE DEGREE OF B. A.

## In Honours.

(Alphabetically Arranged.)
John Allan.
William B. Dawson.
Finlay McN. Dewey.
Kutusoff N. McFee.
John S. MoLennan.
Arohibald D. Taylor.
Henry W. Thomas.
George B. Ward.
Ordinary.
Class I.-Charles J. Harvey.
Class II.-Alfred Harvey.
Samuel Greenshields.
Class III.-JoHn S. Hall.
James R. Black.
John Empson.
James Craig.
Samuel C. Stevengon.
PASSED IN THE INTERMEDIATE EXAMINATION.
Class I.-Hugh Pedley; Archibald McGoun and Henry H. Lyman, equal; Alindus J. Watson.
Class II.-Robert A. Crothers; Jacob W. Cox and Alfred C. Morton, equal.
Class III.-Thomas Duffy, John Graham, Guy C. Phinney, John L. McOuat, William H. Gray, John Matheson.
BACHELORS OF ARTS PROCEEDING TO THE DEGREE OF M. A.
James Cameron, B.A.
John D. Clowe, B.A.
William J. Dart, B.A.
Duncan McGregor, B. A.
Gustavus Munro, B. A.
Edward F. Torrance, B.A.
MASTER OF ARTS PROCEEDING TO THE DEGREE OF LL.D.
James Kirby, M.A.
PASSED FOR THE DEGREE OF BACHELOR OF APPLIED SCIENCE。
Course of Civil and Mechanical Engineering.
(In order of relative standing.)
Charles J. Harvey.
Alexander J. McLean.
St. George J. Boswell.
George S. Robertson..
Course of Mining and Assaying.
(In order of relative standing。)
Joseph William Spencer.
Henry K. Wicksteed.

## Grxaduates of the stuitersity.

## DOCTORS OF DIVINITY.

* Bethune, Rev. John. (ad eundem) 1843. * Falloon, Rev. Daniel, [Hon.]. 1844


## DOCTORS OF LAWS AND OF CIVIL LAW.

* Abbott, Christopher, B. C. L. [D. C. L., in course ]............
Abbott, Hon. J. J. C., B. C. L., [D. C. L. in course] .................. 1867
Adamson, Rev. Wm. A., [D. C. L. hon [
Badgley, Hon. Wm. A., [D. C. L. hon]
.. 1843
Bancroft, Rev. C., D.D [L.L.D. hon 1 .
.. 1870
Bond, Rev. Wm., M.A., [L.L.D.
hon] ........ ............................... 1870
Browne. Dunbar, M.A., B.C.L.
[D.C.L. in course]................... 1871
Chamberlin, B., M.A., B.C.L.
[D.C.L. in course] .................... 1867
Chauveau, Hon. Pierre J. O., [L.L.D. hon.]...
.. 1857
Cordner, Rev. John, [LL.D. hon] 1870
Cornish, Rev. George, M.A., [LL.D. in course]
Davies, Rev. Bedjamin. Ph. D.
[L.L.D. hon] .......................... 18.56
Dawson, John William, M.A.,
[LL.D. hon]. $\qquad$ . 1837
DeSola, Rev. A., [LL.D. hon]
Douglas, Rev. Geo., [LL.D. hon] ... 1870
Doutre, Gonsalve, B.C.L. [D.C.L.
in course]
1873
* Falloon, Rev. D., D.D., [LLL.D. hon] ...................................
Girouard, Desire, B.C.L., [D.C.L.
in course].
ght Hon. Sir Edmund
W. Baronet, M. A.: [LL.D. hon].. 1863

Hemming, Edward J., B.C.L.,
[D.C.L. in course]
1871

* Holmes, Andrew F., M.D., [LL.D.hon]


## DOCTORS OF

Adsetts, John
1866
Alexander; Robt. A...................... 1871
Alguire, Duncan 0.
Allen, Hamilton................................ 1872
Alloway, Thomas Johnsun ............ 1869
Alderson, Alexander..................... 1866
Anderson, John C.............................. 1865
Areher, Thomes................................. 18691869

Howe, Henry A., M.A., [LL.D.
hon] ....................................
Hunt, T., Sterry, M.A., [LL.D.
hon] ........................................ 1765
Kerr, William H., [D. C. L. in
course] ].................................. 1873
Kirby, James M.A., B. C. L.
[D.C.L. in course]
.1874
[LL. D. in course]......................... 1874
Laflamme, R. G., B.C.L. [D. C. L.
in course]
.. 1873
Lawson, G., Ph. D., [LL.D. hon].... 1862
Lafrenaye, P. R., B.C.L., [D. C. L.
in course] ............................... 18
Leach, Rev. Wm. T., M.A.,
[D. C. L. hon]........................ . 849
LL. D. hon 1 .................................. 1857
Logan, Sir William, E., Kt.,
[LL.D. hon] ............................. 1856

* Lundy, Rev. Francis, [D.C.L.
hon]
.1843
Lyall, Rev. W., [LL.D. hon]..........................
MacVicar, Rev. D. H., LL.D. hon]1870
Meredith, Edmund A., B. C. L.,
[LL.D. hon]
. 1857
Miles, Hy. H., M.A., [LL.D. hon].. 1866
Morris, Alexander, M.A, B.C.L.
[D.C.L. in course].
1862
Rollitt, Albert K., LL.D. London
Univ. [LL.D. ad eun]................ 1871
Smallwood, Charles, M.D., [LL.D. hon ] ...................................... 1856
* Smith, William, [LL.D. hon]..... 1858
* Valieres, de St. Real, Hon. J. R., [D. C. L. hon] $\qquad$
Wickes, Rev. W. D., [LL.D. hon]... 1868
Wilkes, Rev. Henry, D.D., M.A., [LL.D. hon].

1870

## MEDICINE.

Ardagh, Johnson... ...................... 1869
*Arnoldi Daniel Montreal. [Hon]. 1847
Atkinson, Robt........................... 1862
Ault, Alexander............................ 1860
Ault, Charles .................................... 1855
Ault, James F.................................... 1855
Ault, Edwin D................................... 1888
Austin, Fred. John............................. 1862
Aylen, John ..... 1857
Aylen, James ..... 1863
Backhouse, John B ..... 1870
Bain, D. S. E., Staff Surgeon Maj. ..... 1868
Baird, James. ..... 1870
Baker, Albert ..... 1848
Barclay, George ..... 1870

* Barnston, James...... [ad eun]... ..... 18.6
Battersby, Charles. ..... 1861
Baynes, George Aylmer ..... 1869
Beattie, David ..... 1862
Beaudet, Alfred ..... 1865
Beaudry, Lewis H ..... 1871
Bell, John, M.A ..... 1866
Bell, Robert $W$ ..... 1873
Bellew, Alfred. ..... 1852
Bergeron, Joseph ..... 1870
Bergin, Darby ..... 1847
Bessey, William E ..... 1863
Bender, Prosper. ..... 1865
Bibaud Jean, G. J. ..... 1843
Blackadder, Alex. D., B.A ..... 1871
Blacklock, John J ..... 1851
* Blanchet, J., B ..... 1863
Blair, Robt. C ..... 1885
Bligh, John W ..... 1865
Bogart, Irvine ..... 1859
Boulter, George Henry ..... 1852
* Boyer, Lewis ..... 1842
* Boylan, Andrew A ..... 1857
* Bowman, William Edward ..... 1860
Bower, Silas J ..... 1865
Bradley, William. ..... 1869
Brathwait, Francis H ..... 1863
Brandon, John ..... 1867
Breslin, William Irwin, Asst. Surg-
geon, 46 th Regiment of Line, 1847
Brigham, Josiah S. ..... 1848
Brissett, Henry R ..... 1847
Bristol, Ames S ..... 1850
Brodeur, Alphonse ..... 1863
Brooks, Samuel T ..... 1851
Brouse, William H ..... 1847
Brown, Peter E ..... 1863
Brown, Harry ..... 1873
Browne, Arthur A., B.A. ..... 1872
Browse, Jacob E ..... 1861
Bruneau, Adolphe
1853
1853
* Bruneau, Oliver T ..... [Hon] 1843
Bruneau, Onesime ..... 1851
Bryson, William G. ..... 1867
Bucke, Richard Maurice ..... 1862
Bucke, Edward H ..... 1852
Buckle, John M. C. ..... 1869
Buckley, William P ..... 1870
Bull, George Joseph ..... 1869
Bullen, Charles F ..... 1864
Burgess, John A ..... 1868
Bureh, Benjamin T ..... 1865
Burland, John H ..... 1863
Burland, Wm. B ..... 1872
Burrows, Philip. ..... 1866
Burnham, Robert Wilkins ..... 1860
Burns, Alfred .T ..... 1854
Burritt, Horatio C. ..... 1863
Butler, George C ..... 1865
* Buxton, John N ..... 1849
Cameron, James C. ..... 1874
Campkell, Donald Peter. ..... 1862
Campbell, Francis Wayland ..... 1860
Campbell, G. W., M.A., [ad eun].. ..... 1843 ..... 1866 Campbell, Samuel. Campbell, Samuel.
Campbell, John. ..... 1869
Carmichael, Duncan A ..... 1873
Carey, Augur D. L......[ad eun]... 1864
Cassidy, David M ..... 1867
Cassidy, John E. ..... 1865
Carroll, Rubert W. W ..... 1859
Carson, Augustus. ..... 1843
Carter, Samuel A ..... 1859
Casgrain, Charles ..... 1851
Cattanach, Andrew J ..... 1871
Chagnon, Vinceslaus G. B ..... 1861
* Challinor, Francis.. ..... 1849
Cherry, William ..... 1869
* Chesley, George Ashbold. ..... 1862
Chevalier, Gustavie ..... 1860
Chevalier, Napoleon E. ..... 1873
Chipman, Olarence J. H., B.A...... 1868
Christie George H ..... 1868 ..... 1868
Christie, John B. ..... 1864
Christie, Thomas ..... 1845
Church, Charles Howard. ..... 1862
Church, Clarence R ..... 1867
Church, Coller M. ..... 1855
Chureh, Levi $R$ ..... 857
Church, Mills Kemble. ..... 1864
Church, Peter H. ..... 1846
Clarke, Octavius H. E. ..... 1870
Clarke, Wallace, B.A. ..... 1871
Clark, Richard A ..... 1870
Clemesha, John Wordsworth ..... 1867
Clement, Victor A ..... 1869
$\dagger$ Cline, John D., B. A
1874
1874
Cluness, Daniel.
1870
1870
Codd, Alfred ..... 1865
Collins, Charles W ..... 1869
Comeau, John B ..... 1870
Cooke, Charles H ..... 1866
Cooke, Herman L. ..... 1867
Cooke, Sidney P ..... 1869
Copeland, W.m. L ..... 1872
Corbett, Augustus M. ..... 1854
Corbett, William H. ..... 1854
Corlis, Josiah ..... 1869
Carson, John ..... 1866
*Cowley, Thomas McJ ..... 1870
Cox, Frank. ..... 1869
Craik, Robert ..... 1854
Cram, Daniel C.... ..... 1872
*Crawford, James ..... [ad eun]. 1854
Crichton, Stuart ..... 865
*Culver, Joseph R ..... 1848
*Cunynghame, W. C. Thurlow ... 1858 ..... 88
Cutter, Frederick A.
Daly, Guy D. F. ..... 1868
Dansereau, Charles ..... 1842
Dansereau, Charles ..... 1869
Dansereau, Pierre ..... 1855
D'Avignon, Fred. F ..... 1871
*Dease, Peter Warren ..... 1847
DeBonald, W. S. ..... 1862
DeBoucherville, ..... 1843
DeGrosbois, T. B ..... 1868
Demorest, Durham G. G. ..... 1852
Desaulniers, Antoine A ..... 1863
DeCelles, Charles D ..... 1841
Dupuis, Joseph G. P ..... 1856
Dice, George ..... 1864
*Dick, James R ..... 1842
Dickinson, James J ..... 1846
*Dickinson, George ..... 1867
Dickson, William W ..... 1863
Digby, James Winnit. ..... 1866
Dodd, John ..... 1843
Donnelly, Charles H ..... 1866
*Dorion, Severe ..... 1843
*Dorland, Enoch P ..... 1850
Dougan, William ..... 1867
Douglass, James................ [Hon]....... 1847
Drake, Joseph M ..... 1861
Dubue, Charlemagne ..... 1864
*Duckett, Stephen ..... 1853
Duckett, William A ..... 1859
Dufort, Thadee A ..... 1865
Duhamel, Louis ..... 1860
Duncan, George ..... 1866
Duncan, Gideon M ..... 1871
Duncan, James S ..... 1858
*Duncan, John. ..... 1871
Dunn, William Oscar ..... 1843
Dunsmore, John M. ..... 1870
Easton, John ..... 1852
Edwards, Eliphalet G ..... 1855
Edwards, Olivier C. ..... 1873
Elkinton, Arthur G., Asst. Surgeon.
Scots Fusileer Guards ..... 1862
Ellison, Saram, R ..... 1873
Emery, Gordon J ..... 1857
Emery, Allard ..... 1866
English, T. F. ..... 1858
Erskine, John ..... 1860
Ethier, Calixte ..... 1867
Evans, Griffith ..... 1864
Ewing, William ..... 1874
Falkner, Alexander ..... 1866
Farewell, G. McGill ..... 1872
Farewell, W. G ..... 1868
Farley, John J ..... 1873
Faulkner, George W. ..... 1871
Fenwick, George Edgeworth. ..... 1847
Fergusson, Alexander A ..... 1864
Fergusson, Alex. A ..... 1866
Finlayson, John ..... 1834
Finnie, John T ..... 1869
*Fisher, John. ..... 1848
Fitzgerald, James ..... 1865
Fortin, Pierre ..... 1845
Fortune, Lewis M ..... 1873
*Foster, Stephen Sewell ..... 1846
Fraleigh, William S ..... 1869
Fraser, William ..... 1836
Fraser, William H ..... 1867
Fraser, Donald M ..... 1889
Fraser Donald ..... 1868
Freeman, Charles M. ..... 1871
Fuller, W ..... 1866
Fuller, Horace L ..... 1870
Fulton, James H ..... 1863 ..... 1852
Garvey, Joseph
Garvey, Joseph
Gardner, Matthew ..... 1871
Gardner, William ..... 1867
Gascoyne, George E., Staff Asst. Surgeon. ..... 1861
Gaviller, Edwin A ..... 1873
Gauvreau, Elzéard ..... 1855
Gauvreau, Lewis H. ..... 1836
Gendron, Thomas ..... 1866
Gernon, George W ..... 1872
Gibb, George D ..... 1846
Gibson, John B ..... 1855
*Gibson, Edward B ..... 1864
Gillies, John. ..... 1867
Gilmour, Angus ..... 1868
*Giroux, Philippe ..... 1859
Girdwood, Gilbert P ..... 1865
Glenn, C. W, E ..... 1858
Godfrey, Robert ..... 1845
Godfrey, Abraham C ..... 1865
Goforth, Franklin ..... 1863
Gordon, Robert. ..... 1868
Gordon, William Wallace. ..... 1863
Graham, Charles E ..... 1866
Graham, Henry ..... 1863
Grant, Donald J ..... 1863
Grant, James A. ..... 1854
Grant, William. ..... 1867
Grenier, L. P. A ..... 1863
Guest, Thomas A ..... 1873
Gunn, James ..... 1861
Gustin, William Claude ..... 1863
Hagarty, Dan. M, J ..... 1868
*Hall, Archibald...... (ad eun) ..... 1843
Hall, James B. ..... 1866
Hall, J. W ..... 1848
Halliday, James T ..... 1866
Hamilton, Andrew W ..... 1859
Hamilton, Charles S ..... 1868
Hamilton John R ..... 1871
Hamilton, Rufus Edward. ..... 1861
Hamel, Joseph Alexander. ..... 1856
Hammond, James H, ..... 1869
Harding, F. W ..... 1868
Harkin, Henry ..... 1867
Harkin, William ..... 1858
Harkness, John, ..... 1862
Harkness, Andrew ..... 1869
Harrison, David Howaxd. ..... 1864
Hart. Frederick W ..... 1835
Harvey, Wm. A ..... 1874
Hays, James ..... 1866
Hebert, P. Zotique. ..... 1872
$\dagger$ Henderson, Alexander A............ 1870
*Henderson, Peter ..... 1843
*Henry, W alter ..... (Hon).. 1853
Henry, Walter J ..... 1856
Hervey, Jones J. G ..... 1856
Hethrington, Harry ..... 1872
Hickey, Charles E ..... 1866
Hickey, Samuel A, B. A.. ..... 1874
Hils, Joseph ..... 1873
Hingston, W. H ..... 1851
Hockridge, Thos. G ..... 1874
Holden, Rufus ..... 1844
Hollwell, John. ..... 1868
*Holmes, Andrew F ..... 1843
Howard, James ..... 1867
Howard, Robert ..... 1872
Howard, R. Palmer ..... 1848
Howden, Robert ..... 1857
Howitt, William H ..... 1870
Howland, Francis D ..... 1867
Hulbert, Edward Augustus ..... 1860
Hulbert, George W ..... 1859
Hunt, J. H., L. R. C. S. I.............. ..... 1869
Hunt, Lewis G ..... 1871
$\dagger$ Hurd, Edward P. ..... 1865
Huclburt, Richard ..... 1873
Irvine, James C ..... 1866
Ives, Eli ..... 1863
*Jaukson, A. Thomas, Staff Surgeon in the Army. ..... 1846
Jackson, Wm. Fred ..... 1874
Johnston, J. C., Asst. Surg. R. A.. ..... 1867
Johinston, Thomas G ..... 1871
Jones, Charles R ..... 1874
Jones, George N ..... 1874
*Jones, Thomas Wm.... [ad oun]... 1854
*Jones, Jonathan C..................... ..... 1865
Jones, Wm. Justus. ..... 1856
Jones, H. J. Montgomery ..... 1873
Keefer, William N., B.A ..... 1869
*Keeler, Thoma ..... 1859
$\dagger$ Kelly, Olinton Wayne. ..... 1867
*Kelly, Wm. Surg'n Royl Art ..... 1846
$\dagger$ Kelly, Thornas ..... 1873
Kemp, William ..... 1864
Kennedy, Richard A ..... 1864
*Keer, James ..... 1858
Killery, St. John, Staff AssistantSurgeon1862
King, Wm. M. H...... ..... 1862
King, Reginald.A. D ..... 1868
King, Richard A ..... 1867
*Kirkpatrick, A ..... 1856
Kittson, John G ..... 1869
Kittson, Edmund G ..... 1873
Knowles, James A ..... 1866
Kollmyer, Alex. H ..... 1856
Laberge, Ed ..... 1856
*Lang, Thos. D ..... 1869
Langrell, Richard T ..... 1865
Larocque, A. B ..... 1847
Law, D. W. C. ..... 1868
Lawrence, Henry G.H., Asst. Surg.Grenadier Guards1862
Leavitt, Julius ..... 1866
Leelair, George ..... 1851
Leclair, Na polèon. ..... 1861
Lee, James C ..... 1856
*Lee, John Rolph ..... 1848
Legault, Daniel. ..... 1868
Lemoine, Charles ..... 1850
Lepailleur, Leonard ..... 1848
Leprohon, John L ..... 1843
Lindsay, Heriot. ..... 1861
Listsr, James. ..... 1862
Locke, C. T. A. ..... 1872
Logan, David D ..... 1842
Logie, William ..... 1833
*Long, Alexander ..... 1844
Longley, Edmund. ..... 1866
Longpre, Pierre F. ..... 1848
Loupret, Andre ..... 1850
Loux. William. ..... 1870
Loverin, Nelson ..... 1855
Lovett, William. ..... 1870
$\dagger$ Lucus, T. D'Arey. ..... 1869
Lundy, Edward Lewis, Staff Asst.,
Surgeon. ..... 1862
Lyon, Arthur ..... 1861
MacDonald, Angus ..... 1863
*MacDonald, Colin ..... 1853
MacDonald, Roderick ..... 1834
MacDonald, Roderick A ..... 1873
MacIntosh, Robert ..... 1863
Mack, Francis Lewis. ..... 1862
Mackie, John R ..... 1865
*Macklem, Samuel S. ..... 1859
*MaoNabb, Francis A. I ..... 1870
Madill, John ..... 1867
Major, George W., B. A ..... 1871
Malcolm, John Rolph ..... 1861
* Malhoit, Alfred ..... 1846
Malloch, Edward C ..... 1863
Malloch, William B ..... 1867
Mallory, Albert E ..... 1872
Marceau, Louis T ..... 1872
Markell, Richard ..... 1867
* Marr, Israel P. ..... 1849
Marr, Walker H. ..... 1859
Marston, Alonzo W ..... 1871
Marston, John J. ..... 1863
Mason, James Lindsey, M.A ..... 1863
$\dagger$ Mathieson, John H. ..... 1871
Mathieson, Niel ..... 1870
Mayrand, William ..... 1847
McArthur, Robert R ..... 1867
McBain, John ..... 1874
McCallum, Duncan C ..... 1850
McCarthy, William ..... 1867
McConkey, J. C. ..... 1872
McConnell, John B ..... 1873
* McCord John D.... ..... 1864
McCormick, Andrew G. ..... 1874
MeCrimmon, Donald A. ..... 1869
MoCurdy, John. ..... 1866* MaeDiarmid, John Duncan, StaffSurgeon in the Army ......... 1847
McDiarmid, Donald...................... 1867
MeDiarmid, James. ..... 1867
MoDonald, Jos. D.A..................... 1873
McDonell, Alex. R ..... 1874
McDonnell, Angus.. ...................... 1852
McDonnell, AEnoas......................... 1849
Mc Dougall, Peter A..................... 1847
McDougall, Peter A... ................. 1864
McEwen, Findlay
MacEarlane, Walliam. ..... 1870
.1869
Maciie, Jumes ..... 1869
McGarry, James ..... 1858
MoGeachy, William............... ..... 1867
McGill, William ..... 1848
MeGillivray, Donald..................... 1861
MeGowan, Henry .W......... ........... 1867
MeGrath, Thomas........................ 1849
MICGregor, Duncan ........... ......... 1861
Maguire, Bernard D..................... 1873 ..... 1873
Mcinnes, Walter. J
MeIntosh, James1859
Mointosh, Donald J ..... 1870
NicIntyre, Peter A ..... 1867
McKelcan, George Lloyd ..... 1860
micKay, John ..... 1869
MeKay, Walter ..... 1854
McLaren, Peter ..... 1861
Micharen, Peter ..... 1869
McLaren, Peter ..... 1872
MoLean. Alexander ..... 1860
noLean, Archibald ..... 1867
McLeod, James ..... 1873
McMicking, George ..... 1851
HeMillan, Aneas J ..... 1874
MeMillan, John ..... 1857
heMillan, Louis J. A ..... 1860
MoMurray, Samuel ..... 1841
* McNaughton, E. P ..... 1849
MoNeece, James. ..... 1866
MoQuillen, James... ..... 1874
McTaggert, Alexander ..... 1869
MoVean, John M ..... 1865
Meane, John M. R. C. S. L., Staff Surgeon Major ..... 1869
Meigs, Malcolm R ..... 1865
* Meredith, Thomas L. B ..... 1842
Mignault, Henri Adolphe ..... 1860
Miller Robert.
1870
1870
Mines William W ..... 1874
Mitehel Fred. ..... 1871
Moffatt, John Edward, Staff Surg... 1862
Moffatt, Walter ..... 1868
Molson, William A ..... 1874
Mondelet Wm. H ..... 1868
Mongenais, Napoleon ..... 1865
Mount, Joha W ..... 1855
Moore, Chas. S
1874
1874
Moore, Jehiel ..... 1874 ..... 1852
Moore, Joseph
Moore, Joseph
Moore, Richard. ..... 1853
Moore, Robert ..... 1889
* Morin, Josh ............ [Hon] ......... 1850
* Morrison, David R. ..... 1869
Morrison, John, M.A. ..... 1872
Munro, James T ..... 1872
* Nelson, Horace. ..... 1861
* Nelson, Wolfred...... [Hon) ..... 1848
Nelsen, Wolfred D. E ..... 1872
Nicol, William R ..... 1872
Nicoll, Charles Richard, Surgeon
Major, Grenadier Guards... ..... 882
Nesbitt, James A ..... 1868
Norton, Thomas. ..... 1874
O'Brien, Thomas B. P. ..... 1862
O'Brien, Robert 5 ..... 1873
0'Brien, David ..... 1873
Q'Callaghan, Cornelius H ..... 1854
* $0^{\prime}$ Carr, Peter ..... 1857
* O'Conner, Daniel A ..... 1861
O'Dea, James Joseph. ..... 1859
Odell, William, Surgeon 19th Re-1849
O'Leary, James ..... 1866
0 'Leary, Patrick ..... 1859
Oliver, James W ..... 1867
0'Reilly, Charles ..... 1867
Osler, Wm ..... 1872
Padfield, Charles Wm ..... 1868
Painchaud, Edward S. L ..... 1848
Palmer, Laurin I ..... 1867
Paquin, Jean M ..... 1843
Paradis, Henry. ..... 1848
Paradis, Pierre E. ..... 1867
Parker, Rufus S. ..... 1866
Parker. Charles S ..... 1866
* Paterson, James. ..... 1805
Paterson, James ..... 1864
* Pattee, George ..... 1858
Pattee, Richard P ..... 1874
Pallen, Montrose A ..... 1864
Patton, Edward K. ..... 1867
Pegg, Austin J ..... 1872
Pegg, Charles H. ..... 1867
Perrault, Victor ..... 1852
Perrier, John ..... 1868
Perrigo, James, M. A. ..... 1870
Perry, Hezekiah R ..... 1873
Phelan, Cornelius J. R ..... 1865
Phelan, James S ..... 1874
* Phelan, Joseph P ..... 1854
Philip, David ..... 1861
* Picault, A. C. E ..... 1857
Pickup, John Walworth ..... 1860
* Pinet, Alexis ..... 1847
Pinet, Alex. R. ..... 1864
Porssette, Arthur Courthope. ..... 1860
Poweil, Israel Wood ..... 1860
Powell, Newton W ..... 1853
Powers, George W ..... 1861
Powers, Lafontaine ..... 1864
Pringle, George ..... 1855
Prosser, Wm. 0 ..... 1874
Proudfoot, John S. ..... 186
Proudfoot, Alex ..... 1862
Proulx, Philias ..... 1844
Provost, E. Gilbert ..... 1859
Quarry, James J. ..... 1868
Quesnel, Jules $M$ ..... 1849
Rae. John Hamilton, ...... (Hon)... ..... 1853
Rainville, Pierre ..... 1863
Rambaut, John. Surgeon, Cana- dian Rifles ..... 1859
Rattray, Charles J.
Rattray, Charles J. ..... 1871 ..... 1871
Rattray, James C ..... 1874
Raymond, Oliver. ..... 1850
Read, Herbert H. ..... 1861
Rednor, Horace P ..... 1864
Reddick, Robert ..... 1874
Reddy, John . (ad eun) ..... 1856
Reed, Thomas D ..... 1871
Reid, Alex. Peter. ..... 1858
Roid, John A ..... 1871
Reid, Kenneth ..... 1864
Reynolds, Robert T ..... 1836
* Reynolds, Thomas ..... 1842
Richard, Marcel ..... 1864
Richmond, Peter E. ..... 1873
Ridley, Henry Thomas ..... 1852
* Riel, Etienne R. R ..... 1857
Rinfret, Ferdinand R ..... 1868
* Rintoul, David M ..... 1854
Richardson, John R. ..... 1865
Ritchie, John L ..... 1874
* Roberts, Edward T. ..... 1859
Roberts, John E., B. A ..... 1867
Robertson, James ..... 1865
Robertson, David ..... 1864
Robertson, David T ..... 1857
Robertson, Patrick ..... 1867
Robillard, Adolphe ..... 1860
Robinson, Wesley ..... 1872
Robitaille, Louis ..... 1860
Robitaille, L. T ..... 1858
Roddick, Thomas $G$ ..... 1868
Rodger, Thomas ..... 1869
Rogers, Amos ..... 1874
Rooney, Robert F ..... 1870
Ross, George, M A ..... 1866
Ress. Thomas ..... 1863
Ross, Henry ..... 1872
Ross, William G ..... 1871
Rugg, Henry C ..... 1865
Rumsey, William. ..... 1859
Ruttan, Allan ..... 1852
* Sabourin, Moise. ..... 1849
Sampson, Jas. (Hon) ..... 1847
Sanderson, George W ..... 1850
Savage, Thomas Y. ..... 1854
Savage, Alex. C ..... 1866
Sawyer, James E. ..... 1863
Schmidt, Samuel B ..... 1847
Schofield, David T. ..... 1869
Scott, Stephen A. ..... 1854
Scott, William E ..... 1844
* Scriven, George Augustus... ..... 1846
Seagar, Franeiz R ..... 1870
Soguin, Andre ..... 1848
Senkler, A. E. ..... 1863
* Sewell, Stephen C ..... 86
Sewell, Colin (ad eun)..... 1848
Sharpe, Wm. James ..... 87 ..... 872
Shaver, Peter Rolph.
Shaver R. N ..... 1857
Shepherd, Francis J ..... 1873
Shoebottom, Henry ..... 1857
* Simard, Amable ..... 1852
Simpson, Thomas ..... 1854
Sinclair, Coll ..... 1874
Smallwood, John R ..... 1868
Smith, Daniel D ..... 1868
* Smith, Edward W ..... 1859
Smith, Norman A ..... 1870
Smythe, T. W ..... 1848
Sparham, Eric B ..... 1852
Sparham, Terence ..... 1841
Speer, Andrew M ..... 1874
* Squire, William Wood, M.A. ..... 1864
Stanton, George ..... 1868
Stark, George A. ..... 1872
* Staunton, Andrew Aylmer, Sur- geon Royal Artillery. ..... 1845
tevens, Alex. D ..... 1857
Stevenson, James McGregor ..... 185B
Stevenson, John A ..... 1873
* Stevenson, John L ..... 1855
Stevenson, Robert A ..... 1871
Stewart, Alezander ..... 1872
Stewart, John Alexander ..... 1862
Stewart, James. ..... 1869
Stephenson, James ..... 1859
Stimpson, Alfred 0 ..... 1868
Shirk, George ..... 1865
St. John, Leonard ..... 1874
Stowbridge, James Gordon ..... 1862
Sutherland, Fred. Dunbar ..... 1861
Sutherland, Walter. ..... 1874
Sutherland, William ..... 1836
* Sutherland, William ..... 1870
Switzer, John E. K ..... 1865
Tabb, Silas E., M.A ..... 1869
Tait, Henry Thomas. ..... 1860
Taylor, William H ..... 1860
Taylor, Sullivan A. ..... 1870
Tew, Herbert S ..... 1864
Temple, James A ..... 1865
Thayer, Linus 0 ..... 1859
Theriault, F. D. ..... 1863
Therien, Honore ..... 1863
* Thomson, James ..... 1842
Thompson, Robert ..... 1852
Tracy, Andrew W ..... 1873
Trenholme, Edward Henry. ..... 1862
Trudel, Eugene ..... 1844
Turgeon, Louis G ..... 1880
Tuzo, Henry A ..... 1853
Ussher, Henry ..... 1861
Vancorman, Jonathan A ..... 1850
Vercoe, Henry ..... 1865
Vicat, John R ..... 1867

Wagner, A. Dizon ........................ 1872
Wagner, William H...................... 1844
Wakeham, Willlam..................... 1866
Wales, 3enjamin N......................... 1874
Walker, Robert........................... 1851
Wallace, Isaac N...................... 1874
Walsh, Edmond C........................ 1866
Walton! George 0........................ 1873
Wanless! John R.......................... 1867
Ward• William T..... ................... 1873
Warren, Frank ............................ 1872

* Warren Henry ................................ 1860

Waugh William S....................... 1872
Webb- James T. S ...................... 1871
Weilbrenner, Remi Claude............. 1851
Weir, Richard.............................. 1852
Wherry, John................................. 1862
Whitecomb, Josiah G................... 1848
Whiteford, James W..................... 1873
Whitford, R. ........ ...................... 1857
Whitwell, William P. 0............... 1860
Whyte, Joseph A.............................. 1870

## * Deceased.

* Widmer, Christopher,... (Hon)... 1847

Wilcox, Marshall B........................ 1888
Wilson, Benjamin S........................ 1856
Wilson, Robert M........................... 1850
Wilson, William.............................. 1857

* Wilscam, John Wilbrod ............. 1846

Wolverton, Algeron. B.A.............. 1867
Woods, David, Staff Surgeon........ 1860
Wood, George C.............................. 1848
Wood, George................................ 1863
Wood, Hannibal W....................... 1885
Woodful, Sam. Pratt. Asst-Surg-
con Royal Artillery.............. 1864
Workman Benjamin...................... 1853
Workman, Joseph......................... 1835
Worthington, Edward... [ad eun].. 1868
Wright, Henry P .......................... 1872
Wright, Stephen ..... . .................... 1858
W right, William............................. 1848
W ye, John A.................................... 1868
Young, Robert C............................. 1873
Youker, William......................... ... 1870

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## MASTERS OF ARTS.

Bancroft, Rev. Charles (ad eun)... 1855
Bancroft, Rev. C., B.A...Junior..... 1870
Baynes, Donald, B.A
.1867
Bethune, Meredith Blenkarne; B. A1869

* Bothwell, John A., B. A............ 1868

Bowman, Wm. M...... [Hon]......... 1859
Boyd, John B.A.............................. 1864
Browne, Dunbar, B.A., B. C. L..... 1861
Butler, Rev. John...... (Hon).......... 1852
Cameron, James, B.A................... 1874
Carmichael, Rev. J; B.A.............. 1871
Chamberlin, Browne, D.C.L. (ad eun)
......... 1857
Chapman, Rev. Charles, M.A.,
London Univ., (ad eun)...... 1872
Clarke, Wallace, B.A., M.D......... 1872
Clowe, James D., B. A ..................... 1874
Cornish, Rev. George B.A............... 1860
Cushing, Lemüel, B.A., B. C. L..... 1867
Dart, William J., B.A................... 1874
Davidson, Rev. James, B.A............. 1866
Davidson, Charles P., B.A., B.C.L. 1867
Davidson, Leonidas H., B.A......... 1867
DeWitt, Caleb S., B.A..................... 1864
Dougall, John R., B.A................... 1867
Duff, Arehibald, B.A...................... 1867
Gibb, George D., M:D... (Hon)...... 1856
Gibson, Thomas A........ (Hon) ...... 1856
Gilman, Francis E., B.A............... 1865
Gould, Edwin, B.A......................... 1860
Graham, John H.......................... 1859
Green, Joseph, B. A......................... 1864
Hall, Rev. Wm. B.A......................... 1867
Hart, Lewis A., B.A...................... 1869
Hicks, Francis W., B.A................ 1870
Hindley, John, B.A........................... 1873
Howe, Henry Aspinwall... (Hon)... 1855

Jones, Montgomery, B.A............. 1873 Kahler, Frederick A., B.A........... 1872 Kemp, Rev. Alexander F....(Hon).. 1863 Kennedy, George T., B.A.............. 1872 Kennedy, Rev. John, B.A............ 1860
Kirby, James, B.A., B. C. L......... 1862

* Leach, Robert A., B.A., B.C.L... 1860 McCord, David R., B.A., B. C. L... 1867 McGregor, Duncan, B.A................. 1874 McGregor, James B.A.................... 1868 McIntosh, John, B.A...................... 1873
McLaren, John R., B.A................. 1868
Markgraf, Charles F.A... (Hon) ..... 1865
Mason, James L., B. A ................... 1863
Mattice, Corydon J., B.A.............. 1862
Morris, Alex., B.A., B. C. L......... 1852 Morrison, Rev. James, D., B.A...... 1868 Morrison, John, B.A..................... 1870
Munro, Gustavus, B. A..................... 1874
Perkins, John A., B.A................... 1862
Perrigo, James, B.A....................... 1869
* Plimsoll, Reginald J., B.A......... 1862

Ramsay, Robt. A., B.A., B. C. L... 1867
Robins, Sampson Paul, B. A........... 1868
Rodger, David......... (Hon)............. 1857
Ross, George, B.A., M.D............... 1866 Stewart, Rev. Colin Compbell, B. A 1870 Tabb, Silas Everett, B.A............... 1869 Thorburn, John......... (Hon) ......... 1861 Trenholme, Norman W., B.A.,

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\text { B. C. L...................... } 1867
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1861 Wickste, Ward F., B.A............. 1874 W., B.A., B.C.L. 1866 Wilkie, Daniel............ (Hon) ...... 1866 Wilson, John, B.A......................... 1870 Wotherspoon, Ivan Tolkien, B.A... 1869

[^5]BACHELORS OF CIVIL LAW.

| * Abbott, Christopher C.............. 1850 | Doutre, Pierre........................... 1858 |
| :---: | :---: |
| Abbott, John J. C........................ 1854 | L outre, Gonzalve....................... 1861 |
| Abbott, John, B........................ 1874 | Driscoll, Netterville H................ 1861 |
| Adams, Abel............................ 1867 | Drummond, William D.............. 1867 |
| Allan, Irvine........................... 1862 | Dubuc, Joseph........................... 1869 |
| $\ddagger$ Archibald, John Sprott, B.A..... 1870 | Duchesnay, Henri J. T................ 1866 |
| Archambault, Henri................... 1874 | Dunlop, John............................ 1860 |
| Archambault, Joseph L. C........... 1871 | Duprat, Pierre N....................... 1866 |
| Armstrong, Louis...................... 1861 | Durand, Naphtalie.................... 1864 |
| Ascher, Isidore G...................... 1863 | Farmer, Wm. O....................... 1866 |
| Aylen, John, M.D..................... 1861 | Fisher, Roswell C....................... 1869 |
| Aylen, Peter, B.A...................... 1854 | Fisk, John J ............................. 1868 |
| * Badgley, Frank H.................. 1852 | Foran, Thos. P......................... 1870 |
| Bagg. Robert Stanley................. 1871 | Franks, Albert W....................... 1871 |
| Barnston, John G....................... 1856 | Gairdiner, William F................. 1856 |
| Barry, Denis.,........................... 1872 | Galarneau, Joseph Antoine........... 1864 |
| Baynes, Edward Alfred.............. 1867 | Gauthier, Zéphirin..................... 1859 |
| Baynes, O'Hara......................... 1874 | Geoffrion, Christopher A.............. 1866 |
| Benjamin Lewis N...................... 1865 | Gibb, James R.......................... 1868 |
| $\ddagger$ Bethune, Meredith, B., M. A..... 1869 | Gilman, Franois E., M. A............. 1865 |
| Blanchard, Athanase................. 1862 | Girourrd, Désiré........................ 1860 |
| * $\ddagger$ Bothwell, John A .................. 1866 | $\ddagger$ Gordon, Asa......................... 1867 |
| Bouthillier, Charles F.................. 1867 | Grenier, Amedé L. W.................. 1863 |
| Boyd, John, B.A....................... 1864 | Hackett, Michael, F.................. 1874 |
| Bowie, Duncan E...................... 1873 | Hall, William A........................ 1863 |
| Browne, Dunbar, M.A................. 1858 | Harnet, Wm. de Courcy............... 1870 |
| Bullock, Wm. E., B.A.. ............. 1863 | Hart, Lewis A., M. A ................... 1869 |
| Butler, Thomas L....................... 1865 | Hemming, Edward J................... 1855 |
| Calder, John............................... 1871 | $\ddagger$ Hodge, David W. R., B.A........ 1874 |
| Carden, Henry............................. 1860 | Holton, Edward......................... 1865 |
| Caron, Adolph P..................... 1865 | Houghton, John G. K................. 1863 |
| Carter, Christopher B................ 1866 | Howard, Rice M........................ 1869 |
| Carter, Edward......................... 1864 | Howliston, Alexander................... 1865 |
| Chamberlin, Brown.................... 1850 | $\ddagger$ Hutchinson, Matthew................ 1873 |
| Chamberlin, John, Junr.............. 1867 | Jenkins, George E........................ 1874 |
| Charland, Alfred...................... 1863 | Jodoin, Isaie............................ 1858 |
| Chaveau, Alexandre,................. 1867 | Johnston, Edwin R.................... 1866 |
| Chauret Amedee...................... 1873 | Jones, Richard A.A................... 1854 |
| Ohoquette, Francis X................. 1874 | Joseph, Joseph O........................ 1864 |
| Cocquet, Ambroise..................... 1865 | Keller, Francis J....................... 1869 |
| Coutlee, Lewis W. P.................. 1873 | Kelley, John P.........................1862 |
| Conroy, Robert Hughes............... 1869 | Kemp, Edson, B. A................... 1860 |
| Cowan, Robert C....................... 1862 | Kenny, William R...................... 1865 |
| Cruikshank, William................. 1872 | Kirby, James, M. A ................... 1862 |
| Curran, Joseph C...................... 1862 | Kitson, George, R. W .................. 1867 |
| Cushing, Charles....................... 1869 | Labadie, M. T. Adolphe.............. 1874 |
| Cushing, Lemuel, Junr, M. A......... 1865 | Labadie, Y. A. Odilon................. 1874 |
| Daty, J. G............................... 1858 | Lacoste, Arthur ........................ 1869 |
| Dansereau, Arthur.................... 1865 | Laflamme, R. G ........................ 1856 |
| Darby, Daniel.......................... 1870 | Laflamme, Leopold .................... 1869 |
| Darey, Pierre J., M.A................ 1868 | Lafrenaye, P. R.......................... 1856 |
| David, Alphonse....................... 1872 | Lambe, William B....................... 1850 |
| Davidson, Charles P., M.A.......... 1863 | Lanctot, Mederic ....................... 1860 |
| Davidson, Leonidas Heber, M.A.... 1863 | Lariviere, Joseph ....................... 1874 |
| Day, Edmund T....... ................. 1864 | Larose, Telesphore ..................... 1860 |
| Desaulniers, Henri Lesieur........... 1864 | Laurier, Wilfred........................ 1864 |
| Des Rosieres, Joseph................. 1873 | Lay, Warren Amos ......... .......... 1867 |
| Desrochers Jean L. B................. 1861 | Lawlor, Richard S ....e......... ..... 1865 |
| Doak, George O........................ 1863 | Leach, Dayid S....................... 1861 |
| Doherty, Thos. J...................... 1868 | * Leach Robert A., M. A.... ....... 1860 |
| Dorion, Adelard A.P.................. 1862 | Le Beanf, Louis C..................... 1873 |


*Deceased. $\quad \ddagger$ Elizabeth Torrance Medallist.
BACHELORS OF ARTS.

Allan, James G. [S e 1] .................. 1873
Allan, John [n I] .......................... 1874
Allworth, John.............................. 1872
Anderson, Jacob de Wit, [C e 1]... 1866
Archibald, John Sprott, [W pll... 1867
Aylen, Peter.............................. 1850
Bancroft, Rev. Chas., Junior......... 1866
Barnston, Alexander [C] .............. 1857
Baynes, Donald.............................. 1864
Beokett, William Henry................ 1866
Bethune, Meredith Blenkarne
[Ln I] $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 1866 ~$
Black, James R............................ 1874
Blackader, Alex. D., [n I]............. 1870
Bockus, Oharles E......................... 1852
*Bothwell, John A., (L n i) ........... 1864
Boyd, John, (n) ........................ 1861
Brewster, William, ( C e J)............ 1865

| Brooks, Charles H., (1.n 1)......... 1888 |  |
| :---: | :---: |
|  |  |
|  |  |
| Browne, Thomas |  |
| Bullock, William E. (C e I) |  |
| Uameron, James (M m I)............ 1871 |  |
| Carmichael, James...................... 1867 |  |
| Cassels, Hamilton, (Morrin).......... 1873 |  |
| Cassels, Robert, (Morrin) (p 1)..... 1866 |  |
| Chipman, Clarence..................... 1866 |  |
| Christie, John H........................... 1872 |  |
| Clarke, Wallace (S P 1) ............... 1869 |  |
| Cline, John D. (C c I)................. 1871 |  |
| Cook, Archibald H. (Morrin).......... 1869 Clowe, John D. |  |
|  |  |
| Cornish, Rev. Geo., B. A., London Univ. (ad eun.) $\qquad$ |  |
|  |  |

Crothers, W. J. (p) Coussirat, Rev. Adrian D. (ad eun)

1872 1871
Cushing, Lemuel, (e l)...................... 1863
Dart, William J............................... 1868
Davidson, Charles Peers.................. 1863
Davidson, Rev. Jas. (ad eun.)....... 1863
Davidson, Leonidas Heber............ 1863
Dawson, William B. (Ln i).......... 1874
Dewey, Finlay Mc N. (m) ............. 1874
Dey, William J. (L n I)............... 1871
DeWit, Caleb S............................... 1861
Dougall, Duncan........................... 1860
Dougall, John Redpath................. 1860
Drummond, Chas. G. B. (n I).......... 1862
Duff, Arohibald (M m 1) ............... 1864
Duncan, Alexander......................... 1867
Ells, Robert, (Lin I).......................... 1872
Empson, John.............................. 1874
Fairbairn, Thomas (p)..................... 1863
Ferguson, John S......................... 1861
*Ferrier, Robert W............................. 1857
Fessenden, Elisha Joseph............... 1863
Fleet, Charles J. (e I)................... 1873
Fortin, Rev. Octave (ad eun).......... 1867
Fowler, Willram ( $\mathbf{n}$ 1)................... 1865
Fowler, Elbert............................... 1868
Fraser, John (Morrin) ..................... 1869
Gibb, Charles.............................. 1865
Gilman, Francis Edward................... 1862
Gore, Frederick............................. 1861
Gould, Edwin. ................................... 1856
Grandy, John........................................ 1866
Greenshields, Edward (W p I) ..... 1869
Greenshields, Samuel.................... 1874
Green, Joseph (C c 1).................... 1861
Green, Lonsdale.............................. 1864
Hall, John S.......................................... 1874
Hall, William............................... 1861
Hart, Lewis A.................................... 1866
Harrington, Bernard J. [L n 1].... 1869
Harvey, Alfred................................ 1874
Harvey, Charles J.................................. 1874
Hicks, Francis W........................... 1864
Hindley, John. .... ....................... 1868
Hodge, D. W. K., [Se1]................ 1872
Holiday, Caleb S......................... 1870
Jones, Montgomery (c I).................. 1869
Johnston, James A. [W p 1] ......... 1870
Joseph, Montefiore [n 1]. ................ 1870
Kahler, Frederick A. [C c I] ............ 1869
Kelly, Frederiok W. [S e I]......... 1871
Kemp, Edson................................... 1859
Kennedy, George T. [n I] ................ 1868
*Kershaw, Philip G.............................. 1867
Kirby, James [C]................................ 1859
Krans, Edward H. [S e 1].............. 1865
Laing, Robert [W p I]........................ 1868
*Leach, Robert A..... .......................... 1857
Lewis, Albert R. [e 1]............... 1869
Lyman, Frederick Stiles................... 1863
Major, George W......................... 1870
Marler, Wm., De M. [M m I] ......... 1868

Mason, James L........................... 1859
Mattice, Corydon J......................... 1859
Maxwell, John, [ n I]....................... 1872
MeCord, David Ross........................ 863
MacDonald, Richard L. [Ce1]...... 1873
MacDuff, Alexander Ramsay........ 1866
McFee, Kutusoff N., [W p 1]....... 1874
MeGregor, James [e 1]................. 1864
MeGregor, Duncan.......................... 1871
McIntosh, John [s e 1].................. 1870
McKenzie, John [Morrin]............... 1867
McKenzie, Robt., [p 1]................ 1869
McLaren, John R............................. 1856
MoLaren, Harry, [c]....................... 1858
MoLean, Neil W., [Morrin] ......... 1866
McLennan, Dunean H.... .............. 1871
McLennan, John S., [m 1]........... 1874
McLeod, Duncan C, [M m 1]........ 1873
MoLeod, Hugh............................. 1866
McLood, Finlay C.......................... 1872
McOuat, Walter [ $\mathbf{n} 1$ ] $\ldots \ldots . . . . . . . . . . . . . . . . . . . ~ 1865 ~$
Merritt, David Prescott................... 1863
Moore, Francis X........................... 1868
Morris, William.................................. 1859
Morris, Alexander......................... 1849
Morrison, John.................................. 1846
Morrison, James D. [L n 1] ........... 1865
Morison, David E. [e 1] ................ 1870
Muir John N.................................... 1864

* Muir, Rev. E. P., (ad eun)....... 1865

Munro, Gustavus.......................... 1871
Munro, Murdoch........................... 1872
Murray, Charles H. [L n 1] .......... 1873
Naylor, W. H. [W p 1].... ............ 1872
Oliver, Theophilus H. (Morrin) [p] 1866
Pease, George H. [w e 1]............ 1864
Perrigo, James [n 1] .................... 1866
Perkins, John A........................... 1858
Petit, Rev. Charles B ....................... 1850
Phillips, Charles W...................... 1852

* Plimsoll, Reginald J...................... 1858

Ramsay, R. Anstruther [W n 1]... 1862
Redpath, Geo. D.......................... $185 \%$
Reddy, Herbert L. [e 1]................... 1873
Ritchie, Arthur F. [c 1] ................... 1873
Robertson, Alex. [L u 1].............. 1870
Robins, Sampson Paul [W mil]... 1863
Ross, George [C c 1]..................... 1862
Russell, Henry (Morrin).................... 1869
Soott, Henry C. (Morrin) [p 1]...... 1866
Sherrill, Alvan F. [C n i ] ............... 1864
Slack, George............................... 1868
Stethem, George T....................... 1852
Stevenson, Samuel C.................... 1874
Stewart, Colin Campbell [L n 1] ... 186 '
Tabb, Silas Everett [n 1]............ 1866
Taylor, Archibald D. [c 1]............. 1874
Thomas, Henry W. [s e 1]............ 1874
Thornton, Rev. R., M.A., (ad eun) 1871
Torrance, Edward F. [p]........... 1871
Torrance, John Fraser.................. 1872
Trenholme, Norman Wm. [C p 1]... 1863
Tunstall, Simon J. [e 1]............... 1873
Tupper, James S. [n 1]................ 1871
Walker, Thomas........................ 1860
Wallace, Robt. W., [p 1] .............. 1872
Ward, George B. [C c 1]............. 1874
Watts, Wm. Tohn [e 1]............... 1866
Whillans, Robert 1872
Wicksteed, Richard G. [c 1] ........... 1863

Wilson, John [e 1]...................... 1886
Wood, Franc ©.....
1869
Wood, Thomas F......................... 1869
Wotherspoon, Ivan T. (Morrin) [p 1].................................. 1866
Wright, William Mckay.............. 1861

# BACHELORS OF APPLAED SCIENCE. <br> In Civil and Mechanical Engineering. 

Boswell, St. George J.,................. 1874 McLean, Alexander J.................... 1874
Brodie, Robert J............................. 1873
Harvey, Charles J.......................... 1874
McLeod, Clement H
1873
Robertson, George S..................... 1874
Kennedy, Grorge T., M.A ............ 1873 Stewart, Donald A........................ 1873
Wicksteed, Henry K..................... 1873
In Mining and Assaying.
Spencer, Joseph Wm. [n \]........... 1874 | Wicksteed, Heary K...................... 1874

Torrance, John Fraser [n i). 1873

## GRADUATES IN CIVIL ENGINEERING.

| Barnston, Alexander, B.A........... 1859 | Gould, James H......................... 1862 |
| :---: | :---: |
| Bell, Robert, [n 1]...................... 1861 | Kirby, Charles H....................... 1880 |
| Crawford, Robert........................ 1859 | McLennan, Christopher............. 1859 |
| Doupe, Joseph.......................... 1861 | Reid, John Lestock ..................... 1863 |
| Edwards, George....................... 1863 | Rixford, Gulian Pickering........... 1864 |
| Frost, George H......................... 1860 | Ross, Arthur.............................. 1860 |
| Gaviller, Maurice........................ 1863 | Savage Joseph.......................... 1860 |
| Gooding, Oliver......................... 1858 | W alker, Thomas, B.A................ 1800 |
| [C] Chapman Medallist. |  |
| [*] Prince of Wales Medallist. |  |
| [M] Ann Molson Medallist. |  |
| [ $\mathbf{S}$ ] Shakespeare Medallist. |  |
| L] Logan Medallist. |  |
| [pl] First Rank Honours in Mental | d Moral Philosophy [p] Second Rank. |
|  | tics ; [ n ] Second Rank. |
| [cl] " $\%$ " $\%$ in Olassic | (c) Second Rank. |
| (nl) $\quad$ \% 6 \% in Natur | Science; (n) Second Rank. |
| (1) $\quad$ (1) $\quad$ \% $\quad$ in Eaglish | Literature; (e) Secend Rank. |
| * Deceased. |  |



## LIST OF THE PRINCIPAL DONATIONS

## LIBRARY AND COLLEOTIONS OF THE FACULTY OF

- ARTS,
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G. C. Broadread, Esq $\qquad$ Reports of the Geological Survey of the State of Missouri, 1851, 1871, roy. 8ro.
$\qquad$
do
$\qquad$
$\qquad$ ... Preliminary Report on the Iron Ores and Coal-Fields from the Fieid work of 1872. 1 vol. roy. 8 vo.
do
do $\qquad$ . Atlas accompanying Report on Iron Ores and Coal-Fields. Large fol.

Dr, P. P. Carpenter, $\qquad$ Cottle on the Oreston Cares, near Plymouth. pam. sm. fol.
Dr. F. V. Hayden, $\qquad$ Contributions to the Extinct Vertebrate Fauna of the Western Territories of the U. S. 1 vol. 4to. pap.
R. G. Wicksteed, B.C.L......................... Table of the Statutes of the Domidion of Canada. I rol. 8ro.

TO THE MUSHUUM.
From Major Grant, Hamilton, Ont.,.....Specimens of Fossils from the Niagara and Clinton formations,
From H. E. Gov. Rawson, Barbadoes,...Specimen of Pentacrinus Mulleri.
From G. Lestock Reid, Esq., C. E.. $\qquad$ .Antlers and Head of Wapiti.
From T. Bland, Esq., New York, $\qquad$ Specimens of Land Shells, West Indies.
From G. Barnston, Esq- $\qquad$ Specimens of Fossils from Hudson's Bay and Texas.
From Mr. Allis, Springfield, Mass, $\qquad$ Cast of Footprint of Brontozöon.
From Mr. G. T. Kennedy, B.A., $\qquad$ Specimens of Post-pliocene Shells, \&ce..
$\qquad$ Specimens of Upper Silurian Fossils, Ontario,
From Mr. W. B. Dawson, $\qquad$ Specimens of Upper Silurian Fossils, New Brunswick.
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## Gitcoill glomal Sthool.

## 1874-75.

## Government of the School.

Under the Regulations for the establishment of Nurmal Schools in the Province of Quebec, the Minister of Public Instruction is empowered to associate with himself for the direction of one of these Schools the Corporation of McGill University, Montreal. In accordance with this arrangement the Provincial Protestant Normal School is affliated with the McGill University, and the following members of the Corporation of the University constitute the Committee of the Normal School for the session of 1874-75.

## NORMAL SCHOOL COMMITTEE.

J. W. Dawson, LL.D., F. R. S., Vice Chancellor of the University. Chairman.
David Torrance, Esq.
George Moffat, M. A. $\quad\{\quad$ Governors of MeGill College.
Rev. George Cornish, LL.D. \{ Fellows of MeGill Robert A. Ramsay, M.A., B. C. L. \{ University. William Craig Baynes, B. A., Secretary.

## OFFICERS OF INSTRUCTION.

William Henry Hicks, Esq.-Principal, and Ordinary Profes. sor of English Language and Literature.
James McGregor, M, A.-Ordinary Professor of Mathematics, and Instructor in Classics.
Sampson Paul Robins, M.A.-Associate Professor of Natural History and Agriculture.
Pierre J. Darey M.A., B. C. L.-Associate Professor of French.
Mr. James Duncan.-Instructor in Drawing.
Mr. R. J. Fowler.- " in Music.
Mr. John Andrew.- " in Elocution.
J. Baker Edwards, Ph D.-Lecturer on Chemistry and Natural Philosophy.

This institution is intended to give a thorough training to teachers especially for the Protestant population of Lower Canada. This enc is attained by instruction and training in the Normal Schoo itself, anc by practice in the Model Schools; and the arrungements are of such character as to afford the greatest possible facilities to Students from all parts of the Province.

The Seventeenth Session of the School will commence on the first o September, 1874, and will terminate on the first of July, 1875.

The complete course of Study extends over three years, and the Students are graded as follows : -

1. Elementary School Class.-Studying for the Elementary Schoo Diploma.
2. Model School Class.-Studying for the Model School Diploma
3. Academy Class.-Studying for the Academy Diploma.
4. Conditions of Admission and obtaining Diplomas.

Candidates for admission into the Elementary School Class, will b required to pass an examination in Reading, Writing, the Elements Grammar, Arithmetic and Geography; and to produce the certificat and sign the application referred to in Articles 1 and 2 of the Regula tions. Admission into each of the higher classes requires a knowledg of the subjects of the previous one.

Each Student must produce a certificate of good moral characte from the clergyman or minister of religion under whose charge he he last been, and also testimony that he has attained the age of sixtee years. He will also be required to sign a pledge that he purposes teach for three years in some public school in Lower Canada.

There will be a Semi-sessional Examination at Christmas, which a Students are required to pass, in order to continue in the classes.

At the close of the first year of Study, students may apply for e amination for diplomas giving the right to teach in Elementary Schools and after two years' study or if found qualified at the close of the fir year, they will, on examination, be entitled to diplomas as teachers Model Schools.

Students having passed the examination in the Model School Clas or having advanced to the requisite knowledge, may go on to th Academy Class, and, on examination, may obtain the Academy Diplom:

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## 2. Privileges of Students.

On complying with the above conditious, all students will be recognized as Teachers in Training; and as such will be entitled to free tuition with the use of test books, and to bursaries in aid of their board, not exceeding $\$ 36.00$ per annum in the case of those in the two first Classes, or $\$ 80.00$ in the case of those in the Academy Class, should they be successful in obtaining the diploma at the final examination. A portion of this allowance will be advanced to such students as are not resident in Montreal, on their passing the semi-sessional examination at Christmas.

Under the regulations subjoined, and with the view of extending the benefits of the school to all parts of the country, those who reside at a distance of more than ninety miles from the city of Montreal, will also be entitled to a small allowance for travelling expenses proporionate to the distance.

Students resident in Montreal may share in the bursary fund, on producing certificates from their ministers or clergymen that such aid is absolutely necessary to their continuing in attendance at the school.

In addition to religious instruction of a general Protestant character by the Professors, arrangements will be made for special religious instruction by ministers representing the several denominations with which the students may be connected.

No boarding-house is attached to the institution, but every cale will be taken to insure the comfort and good conduct of the students, in private boarding-houses approved by the Principal. Board can be obtained at from $\$ 10$ to $\$ 14$ per month.

The Prince of Wales Medal and Prize will be given to the Student taking the highest place in the Model School Class, provided that such Student shall attain to the standard fixed by the Regulations of the Council of Public Instruction for this Medal.

The Earl of Dufferin Medal will be given to the student taking the highest place in the Classical and Mathematical subjects of the Academy class, and passing creditably in the other subjects.

The J. C. Wilson Prize of $\$ 40$ and a Book, contributed by him as a former Student of the School, will be effered for competition to the candidates for the Elementary Diploma, and will be given for the highest aggregate number of marks.

[^6]Persons holding the degree of B. A. or M. A. of any University in the Province of Quebec, may receive the Academy Diploma, on passing an examination in the art of teaching, and in such other subjects necessary to the Academy Dip'oma, as may not have been included in their University examination.

## 3. Course of Study.

## 1. ELEMENTARY SCHOOL CLASS, STUDYING FOR THE ELEMENTARY SCHOOL DIPLOMA.

With the view of accommodating those who may be unable to enter at the commencement of the Session, or whose previous education may enable them to enter at a more adranced period, the course of study in this class is divided into terms, as follows.

First Term, from September 1st to December 26.
(Entrance examination as stated above).
English.-Grammar and Composition; so far as to parse syntactically and write correctly a few short descriptive sentences. Text-Books, Bullion's Grammar and Parker's Progressive Lessons; Reading and Spelling, Etymology, Penmanship, Elocution.

Geography.-So far as to have a good acquaintance with the Map of the world.

History.-Outline of Sacred and Ancient History.-History of Canada, TextBooks, White and Hodgins.

Art of Teaching.-School Organization, Classification, Registration, Method, \&e.

Arithmetic.-Simple and Compound rules, Vulgar and Decimal Fractions, and Practice, with explanation and demonstration of rules: Text-Book, Sangster's Arithmetic.

Algebra.-The Elementary rules, as in Todhunter's Algebia.
Geometry. First Book of Euclid.
Physics. The Chief Forces of Nature, Properties and states of Bodies, Solids, Liquids and Gases.

French. Elements of Grammar, easy reading and translation. Text-Books, Student's Companion to the study of French. Darey, Lectures frangaises.

Natural History. Botany as in Gray's Text-Book.
Drawing. Elements and simple outlines.
Music. Elements of Vocal Music.
Second Term. January 1st to April 1st.
(Pupils entering at the commeneement of this term, will be expected to pass a satisfactory examination in the subjects of the previous term).
English. Grammar and Composition, as far as to be able to analyse simple and complex sentences, and to write correctly a short essay on a familiar subject.Elocution continued.

Geogrophy.-So far as a good acquaintance with the physioal features and politioal divisions of the great continents.

History. England and France. Ancient History.
Arithmetic. Proportion, Per-centage, Exchange.
Algebra. Simple Equations of one, two and three unknown quantities.
Geometry. Second and third books of Euclid.
Physics. Motion. Vibration, Heat and Light.
French. Grammar continued; including reading, Translation, Oral and Written Exercises.

Natural History. Continued.
Drawing. Landscape, eto., in pencil.
Music. Elements of Vocal Music, and Part Songs.
Third Term. April 1st to July 1st.
(Pupils entering at the commencoment of this term, will be expected to pass a satisfactory examination in the subjects of the two previous terms.)
English.--Advanced Lessons, Grammar and Composition.-Elocution continued. . Geography and History.-Advanced Lessons with use of Globes and recapitu. lation of previous parts of the course.

Art of Teaching. Continued.
Arithmetic. Conclusion of Commercial Arithmetic and general Recapitulation. Book-keeping. By Single Entry.
Algebra. Quadratic Equations and Recapitulation.
Geometry. Recapitulation and Deductions.
Elementary Chemistry. Elements and Constituents of Soils.
French, Natural History, Drawing, and Music. Continued as in the previous term.

Religious Instruction will be given throughout the Session.

## 2. MODEL SCHOOL CLASS, STUDYING FOR THE MODEL SCHOOL DIPLOMA.

Students entering this Class, must have passed a satisfactory eicamination in the subjects of the Elementary School Class. The Class will pursue its studies throughout the Session, without any definite division into terms:
English.-Principles of Grammar and Composition, Style. History of the English Language. Lectures on English Literature. Elocution.

Geography.-Mathematical, with Nautical Problems, Detailed course of Political and Physical Geography.

History.-Mediæval and Modern, with especial reference to the History of Literature, Science and Art, and Colonization and Commerce.

Education:-Advanced course of Lectures on Educational Subjects.
Mathematics.-Logarithmic, Algebraic, and Geometric Arithmetic, Recapitulation of Commercial Arithmetic. Quadratic Equations continued. Ratios and Progression.

Theorem of Undetermined Co-efficients, Binominal and Exponential Theorems 5 th and 6th books of Euclid.

Chemistry and Natural Philosophy.-Aflnity, Laws of Combination, Principal groups of Salts. Electricity and Electrolysis, Mechanical Physics.

Olaseics. Eloments of the Latin Language, as in Bryoe's Ist Latin Readero

French.-Student's Companion. Translation from French into English, and from English into French. Darey, Lectures françaises.

Natural History.-Zoology as in Dawson's Hand Book.
Agrieultural Chemistry.-Principles, and application to Canadian Agrioulture.

Draving.-Figures from the Flat and from Models. Elements of Perspective. Music.-Instrumental Music, and Part Songs, in Vocal Music.
Religious Instruction throughout the Session.

## 3. ACADEMY CLASS, STUDYING FOR THE ACADEMY DIPLOMA.

(Stu Tents entering this Class must have passed a satigfactory examination in the subjects of the Model School Class).
English Literature.-An advanced course.
History and Geography.
Logic and Ethics.-As in Abercrombie's Intellectual and Moral Philosophy.
Mathematics.-Trigonometry, Solid Geometry, Theory of Equations, Mechanics and Astronomy. Galbraith and Haughton.

Latin,-Sallust, Catiline ; Virgil Eneid, Book IV ; Latin Prose Composition, Roman History.

Greek.-New Testament, John's Gospel ; Xenophon, Anabasis B I; Grammar and History.

Botany.-As in Gray's Text-book.
French.-Conversation in French. French Literature, Poitevin's French Grammar, Racine and Molière.

Elocution.
Drawing.

## EXTRACTS FROM THE REGULATIONS.

## Special Regulations for admission of teachers in training.

Article First.-Any person desirous of being admitted as a teacher in training must apply to the Principal of the Normal School, who, on his producing an extract from the Register of Baptisms, or other evidence, showing that he is full sixteen years of age, with the certificate of character and conduct required by the 16th article of the General Rules and Regulations, approved by His Excellency the Governor General in Council, on the 22nd December, 1856, shall examine the candidate.

If upon his examination it is found that the candidate can read and write sufficiently well, knows the rudiments of Grammar in his mother tongue, Arithmetic as far as the rule of three inclusively, and has some knowledge of Geography, the Principal shall grant him a certificate.

Article Second. -The candidate having thus obtained the certificate of the Principal, shall then, (in the presence of two witnesses, who, with the Principal, shall countersign the same,) sign an application in writing for admission, containing the declaration required by the 23 rd general regulation. This shall be forwarded to the Superintendent of Education, together with all the certificates and other documents required, and if the whole be found correct, the Superintendent shall cause the name of the candidate to be inscribed in the Register, and notice thereof shall be given to the Principal.

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Article Third.-The teachers in training shall state the place of their residence ; and those who cannot reside with their parents, will be permitted to live in boarding-houses, but in such only as shall be specially approved of. No boarding-houses having permission to board male teachers in training will be permitted to receive female teachers in training as boarders, and vice versa.

Article Fourth.-Every teacher in training on passing the examinations, will be allowed a sum not exceeding $£ 9$ to assist in paying his board.*

Article Fifth.-Every teacher in training residing at a distance of more than ninety miles from the City of Montreal, shall be entitled to receive an allowance for travelling expenses proportionate to the distance, but not to exceed two pounds ten shillings per annum.

Article Sixth. -The total amount of allowances paid to teachers in training under the foregoing articles shall not exceed $£ 333.6 \mathrm{~s}$. 8d. currency, yearlythat being the sum granted for that subject; and when the whole of this amount is appropriated, such teachers in training as may apply for admission shall not be entitled to any portion thereof until vacancios shall oceur.

## Special Regulations for Government and Discipline.

Article First.-Teachers in training guilty of drunkenness, of frequenting taverns, of entering disorderly houses or gambling houses, or keeping company with disorderly persons, or committing any act of immorality or insubordination, shall be expelled.

Article Second.-There shall be no intercourse between the male and female teachers in training while in the School, or when going to, or returning from it. Teachers of one sex are strictly prohibited from visiting those of the other.

Article Third.-They are on no account to be absent from their lodgings after half-past nine o'clock in the evening.

Article Fourth. - They will be allowed to attend such lectures and publio meetings only as may be considered by the Principal conducive to their moral and mental improvement.

Article Fifth.-Proprietors of boarding-houses authorized by the Principal shall report to him any infraction of the rules with which they have become a.cquainted.

Article Sixth. -The Professors shall have the power of excluding from the lectures for a time, any student who may be inattentive to his studies, or guilty of any minor infractions of the regulations.

Article Seventh.-Teachers in training will be required to state with what religious denomination they are connected; and a list of the Students connected with each denomination shall be furnished to one of the Ministers of such denomination resident in Montreal with a request that he will meet weekly with that portion of the teachers in training, or otherwise provide for their religious instruction. Every Thursday after four o'clock will be assigned for this purpose.

[^7]
## 112

Artiole Eight. - In addition to punctual attendance at the weekly religious instruction, each student will be required to attend public worship at his own church, at least every Sunday.

Intending students may obtain all necessary information on application to the Principal or either of the Professors.

## MODEL SCHOOL OF McGILL NORMAL SCHOOL.

Head Teacher of Boy's Sohool-Francis W. Hicks, M. A.
" " Girls' School-Amy F. Murray.
" " Primary School-Lucy H. Derick.
These Schools can accommodate about 300 pupils, are supplied with the best furniture and apparatus, and conducted on the most modern methods of teaching. They receive pupils from the age of six and upwards, anå give a thorough English Education. Fee ; Boys' and Girls' Model Schools, 1s. 3d. to 2s. per week ; Primary School, 9 d. ; payable weekly.

## Examination dapers

OF THE

McGILL UNIVERSITY,

MONTREAL.


Montreal :
PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.
1874.

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## EXHIBI'TIONS AND SCHOLARSHIPS, 1873.

## FIRST YEAR EXHIBITIONS.

## GREEK.

Mondìy, September 15th:-Morning, 9 to 12.

## Examiner, <br> $\qquad$ Rev. George Cornish, LL.D.

1 Translate:-Homer, Iliad, Book I., vss. 188-201., and vss. 531-539,
2. (a) State what you know about the date and birthplace of Homer. Name the seven cities that claimed him as their countryman, and state of which two, and on what grounds, the claims are the most plausible. (b) Give a general account of the preservation and transmission of the Homeric poems, and also of the controversy in modern times as to their genuineness.
 $\kappa \dot{\mu} \eta \eta \varsigma$, -why the genitive? (b) In ovjpavóv vss. 532 what is the force of the suffix?
$\dot{a} \pi$ ' no accent? vss. 531-532
(c) Scan
4. Translate:-Xenophon, Anabasis, Bk. I., chap. iii., §§ 13 and 14, and chap. x., $\S \S 6$ and 7 .


 of the particle $\dot{\text { es }}$ as here used.
6. Give the date of the expedition of the Ten Thousand, Name the geographical position of Cunaxa, Pylæ, Thapsacus, Tralles, Issus.
7. Translate:-Lucian, Charon, chap. xvii., down to á asơ 1avóvtes.
8. When and where was Lucian born? Write an outline of the dialogue Charon and state its object.


 10. Translate into Greek:-1.
2. Virtue is a praiseworthy thing Both the woman and the man are good. into the enemy's eamp. 4. These thine king and those with him broke marched with the king. 6. The good man are terrible. 5. Many nations arched with the king. 6. The good man ; the boy is good.

> Latin.
> Monday, September 15 th :-Afternoon, 2 to 5.
> Examiner,......................................Rev. George Cornish, LL.D.

1. Translate :-Livy, Bk. V., chap. xiv.
2. Explain carefully the cases of the followng words, and why they aro
used :-(a) Eo anno; (b) clarissimis viris præparatis ; (c) pestilentiam illatam; (d) pestis arcendæ; (e) his tribunis.
3. (a) Write down the full forms for the following abbreviations:-A. App., D., Gn., M., M.', Ser., Sp., Ti., Coss., Aed., P. C., Quir. (b) Name the geographical situation of:-V eii, Falisci, Senones Galli, Clusium, Lacus Albanus, Uapena, Capua, Hernici. (c) Idibus Decembribus; Calendis Octobribus; Nonis Martiis ; a. d. xvi. Kal. Jan.-Express and explain in modern dates.
4. Translate :-Horace, Odes Bk. I., (a) xxi., and (b) xxxii.
5. Give the name of the metre of ext. (b) and scan the first stanza.
6. (a) Explain:-Intonsum; Natalem Delon; Fraterna lyra; Principe Cæsare ; Lesbio civi. (b) Give an account of the life and writings of Horace.
7. Translate:-Cicero, Pro Leg. Manil., § 62
8. (a) Parse the following words:-Intactæ, percussit, $\grave{\text { Lesit, sěvē }}$ sēverris, desisse, amiserint, assuestis, deserturcs, veniere. (b) Derive the following:-Exilis, semestri, lenimen, æquora, molli, simplex, nobilis, stipendium. (c) Decline :- Ara, republica, aurium, edite, tertes, grandinis. 9. (a) Olassify verbs according to their stem-terminaticns, and write down the personal-terminations of the active voice. What were these originally? (b) Conjugate the Fut. Ind. of posse; the Imp. Suij. of velle; the Pluperf. Ind. of ferre; the Participles of ire; and the Perf. Ind. of fari. (c) Distinguish between transitive, intransitive, and deponent verbs.
9. By what cases are the following words severally followd ?-Apud, in, coram, tenus, clam, trans, satis, prudens, carus, fretus.
10. Translate into Latin:-1. He gave the soldiers a hurdred sesterces a-piece. 2. Socrates, the wisest of the Greeks, was put to death by poisoning. 3. Miltiades, the general of the Athenians, led his forces from Marathon to Athets after the battle. 4. After the death of Socrstes the Athenian people repented of their judgment. 5. Masinissa, King of the Numidians, died at the age of ninety. 6. Cicero married Terentia, and his daughter Tullia married C. Calpurnius Piso Frugi.

## MATHEMATICS.

## Tuesday, September 16th:-Morning, 9 to 12. Vile p. 1.

## Examiner, <br> Alexandar Johnon, LL.D.

1. On a given right line construct a parallelogram equal to a given triangle, and having an angle equal to a given one.
2. If a right line be bisected and also cut unequally, the rectangle under the unequal parts together with the square of the intermediate part is equal to the square of half the line.
a. The rectangle under the sum and difference of two lines is equal to the difference of their squares.
3. Construct a square equal to a given rectilineal figure.
4. In equal circles the arcs which subtend equal angles are equal, whether the angles be at the centres or circumferences.
a. Two parallel chords in a circle intercept equal arcs.
5. Construct an isosceles triangle which shall have each of its base angles double the vertical angle.
6. The bisector of the vertical angle of a triangle divides the base into segments which are proportional to the conterminous sides.
a. This is true also of the bisector of the external vertical angle.
7. From a given line cut off one-sixth part.
8. Construct a rectilineal figure similar to a given ore and equal to another.
9. In any triangle the rectangle under the two sides is equal to the rectangle under the perpendicular on the base and the diameter of the circumscribed circle.

## MATHEMATICS.

Tunsday, September 16th:-Afternoon, 2 to 5.

## Examiner

Alexander Johnson, LL.D.

1. The difference between the first and second of four numbers in geometrical progression is 12 , and the difference between the 3rd and 4 th is 300 ; find them.
2. Find two numbers whose difference is 8 , and the harmonical mean between them $1 \frac{4}{5}$.
3. Prove ihe general formula for finding the sum of an arithmetical series.
4. The differences between the hypotenuse and the two sides of a right-angled triangle are 3 and 6 respectively; find the sides.
5. Solve the equations

$$
\begin{gathered}
x^{2}+y^{2}=25 \quad, \quad x+y=1 \\
\frac{x}{x+1}+\frac{x+1}{x}=\frac{13}{6} \\
x+y+z=5, \quad x+y=z-7 ; \quad x-3=y+z \\
\frac{x+4}{3 x+5}+1 \frac{1}{6}=\frac{3 x+8}{2 x+3}
\end{gathered}
$$

6. A cistern can be filled by two pipes in $24^{\prime}$ and $30^{\prime}$ respectively, and emptied by a third in $20^{\prime}$; in what time would it be filled, if all three were running together.
7. Show tiat

$$
1+\frac{a^{2}+b^{2}-c^{2}}{2 a b}=\frac{(a+b+c)(a+b-c)}{2 a b}
$$

8. Prove the rule for finding the greatest common measure of two quantities.
9. Simplif?

10. Divide $3 \frac{1}{4}+1 \frac{1}{5}$ by $2 \frac{1}{2}-\frac{7}{8}$, and express the result in a decimaform
11. Reduce the circulating decimal . $785^{\prime}$ to a vulgar fraction
12. Find the square root of 1.00687 .
13. If the ratio of a diameter of a circle to its circumference be as 113 to 335 , find the number of miles travelled by the earth in a second supposing the radius of ier circular orbit to be $91 \frac{1}{2}$ millions of miles and the length
of the year $365 \frac{4}{4}$ days.

## 4

## ENGLISH GRAMMAR.

Wednesday, September 17th:-Morning, 9 to 12.
Examiner $\qquad$ .Ven. Archeracon Leach, D.C.L.

1. What does a sentence express ; and what are the parts of which it consists?
2. Which are the several forms that a sentence may take?-give examples.
3. Distinguish the Logical subject and Predicate and the Grammatical Subject and Predicate.
4. In Imperative sentences, what is the Subject and what the Predicate?
5. Which are the parts of speech denominated notional and which relational.
6. Give examples of Nouns ; 1 Proper and Singular ; 2 Proper and Common; 3 General and Significant; 4 Singular and Significant.
7. Distinguish Abstract and Concrete Nouns.
8. Which are the equivalents of the Noun in composition?
9. Why is it said that a Pronoun is purely connotative and a proper name non-connotative?
10. Why are the pronouns 'he, ' she,' 'it,' classed as demonstrative, not as personal Pronouns ?
11. Give examples of the use of 'this,' and 'that' as (1) Demonstrative adjectives and (2) as Demonstrative or adjective Pronouns.
12. How are Pronouns classified ?
13. State the rule given for the use of the Indefinite pronoun 'one.'
14. What peculiarity is there in the structure of the Reflective Pronouns?
15. Besides the Relatives proper, there are some other words commonly used as Relatives-mention them.
16. Mention the two different significations in which the relative 'who' is is commonly used.
17. Mention the different ways for avoiding the repetition of nouns.

## Afternoon, 2 to 5.

Subject of composition:-The advantages and disadvantages of the climate of Canada.

## SECOND YEAR EXHIBITIONS.

GREEK.
Monday, September 15th:-Morning, 9 to 12.
Examiner,
Rev. George Cornish, LL.D.

1. Translate:-Xenophon, Hellenics, Bk. I.-(a) Chap. i., §§ 13-15. (b) Chap. v., §§ 5-7.
2. (a) Give an account of the Hellenics of Xenophon. (b) Explain the
 other meal and the names of the corresponding ones among the Romans.

3. Give a short account of the public life and character of Alcibiades. For what events in the history of Athens was the year 406, B. C., noted ?
4. Translate :-Arrian, Anabasis, Bk. III., chap. xiv., §§ 1-3.
5. When and where did Arrian live? Indicate points of resemblance
between him and Xenophon in "respect of literary style, and topics on which he wrote. Name his most important work, and state in what estimation it is held for accuracy and trustworthiness.
6. Translate :-Homer, (a) Iliad, Bk. VI., vss. 466-481. (b) Odyssey, Bk. IX., yss. 152-171.
7. (a) What, according to Herodotus, was the date of Homer? (b) In what estimation were the Homeric poems held by the ancients ? By whom were they first collected and edited? Name the leading commentators in ancient and modern times.
8. Explain carefully the derivation, and give cognate forms in Latin and English, where you can, of the following words:- $\beta$ рот $\sigma \varepsilon \nu \tau a, \delta \bar{\omega} \mu \alpha, \pi \delta ́ \sigma \iota \varsigma$ ( $\dot{\delta}), \pi o ́ \sigma \iota \varsigma(\grave{\eta}), \lambda \dot{a} \xi$, áтos.


 the primitive force of $\delta, \dot{\eta}, \tau 6$ ? Instance traces of this in Attic usage. Illustrate the use of the article to distinguish between subject and predicate. (c) Illustrate the uses of the Accusative, severally, as (1) Cognats; (2) Specification; (3) Extent in time and space ; (4) Adverbial.
9. Translate into Greek:-1. The enemy came and deprived the people of their land. 2. Many of the barbarians, fought well in most of the battles. 3. Through fear he took hold of his father's hand when he heard the tumult. 4. He said that each citizen was born for his country and was therefore bound to serve it in all things.

## LATIN.

Monday, September 15th:-Afteroon, 2 to 5.

## Examiner, .....................................Rev. George Cornish, LL.D.

1. Translate :-Cicero, Select Letters, ep. xxxvi.
2. Translate :-Livy, Bk. V., chap. xlvii. down to in præceps deferri.
3. (a) Give the date of the events referred to in this ext. When did other immigrations of the Gauls into Italy take plaee? Where was their chief settlement, and when was it reduced to the form of a Roman province? (b) By what other names are the Gauls known in ancient writers? To what family of the Indo-European race dil they belong, and who are their modern representatives?
4. Translate:-Horace, Odes Bk. III. Ode viii.
5. Write short notes explanatory of:-1. Sermones utriusque linguae. 2. Voveram Libero. 3. Dies festus. 4. Amphoræ institutæ. 5. Daci Cotisonis. 6. Negligens cavere.
6. Translate:-Virgil, Aneid, Bk. VI., vss. 771-788.
7. Explain the following references:-(a) Civili quercu. (b) Ilia mater. (c) Pater ipse. (d) Berecyntia mater. (e) Superûm, or Superum? and
why? 8. (a) Derive :-Resides, arva, inclyta, postuma, seclusum, bellus. (b) Decline :-Arx, cassis, sitis, ignis, mensis. (c) Parse:-Effare, defuncte, subiere, effusa, lapsura, fixit.
8. Translate into Latin :-At this time, there came a strange woman to the king, and offered him nine books of the prophecies of the Sibyl for a certain price. When the king refused them, the woman went and burned three of the books, and came back and offered the six at the same price which she had asked for the nine; but they mocked at her, and would not take the books. Then she went away and burnt three more, and came back and asked still the same price for the remaining three. At this the
king was astonished, and asked of the augurs what he should do. They said that he had done wrong in refusing the gift of the gods, and bade him by all means to buy the books that were left. So he bought them; and the woman who sold them was seen no more from that day forwards.

## MATHEMATICS.

Tunsday, September 16th:-Aftarnoon, 2 to 5.
$\qquad$

1. Given a system of three co-axal circles, if from any point on one, tangents be drawn to the other two, these tangents will be in a constant ratio.
2. Given the base and the sum of sides of a triangle ; the polar of the vertex with respect to one extremity of the base as origin always touches a fixed circle.
3. Given a circle and the lengths of the threc diagonals of a quadrailteral inscribed in it, construct the quadrilateral.
4. Describe a circle passing through a given point and touching two given circles.
5. A straight line meeting a circle and the sides of any inscribed quadrilateral is divided in six points in involution.
6. The anharmonic ratio of four fixed points on a circle is constant.
7. Given three consecutive legs of an harmonic pencil, find the fourth leg.
8. Given the base and vertical angle of a triangle find the locus of the iutersection of its perpendiculars.
9. Given :

$$
x=n-\frac{1}{2} n^{2}+\frac{1}{3} n^{3}-\frac{1}{4} n^{4}+\& c .
$$

and $n$ in a series of powers of $x$.
10. A debt of $a$ pounds accumulating at compound interest is discharged in $n$ years by aunual payments of $\frac{a}{m}$ pounds; prove that

$$
n=-\frac{\log (1-m r)}{\log (1+r)}
$$

11. Insert three geometric means between $\frac{1}{9}$ and 9 .
12. Expand $a^{x}$.
13. In how many ways can 8 persons be seated at a round table, so that no one shall have the same neighbours in any two arrangements.
14. Find the amount of an annuity in any number of years at compound interest.

## MATHEMATICS.

Tuesday, September 16th:-Morning, 9 to 12.
Examiner, $\qquad$ Alexander Johnson, LL.D.

1. If a right line be bisected and produced, the sum of the squares of the whole line thus produced, and of the produced part, is equal to double the sum of the squares of half the live and of the line between the points of section.
2. On a given right line construct a segment of a circle containing an angle equal to a given angle.
3. The rectilineal figure described on the hypotenuse of a rightangled triangle is equal to the sum of the similar figures similarly described on the sides.
4. Define duplicate ratio, and show that similar triangles are in the duplicate ratio of their homologous sides.
5. Define the two units of angular measurement commonly employed and find their ratio.
6. Prove $\frac{\operatorname{Cos} A+\operatorname{Cos} B}{\operatorname{Cos} A-\operatorname{Cos} B}=-\frac{\operatorname{Cot} \frac{1}{2}(A+B)}{\operatorname{Tan} \frac{1}{2}(A-B)}$
7. In any triangle

$$
\sin \frac{1}{2} A=\sqrt{\frac{(s-b)(s-c)}{b c}}
$$

8. Find $\sin 18^{\circ}$ to three places of decimals.
9. If $\frac{a}{b}=\frac{c}{d}=\frac{e}{f}$ prove

$$
\frac{a^{n}}{b^{n}}=\frac{m a^{n}+n c^{n}+p e^{n}}{m b^{n}+n d^{n}+p f^{n}}
$$

10. Find the square root of $8-2 \sqrt{15}$.
11. Divide $16 x-y^{2}$ by $2 x^{\frac{1}{4}}-y^{\frac{1}{2}}$.
12. Find two numbers whose difference is 5 and whose sum multiplied by the greater is 228 .

## ENGLISH.

Wednesday, September 17 th :-Morning, 9 to 12.

## Examiner, <br> $\qquad$ .Ven. Archdeacon Leach, D.C.L.

1. Why is it not a correct definition of an adjective to say that it is the name of a quality of the noun to which it is joined?
2. Show, 1st, that nouns are often used as adjectives; 2nd, how they are distinguished from true adjectives.
3. Give the classification of adjectives.
4. Give the substance of what is said on "The circumstances determining the use of the article "the."
5. Show that the same verb, expressing the same action, can be both Transitive and Intransitive.
6. Explain grammatically such expressions as the following:-"He arrived at the conclusion," "We wonder at his zeal," "They came to the resolution," "His friends stood by him."
7. Give instances of Adverbs modifying other kinds of words besides "verbs, adjectives and other adverbs."
8. How do you explain the idiom-" There was once-there was a voice from heaven."
9. Give the signification of the three suppositions:- "If the man is there;" "If the man be there ;" "If the man were there."
10. What is the only correct form of the future Subjunctive?
11. Show that the present Indefinite has sometimes a future meaning.
12. What kind of actions or facts in their relation to time, are expressed by the present perfect tense?
13. Give the substance of the section:-"The progressive tenses of the Passive Voice."
14. Mention the principal sources whence English words are derived and give the dates at which the principal elements of the language were introduced.
15. Explain the subject of Metrical Notation.
16. What are Perfect and Imperfect Rhymes?
17. What are Single Rhymes and Double Rhymes?
18. What are metres called where there is no Rhyme?

Give a Grammatical Analysis of the following sentence :-
Because I would put far from thee Hell's hot misery,
That thou mightst holy shine
Blessed in the eternal life
Therefore did I that hardship suffer.
Afternoon, 2 to 5.
Subject of Composition :-Uses of the Study of History.

FRENCH.
Thursdat, September 18th:-Morning, 9 to 12.
Examiner
P. J. Darex, M.A., B. C. L.

1. Translate into English:

Vous voyez comment je m'y prends (1), et les adroites complaisances qu'il m'a fallu mettre en usage pour m'introduire à son service ; sous quel masque de sympathie et de rapports de sentiments je me déguise pour lui plaire, et quel personnage je joue tous les jours avec lui, afin d'acquérir sa tendresse. J'y fais des progrès admirables; et j'éprouve que, pour gagner les hommes, il n'est point de meilleure voie que de se parer à leurs yeux de leurs inclinations, que de donner dans (1) leurs maximes, encenser leurs défauts et applaudir à ce qu'ils font. On n'a que faire (1) d'avoir peur de trop charger la complaisance, et la manière dont on les joue a beau (1) être visible, les plus fins toujours sont de grandes dupes du côté de la flatterie ; et il n'y a rien de si impertinentet de si ridicule qu'on ne fasse avaler quand on l'assaisonne en louanges. La sincérité souffre un peu au métier que jo fais; mais, quand on a besoin des hommes, il faut bien s'ajuster à eux ; et puisqu'on ne saurait les gagner que par là, ce n'est pas la faute de ceux qui
flattent, mais de ceux qui veulent être flattés.

Moliere, $l$ 'Avare.
2. How do you call the four expressions (1) in the above extract.
3. Parse the first sentence of the above extract.
4. What are the two principal characters of the comedies, l'Avare, le Misanthrope et les Femmes savantes.
5. Translate into French:

The nations with which foreign languages enable us to exchange thoughts, having diverse origins, living under different climates, brought up in habits and subjects to laws peculiar to themselves, must also have
ideas and opinions differing from ours. Their writers must see in a different light many questions which have also been treated by our national authors. In history, in politics, in belles-lettres, in the arts, and in other departments of knowledge, their notions, often widely differ from ours; the perusal of their works will therefore enlarge the circle of our ideas and bring us nearer to the truth.

Marcel, The study of languages.

CHEMISTRY.
Thursoay, September 18th:-Afternoon, 2 to 5.
Examiner, .......................................B. J. Harrington, B.A., Ph. D.

1. Describe fully the manufacture of Sodium Carbonate.
2. How is Potash Alum prepared, and what is its formula?
3. By what tests can you distinguish Ferrous from Ferric salts ?
4. Give the properties of metallic Antimony and of one of its oxides.
5. Explain the reactions indicated by the following formulae :
(1] $\mathrm{PbSO}+\mathrm{PbS}=2 \mathrm{~Pb}+2 \mathrm{SO}_{2}$
(2) $\mathrm{PbO}+\mathrm{PbS}=3 \mathrm{~Pb}+\mathrm{SO}_{2}$
6. What are the best tests for Silver, Gold and Mercury, when in solution?
7. What are the properties of the metal Platinum ?
8. What do you understand by Specific heat and Atomic heat ?

## SCIENCE SCHOLARSHIPS.

## DIFFERENTIAL AND INTEGRAL CALCULUS.

$$
\text { Monday, September 15th:-Morning, } 9 \text { to } 12 .
$$

Examiner Alexander Johnson, LL.D.

1. The equation to the catenary is

$$
2 y=a\left(e^{\vec{a}}+e^{-\frac{x}{a}}\right)
$$

show that the radius of curvature is equal, but opposite to the normal.
2. Find the evolute of the common parabola.
3. If a curve be given in polar co-ordinates $(r, \theta$,$) prove that the$ following equation, where $p$ is the perpendicular from the origin on the tangent, and $u=-\frac{1}{-}$ is true;

$$
\frac{1}{p^{2}}=u^{2}+\frac{d u^{2}}{\theta^{2}}
$$

4. If $V$ be the volume of a solid of revolution prove

$$
\frac{d V}{d x}=\pi y^{2}
$$

5. If $u$ be a homogeneous function of $x, y, z$, and $n$ be the sum of the exponents in each te:m, prove that

$$
n u=x \frac{d u}{d x}+y \frac{d u}{d y}+z \frac{d u}{d z} ;
$$

$n(n-1) u=x^{2} \frac{d^{2} u}{d x^{2}}+z^{\prime a} \frac{d^{2} u}{d y^{2}}+z^{2} \frac{d^{2} u}{d z^{2}}+2 x y \frac{d^{2} u}{d x d y}+2 y z \frac{d^{2} u}{d y d z}+2 z x \frac{d^{2} u}{d x d x}$
6. If $z=x f\left(\frac{y}{x}\right)+\phi(x y)$, prove that $x^{2} \frac{d^{2} z}{d x^{2}}=y^{2} \frac{d^{2} z}{d y^{2}}$
7. The volume of $\downarrow$ cone being given, find its form when its surface is a maximum.
8. Given that

$$
f(x) \cdot f(h)=f(x+\hbar)+f(x-h)
$$

find $f(x)$.
9. Find $\frac{d u}{d x}$ when $u=x^{\frac{1}{x}}$
10. A parabolic arta is bounded by the curve and the double ordinate, find the volume of tle solid generated by its revolution round the double ordinate.
11. Find the surfuce of the solid generated by the revolution of an ellipse round its major axis.
12. Find the integrals

$$
\int_{x} \frac{1}{a+b} \frac{\cos x}{} ; \quad \int_{x} \frac{x^{m}}{(\log x)^{2}} ; \quad \int(\sin m \theta \sin n \theta)
$$

13. Find the integ:als

$$
\int_{x} \frac{x^{3}}{\left(1+x^{2}\right)^{\frac{3}{2}}} \int_{x} \frac{x^{m}}{\sqrt{a+b x+c x^{2}}} \quad \int_{x}\left(a^{2}-x^{2}\right)^{\frac{n}{2}}
$$

14. Find the integrals

$$
\int_{x}^{\left(x^{2}+3 x+2\right)} ; \quad \int \frac{1}{a+b x+c x} \quad \int \frac{x-1}{\left(x^{2}+1\right)^{2}}
$$

## ANALYTICAL GEOMETRY.

Monday September, 15th:-Afternoon, 2 to 5.
Examiner, Alexander Johnson, LL.D.

1. If the co-efficients in the equation of any right line $\lambda \alpha+\mu \beta+\nu \gamma$ be connected by anyrelation of the second order in $\lambda, \mu, \nu$,
$A \lambda^{2}+B \mu^{2}+C \nu^{2}+2 F \mu \nu+2 G \nu \lambda+2 B \lambda \mu=0$,
the envelope of the ine is a conic section.
2. The equation of the conic touching the lines $a, \beta, \gamma$, at their middle points is

$$
(a a)^{\frac{1}{2}}+(b \beta)^{\frac{1}{2}}+(c \gamma)^{\frac{1}{2}}=0
$$

3. Find the equation of a conic having double contact with two given conics, $S$ and $S^{\prime}$.
4. All conics which have both foci commen have four imaginary common tangents.
5. Reciprocate the following theorem, usinga circle as the auxiliary conic :
"The locus of the intersection of tangents tr a circle, which cut at a given angle is a concentric circle."
6. The locus of a point such that the square of the tangent from it to a fixed circle is in a constant ratio to the product of its distances from two fixed lines, is a conic passing throtgh the four points in which the fixed lines intersect the circle.
7. Find the angle contained by the two tangents through the point $x^{\prime} y^{\prime}$ to the parabola $y^{2}=4 m x$
8. Find the locus of the intersection of the pependicular from a focus on any tangent to a central conic, with the rsdius vector from centre to the point of contact
9. Find the principal parameter of the parabola

$$
9 x^{2}+24 x y+16 y^{2}+22 x+46 y+1=0
$$

10. Any focal chord of an ellipse is a third prportional to the transverse axis and the parallel diameter.
11. Find the locus of intersection of tangents to an ellipse which cut at right angles.
12. The equation of the circle circumscribing the triangle formed by the lines

$$
\begin{gathered}
a=0 \quad \beta=0 \quad \gamma=0 \quad \text { is } \\
\beta \gamma \sin A+\gamma a \sin B+a \beta \sin C=0
\end{gathered}
$$

where $A B C$ are the angles of the triangle formed by the lines.
13. Find the locus of a point, such that if it be joined to the vertices of a triangle, and perpendiculars to the joininglines erected at the vertices, these perpendiculars meet in a point.
14. Find the equation of the polar of the paint $x^{\prime} y^{\prime}$ with regard to the curve

$$
a x^{2}+2 h x y+b y^{2}+2 g x+2 f_{3}+c=0
$$

## HIGHER ALGEBRA AND TRIGOIOMETRY.

Tursday, Septrmper 16th:-Mornivg, 9 to 12.
Examiner, $\qquad$ Alexaider Johnson, LL.D.

1. Calculate

$$
\begin{gathered}
\text { ulate } \\
\phi(\lambda)=\left|\begin{array}{ccl}
\phi(\lambda), & \phi(-\lambda) & \\
a-\lambda, & h, & g, \\
h, & b-\lambda, & f, \\
g, & f, & c-\lambda
\end{array}\right| \quad \text { if }
\end{gathered}
$$

and thence show that the roots of $\phi(\lambda)=0$ art all real.
2. Every skew symmetrical determinant of even degree is a perfect. square,
3. Give Borchardt's proof that if $\lambda$ be added to each of the leading terms of a symmetrical determinant and the result equated to zero, the roots of the equation thus formed are all real.
4. Solve the equations

$$
\begin{gathered}
(y-1) x^{2}+y x+y^{2}-2 y=0 \\
(y-1) x+y=0 .
\end{gathered}
$$

5. If $S_{1}, S_{2}, S_{3}$ are the sums of the first, second, third powers of the roots of the equation $f(x)=0$, of the $n$th degree, show that

$$
\frac{x f^{\prime}(x)}{f(x)}=n+\frac{S_{1}}{x}+\frac{S_{2}}{x^{2}}+\frac{S^{3}}{x}+\& c
$$

6. Apply Sturm's theorem to determine the situation of the real roots of the equation

$$
x^{4}-4 x^{3}-3 x+23=0
$$

7. Give Ferrari's method of solving biquadratic equations.
8. Solve the equation

$$
x^{3}-x+6=0
$$

9. Solve the following equation which has equal roots

$$
x^{6}-3 x^{5}+6 x^{3}-3 x^{2}-3 x+2=0 .
$$

10. Show that the second and fourth terms of the equation

$$
x^{4}+p_{1}, x^{3}+p_{2} x^{2}+p_{3} x+p_{4}=0
$$

can be removed by the same transformation if

$$
p=p_{1},\left(4 p_{2}-p_{1}^{2}\right)
$$

11. Find the sum of $n$ terms of the series

$$
(\tan a+\cot a)+\left(\tan _{4} 2 a+\cot 2 \alpha\right)+(\tan 3 a+\cot 3 a)+\& c .
$$

12. If $r$ be the circular radius of the small circle which may be inscribed in a spherical triangle prove

$$
\tan r=\sqrt{\frac{\sin (s-a) \sin (s-b) \sin (s-c)}{\sin s}}
$$

13. Prove that in any spherical triangle

$$
\sin c \cot a=\cot A \sin B+\cos B \cos C .
$$

14. Prove that
$2 \sqrt{-1} \sin a=e$

$$
a \sqrt{-1} \quad a \sqrt{-1}
$$ $-e$

## MATHEMATICS

Tuesday, September 16th:-Afternoon, 2 to 5.
Examiner $\qquad$ Alexander Johnson, LL.D.

1. If through any points $Q$ and $Q$ of an hyperbola a line $R Q Q R$ be drawn in any direction meeting the asymptotes in $R$ and $R$; then will $R Q=R^{\prime} Q$.
2. If $P$ be any point on the hyperbola whose centre is $C$ and foci $S$ and $S^{\circ}$, and if $C D$ be conjugate to $C P$, prove

$$
S P . S P=C D^{2} .
$$

3. The area of the ellipse is to the area of the auxiliary circle as $b$ to $a$.
4. Prove the theorem in question 2 for the ellipse.
5. Draw a pair of tangents to an ellipse from an external point.
6. If $Q V$ be an ordinate to the diameter $P V$ of a parabola, then $Q V^{2}=4 S P, P V, S$ being the focus.
7. If two chords of a parabola intersect one another, the rectangles contained by their segments are in the ratio of the parameters of the diameters which bisect the chords.
8. The sum of an infinite geom. series is 2 , and the second term is $-\frac{3}{2}$; find the series.
9. Transform $27 t$ and 7007 from the undenary to the octenary.
10. Solve the equations

$$
\begin{aligned}
& x^{2}+x y=a^{2} \\
& z^{2}+x z=b^{2}
\end{aligned}
$$

11. Prove $\sin (A+B) \sin (A-B)=\sin ^{2} A-\sin ^{2} B$.
12. If a solid angle be bounded by three plane angles any two of them are greater than the third.
13. Draw a perpendicular to a given plane from a point outside it,

BOTANY.
Thursday, September 18th:-Morning, 9 to 12.
Examiner,
J. W. Dawson, LL.D., F.R S.

1. Describe the perenchyma of a Leaf, with its modifications in aquatic and condensed plants.
2. What are the special characters of the prosenchyma of Pines.
3. Explain the principal modifications of the Anther.
4. Describe the changes immediately succeeding the fertilization of the ovule.
5. State the distinctions between Mosses, Lichens and Ferns, as to their fructification.
6. In what respects do Gymnosperms resemble Cryptogams.
7. How does the heart wood of Exogens differ from the Alburnum.
8. State the distinctive characters of Gramines and Cyperaces.
9. Describe the Families Leguminosæ and Araliaceæ, with Canadian examples of the genera.
10. State what you know of the plants exhibited.

CHEMISTRY.
Thursday, September 18th:-Afternoon, 2 to 5.
Examiner,
.B. J. Harrington, B.A., Ph.D.

1. What is the composition, and what the properties of Ozone?
2. How many grams of Nitre and Sulphuric Acid will be required to produce 1000 grams of Nitric Acid ?
3. What is the composition of Marsh gas and Fire damp?
4. How is Bromine prepared, and what are its properties?
5. Describe the method of preparing Hydric Phosphide.

## 14

6. What are the properties of the metal Platinum ?
7. Explain the construction and use of the Spectroscope.
8. State fully the meaning of the term Quantivalence.
9. By what tests can you recognise the presence of Copper, Lead and Arsenic when in solution?

LOGIC.
Wednesday, September 17th:-Morning, 9 to 12:


1. Distinguish categorematic and syncategorematic words.
2. In the following sentence state what words are categorematic, what syncategorematic: A thing of beauty is a joy for ever.
3. Distinguish (a) singular and common, (b) concrete and abstract, terms.
4. Of the following terms state which are singular and which common; which are concrete and which abstract: Horse, Bucephalus, Virtue, Honesty, Virtuous, City, This city, Montreal.
5. (a) What is meant by the distribution of a term? (b) What propositions distribute their subjects; what, their predicates?
6. Give the various opposites of each of the following propositions :-
(a) All men are responsible.
(b) No irrational beings are responsible.
(c) Some men are wise.
(d) Some men are not wise.
7. Convert the propositions given under the previous question.
8. In the following syllogism distinguish the various terms and propositions: "Notions that are necessary and universal are not derived from experience ; and therefore the notions of space and time are not derived from experience, because they are necessary and universal."
9. Why cannot IE form the premisses of any syllogism?
10. (a) To what figures do Camestres, Felapton, Bokardo, Darii, sever* ally belong? (b) Explain the meaning of their symbolic letters.
11. Name the mood and the figure of the following syllogism, and reduce it to the first figure:-"The taste for beauty is variable ; but congenital instincts are not variable ; therefore, the taste for beauty is not a congenital instinct."
12. What are the only allowable modes of reasoning in conditional and in disjunctive syllogisms respectively?
13. Distinguish (a) logicab and non-logical; (b) purely logical and semilogical, fallacies.
14. Name the fallacy involved in the following argument, and the class to which it belongs :-" An import duty on leather is a benefit to tanners ; on cloth, to cloth-weavers ; on sugar, to sugar-refiners ; on corn, to corngrowers ; and similar duties are of benefit to other trades. But tanners, cloth-weavers, sugar-refiners, corn-growers, and other traders make up the whole community; and, therefore, the whole community is benefited by such import duties."

## CLASSICAL AND MODERN LANGUAGE SCHOLARSHIPS.

> GREEK, Monday, September 15th:-Morning, 9 to 12. Examiner,....................................Rev. George Cornish, LL.D.

1. Transiate :-Herodotus Bk. VIII., chaps. Ixxii-iii.
2. Write explanatory notes on the following:-(a) Kápveca. (b) avitó $\chi$ -
 ouinv,-(9.) Name the divisions of the day. ( $f$ ) $\pi \rho \sigma \xi \varepsilon$ vos.
3. Translate:-Thucydides, Bk. I., chap. L.
4. Explain carefully the syntax of the following extracts :-(a) às кata-
 avtoìs. (e) кaì oi Kopivधtol:- Explain the force of кai as here used. (f)
 difference is caused by the use of the article?
5. Translate :-Xenophon, Hellenics, Bk. I., chap. vi., §§ 29-31.
6. (a) In what year of the Poloponnesian war did the events here recorded take place? (b) Give the geographical situation of Arginusae, with a plan of the hostile fleets as here described.
7. How do Herodotus, Thucydides, and Xenophon stand related to each other in their treatment of Grecian history?
8. Translate :-Demosthenes, Olynthiacs, II., § 22-23.
9. Explain briefly the meaning of the following in the political consti-


10. Translate:-Euripides, Medeà, vss. 686-705.
11. (a) à $\tau \iota \mu \circ \iota \dot{\varepsilon} \sigma \mu \dot{\varepsilon} v$ :-Explain this usage of the Masculine plural. (b غ̈ $\phi v, 690 ; \grave{\eta}, 701$;-explain, and illustrate from Horace this use of the
 $\dot{\eta} \delta \iota \kappa \eta \mu \varepsilon \nu \eta, 26$ :-Name the other verbs that are construed with the participle. (e) $\sigma \circ \tilde{v}, 51$ :- on what does the Gen. depend? ( $f$ ) $\varepsilon$ हैãv, 69 :-what tense and how is it formed?
12. (a) Name the dialects used by the writers from whom the above extracts have been taken. (b) Contract and accentuate the Pres. and 1 mperf. Ind. Act. of $\lambda v \pi \varepsilon \varepsilon \sigma$. (c) Distinguish between $\vartheta \varepsilon \tilde{\omega} \nu-\vartheta \varepsilon \varepsilon \omega v$. т $\tau \mu a ́ v$



## LATIN.

Tuesday, September 16th:-Morning, 9 to 12.

## Examiner,......................................REv. George Cornish, LL.D.

1. Translate:-Tacitus, Annals, Bk. I., chap. xliii.
2. (a) Melius et amantius:-Supply the ellipse. (b) legissetis, sineret, sinant :-Explain the use of Tense and Mood, severally. (c) Construe:-1. Pectori meo. 2. Flagitiorum exercitui meo. 3. Vari et trium legionum. 4. Caelo. (d) Imago:-How do you interpret this, and why? (e) Dive :Explain.
3. Translate :-Cicero, Select Letters, ep., cxxxii.
4. (a) 'Attico':-Give his name in full, and state what you know about him. (b) Explain the system of Roman names as illustrated by the name Publius Cornelius Scipio Africanus Aemilianus. Was the Agnomen hereditary? (c) 'H. S. octogiens':-Write out the full expression for this and give the value.
5. Translate:-Horace, (a) Satires I., sat. vi., vss. 45-62. (b) Epistles, I., ep, ix.
6. (a) Libertino patre natum; mihi pareret legio; Te sortitus amicum : -Explain these personal references on the part of Horace. (b)'Claudi' :(d) Tui gregis:-What construction?
7. Translate :-Terence, Adelphi, Act II., sc. 3. Explain the reference in vss. 15-16 of the Prologue.
8. Translate:-Virgil, Georgics, Bk. I., vss. 466-475.
9. Write explanatory notes on the following expressions:- (a) Centurionatum egit. (b) Principes juventutis. (c) Ipsis Megalensibus, ( $($ ) Stabianum perforasti. (e) Ambubaiarum collegia. ( $f$ ) Indictis Latinis. (g) Tibiis Sarranis.
10. (a) Give the quantity of the ultimate, and explain the formation of interea, preterea, propterea. (b) Point out the origin of quif, ibi, statim, tenus, humi. (c) Write down the Pres. Inf. of:-Ortus, mensus, aptus, pactus, iratus, fassus, adultus, exarsus.

## GREEK AND LATIN PROSE COMPOSITION.

$$
\text { Monday, September 15th:--Afternoon, } 2 \text { to } 5 .
$$

Examiner.
Rev. George Cornish, LL.D.

## 1. Translate into Greek:-

(a) The general said, that if the citizens had done what the philosopher told them to do they would now be faring better. (b) He sent his sons to the master in order to have them taught philosophy. (c) He was so ambitious as to bear and do anything for the sake of becoming powerful. (d) Having said this he rose up and went into the city. (e) Since this is the case, let us tarry no longer, but go away at once.

## 2. Translate into Latin :-

Of the Greek generals then living Pyrrhus was indisputably the first. Among the troops who were trained in the Greek discipline, his Epirotes ranked high. His expedition to Italy was a turning-point in the history of the world. He found there a people who, far inferior to the A thenians and Corinthians in the fine arts, in the speculative sciences, and in all the refinement of life, were the best soldiers on the face of the earth. Their arms, their gradations of rank, their order of battle, their method of entrenchment, were all of Latian origin, and had been gradually brought near to perfection, not by the study of foreign models, but by the genius and experience of many generations of great native commanders. The first words which broke from the king, when his practised eye had surveyed the Roman encampment, were full of meaning ; "These Barbarians," he said, "have nothing barbarous in their military arrangements."

## ANCIENT HISTORY.

## Tuesday, September 16th:-Afternoon, 2 to 5.

## Examiner

Rev. George Cornish, LL.D.

1. (a) What are the divisions of History? (b) Name the sources of History, mentioning the leading authorities in ancient history and geography. (c) Give the geographical position of ancient Media, Armenia, Parthia, Syria, Chersonesus (1) Taurica, (2) Thracica, and (3) Cimbrica, with modern names where you can.
2. To what family of the human race did the Carthaginians belong?


Give a general account of the national characteristics and political institutions of the Carthaginians. In what ways do you suppose the position and interests of civilized nations in Western Europe would have been affected if Carthage had conquered Rome?
3. Give an account of the accession of Darius $I$., and of the leading events of his reiga. What was the great principle of his policy in regard to the Western nations ?
4. (a) Name the earliest inhabitants of Greece, and give the legendary genealogy of the Hellenes. (b) Specify the most noticeable features of early Greek society as represented in the Homeric poems. (c) What causes tended to Greek unity? To what may their partial operation and ultimate failure be attributed?
5. What events and causes led to the establishment and overthrow of the supremacy of Athens?
6. When and under what circumstances was Greece reduced into the condition of a Roman Province?

7 (a) The leading races of ancient Italy. (b) The Etruscans;-their origin, and physical and intellectual characteristics. (c) What races offered the stoutest opposition to Rome in the course of her subjugation of
Italy?
8. The leading events in the political career of Servius Tullius; Sp . Cassius ; The Gracchi; Sulla; and Oicero.

## english language and literature.

$$
\begin{aligned}
& \text { Wednbsday, Seftember } 17 \mathrm{th}:- \text { Mornine, } 9 \text { to } 12 . \\
& \text { Examiner,............................. Ven. Arohdeacon Leach, d.c.L. }
\end{aligned}
$$

1. Give the substance of the remarks on the usual course of Early National Literature.
2. Give some account of the Latin Literature in England during the Anglo-Saxon period.
3. (1) Mention the principal poetical productions in the Anglo-Saxon tongue. (2) Give a particular account of one or other of them. (3) And escr e the peculiarities of their style and of their mode of versifieation.
4. (1) Enumerate the principal writers in Anglo-Saxon prose, with the productions. (2) Mention the general character of those productions and the object or purpose that the authors appear to have had.
5. Give some account of the Chivalrous Romances of Normandy and or their influence upon English Literature.
6. Mention the most remarkable of the earliest writers of English prose and give some account of their productions.
7. Which are the two prose tales of Chaucer, and give the substance of the remarks upon them.
8. Give an analytical account of Lydgate's "Storie of Thebes."
9. Give the names of the principal Scottish writers in the 14th and 15th centuries, with critical notices of their productions.
10. Give the substance of the remarks on the immediate effects of the Reformation upon literary exertion.
11. Give some account of the Religious Drama ir the middle ages.
12. Show in what respect the works of Howard, Earl of Surrey, may be regarded as the opening of a new era in the history of English poetry.
13. Mention the principal prose works of Milton ; with critical remarks upon each of them.
14. Mention the principal names in English Literature between the midelle of Elizabeth's reign and the Restoration.
15. Give some account of the Regular and Irregular Schools of Dramatic Art.
16. Give the substance of Lord Bacon's Essay on "Atheism;" with critical remarks on the language, style and matter of the Essays.

## ENGLISH (ANGLO-SAXON AND FRENCH).

Tuesday, September 17 th-Afternoon, 2 to 5.
Examiner,
Ven. Archdeacon Leach, D.C.L.

1. State the general rules for Anglo-Saxon declensions.
2. Decline the article si, séo, thaet.
3. Give the synopsis of Declensions of Nouns.
4. How are the declensions of nouns distinguished?
5. How are the Comparative and the Superlative of adjectives formed? -Of adverbs ?
6. Decline the First and the Second Personal Pronouns.
7. How are the relatives 'who,' 'which,' 'that,' generally expressed is Anglo-Saxon?
8. Conjugate the auxiliary verbs 'Wesan' and 'be'on?'

## 9. What are negative verbs? Give examples.

10. What are the significations of the prepositions 'baeftan,' 'binnan,' 'gehende,' 'geond,' 'ymb,' 'mid,' 'oth,' 'nymthe.'
11. Mention some of the peculiarities of Anglo-Saxon Syntax.
12. What is the use of studying the past history of our language ?
13. Give examples of the "double adoption" of a Latin word.
14. How may it be shown that " the radical constitution of our language is Saxon"?
15. Give the substance of Dr. Trench's remarks on the relation of English to some other languages of the Continent of Europe.
16. How was the extensive introduction of Latin words into our language at the time of the Reformation prevented corrupting it.
17. Give examples of new words formed from the names of persons.
18. Mention some of the reasons or motives for the adoption of new words.

Subject of Composition-The causes and conditions of national greatness and prosperity.

## FRENCH.

Thursday, Seftember 18th:-Morning, 9 to 12.
Examiner $\qquad$ P. J. Darey, M.A., B.C.L.

## 1. Traduisez en français :-

Alexis de Tocqueville was born in Paris in 1805. He studied for some time at the College of Metz ; travelled with one of his brothers in Italy and Sicily ; was attached, after his return, to the court of justice at Versailles where his father, the Count de Tocqueville, was prefect. While performing the duties of Juge-Auditeur, he found time to engage with ardor in political studies. After the Revolution of 1830 , he obtained from the ministry of the Interior a mission to America, for the purpose of examining our system of prison discipline. In 1831 he came to the United-States with his friend M. de Beaumont, and after a year's residence, returned to Paris, and soon after published the first two volumes of his "Democracy in America"a work that established his reputation as an original and systematic thinker on political questions and social science.

Tuckerman, America and her commentators.
2. Quels sont les deux personnages principaux de chacune des tragédies de Racine : Britannicus, Andromaque et Iphigénie? Quel est le sujet de
chacune de ces tragédies? Laquelle est la plus tragique et laquelle est la plus sublime?
3. Traduisez en anglais :-

Ainsi, sur l'avenir n'osant vous assurer,
Vous croyez que sans vous Néron va s'égarer.
Mais vous qui jusquici content de votre ouvrage,
Venez de ses vertus nous rendre témoignage,
Expliquez-nous pourquoi, devenu ravisseur,
Néron de Silanus fait enlever la sour.
Ne tient-il (1) qu'a marquer de cette ignominie
Le sang de nos aïeux (2) qui brille dans Junie?
De quoi l'accuse-t-il? Et par quel attentat
Devient-elle en un jour criminelle d'Etat:
Elle qui, sans orgueil jusqu'alors élevée, (3)
N'aurait poiist vu Néron s'il ne l'eût enlevée ; (4)
Et qui même aurait mis au rang de ses bienfaits
L'heureuseliberté de ne le voir jamais..
Racnes, Britannicus. Acte 1, sc. II.
4. Comment appelez-vous cette expression (1) ne tient-i? (2) Quel estle singulier des ce mot; quel est l'autre pluriel. Expliquez la différence qu'il y a entre ces deux pluriels. (3) Pourquoi le mot élevée est-il ainsi écrit? Répondez à la même question pour le mot enleée (4) Expliquez pourquoi co verbe est à ce temps.
5. Quand la forme verbale ant prend-elle une $s$, et quand reste-t-elle nvariable? Donnez des examples.

CHRISTMAS EXAMINATIONS,
1873.

GREEK.-XENOPHON.-HELLENICS, BOOK I.
FIRST YEAR.
Fridat, Deckmber 10th:-Morning, 9 to 12.
Examiner, . . . . . . . . Rky. George Cornish, LL,D.

1. Translate :-




























 $\tau \iota \mu \rho \varepsilon і ̈ \sigma \vartheta a \iota$.
2. Explain carefully the construction of the following expressions:


 ঠeïөӨal $\pi \rho a \gamma \mu a ́ t \omega v$. (Turn (e) into Latin.)
3. Analyse and derive the following:- $\dot{\eta} \mu \varepsilon \rho о \sigma к o ́ \pi o s, ~ \hat{\varepsilon} i \lambda \eta \varsigma$, трtipms oikoөधv, $\xi v \nu \omega \rho i ́ s, \pi \rho \eta \sigma \tau \tilde{\eta} \rho \circ$, oikot, عípıтov.
4. Name the cases of the following, severally, and write down the



5. State briefly the meaning of the following :-ipuoatís, $\pi \rho \dot{\sigma} \xi \varepsilon v o s$
 ठ $\beta$ ohos, äplбтov.
6. Distinguish between :-Tà кã̀ $a$ and $\tau a ̀ ~ \kappa a \lambda a ́ . ~ \tau o ́ \lambda \mu \eta \sigma a \iota, ~ \tau о \lambda \mu \tilde{j} \sigma a h, ~$
 $\tau a ̀ ~ \pi v \rho a ́, ~$
7. Define the geographical position and give modern names where you can, of:-Chios, Phocaea, Mytilene, Eïon, Gaurium, Gythium, Chalcedon, Selinus, Heraclea. How many places, and where, bore this last nsme?
8. (a) Decline $\theta a ́ \lambda a \sigma \sigma \pi, \tau \varepsilon \lambda \omega \nu \eta \zeta, \gamma \dot{v} \psi$, $\varepsilon i \zeta$, ovitos, and avirós. (b) Com*
 principal parts (1st Sing.) of :- $-\lambda \varepsilon i \pi \omega$, io $\tau \eta \mu \iota, \gamma \rho \alpha ́ \phi \omega, \lambda a \mu \beta a ́ v \omega$, фaiv, and $\phi \eta \mu i ́$.
9. Translate into Greek:-1. The father loves his son. 2. The soldiers follow their general. 3. The king admires those who manage his affairs. 4. The city is beautiful.

## 23

GREEK. EURIPIDES.-MEDEA.

## SECOND YEAR.

Friday, December 12th :-Morning, 9 to 12.
Examiner, . . . . . . Rev. Georgr Cornish, LL,D.

## 1. Translate:-

(A) XO. $\varepsilon \kappa \kappa \lambda v o v ~ \phi \omega v \grave{v} v, ~ \tilde{\varepsilon} \kappa \lambda v o v ~ \delta \varepsilon ̌ \beta \circ a ̊ \nu$

тàs duvтávov


 غ̇л $\varepsilon i ́ \mu \circ \iota$ фíhov кє́краขтти.



 $\pi a \rho a \theta a \lambda \pi о \mu \varepsilon ́ \nu \eta$ фр́́va $\mu \dot{v} \theta 0 \iota$ s.
MH. aiaī,

 $\phi \varepsilon \ddot{v} \phi \varepsilon \tilde{v} \cdot$ Aavátఢ катадvбаípav ßıөтàv бтvүعрà̀ $\pi \rho \circ \lambda \iota \pi o v ̃ \sigma a . ~$


AI. $\tau i ́ \phi \eta \grave{s} ;$ баф $\omega$ s $\mu o \iota ~ \sigma a ̀ s ~ ф р a ́ \sigma o v ~ d v \sigma \theta v \mu i a s . ~$











AI. छv $\gamma \gamma \nu \omega \sigma \tau a ̀ ~ \mu \varepsilon ̀ v ~ \gamma a ̀ \rho ~ \grave{\eta} v ~ \sigma \varepsilon ~ \lambda v \tau \varepsilon i ̈ \sigma \vartheta ゚ a t, ~ \gamma i ́ v a u . ~$
















2. (a) Write down the Doric forms, with their equivalents in Attic, of ext. (A). Name the metre, and give the scale, of the last four verses of the same ext. Scan these verses. (b) Explain briefly the follow-
 $\dot{\varepsilon} \pi \eta \nu \varepsilon \sigma a$. (c) In ext. (C) explain the use of the Dative $\mu o^{\prime}$, and of the Genitive $\tau o \tilde{v} \delta \varepsilon$.
3. Construe carefully the oblique cases in the following, explaining




4. Give the meaning and etymology of the following:- $\delta \dot{\varepsilon} p \gamma \mu a$,
 $\kappa i ́ \delta \eta \eta \lambda o s, \chi \lambda \omega \rho o ́ v$.
5. Parse the following verbs:- $\dot{\alpha} \mu \dot{\phi} \vartheta \tilde{n}, \dot{\partial} \mu \nu v, \mu \varepsilon \vartheta \tilde{\omega}, \varepsilon i \lambda o v, \tau \mu \eta \vartheta \varepsilon \tau ँ \sigma a, \sigma i \gamma a$, $\sigma \iota \gamma \ddot{a}, \delta \rho a ́ \sigma \varepsilon \varepsilon \varepsilon, \tau \alpha ́ \kappa o v, \dot{\varepsilon} \xi \varepsilon \lambda a ̄ ̧$.
6. Write explanatory notes on:-1. á $\mu \phi \dot{\chi} \Pi \varepsilon \iota \rho \dot{p} \nu \eta$, 2. $\dot{a} \mu \phi \iota \pi \hat{1} 10 v$


 puteṽoar.
 $\varepsilon \sigma \sigma \varepsilon$, -oi $\sigma \vartheta '$ 's $\mu \varepsilon \tau \varepsilon v \xi \varepsilon \iota$. Discuss the meaning of these forms of expressions, severally, and express it in Latin where you can.



9. (a) Explain Syncope, Elision, and Crasis, and give two examples of each. (b) Decline $\mu \dot{\varepsilon} \gamma a \varsigma, \dot{\lambda} \lambda \eta \vartheta \eta \dot{\eta} s$, à $\sigma \tau v, \dot{\varepsilon} \gamma \dot{\omega}$, and 0 öctus. (c) Write down the Second Aorist Active and Passive of $\lambda \varepsilon i \pi t \omega$.
10. A short account of the life and times of Euripides.

## GREEK.-DEMOSTHENES.-THE OLYNTHIACS.

## natgas is

## THIRD YEAR. WIT

Monday, Deokmber 15th:-Morning, 9 to 12.

Examiner, . . . . . Rev. George Cornish, LL.D.

Translate:-












 $\chi{ }^{6} \rho q$.










 $\pi \rho a ́ \gamma \mu a \tau a$.
(C) ís ảmas $\mu \varepsilon ̀ v ~ \lambda o ́ \gamma o \varsigma, ~ a ̂ v ~ a ́ \pi \eta ̃ ̃ ~ \tau a ̀ ~ \pi \rho a ́ \gamma \mu a \tau a, ~ \mu a ́ т a u o ́ v ~ \tau \iota ~ ф а i \nu \varepsilon \tau a \ell ~ к а \grave{~}$








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2. Explain the grammatical construction of:-(a), бкотعïə $\varepsilon \varepsilon$ вis +i
 $\phi a \nu \omega ̃ \mu \varepsilon \nu$ $\xi \eta$ тoũvт $\varepsilon$. (How would you express this in Latin?) (c) $\chi \omega p i \xi$
 parse кaӨvøєi $\mu \varepsilon \theta a$, and why? And to what mood and tense are $\pi \varepsilon \rho \iota \sigma \tau \dot{\alpha} \sigma \eta s$ ầ equivalent?) (d) ह́ $\chi \dot{\partial \nu \tau \omega \nu}$ Ө $\eta \beta a i \omega \nu \dot{\eta} \mu i v$. (What Genitive and Dative?
3. In ext. (A) the Ed. Tauchnitz, after the MSS., reads à $\dot{\varepsilon} \pi i$ $\pi о \lambda \lambda q_{q} \kappa . \tau . \lambda$. -What would you make of this reading? In (B) the same text has $\dot{\varepsilon} \kappa \pi о \lambda \varepsilon \mu \tilde{\omega} \sigma a \iota$ for $\dot{\varepsilon} \kappa \pi о \lambda \varepsilon \mu \tilde{\eta} \sigma a \iota$ :-With what difference of meaning? What is said by some to be the difference between $\mu \varepsilon \tau a ́ \sigma \tau a \sigma \iota \nu$ and $\mu \varepsilon \tau a \beta o \lambda ̀ \dot{\eta}$ ?

 any.
4. Give the meaning, and also the etymology, of the following :-
 $\pi \varepsilon \varnothing \varepsilon \nu a ́ \kappa \iota \kappa \varepsilon v, \alpha \dot{\alpha} \kappa \rho \subset i o v, \dot{\omega} \tau a ̉ v$.
5. (a) Distinguish between:- $\dot{\alpha} \theta \lambda a$ and $\lambda \eta \mu \mu a \tau \alpha, \gamma \rho a ́ \phi \eta$ and $\gamma \rho a \phi \tilde{\eta}$,

 $\dot{\varepsilon} \gamma \varphi \bar{\mu} \mu a$. (c) What is the import of the particles $\dot{\omega} \varsigma$ and $a ̈ \tau \varepsilon$ respectively when used to qualify participles?
6. (a) Write down the Gen. Sing. and the Dat. Plu. of:-opuls $\kappa \dot{v} \omega v, \kappa \varepsilon ์ \rho a \varsigma, ~ \sigma a ́ \lambda \pi \iota \gamma \xi$. (b) Decline $\gamma \varepsilon ́ \lambda \omega \varsigma$, $\chi \rho \omega \dot{\varsigma}$. (c) Write down the
 Accentuate $\pi o \lambda \varepsilon \mu \eta \sigma a \iota$ (in all its uses), $\dot{\varepsilon} \pi o \lambda \varepsilon \mu \varepsilon \iota, \pi o \lambda \varepsilon \mu \varepsilon \iota, \dot{\varepsilon} \lambda \theta \varepsilon \iota \nu, \beta o v \lambda \varepsilon v \varepsilon v$, ${ }^{\dot{\varepsilon}} \beta$ оидяveто.
7. Give the dates of the accession and death of Philip; the delivery of the Olynthiac Orations ; of the capture of Olynthus ; Chæroneia ; accession of Alexander; What was the end of Demosthenes?

## LATIN.-VIRGIL.- ANEID, BOOK VI.

FIRST YEAR,
Fridat, Deoember 12th:-Afternoon, 2 to 5.
Examiner,
.Rev. George Cornish, LL.D.

1. Translate:-
(A) Phoebe, gravis Troiae semper miserate labores, Dardana qui Paridis direxti tela manusque Corpus in Aeacidae, magnas obenntia terras Tot maria intravi duce te penitusque repostas

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Massylum gentis praetentaque Syrtibus arva, Iam tandem Italiae fugientis prendimus oras; Hac Troiana tenus fuerit Fortuna secuta.
Vos quoque Pergameae iam fas est parcere genti, Dique deaeque omnes, quibus obstitit Ilium et ingens Gloria Dardaniae. Tuque, o sanctissima vates, Praescia venturi, da, non indebita posco Regna meis fatis, Latio considere Teucros Errantisque deos agitataque numina Troiae.
(B) Continuo auditae voces vagitus et ingens Infantumque animae flentes in limine primo, Quos dulcis vitae exsortis et ab ubere raptos Abstulit atra dies et funere mersit acerbo. Hos iuxta falso damnati crimine mortis. Nec vero hae sine sorte datae, sine iudice, sedes: Quaesitor Minos urnam movet; ille silentum Concilumque vocat vitasque et crimina discit. Proxuma deinde tenent maesti loca, qui sibi letum Insontes peperere manu, lucemque perosi Proiecere animas. Quam vellent aethere in alto Nunc et pauperiem et duros perferre labores ! Fas obstat, tristique palus inamabilis unda Alligat, et noviens Styx interfusa coercet.
(C) Illae autem, paribus quas fulgere cernis in arms, Concordes animae nunc et dum nocte premuntur, Heu quantum inter se bellum, si lumina vitae Attigerint, quantas acies stragemque ciebunt! Aggeribus socer Alpinis atque arce Monoeci Descendens, gener adversis instructus Eiois. Ne pueri, ne tanta animis adsuescite bella, Neu patriae validas in viscera vertite viris; Tuque prior, tu parce, genus qui ducis Olympo, Proiice tela manu, sanguis meus !-
Ille triumphata Capitolia ad alta Corintho Victor aget currum, caesis insignis Achivis. Eruet ille Argos Agamemnoniasque Mycenas, Ipsumque Aeaciden, genus armipotentis Achilli, Ultus avos Troiae, templa et temerata Minervae.
2. (a) Explain carefully the use of the following oblique cases in extt. (A) and (B):-(a) Syrtibus. (b) hac. (c) genti. (d) venturi. (e) meis fatis. ( $f$ ) dulcis vitae. ( $g$ ) crimine mortis. (b) Explain the historical references in the words printed in italics in ext. (C) What peculiarity do you note in the first verse of the same ext.?

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3. Write short explanatory notes on the following:-(1) Euboicis Cumarum oris. (2) Triviae. (3) Sybilla, (4) Alius Achilles. (5) Cognomine terra. (6) Euantis orgia. (7) Furiarum maxuma. (8) tertia arma suspendet Quirino.
4. Name the geographical situation, and give modern names where you can, of :-Arce Monoeci, Caietae portum, Mycenas, Curibus parvis, Maeotia tellus, Garamantas, Sale Tyrrheno, Minoia regna.
5. Parse the following verbs, giving their principal parts :-praestiterit, defuerint, decerpserit, subiere, texit, mersit, adgnovit, utere.
6. Write down the lst Sing. Pres. Ind., and name the conjugation of :-orsa, lapsura, districti, repostos, excussa, sate, fusus, instructus.
7. Give the meaning and etymology of:-instar, egregium, tumultu, stragem, juga, incluta, postuma, cognomen, lacerum, vulgus. Give cognates in English where you can.
8. (a) Cite instances of (1) archaic grammatical forms, and 2) of imitations of Greek expressions and constructions, in Virgil. (b) Name the metre, and write down the scale of it, use 1 by Virgil. (c) Scan the first four vss, of ext. (A.)
9. (a) Distinguish between:-manent and mănent; nitens and nĭtens; lucǐs and lucis; dücis and dŭcis; rēfert and rĕfert; vēnĭmus rnd vĕnimus (b) Decline acer, vulnus, vis, aliquis, ipse. (c) Compare similis, gravis, nequam, bene, breve. (d) By what cases are these words severally followed:-miseret, pudet, refert, nubo, condemno, parcus, sub, in.
10. Translate into Latin: (1) Demaratus, the father of King Tarquin, fled from Corinth to Tarquinii. (2) Pompey was the first Roman who subdued the Jews. (3) The tyrant Dionysius, expelled from Syracuse, taught boys at Corinth.

## LATIN-VALERIUS MAXIMUS, BOOK LII,

SECOND YEAR.
Friday, December 12th:-Afternoon, 2 to 5.
Examiner
. Rev. George Cornish, LL. D.

1. Translate:-
(A) Sed quod ad proeliatorum excellentem fortitudinem attinet, merito L. Sicinii Dentati commemoratio omnia Romana exempla finierit: cuius opera honoresque operum ultra fidem veri excedere iudi-

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cari possent, nisi ea certi auctores, inter quos M. Varro, monumentis suis testata esse voluissent. Quem centies et vigesies in aciem descendisse tradunt, eo robore animi atque corporis utentem, ut maiorem semper victoriae partem traxisse videretur : sex et triginta spolia ex hoste retulisse: quorum in numero octo fuisse, cum quibus, inspectante utroque exercitu, ex provocatione dimicasset: XIV cives ex media morte raptos servasse, quinque et XL vulnera pectore excepisse, tergo cicatricibus vacuo: novem triumphales imperatorum currus secutum, totius civitatis oculos in se numerosa donorum pompa convertentem. Praeferebantur enim aureae coronae octo: civicae XIV : murales tres : obsidionalis una : torques LXXXIII, armıllae CLX, hastae XVIII, phalerae XXV, ornamenta etiam legioni, nedum militi satis multa.
(B) Militis huius in adverso casu tam egregius tamque virilis animus, quam relaturus sum imperatoris. P. enim Crassus, cum Aristonico bellum in Asia gerens, a Thracibus, quorum is magnum numerum in praesidio habebat, inter Elaeam et Smyrnam exceptus, ne in ditionem eius perveniret, dedecus, arcessita ratione mortis, effugit. Virgam enim, qua ad regendum equum usus fuerat, in unius barbari oculum direxit, qui vi doloris accensus, latus Crassi sica confodit: dumque se ulciscitur, Romanum imperatorem maiestatis amissae turpitudine liberavit. Ostendit fortunae Crassus, quam indignum virum tam gravi contumelia afficere voluisset; quoniam quidem iniectos ab ea libertati suae miserabiles laqueos prudenter pariter ac fortiter rupit, donatumque se iam Aristonico, dignitati suae reddidit.
(C) Miro quoque gradu Varro ad consulatum ex macellaria patris taberna conscendit. Et quidem fortuna parum duxit, sordidissimae mercis capturis alito XII fasces largiri, nisi etiam L. Aemilium Paullum dedisset collegam. Atque ita se in eius sinum infudit, ut, eum apud Cannas culpa sua vires populi Romani exhausisset, Paullum, qui proelium committere noluerat, occidere pateretur, illum in urbem incolumem reduceret. Quin etiam senatum gratias ei agentem, quod redire voluisset, ante portas eduxit; extuditque, ut gravissimae cladis auctori etiam dictatura deferretur.
(D) Apud Indos vero patientiae meditatio tam obstinate usurpari creditur, ut sint, qui omne vitae tempus nudi exigant, modo Caucasi montis glacialı rigore corpora sua durantes, modo flammis sine ullo gemitu obiicientes. Atque haud parva his gloria contemptu doloris aequiritur: titulus namque sapientiae datur.
2. (a) Give the proper Latin words for the numerical signs in ext. (A). Write down the Latin words for seven, seventh, seven times. b) Explain what coronae civicae, murales, and obsidionales were
respectively. (c) Give the name of the persons referred to in ext. (D) by titulus sapientiae.
3. Explain carefully the construction of the words in Italics in the above extt., and state concisely the rules of Syntax which govern them.
4. Parse the following verbs, giving their principal parts:-fulsit, extudit, pateretur, auxit, expediret, prosternerent, manasset, excussum, perosus, inlisum.
5. Write short explanatory notes on :-(1) C. Cossus spolia consecravit. (2) Athenienses finitimo bello implicati. (3) Dies taeterrimi facti. (4) Cato superior; Cato posterior. (5) Thyreatium solum. (6) Mirificas filias Leuctram et Mantineam relinquo.

6 . Distinguish between:-(a.) tenērřs and tenĕris; occidere and occǐdere; nitĕre and nitère; pendēre and pendĕre; rēge and rĕge; decŏrǐs and decōri̊s; fugēre and fŭgĕre. (b) metuo ei and metuo eum; consulo ei and consulo eum ; caveo ei and caveo eum ; quotidie and in dies; rure and ruri ; alii and ceteri ; amplius, magis, and plus.
c.) Express in Latin, in various ways:-His name is John.
7. (a) Mark the quantity of the penultimate in:-quare, paullatim, pedes, edis, inquimus, fatur, apage, maritimus, quisquis, quinam. (b) Mark the terminations of the following and state their force:audax, amabilis, iracundus, decies, deni, agito, albesco, esurio. (c) Explain, with examples, the construction with the following, severally :-avarus, similis, expers, miseret, interest, expedit, jubeo, promitto.
8. Translate into Latin:-

When Pyrrhus, King of Epirus, had, without provocation, engaged in war against the Roman people, a deserter from him came into the camp of Fabricius, the Roman general, and promised that, if he would offer him a reward, he would return to the camp of Pyrrhus, and would put him to death by poisoning. Fabricius took care that he should be taken back to Pyrrhus; and that act of his was applauded by the Senate.

## LATIN.-JUVENAL.-SATIRES VIII. AND X. THIRD YEAR.

Monday, Degember 15th :-Afternoon, 2 to 5.

Examiner,
Rev. Georgie Cornish, LL.D.

1. Translate, and be careful to indicate the parts of the dialogue in ext. (B), the following passages :-
(A) Præter majorum cineres atque ossa volucri Carpento rapitur pinguis Lateranus, et ipse,

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Ipse rotam adstringit multo sufflamine Consul ; Nocte quidem : sed luna videt, sed sidera testes Intendunt oculos. Finitum tempus honoris Quum fuerit, clara Lateranus luce flagellum Sumet, et occursum nunquam trepidabit amici Jam senis, et virga prior annuet, atque maniplos Solvet, et infundet jumentis hordea lassis. Interea dum lanatas torvumque juvencum More Numæ cædit Jovis ante altaria, jurat Solam Eponam et facies olida ad presepia pictas. Sed quum pervigiles placet instaurare popinas, Obvius assiduo Syrophœnix udus amomo Currit, Idumææ Syrophenix incola portæ, Hospitis affectu dominum regemque salutat, Et cum venali Cyane succincta lagena.
(B) Pone domi lauros, duc in Capitolia magnum

Cretatumque bovem: Sejanus ducitur unco
Spectandus! gaudent omnes. Quæ labra! quis illi
Vultus erat ! nunquam si quid mihi credis, amari Hunc hominem. Sed quo cecidit sub crimine? quisnam Delator? quibus indiciis, quo teste probavit? Nil horum : verbosa et grandis epistola venit A Capreis. Bene habet; nil plus interrogo. Sed quid Turba Remi? Sequitur fortunam, ut semper, et odit Damnatos. Idem populus, si Nurtia Tusco Favisset, si oppressa foret secura senectus Principis, hac ipsa Sejanum diceret hora Augustum. Jam pridem, ex quo suffragia nulli Vendimus, effudit curas. Nam qui dabat olim Imperium, fasces, legiones, omnia, nunc se Continet, atque duas tantum res anxius optat, Panem et Circenses. Perituros audio multos.
(C) Ut vigeant sensus animi, ducenda tamẹn sunt

Funera natorum, rogus aspiciendus amate Conjugis et fratris plenæque sororibus urnæ. Hæc data pœena diu viventibus, ut renovata Semper clade domus, multis in luctibus inque Perpetuo mœerore et nigra veste senescant. Rex Pylius, magno si quidquam credis Homero, Exemplum vitæ fuit a cornice secundæ. Felix nimirum, qui tot per secula mortem Distulit atque suos jam dextra computat annos, Quique novum toties mustum bibit. Uro, parumper Attendas, quantum de legibus ipse queratur Fatorum et nimio de stamine, quum videt acris

Antilochi barbam ardentem; quum quærit ab omni, Quisquis adest socius, cur hæc in tempora duret, Quod facinus dignum tam longo admiserit aevo ? Haec eadem Peleus, raptum quum luget Achillem, Atque alius, cui fas Ithacum lugere natantefn.
2. (a) Write explanatory notes on the words in italies in extt. (A) and (B). (b) For torvom some read robum:-why? What objection is there to its admission? Cite other various readings ind these two satires. (c) Give a short account of Sejanus.
3. Write briefly the argument of Satire X., and discuss Juvenal's mode of treatiug his subject, pointing out any indications of a desire to exaggerate for mere effect. What authors had he probably before him specially, in writing it?
4. (a) To what extent may Juvenal be regarded as a trustworthy authority in his pictures of Roman political, social, and private life and char. acter? Give the substance of anything you have read in Tacitus which bears upon these points. (b) Explain the meaning of the following expressions in the VIII. Satire: (1) Multa contingere virga. (2) Procerem, nobilis, generosum. (3) Cecropides. (4) Sensus communis. (5) Perdere naulum.
(6) Discinzerit Afros.
(7) Thermarum calices.
(8) Inscripta lintea.
5. Construe carefully, stating briefly the rules, the cases in italics in the following:-(a) Evertere domos totas optantibus ipsis. (b) Ardet adoratum populo caput. (c) Ingenio manus est et cervix caesa. (d) Ossa rides regum vacuis exsucta medullis. (e) Dominos pretiis mutare iubentur exiguis.
6. Give the derivation and meaning of :-asylum, diadema, mirmillonis triscurria, acersecomes, conchylia, nanum, loripedem, cute, Quinquatribus.
7. Scan the following and note any peculiarities of metre :-
"Confisus periit admirandusque lacertis."
"Ergo supervacua aut perniciosa petuntur."
"Bellorum pompa animam exhalasset opimam."
8. (a) Explain and illustrate the use of quum temporal and quum casual, (b) State and illustrate the rule for the sequence of Tenses. Illustrate the various ways of expressing a purpose in Latin. (c) Enumerate the chief uses of the Ablative, and explain the proper use of the Ablative Absolute.

## EUCLID,-ARITHMETIC

## FIRST YEAR.

## Monday, December 15th:-Morning, 9 to 12.

Examiner,
Alexander Johnson, LL.D.

1. If a parallelogram and a triangle be on the same base and between the same parallels, the parallelogram is double of the triangle.
$a$. The area of any triangle is half the rectangle under its base and perpendicular.
2. If a line be divided into any two parts the sum of the squares of the whole line and one part is equal to twice the rectangle under the whole line and that part, together with the square of the other.
a. Find the difference between the sum of the squares of any two lines and the square of their difference.
3. A perpendicular to the diameter of a circle at its extremity cannot meet the circle in any other point.
4. If from a point outside a circle two right lines be drawn to the circle one cutting and the other touching it, the rectangle under the whole secant and the external segment is equal to the square of the tangent.
5. Inscribe a regular pentagon in a circle.
6. If in any triangle a line is drawn bisecting the verticle angle to meet the base, it cuts the base into segments proportional to the contermiuous sides.
7. Find a mean proportional between two given lines.
8. Construct a rectilineal figure similar to one given figure and equal to another.
9. Add together $1 \frac{1}{2}+3 \frac{1}{4}+5 \frac{7}{8}$; subtract the difference of $\frac{57}{69}$ and $\frac{21}{23}$ from the sum thus obtained; and divide the remainder by $\frac{3}{4}$ ths of $\frac{5}{5}$.
10. Reduce $\frac{5}{6}$ to a decimal, and prove the result by converting the answer back to a vulgar fraction.
11. Find the number of gallons of water in a closed cubical vessel, one of whose outside edges is 4 feet long, the thickness of the sides being one inch; the weight of a cubic inch of water being 252.5 grs. , and a gallon of water weighing 10 lbs .
12. Find the interest on $£ 375$ 6s. $4 \dot{d}$. for 5 months at $6 \frac{1}{2}$ per cent. per annum.
13. Convert $£ 375$ 6s. 4 d . stg. into dollars and cents at the rate of $\$ 4,866$, to the pound sterling.
14. Find the square root of 1,104 .

## EUCLID.-ALGEBRA.-TRIGONOMETRY.

## SECOND YEAR.

Monday, Decbmber 15th:-Morning, 9 to 1.

## Examiner

$\qquad$ Alexander Jounson, LL.D.

1. Angles in the same segment of a circle are equal.
2. In a circle inscribe a regular quindecagon.
3. Similar polygons may be divided into the same number of similar triangles proportional to the polygons; and the polygons are to one another in the duplicate ratio of their homologous sides.
4. In the same circle angles at the centre are to one another as the arcs on which they stand.
5. Find the greatest common measure of

$$
x^{3}+2 x^{2}-8 x+15 \text { and } x^{6}-x^{4}+x^{2}-1
$$

6. Add together

$$
\begin{array}{r}
\frac{2 x+3}{x-5}+\frac{x}{2 x-3}-\frac{x-4}{x^{2}+25} \\
2 x^{2}-13 x-15
\end{array}
$$

divide the result by
and reduce the quotient to its simplest form.
7. Multiply $x^{\frac{1}{2}}-3 x^{\frac{1}{4}} y^{\frac{1}{4}}+y^{\frac{1}{2}}$ by $x\left(\begin{array}{l}\left(\frac{3}{2}\right) \\ (+) \\ 2\end{array}\right)-y^{\frac{1}{2}}$
8. Solve the equations

$$
\begin{aligned}
& \frac{x-2}{3}-\frac{\left(\frac{3}{2}\right)(x+4)}{5}=(5)(x-7) \\
& \frac{x-4}{x-5}+\frac{2 x-6}{x-1}=3 \\
& a x+b y=c, a x-b y=d
\end{aligned}
$$

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9, Define the two units of angular measure commonly employed find their ratio ; and thence deduce a formula for converting the measure of any angle expressed in one system into that in the other system.
10. Prove

$$
\tan A=\frac{\sin A}{\cos A} ; \sec A=\frac{1}{\sqrt{1-\sin ^{2} A}}
$$

a. If $\sec A=\frac{1}{2}$, find $\sin A$.
11. Prove $\sin A=2 \sin \frac{1}{2} A \cos \frac{1}{2} A$.
12. The area of any triangle is equal to

$$
\sqrt{s(s-a) s-b)(s-c)}
$$

a. If the sides of a triangle be 6,8 and 12 feet respectively, find the area of the triangle formed by joining the middle points of its sides.
13. Two sides of a triangle are 112 and 328 feet, and the angle contained by them is $56^{\circ} 14^{\prime} 24^{\prime \prime}$; find the base angles.
14. From the top and bottom of a tower 60 feet high, on the top of a hill, the angles of depression of an object in the plain are found to be $43^{\circ} 1034^{\prime \prime}$ and $41^{\circ} 12^{\prime} 25^{\prime \prime}$; find the height of the hlll.
15. From the top of a mountain 2 miles high, the top of another 3 miles high is just visible ; find their distance apart.

## MECHANICS.-HYDROSTATICS.

THIRD YEAR.
Friday, December 12th:-Morning 9 to 12.
Examiner, $\qquad$ Alexander Johnson, LL.D.

1. Give that part of Duchayla's proof of the parallelogram of forces in which it is shown that if two incommensurable forces meet at a point, their resultant lies in the direction of the diagonal of the parallelogram formed by the forces.
2. If three forces meeting at a point, equilibrate each other, the sum of their moments, with respect to any point is equal to zero.
3. Find the resultant of two parallel forces ; -
(a) When they act in the same direction, and
(e) When they act in opposite directions.

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4. A body of given weight is supported on an inclined plane by a force parallel to the base of the plane : find the ratio of this force to the weight.
5. Five steam engines of a total power of 1310 horses were employed in pumping water from the shaft of a colliery;-how many gallons of water per hour could they raise from a depth of 73 fathoms.
6. State the principle of constancy of work done, and apply it to find the ratio of the power to the resistance in Smeaton's pulley. (Describe the pulley.)
7. Prove the following equations for a constant force

$$
v=f t ; \quad s=\frac{c t}{2} ; \quad \quad v^{2}=2 f s
$$

N.B. Define $f$ accurately; for example, suppose it to be 32.2 .
8. Find the acceleration in the time of oscillation of a pendulum due to a change of place.
a. A seconds pendulum loses 5 seconds a day when carried from the bottom of a mountain to the top: find the height of the mountain.
9. A closed vessel, which can bear a pressure of 20 lbs . to the square inch, is full of water; a vertical tube is inserted into the upper side, and water poured in; what should be the length of the tube in order to burst the vessel.
10. Define centre of a pressure. Find it for a rectangular surface, one of whose sides coincides with the level of the liquid.
11. Describe the experimental proof of Boyle and Marriotte's law.
12. State Dalton \& Gay-Lussac's law, and from it deduce two formu-1æ:-
a. Determining the volume of a gas when a given volume has been raised from the temperature $t^{\circ}$ Fahrenheit to $t^{\circ}$ Fah., the pressure remaining unchanged.
6. Determining the volume when the pressure also is changed.

## MECHANICS.-HYDROSTATICS.-OPTICS.-ASTRONOMY,

## FOURTH YEAR.

Friday, December 12th:-Morning, 9 to 1.
Examiner, ......................................Alexander Johnson, LL.D.

1. Find the centre of gravity of a homogeneous thin plate cut into the form of a triangle.
a. If the triangle be equilateral, and its side 4 feet long, find the distance of this point from the base.

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2. A cubical mass of ice ( $\mathrm{sp} . \mathrm{gr} .=.918$, $)$ l foot long, falls from the top of a house 40 feet high; find its momentum on reaching the ground.
3. A force of 17 lbs . produces a velocity of 14 feet in a cubic foot of matter in one second; find the specific gravity.
4. The velocity acquired by a body in running down any inclined plane is equal to the velocity acquired in falling down the height of the plane.
5. Two men support a uniform plank 12 feet long between them; one is at one end, find where the other is placed if he bears ${ }_{4}^{3}$ ths. of the weight.
6. If a homogeneous body float in a liquid, its whole volume will be to that of the part immersed, in the inverse ratio of the specific gravities of the body and liquid.
7. Describe the suction pump, and find the effective pressure on the piston.
8. Describe the method of finding the specific gravity of a solid that sinks in water.
a. A piece of lead whose weight is 511.56 grs ., weighs in water 466.57 grs; find its specific gravity.
9. Describe the construction of the air-pump, and show that it cannot make a perfect vacuum.
10. A statuette, 10 inches long, is placed 3 feet from the surface and directly in front of a conclave reflector, whose radius is 2 feet, find the position and magnitude of the image.
11. Define the dispersion produced by a prism-and show how it may be found! for a prism of a known small angle, if the refractive indices of the red and violet rays for the substance are given.
12. The focal length of the object glass of a microscope is $\frac{1}{5}$ th inch, and of the eye-glass 8 th inch, the object being placed in front of the object glass at a distance from it exceeding its focal length by $r_{0}^{3} 0_{0}$ th of an inch: find the magaifying power of the instrument when the distance of distinct. vision of the observer is 10 inches.

## 13. Describe the Newtonian Telescope.

14. Find by Kepler's third law, the distance of Uranus from the Sun, if his periodic time be 84 years.
15. Given the apparent semi-diameter of the Sun and Moon at the time of a solar eclipse, determine when the eclipse will be partial, annular, or total.
16. Investigate the method of finding the moon's distance from the Earth.
17. Prove that the latitude of any place is equal to the altitude of the pole.

## EXPERIMENTAL PHYSICS-LIGHT.

## THIRD AND FOURTH YEARS.

Friday, December 12th:-Afternoon, 2 to 4.
Examiner, .......................................ALexander Johnson, LL.D.

1. Describe Rumford's Photometer and explain the method of comparing by it the intensities of two lights. Show particularly that it is not shadows that are compared.
2. Account fully for the shape of the bright spots on the ground when the sun shines through foliage.
3. Describe an experiment exhibiting the caustic formed by a concave reflecting surface.
4. A straight line 10 inches long is placed at angle of $45^{\circ}$ intersecting the axis of a concave spherical reflector, so as to be bisected by it ; the distance of the point of intersection from the surface is 3 feet, the radius of reflector is 2 feet:-Draw a diagram on any scale you please, and find by a geometrical construction the images of the two extremities of the line.
5. State the laws of refraction, and make a diagram showing the path of a ray of light which passes through a sphere of glass.
6. A luminous point is placed at a great distance from a convex lens, and then moved in towards the lens and up to its surface ; describe the different positions of its image, when real, as obtained experimentally (together with the method of exhibiting them), and give diagrams showing the actual course of the rays in the several cases, whether the image be real or virtual.
a. Describe experiments to explain the inversion of the image of a luminous object, and also the variation in its magnitude. When is the image erect?
7. Describe the eye as an optical instrument and its different parts.
a. Describe an experiment showing that there is a part of the retina on which, if the image fall, the object will be invisible.
8. Account fully for the magnifying power of a simple lens, and describe an experiment illustrating it.

## ENGLISH GRAMMAR.

## FIRST YEAR.

Fridat, December 19th:-Afternoon, 2 to 5
Examiner:

## Ven. Archdeacon Leach, D.C.L.

1. Mention some of the processes for obtaining noun forms to signify what is expressed by verbs. On what principles is the employment of verbs for nouns and nouns for verbs to be explained?
2. Give the principal idiomatic forms of the employment of the pronoun 'it."
3. Give the substance of what is said in regard to the use of the demontratives " this" and "that."
4. Give examples to show the co-ordinating and the restrictive use of the relatives "who " and "which."
5. When is the word "but" used as a relative? explain the form of expression
6. Which are the adverbs equivalent to the interrogative pronouns "who" "which" "what."?
7. When are "No" "None" followed by a singular or plural ?
8. Give the classification of the subordinating conjunctions; with examples.
9. Give the substance of what is said in regar.l to the new and the old conjugations and explain the twofold forms of the past tense, such as "sang" and "sung."
10. Explain the forms of expression - " has come," "is come."
11. Mention the exceptions to the rule two nouns or pronouns united by the conjunction "and" are followed by the verb in the plural.
12. Give the substance of the remarks on the use of the word "every."
13. State the rule in regard to the position of adverbs and show the different meanings produced by the different positions of the word "only" in a sentence.
14. Give examples of the composition of nouns with other parts of speech.
15. Give a grammatical analysis of the following sentence and express it by notation :-
"The secret feeling he had previously had that the tenacious adherence to A's wishes about the house had become under existing circumstances a piece of sentimental folly which deprived himself and $\mathbf{C}$ of substantial advantages might perhaps never have wrought itself into action but for the events of the past week, which had brought at once the pressure of a new motive and the outlet of a rare opportunity."

## RHETORIC.

## THIRD YEAR.

Friday, December 18th:-Afternoon, 2 to 5.

## Examiner

Ven. Archdeacon Leach, D.C.L.

1. Explain the two errors that are particularly adverse to unity of composition.
2. State and explain the three preliminary questions in regard to propositions about to be laid down.
3. Define the argument designated sign.
4. Explain the ambiguity commonly involved in the use of the words, " therefore," "hence," "because," "why," \&c.
5. Give the substance of the remarks on concurrent signs, exclusive of hose of testimony.
6. Answer the question-" What is meant by the chances against any supposition?"
7. Explain the argument from example in the more comprehensive sense and in the narrower.
8. Give the substance of the remarks on Experience.
9. Show the necessity, in arguments from analogy and example generally, of special attention to the important and unimportant resemblances and differences of cases.
10. Distinguish real and invented examples and show how the latter may be properly used either for conviction or illnstration.
11. State the conditions under which arguments from cause to effect should have the precedence.
12. Explain the two different modes of refutation.
13. Give an example of an argument that proves too much.
14. Why should objections be stated in their full force?-and what is to be done when objections are unanswerable or decisive?
15. Give the substance of the remarks on the kinds of argument that should be used first in order.

## ENGLISH LITERATURE.

## FOURTH YEAR.

Friday, December 19th:-Afternoon, 2 to 5.
Examiner $\qquad$ Ven. Archdeacon Leach, D.C.L.

1. Shew that literature exerts a powerful influence upon the operative principles of the people among whom it is cultivated.
2. Shew from facts of history that some connection subsists between the periods most remarkable for literary cultivation and public events of an exciting character.
3. Give some account of the order of Bards and their early literary efforts in the several countries in which the order is known to have existed.
4. Mention the principal causes that have led to the marvelous diffusion of literature in modern times.
5. How do you account for the existence of the same or very similar fictitious stories among different nations?
6. What beneficial effects of a permanent character are supposed to be justly ascribed to the Romans during their occupation of Britain?
7. What causes may be assigned for the scantiness of the relics of Grelic or Erse literature that have reached the present times?
8. Mention the historical events that connect Brittany (Bretagne) with the Celtic inhabitants of Britain.
9. How do ycu account for those imaginative creations of monsters of various kinds that are so often found in the early fictitious literature?
10. Mention the principal writers in the Latin tongue during the AngloSaxon perivd.
11. Give a particular account of John Scotus Erigena.
12. Describe the earliest specimens that remain of prose writing in the Anglo-Saxon tongue.
13. Mention the peculiarities worthy of note that appear in the code of Laws digested by Alfred.

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.2 H A 1+51 H 2
$$

## ELEMENTARY PSYCHOLOGY.

SECOND YEAR.
Friday, December 19th :-Morning, 9 to 12.
Examiner...................................................... Clark Murray, LL.D.

1. Explain the original meaning and the present philosophical use of the terms subject and object.
2. Distinguish the special and the general senses, illustrating the distinction by an example of each.
3. The words flavour and savour are applied both to tastes and to smells. Explain, on psychological grounds, this combination of meanings.
4. State any facts which prove that the sensibility of the nostrils to pungent substances, like snuff, is distinct from smell.
5. What is the compass of the ear in reference to the pitch of tones?
6. What is the organ of touch $(a)$ in general, $(b)$ in a more restricted sense? (c) Name the most acute and the most obtuse parts of the organ.
7. What are the two processes by which the elements of our knowledge are combined?
8. State the two primary laws of suggestion.
9. Show that the suggestion of one correlative term by another is due to the combined action of these two laws.
10. Explain, by the secondary laws of suggestion, why " the whole world seems happy" while we are gladdened by an intense joy, whereas "the whole world seems gloomy " while we are suffering any intense sorrow.
11. Explain, by the same laws, voluntary recollection.
12. State the Law of Irresistible and Instantaneous Suggestion, giving an illustration of its action.
13. What special science investigates the laws of comparison?
14. Mention some of the mental phenomena, regarding which it is still disputed whether they are elementary or not.

## MORAL PHILOSOPHY.

THIRD YEAR.
Thursday, December 18th:-Morning, 9 to 12. Examiner, $\qquad$ J. Clark Murray, LL.D.

1. Explain the origin and the meaning of the terms Ethics and Morals.
2. Distinguish sensations and emotions.
3. Describe and illustrate the influence of relativity in modifying all our feelings.
4. Describe and illustrate those emotions which are created by the influence of relativity.
5. Define pleasure and pain.
6. Explain the properties on which depends the value of a feeling as a motive power.
7. Classify the appetencies.
8. (a) Define the appetites, and state their characteristics. (b) Distinguish the natural appetites from the acquired or artificial.
9. (a) State Hobbes' theory regarding the desire of society. (b) Point ou the feelings out of which the desire is generated. (c) Show that it is quite compatible with the love of solitude.
10. (a) Point out the feelings which generate the desire of esteem. Show (b) how it creates vanity in two forms, (c) how it originates the love of posthumous fame, (d) how it may aid purely ethical motives, and (e) enters as an element even into the religious emotions.
11. (a) State the original form and meaning, as well as the present use, of the word resentment. (b) Distinguish the two kinds of resentment.
12. (a) What two conditions are required to make an action ásolutely righ? (b) Explain the character of an action, according as the one or the other of these conditions is unfulfilled.


MENTAL PHILOSOPHY.

## FOURTH YEAR.

CHRISTMAS EXAMINATIONS, 1873.

## Fridat, December 19th:-Morning, 9 to 12.

## Examiner.

## J. Clark Murray, LL D.

1. Describe the process by which a mere sensation rises to a cognition or perception, showing the respective functions of association and comparison in the process.
2. James Mitchell, the blind deaf mute, is said to have perceived by smell not only the presence, buteven the direction, of strangers in a room. Suggest a possible explanation of the perception.
3. State the facts which prove that we cannot perceive distance y bsight alone.
4. If the eyes are directed to a point behind an object, explain, on psychological grounds, why the object appears $(a)$ to recede to that point, (b) to become largere?
5. Explain, on psychological grounds, why an imitation of bassrelief, to be successful, must be at a distance from the spectator's eyes.

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6. (a) What are the two main perceptions which we owe to the Muscular Sense ? (b) What are the properties of matter, with which we become acquainted by its means ?
7. Mention any proofs, from ordinary experience, of the great delicacy of the Muscular Sense.
8. What is meant by the terms a priori, pure, transcendental, as applied to certain cognitions?
9. Sketch and criticise Mill's theory with regard to the origin of selfconsciousness.
10. State (a) the Empirical theory on the origin of the notion of time, and (b) the counter-arguments of the Intnitionalists.

## FRENCH.

## FIRST YEAR.

$$
\text { Saturday, December 20th:-Morning, } 9 \text { to } 12 .
$$

Examiner. $\qquad$ P. J. Darey, M.A., B.U.L.

1. Write the partitive article in French, and explain when each of its forms is to be used.
2. Write the two numbers in French the following words, canal, ballr particulars, jewel, hatter, owl, voice, aïeul, work and book. State the rules to form the plural of those nouns in French.
3. Write both genders of the following adjectives in French : old, mildr idle, similar, clean, ancient, plaintiff, short, singer, and false. State the rules to form the feminines of those adjectives, and mention those which form their feminine irregularly.
4. State the three ways to write the word mille in French. Explain when each is to be used.
5. Where do you place the personal pronouns in French? Give two examples. Mention three exceptions to that rnle.
6. Translate into French my, her, his, and thy. Give examples. Mention the difference between the French and the English languages in the agreement of those adjectives.
7. What difference is there between the demonstrative pronoun ce and the adjective demonstrative $c e$ ?
8. What do you cull indefinite pronouns? What remark do you make on the word on? When do you place the euphonique letter $l$ before on?
9. How many conjugations are there in French? - Enumerate them. What do you call primitive tenses in French? Which are the primitive tenses?
10. How are the English negatives no, nothing, never, rendered in French? 11. What remark do you make in those verbs whose infinitive end in ger and cer? Give examples.
11. Write the primitive tenses of ne pas parler, $y$ avoir, appeler, finir, pleuvoir.
12. Translate into English:-

Le calcul est juste; et là-dessus je vous dirai franchement et en ami, comme vous m'avez fait promettre de vouz parler, que le mariage n'est guère votre fait. C'est une chose à laquelle il faut que les jeunes gens pensent bien mûrement avant que de la faire ; mais les gens, de votre âge n'y doivent point penser du tout; et si l'on dit que la plus grande de toutes les folies est celle de se marier, je ne vois rien de plus mal à propos que de la faire cette folie, dans la saison où nous devons être plus sages.Molibre, Le Mariage forcé.

## 14. Translate into French :-

I shall endeavour to persuade them. The plank was bending under him. We do not intend to travel this year. Never yield to the violence of thy passions. Render unto Cæsar the things that are Cæsar's. That town was swallowed up by an earthquake. At all times gold has been looked upon as the most precious metal. My watch does not go so well as hers.

## FRENCH.

## SECOND YEAR.

Saturday, December 20th:-Morning, 9 to 12. Examiner. $\qquad$ P. J. Darey, M.A., B.C.L.

Translate into French:

1. (1.) The late princess was universally regretted. 2. The great wall on the north of China is about twelve hundred miles long. 3. He, perceiving their intentions, gave up his project. 4. You were hardly gone when your brother arrived. 5. They raised him up, and he dressed his wounds. 6. They came to us when we were not thinking of them. 7. That horse was formerly mine, but I sold it to your cousin. 8. It was the Egyptians who first observed the course of the stars, regulated the year, and invented arithmetic. 9. Neither the one nor the other will obtain the prize. 10. He has furnished the number of copies agreed upon. 11. Your brother is honored and respected by all who know him. 12. He amuses himself with making chemical experiments.
2. Explain fully how each of the underscored word, in the above sentences is to be written; and give the rules.
3. Write the following verbs with the prepositions they require afte them in French, when they require any:-to set about to, to succeed in, to try to, to congratulate upon, to glory in, to intend to, to seem to, to thank for
to stoop to, to excel in.
4. Translate into French :-When I have done, 1 shall go out. The temple a Delphi had for an inscription this maxim :-Know thyself. When 1 had done that, I set out. I had finished my work when he arrived.
State in what tense or tenses the verbs in the above sentences have to be ranslated into French.
5. Translate into English the following sentences from Britannicus: Toute autre se serait rendue à leurs discours. Clandius penchait vers son (éclin. Eussiez-vous pu prétendre qu'un jour Claude à son fils dût préférer son gendre. Qu'un sache si ma mère est encore en ces lieux. Je ne sais pas cu moins épier ses discours. Ah! n'en voilà que trop.
6. Mention the characters which are contrasted with one another in Britannicus.
7. Translate into English:-

Retirez-vous, Seigneur, et fuyez un courroux
Que ma perséverance allume contre vous.
Néron est irrité. Je me suis échappée,
Tandis qu'à l'arrêter sa mère est occupée.
Adieu ; réservez-vous, sans blesser mon amour, Au plaisir de me voir justifier un jour.
Votre image sans cesse est présente à mon âme.
Rien ne l'en peut bannir.-Je vous entends madame.
Britannicus, Acte, III, sc. VII.

FRENCH.
THIRD AND FOURTH YEARS.
Saturday, December 20th: Morning, 9 to 12.
Examiner. $\qquad$ P. J. Darey, M.A., B.C.L.

Toutes les réponses devront être faites en français.

1. Donnez un court résumé de la tragédie de Corneille Cinna. Comparez Chimène dans le Cid à Emilie dans Cinna. Quelle était la cause de la haine d'Emilie contre Auguste?
2. Traduisez en anglais Cinna Acte II sec. I. depuis Que l'amour du pays jısqu'à soit digne de vous.
3. Quand Montesquien naquit-il? A quoi son père le destinait-il? Quel fit le premier ouvrage qu'il publia? Quel est le caractère de cet ouvrage? Lans quel pays voyagea-t-il. Quels personnages fameux rencon-t:a-t-il dans ses voyages. Quel ouvrage publia-t-il après son retour e. France? Quel fut son principal ouvrage? Par quoi Montesquieu nérite-t-il notre admiration? Où mourut-il? A quel âge?
4. Nommez encore trois auteurs fameux appartenant au XVIII siècle, et. frites connaitre quelques-uns de leurs ouvrages.
5. Traduisez en français :-

His partner has sent me a remittance with samples of goods. I have aso received the bill of lading from the ship-broker. A mortgage is generaly a good security. There has been a fall in stocks this fall. Almost $1 l$ governments have sinking-funds,
6. Traduisez en français :-

The influence of the Arnaulds on Madame de Sévigné was perceptible in after years; but it is remarkable that the powerful sermons of men wio were not such enthusiasts, but viewed religion in a truer light-men lite Bossuet, Bourdaloue, \&c., the greatest preachers of their day, and the greatest ever heard in France-should not have moved her so much as the privae conversation of a family of ascetics. The fact was, that to hear sermors, and comment on them, was then, as now, a fashion; and then, as now, tle style was admired or criticised : the words were declared powerful, searcling, and so forth, but the matter was not taken to the heart. The warning? the entreaties, the thunders of men who were sincere in their condemnstion of the vices of the court were listened to as a piece of well-studiel oratory, to be talked of in their salons, in the same tone as one talked of the eloquence of Demosthenes and Cicero. Grace \& Philip Wharion.


## SENIOR YEAR, ENGINEERING.

Saturdat, December 20th.:-Morning, 9 to 12.

## Examiner

Qu'elle a tort down to hélas! denouement of the tragedy? tragedy of Corneille Horace? Relate the What is that sublime exclamation so much
3. Translate the circumstances which were the cause of it.

L'ébral
L'ébranlement sied bien aux plus fermes courages. Les soupirs qu'il ponsse vers les cieux. Il m'a vu comme gendre, avec une tendresse qui témoignait assez une entière allégresse. Le sort épuise sa force. Qu'on ceigne une autre tête. J'atteste les dieux. N'attendrissez point mes sentiments.
4. Our forests produce in great quantity the oak, the maple, the fir-tree the birch-tree, the beach-tree, the ash, but the linden-tree is rare, and the ivy is not found in this country in its wild state.
5. Combien d'espèces de mots forment les parties du discours? Corment se divisent ces différentes espèces de mots?

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6. Quels substantifs en ail forment leur pluriel en aux ?
7. A quels changements est sujet l'article? Donnez des exemples.
8. Traduisezen français :

Towards the end of the week, we received a card from the town ladies; in which, with their compliments, they hoped to see all our family at church the Sunday following. All Saturday morning I could perceive, in consequence of this, my wife and daughters in close conference together, and now and then glancing at me with looks that betrayed a latent plot. To be sincere, I had a strong suspicion that some absurd proposal was preparing for appearing with splendor the next day. In the evening they began their operations in a very regular manner, and my wife undertook to conduct the seige. After tea, when I seemed in spirits, she began thus: "I fancy, Oharles, my dear, we shall have a great deal of good company at our church to-morrow."-Goldsmith, Viear of Wakefiel 1.

## GERMAN.

## SENIOR CLASS.

Saturday, December 20th:-Afternoon, 2 to 5.
Examiner,...........................................C. F. A. Markgraf, M.A.

1. Translate into English: $-\square \square$
a. "Die beiden Mufen," by Klopstock. P. 121. or $b$. "Der ఇaudjer," by Schiller. P. 137.
2. What is the characteristic of the strong, and that of the weak declension of substantives?-Show which of the following nouns belong to the one, and which to the other declension, and give the gender and meaning

 Geftidt, Sifmerz, Interthan.
3. a. Give instances of nouns the gender of which may be determined by their termination. b. What class of nouns may be used in different genders? $c$. What nouns are used to denote persons of both sexes? $d$. What nouns cannot be used without the article? e. Are there any German nouns that take $\S$ in the Plural?
 trïbett.-Give the meaning of the above verbs, and state the cases and prepositions governed by them.
4. When are the pronouns myself, thyself, himself, \&c., expressed by mid), Didj, fid. \& c. ; when by mid) felbit, Did) felbit, fich felbft, \&c. ; and when by felbit only? Explain, and give short examples.
5. Translate:-that man of whom I speak-the son whose father I know -whose dwelling is that?-what is the name of that book?-what name have you given this flower?-that which I said is true-he who (has) said this, was mistaken (ficif) irren, Perf.) -those are my friends-are not these strangers ?
6. When do possessive pronouns become definite words? How are they declined when definite? When do they retain their primitive form? State rules and add examples.
7. Give the irregular forms of the following verbs:-befeblen fliegen, idiließen, helfen, erfennen, beftehen, abtreten, nadjomfen, begimen, umgeben, abjangen, verbinden; -and the Imperative Mood (all persons) of nefgmen, laffen, and fict) fetgen.
8. Conjugate in the Passive voice "begleiten," giving the 1st Sing. of all moods and tenses.
9. When are independent or principal sentences inverted in German, and in what way? Explain.
10. Point out the difference between the prepositions bimen and imner halb ; gegen and mider; gegen and entgegen; entgegen aed zumider; zuwioer and miDer; nädjft and zunädjit.

## 12. Translate into German:-

The nations were in olden times either herdsmen, hunters or husbandmen. The road to India passes (goes) through the Arabian desert. That pleasant (freundlid) little village (dim.) lies on the other side of the river, in the neighborhood of the Black Forest. I could not believe it, if I had not seen it. We wished it might be so. He took me by the hand, and assured me, that he knew nothing of it. According to the last news the enemy is totally beaten, but many of our best officers have been killed in the battle. Shall I come up to you? No, I will come down, if you will wait below. The voices of thousands, who were assembled on (auf) the meadow below the town, welcomed the returning king. By means of his influence he can do much for his friends. I heard you bad received letters from you. absent relations.

## GERMAN.

## JUNIOR CLASS.

## Saturday, Decbmber 20th:-Afternoon, 2 to 5.

## Examıner,

C. F. A. Markgraf, M.A.

## 1. Translate into English:-

[^8]2. a. When must the definite article be used in German, though not expressed in English? b. When is the indefinite article omitted in German, though used in English? c. When is the indefinite article in English rendered by the definite in German?-Explain and give one example in each case.
3. a. What words are declined like the definite article? $b$. What is the Plural termination of declinable words preceding nouns and adjectives?
4. a. What classes of Nouns are always maseuline, or feminine, or neuter?
b. Which masc., fem., and neuter Nouns do not soften the radical vowel in the Plural?
c. Which feminine Nouns take no ending in the Nominative Plural ?
d. Which Nouns may take the Plural ending e, and which er?
5. Give the Nominative and Accusative Singular, and the Nominative Plural of:-this friendly old man; their diligent boy; the new iron bridge; that small wooden house ; a younger son (plur. younger sons) ; what sort (fruit of $\mathrm{F}^{\mathrm{r} u d)} \mathrm{t}$ ).
6. Give the three degrees of comparison in German of the following adjectives :-strong, hard, old, black, long, near, red, short, great.
7. Write down in letters the cardinal numbers from 80 to 90 , and the ordinal from 10 to 25 ; and $4075,92381$.
8. Translate:-Is this your friend? Who is this man? That is his son Is that house finished (ready)? This one is (ready), but not that one. What books do you read? We read only good ones.
9. a. Give the 1st and 3rd persons Sing., Present Indicative, of:wollen, fömen, müfen, fragen, mögen, jollen, folfen, Dürfen, wiffen; and the Participle Perfect of:-binden, Gageln, idjreiben, baden, wiffen, tragen, feben, effen, lebren, ausreiten, trinfen.
10. Translate into German :-

White sand is finer than grey sand. The sparrows are small birds. Her daughters are our neighbours and friends. We do not know what they want. Pray, stay here. Our cousins and nephews have gone home. All trees are higher than hedges. Do you not hear us? We do not like to wait here ; can we not go anywhere etse (else whither)? Do you like these people? This country has no large rivers. Your servant has just brought these pictures for you ; have you bought them? We will traval for a whole month next summer. The last leaves are no longer green. The month of April has been last year more pleasant than the month of May. Glass mirrors are now very common ; but the ancient nations (have) had only metal ones.

## 51

## HEBREW. <br> JUNIOR CLASS.

Fridat, December 19Th:-Morning, 9 to 12. Examiner ........................... Aev. De Sola, LL.D.

1. Give the rules for the Defineit article, and exhibit by examples, the changes necessitated in its punctuation by the occurrence of a guttural; also the rules for its compensation by Dagesh, \&c.
2. Describe the interrogative $\pi$, and show how : the propositions are prefixed to the definite article in a contracted form. Give examples especially showing the changes of punctuation produced by the intervention of a guttural.
3. Give the rules for Sheva and Kamets, and especially show the effects of Metheg on the latter.
4. Describe Dagesh, lene and forte, and give the rules by which they are distinguished from each other, also the rules for compensation of Dagesh forte.
5. Write a brief sketch of the history of the Hebrew language showing, ( $a$ ) its origin; (b) the claims assigned for its primitive character; (c) origin of its vowel system and the Massorah; (d) its development; (e) its relation to the other Semitic dialects, and $(f)$ its main characteristics as exhibited in the Sacred Scriptures.
6. Give the rules for Mappik and Makikaph, and show the effects of the latter on accent.
7. Explain composite Sheva and Patach furtive.
8. Give the terminations of nouns in the masculine and feminine plural, and the dual; in the nominative singular feminine, and construct plural, masculine and feminine.
9. Write the rules for adjectives, and give examples showing their position and agreement with nouns in gender and number.
10. Translate into Hebrew :- The good man and the good woman are in the small house. The horse and mare are in the large field. From the king and queen to the prince and princess. Nineveh was a great city, and the inhabitants thereof very sinful. The men of this place are very great. The land is exceedingly good.
11. Translate into English:-


 אחותך אשר בּבּת :

HEBREW.
SENIOR CLASS.
Friday, December 19th:-Murning, 9 to 12.
Examiner, .................................. A. De Sola, LL.D.

1. Write out an irregular verb $y^{\prime}$ פממד)
2. Write out the verb לבש in Kal, Niphal and Piel forms,
3. Add the pronominal fragments to the noun $\tau y$, sing. and plural.
4. Show the effect of the employment of both mutable and immutable vowels with reference to the formation of the construct singular, giving, at the same time, the rules affecting the changes of punctuation, as determined by the position of the vowels.
5. Give a general description of Segholates; and show how the various paradigms of nouns may be included in two chief classes.
6. Give examples showing the position of the adjective and its agreement in gender and number with nouns, (singular and plural, masculine and feminine.)
7. Translate literally the first chapter of Genesis.
8. Analyze fully the last five verses.

9, Explain , conversive, show its proper punctuation and effect on the accent. Write out the future and preterite tenses of the verb in Kal and Hithpael forms, adding the , conversive.
10. Translate into Hebrew (with points): God created the world and all that is therein, in six days. He made the heavens and all their hosts; the sun, the moon and the stars. When the sun is above the earth, there is light; when beneath, there is darkness. Darkness was called night, and light was called day.
11. Translate into English :-

ביום חשני עשה חי" אמלחים את הרקיע להכריל ביצ ביץ מים למים ביום



וביוט השביעי שבת וינפשד :

## 53

## ELEMENTARY CHEMISTRY,

## FIRST YEAR.

## Wednesday, December 17th:-Morning, 9 to 12. <br> Examiner, <br> B. J. Harrivgton, B.A., Ph. D.

1. What do you understand by the terms Element, Synthesis, and Analysis?
2. Describe the Fahrenheit, Centigrade and Reaumur thermometric scales, and reduce $45^{\circ} \mathrm{F}$. to the corresponding position on the Centigrade and Reaumur scales.
3. Explain Dalton's Atomic Theory.
4. How may Ozone be obtained, and what are its properties?
5. Describe an experiment performed in the class-room, illustrating the Law of Gaseous Diffusion.
6. How is Ammonia prepared, and what are its properties ?
7. Explain the following formulæ:-

$$
\begin{gathered}
K \mathrm{NO}_{3}+\mathrm{H}_{2} \mathrm{SO}_{4}=H \mathrm{HO}_{3}+K H S O_{4} \\
\mathrm{CaCO} \mathrm{CO}_{3}+2 \mathrm{HCl}=\mathrm{CaCl}+\mathrm{H}_{2} \mathrm{O}+\mathrm{CO}_{2}
\end{gathered}
$$

8. What are the best means of detecting the presence of Nitric Acid and Carbonic Dioxide?
9. Explain the construction of the Davy Lamp and Bunsen Burner.


## ELEMENTARY BOTANY.

## SECOND YEAR.

Wednesday, December 17 th;-Morning, 9 to 1 p.m.
Examiner. $\qquad$ J. W. Dawson, LL.D., F.R.S.

1. Describe a parenchymatous cell, and explain the nature of Prosenchyma.
2. Describe the various modes of thickening jthe walls of cells and vessels.
3. Explain the normal structure and functions of the root.
4. Explain the anatomy of the leaf, and its relations to the atmosphere.
5. What are Raphides and Chlorophyll, and their uses?
6. What are vascular as distinguished from cellular plants?
7. Describe a woody wedge of an ordinary exogen, and state the modifications of the structures in herbaceous plants and in gymnosperms.

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8. State the sources of the carbon and nitrogen of plants.
9. Explain on illustrate by figures the terms Pentastichous, Pinnate, Crenate, Reniform, Lobed, Mucronate, as applied to leaves.
10 Describe the parts and structures denoted by the following terms:-
(a) Spine,
(b) Aerial Root,
(c) Phyllodium,
(d) Cambium,
(e) Stipule,
(f) Rhizoma.

## ELEMENTARY ZOOLOGY

## THIRD YEAR.

Wednesday, December 17th:-Morning, 9 to 12.
E Examiner
J. W. Dawson, LL.D., F.R.S.

1. Describe Bone and Cartilage, and state their relations.
2. State the different types of nervous system, and give examples of the Animals in which they occur.
3. Explain the terms Species, Race, Variety, as used in Zoology.
4. What are the primary divisions of the Animal Kingdom, and their distinctive differences ?
5. Give an example of the use of Classes, Orders, Families and Genera, in Zoology.
6. Describe the appearance of Blood-Cells and Muscular Fibre as seen under the microscope.
7. State the distinctive characters of the skeleton in Articulata and Vertebrata.
8. Explain the function of Respiration, and describe the parts concerned in it.
9. Explain the terms Secretion, Fission, Ciliary motion.
10. Describe the structures indicated by the terms Auricle, Retina, Pseudopodia, Spicula, and mention the animals and organs in which they occur.
11. State the characters of the Radiata, with examples from one of its classes.

## MINERALOGY AND PHYSICAL GEOLOGY (IN PART). FOURTH YEAR.

Wednesday, December 17th:-Morning, 9 to 12.
Examiners
\{ J. W Dawson, LL.D., F.R.S
$\{$ B. J. Harrington, B. A., Ph. D.

1. Describe the Primary Forms of the Trimetric and Hexa gonal Systems and mention some minerals which crystallise in these forms.
2. Mention some Minerals which can be readily distinguished by their Hardness or Specific Gravity.
3. Describe the several Felspars, with their differences and modes of occurrence.
4. Describe Calcite, Barite, Pyroxene and Mica, with their relations to rocks and mineral veins.
5. By what characters can Magnetite be distinguished from Specular Iron, and Blende from Tinstone.
6. What are the constituent minerals of Granite, Syenite, Diorite, and Dolerite.
7. Explain the chemical and geological relations of Coal, Bitumen and Graphite.
8. Give a tabular classification of the more common Rocks, with explanation of the grounds on which it is based.
9. Explain concretionary structures and the usual modes of mineralization of organic remains.
10. Illustrate by diagrams, dip, strike, anticlinal and synclinal arrangements, and unconformability.
11. Explain the causes of denudation, and its principal results as affecting the surface of the land.
12. Explain the grounds on which the use of fossils in determining the ages of rocks depends.
13. Describe the rocks exhibited and state what you know as to their origin.

## DEPARTMENT OF PRACTICAL AND APPLIED SCIENCE.

## CHAIN SURVEYING.

Tubsday, Deoember 9th:-Afternoon, 2 to 4.30.
JUNIOR YEAR.
Examiner, $\qquad$ G. F. Armstrong, M.A., C.E.

1. Describe the optical square.
2. What is the object of making a preliminary reconnaisance ?
3. State fully why Gunter's chain is particularly applicable to tho survey of estates?
4. How would you measure the breadth of a river across which it is impossible to chain?
5. What is the use of oblique offsets?
6. Plot the accompanying survey on a scale of ; chains to the inch, and compute its area.

## DRAWING.

JUNIOR YEAR, Monday, December 8th:-Afternocy, 2 to 4.30.
Examiner $\qquad$ ............G. F. Armstrong, M.A., C.E.

1. Construct geometrically :-
(a) A Square on a diagonal of $5 \cdot 67$ inches.
(b) An Isosceles Triangle, the vertical angle of which is $25 .^{\circ}$, and the base 3.26 inches.
(c) A Regular Pentagon, a side of which is 3.81 inches.
(d) An Oval 4.31 inches wide.
(e) An Epicycloidal Curve, the radii of the lirecting and generating circles being respectively 4.91 inches, and $2 \cdot 11$ inches.
$(f)$ A Rectangle equal in area to a triangle, tie sides of which are respectively 3,4 , and 5 inches.
(g) A Gothic Quatrefoil, the diameter of whichshall be 8.54 inches.
2. Through two given points describe a circle so as to divide the circumference of another circle, radius 2.31 inches, intotwo equal parts.

Note.-All dimensions to be taken from the lager diagonal scale of the Protractor.

Neatness and accuracy are, in all cases, essentid.

## DRAWING.

## SECOND YEAR.

Monday, Decemzer 8th:-Afternion, 2 to 4.30.
Examiner $\qquad$ G. F.Armstrong, M.A., C.E.

1. Exhibit the section of a square prism, $2 \cdot 65$ inches base and $5 \cdot 11$ inches high, made by a plane passing from a line joining the middle points of the two adjacent edges of the top, to a simlar line joining the two opposite edges of the bottom.
2. A cone, 2.41 inches base and 5.13 inches high, is cut by a plane that makes an angle of $45^{\circ}$ with the axis at a point whose perpendicular height is 3.45 inches. Draw the development of the lower frustrum.
3. Project orthographically on two rectangular planes:-
(a) A square plane, 3.24 inches side, when one diagonal is at $50^{\circ}$ to the vertical and $25^{\circ}$ to the horizontal plane.
(b) A cube of 3.64 inches side standing on a plane inclined at $30^{\circ}$ to the horizon, and having two of its adjacent faces at $25^{\circ}$, and $75^{\circ}$ respectively to the vertical plane.
(c) A cylinder 2.64 inches base and 5.31 inches high, when resting upon an edge of the base, with its axis at $60^{\circ}$ to the horizontal, and $30^{\circ}$ to the vertical plane.
(d) A cylinder 3.64 inches base and $5 \cdot 16$ inches high, penetrated at its centre and at right angles, by another cylinder of equal size, when the axis of the penetrated cylinder is placed at $60^{\circ}$ to the vertical, and $30^{\circ}$ to the horizontal plane.
4. Project isometrically :
(a) A heragonal prism, $2 \cdot 15$ inches side and $5 \cdot 14$ inches high, when standing on one end.
(b) A rectangular block of wood, 6 inches high $\times 4.96$ inches $\times 8.74$ inches long, cut into steps $\cdot 75$ inches high, when the end view is turned to the spectator.
Note.-All dimensions to be taken from the larger diagonal scale of the Protractor.

## LEVELLING.

## SECOND YEAR.

Tuesdar, December 9th:-Afternoon, 2 to 4.30.

1. Give a definition of levelling, and explain fully what is meant by a "level line."
2. What are "the errors of curvature and refraction," and how are they allowed for in extensive levelling operations ?
3. To what character of work is the Theodolite, as a levelling instrument, adapted, and in how many different ways is it usual so to employ it?
4. With what means of ascertaining differences of height expeditiously in mountainous districts are you acquainted?
5. Mention some precautions that are necessary when working with the Spirit-level in order to ensure correct results.
6. Exhibit any methods of keeping a level-book with which you are acquainted, and indicate the mode of checking the correctness of the "reduced column" in each case.

## DRAWING。-MINING.

SENIOR YEAR.
Tgesday, December 9th:-Afternoon, 2 to 4.30.
Examiner,
Project isometrically the following objects:

1. A solid cross formed by a central cube of 3.16 inches side, on each face of which another similar cube, but of 2 inches side, is fixed, when lying on the horizontal.
2. A pipe 3 inches square penetrated through two of its sides, and at right angles, by another of 1.76 inches side, when the larger pipe is standing on one end.
3. A book-case 8 inches high, 1.67 inches deep, and 3 inches wide, with three shelves, .3 inch thick, placed so as to divide the case into four equal spaces.
4. A cube of 3 inches side, surmounted by a square pyramid formed of a base and four equilateral triangles of 3.5 inches side.
5. Six squares in width and 12 in length of a pavement composed of squares of 1 inch side. Shade the alternate squares with fine lines inclined at $45^{\circ}$.
6. A solid circular block of wood penetrated at its centre by a square shaft. The block is 2.41 inches radius, and 1.56 inches thick; a side of the shaft. 75 inches and 4.21 inches long.

Note.-All dimensions to be taken on the larger Protractor scale.

## DRAWING.

## SENIOR YEAR.

Monday, December 8th :-Afternoon, 2 to 4.30.
Examiner $\qquad$ G. F. Armstrong, M.A., C.E.

- Draw a perspective view of the following objects :-

1. Six stone steps 7.5 feet long, the rising and tread of each step being 9 inches, when the front makes an angle of $10^{\circ}$ with the picture plane 2 feet on the right of the spectator.
2. A pile of four rectangular blocks of stone, the centres of which are in one right line, and the edges parallel, when a face of the lowest makes an angle of $30^{\circ}$ with the picture plane two feet on the left of the spectator and three feet within the picture. The lowest block is 5 by 4 by 2 feet, and the others each 6 inches less in all directions than the one below it
3. An erect hexagonal prism terminated by a hexagonal pyramid, when
one of its faces, immediately in front of the spectator and one foot within the picture, makes an angle of $15^{\circ}$ with the picture plane.
4. A hollow cylinder, outer diameter 12 inches, inner 9 inches, and 5 feet long, when lying on the ground with its axis at $25^{\circ}$ to the picture plane 2 feet within the picture, and 1 foot on the left of the spectator.
5. Five segmental arches of a viaduct, each of 6 feet $\operatorname{span}, 2$ feeet rise, and 4 feet deep, springing from piers 8 feet high, and 1 foot thick, when seen in the direction of their length 2 feet on the right of the nearest abutment.
6. A rectangular court yard, 6 feet $\times 5$ inside measurement, surrounded by buildings with flat tops, 2 feet deep and 4 feet high; and from the centre of which rises a tower of 2 feet side to a height of 9 feet. The longer side of the rectangle makes an angle of $30^{\circ}$ with the picture plane at a point 1 foot on the right of the spectator.
Note.-All dimensions to be taken from the larger diagonal scale of the Protractor
The height of the eye is assumed as 5 feet 6 inches, and the picture distance as 9 feet.

## APPLIED MECHANICS.

Wednesday, December 10th:-Morning, 9 to 12.

1. Define and illustrate what is meant by "Weight."
2. Give some examples of the practical application of the expansion of bodies by heat.
3. What are the modes of rupture consequent on compression?
4. Explain fully what is meant by the "efficiency of an agent," and interpret the expression

$$
U,\left(\text { thus } U_{2}\right)=K U
$$

5. Describe the Steam Indicator, and its mode of action.
6. The area of the piston of a steam engine is 5000 sq. in., the length of the stroke 10 ft ., what must be the effective pressure of the steam per in., so as to give 8 strokes per minute to the plunger of a pump whose section is 9 sq . ft ., and stroke $10 \mathrm{ft} .$, ; the height to which the water is raised being 108 feet?
7. The section of a stream that falls 15 ft ., is 4 ft . by 2 ft ., and it has a mean velocity of 20 ft . per minute. How many cubic feet of water per minute will a water wheel whose modulus is 68 , driven by this steam, pump from the top of the fall to a height of 115 ft . ?
8. A condensing engine having a 5 ft . stroke is actuated by steam at 48 lbs . pressure cut off at 2 ft . of the stroke, while the elasticity of the vapour in the condenser is 4 lbs . The work done on 1 sq . in . of the piston in one stroke is required.
9. A right cone, right-angled at the vertex, and a hemisphere lie on opposite sides of a common base of 2 ft . diameter. Supposing the cone is made of iron (sp.gv. 7.9) and the hemisphere of lead (sp.gv. 11.4) ; determine the difference of their weight.

CONSTRUCTION. (RAILWAY.)

Wedndsday, December 10th:-Afternoon, 2 to 4.30.
Examiner, $\qquad$ G. F. Armstrotg, M.A., C.E.

1. What information should the deposited plan and section afford?
2. What precautions is it necessary to take in the formation of the seat of an embankment ( $a$ ) when on sidelong ground; $(b)$ when on peat, or other soft material.
3. Describe the operations of cutting, and state how to determine approximately a proper proportion of "getters," "fillers" and "wheelers."
4. Enumerate the qualities of a good brick, and of the best kind of brickwork. Mention, also, some points of importance to be attended to during the building of brick structures.
5. Into how many classes is masonry divided? State the characteristics, and uses of each.
6. What are Concrete and Beton, and how are they best applied ?
7. What points demand special attention as regards the position of the courses in the building of skew arches, counterforts, wing-walls, piers, and abutments?
8. What means are usually employed in order to render an arch impervious ; and how would you provide for proper drainage?

Nots.-Answers should be concise, and, as far as possible, illustrated by sketches.

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## MINING.

## SENIOR YEAR.

$$
\text { Wednesday, December 17eh:-Morning, } 9 \text { to } 12 .
$$

## Examiner,

B. J. Harrington, B.A., Ph. D.

1. Describe the construction und use of the Pan, Tom, and Rocker
2. What do you understand by a Miner's Inch and a Head of Water?
3. Describe the tools and operations involved in ordinary blasting.
4. State what you know about ladders and their use in shafts.
5. In what ways is motion generally communicated to the rods of the man-engine ?
6. Describe fully the prircipal methods of timbering employed in levels.
7. What are the best ways of joining iron or wooden Bore-rods ?
8. What are some of the devices employed for supplying air to miners while drifting?

Saturday, December 6th:-Morning, 9 to 12.
ENGLISH HISTORY FROM THE ACCESSION OF JAMES I. TO THAT OF WILliAM III.

## Examiner,.......................Professor Goldwin Smith, M.A.

1. With what parties, political or ecclesiastical, do you connect Hooker, Bacon, Milton, Chillingworth, Hobbes, Filmer, Locke?
2. How did King James' theory of the Constitution differ from that of his Parliament?
3. What determined the foreign policy of the Court during the reign of James I. ?
4. Compare the character of Charles I. with that of his father.
5. Into what parties, religious and political, was the Long Parliament, divided when it first met? Give the leaders of the different parties? change took place in the temper of the House after the execution of Strafford?
6. What was the Grand Remonstrance?
7. Sketch briefly the course of events from the battle of Naseby to the execution of Charles I.
8. Give an account of the Instrument of Government, and of the plan of Parliamentary Reform connected with it.
9. Compare the Commonwealth of England with previous experiments in Republican Government.
10. What effects of the Revolution survived the Restoration ?
11. Give characters of Clarendon, Lauderdale and Shaftesbury.
12. What were the Conventicles Act, the Five Mile Act, and the Test Act? Against whom were they severally directed?
13. Trace the course of the revolution and the counter-revolution took place in polities during the latter part of the reign of Charles II. what poem do they form the subject?
14. What led to the defeat of the designs of James ii.? How was his position affected by the birth of his son?
15. What change did the Revolution of 1668 make in the law regarding the Judiciary? Show its importance by reference to the events of the preceding reigns?
16. What change took place at the same period with regard to the liberty of the Press?

# SESSIONAL EXAMINATIONS, 1874. 

CLASSICS.

## FIRST YEAR.

GREEK.-HOMER.-ILIAD, BOOK VI.
Wednesday, April 1st:-Morning, 9 to 12.
Examiner
Rev. George Cornish, LL.D.

1. Translate:-














 Oivev̀s $\gamma$ á $\pi$ тотє dios á $\mu v i \mu o v a$ B $\varepsilon \lambda \lambda \varepsilon \rho o ф \dot{\nu \tau т \eta ~}$

 Oivcús $\mu \varepsilon ̀ v$ 弓 $\omega \sigma \pi \tilde{\eta} \rho a$ dídov фоívıкє фaعıvov,




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 $\Delta \varepsilon \sigma \mu o ̀ v a ́ \pi o \rho \rho \dot{\eta} \eta \xi a \varsigma ~ \theta \varepsilon i ́ \eta ~ \pi \varepsilon \delta i o l o ~ к р о а i \nu \omega \nu$,












3. Parse the following Verbs, and give the Attic for the Epic forms :


4. Explain and derive the following words:-óápı̧६, $\dot{\eta \lambda \varepsilon ́ \kappa т \omega \rho, ~ \sigma т a \tau o ̀ s, ~}$

5. (a) $\varepsilon$ 'vl:-Why not $\dot{\varepsilon} v i ́ ? ~ b o v \sigma i v \dot{\varepsilon} \pi^{\prime}$ : -Why has the preposition no accent? (b) Distinguish between the meaning and derivation of the

 lowing:-кá $, \tau i \pi \tau \varepsilon, \kappa a ́ \lambda \lambda \iota \pi \varepsilon$.
6. (a) Define the terms Hiatus, Crasis, Arsis, Thesis. State the rule for the effect of the last two on the quantity of vowels. (b) Write down the proper designation and the scheme of the metre of the Iliad. (c) Scan the first four verses of extract (B) and point out any metrical peculiariaties.
7. (a) Deeline:- $\delta o ́ \rho v, \kappa \lambda \varepsilon i \varsigma, \pi a ̈ \varsigma$, and (with accents) vóбos $\pi \rho a ̆ \gamma \mu a$,


1st Sing., Future Indicative Active, Passive and Middle, of che following Stems :- $\lambda \varepsilon \gamma-, \tau \rho \iota \beta$ - $\pi \varepsilon \iota \vartheta$-, and accentuate them. (d) Give the force as exactly as you can of the following Particles, and the derivation of any :- $\mu \dot{\varepsilon} v, \delta \dot{\varepsilon} \delta \dot{\eta}, \kappa \varepsilon \dot{\varepsilon}, \dot{\rho} a^{\prime}, \mu \eta \nu$. Explain the force of the suffixe $-\phi l,-\vartheta \varepsilon \nu$, and $-\delta \varepsilon$.
8. (a) Narrate briefly the legend of the origin of the feud between the Greeks and Trojans. What is the received date of the destruction of 'Iroy? (b) What is known of the life of Homer? (c) Who were the Homeridae?

## INTERMEDIATE EXAMINATION.

## GREEK.-HERODOTUS.-BOOK IX.

$$
\text { Wednesday, April } 1 \text { st:-Morning, } 9 \text { to } 12 .
$$

Examiner,
Rev. George Cornish, LL.D.

## Translate:-











 दुधıऽ ह̀̉á $\mu \beta a \nu \varepsilon$.










 غ̇ $\sigma \tau \rho a \tau о \pi \varepsilon \delta \varepsilon$ v́ovto.
(D)




 $\tau \omega ̆ \nu$ ' $\mathrm{E} \lambda \lambda \not \partial \nu \omega \nu$.





 Флıaбiovs, ס८à тoṽ $\pi \varepsilon \delta i o v ~ \tau \eta े \nu ~ \lambda \varepsilon \iota o т a ́ \tau \eta \nu ~ \tau \omega ั \nu ~ o ́ \delta \omega ̃ \nu, ~$
2. (a) State as accurately as you can the import of the following combinations of particles, and expréss the same in Latin, nearly
 *кaí. $\tau \grave{\varepsilon}$ * * каí. (b) Distinguish between the force of $\dot{\omega} \varsigma$ and $\hat{a} \tau \varepsilon$ as adjuncts of the Participle in such expressions as $\dot{\omega}$ s $\sigma \nu \mu \beta a \lambda \hat{\varepsilon} o v \tau \varepsilon s$
 various meanings of $\tau i \theta \varepsilon \sigma \theta a \iota ~ \tau \grave{a} 8 \pi \lambda a$.
3. (a) Construe the first sentence in extract (C), and point out what is the subject of $\delta \eta \lambda_{0} . \tilde{o}_{\text {. Also explain the construction of the }}$


4. Parse carefully the following Verbs, and give Attic Equivalents


is "ti 203 Kôm
उअsito yerequ. TA
5. Write short notes explanatory of the etymology and meaning
 'Takivisa.


6. Distinguish between :- Biovs and $\beta$ coúswanepa and öpe. ग̉pav and
 are $\dot{\eta} \rho \varepsilon \iota \pi o \nu$ and $\ddot{\eta} \rho \iota \pi o \nu$; -show how they differ, and which is to be preferred.

(d)

7. (a) Name and trace the three roiutes from Attica to Boeotia. (b) Hıтavqтécu $\lambda o \chi$ ov:-Explaing aind state what Thacydides says about this. What facts can be adduced from other quarters on this point? (c) Name the villages of which Sparta was compesed, and define the Geographical situation of Tegea, Potidaea, Tiryns and Leucas.
 down the 1st. Sing. of Perf., Aorist, and Future Indicative of :-ypow-

9. Write a sketch of the Life of Heredotus, and mention Greer writers who lived before his time.

## THIRD YEAR.

GREEK- 区SCHYIUS.-SEVEN AGAINST THEBES.
Wednesday, April 8th:-Morning, 9 to 12.
Examiner


 iாл $\kappa \kappa o \nu \tau^{\prime}$ à $\pi v o \nu ~ \pi \eta \delta a \lambda i \omega v$ dia бтб́цua $\pi v \rho \iota \gamma \varepsilon \nu \varepsilon \tau a ̃ \nu ~ \chi a \hat{\imath} \iota v \omega ̃ \nu$.
 $\pi \rho \dot{\mu} \mu \nu \eta \vartheta \varepsilon \nu$ عن̉ $\rho \varepsilon \mu \eta \chi a \nu \eta ो र ~ \sigma \omega т \eta \rho i ́ a \varsigma$,


 öт' ò $\lambda о a ̈ s ~ v \iota ф о \mu \varepsilon ́ v a s ~ \beta \rho o ́ \mu o s ~ \varepsilon ̌ v ~ \pi v \lambda a \iota \varsigma, ~$





 ä $\delta \varepsilon \pi a \nu a ́ \gamma v \rho \iota \varsigma, ~ \mu \eta \delta^{\prime}$ ह̀ $\pi i ́ \delta o \iota \mu \iota$ Táv $\delta^{\prime}$ $\dot{a} \sigma \tau v \delta \rho о \mu о v \mu \varepsilon ́ v a \nu \pi \sigma ́ \lambda \iota \nu ~ к а і ̈ ~ \sigma т \rho a ́ т \varepsilon v \mu '$




 àvخोم кат' ävঠрa тои̃тор $\dot{\eta} \rho \varepsilon ์ \vartheta \eta, ~ \vartheta \varepsilon ์ \lambda \omega \nu$









(C) $\mathrm{X} 0, \tau i \delta^{\prime}$ हббтi ш $\rho a ̃ \gamma о \varsigma ~ \nu \varepsilon б к о т о \nu ~ \varpi б ́ \lambda \varepsilon \iota ~ \varpi а \rho o ́ v ; ~$
$А$. a̋v

АГ, фроvoṽซa vṽv ăkovoov, Didímov révos.



АГ, ovit $\omega$ s ádeiфais xepoív ìvaipovt' ă $\gamma a \nu$.

 то九аи̃та хаípev каì ঠакри́гоэai $\pi a ́ p a . ~$





 $\pi \dot{\varepsilon} \pi \omega \kappa \varepsilon \nu$ ai$\mu a ~ \gamma a \vec{i} \dot{v} \pi \pi^{\prime} \dot{\alpha} \lambda \lambda \dot{\eta} \lambda \omega \nu \nu \dot{\phi} \nu \omega$.
2. (a) In extract (A) with what do you construe dia; What of its accent? (b) Tov vıcóvov:-Explain the use of the Genitive. What other reading for $\tau \circ v ?$ (c) (C) v\&óкотоv:-Explain the formation.

3. Give the meaning of the following epithets :-E $\mathcal{B} \delta \rho \mu a \gamma \varepsilon \tau \eta \varsigma$, ' $A \lambda \varepsilon \xi_{-}$
 Xáñßos.
4. Explain the meaning and the allusions in the following:-(a)






6. Parse the following Verbs, noting any peculiarities:-áva $\lambda_{0} z_{,}$



8. Distinguish between the following variants :-(1) $\mu \eta \tau \varepsilon \dot{\varepsilon} \rho \omega \nu \tau \varepsilon \theta \rho a \nu^{2}$


9. Write down the scale of the Iambic Senarius, and also of the Anapaestic Dimeter Acatalectic.
10. (a) A short account of the life and times of Aschylus. Note the leading characteristics of his style and treatment of subjects.

## B.A. ORDINARY EXAMINATION.

GREEK.- $\left\{\begin{array}{l}\text { SOPHOCLESS.-ELECTRA. } \\ \text { DEMOSTHENES.-OLYNTHIACS. }\end{array}\right.$
Wednesday, April 8th:-Morning, 9 to 12. Examiner,

Rev George Cornish, LLid.

1. Translate:-
(A)



 $\pi a \tau \rho \psi^{\prime} \dot{\delta} \rho \bar{\omega} \sigma \alpha \pi \eta \mu \mu a \tau^{\prime}$, ơ $\delta \rho q^{\prime} \eta \tau \alpha ́ \delta^{\prime} \dot{a} v$,


















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 $\tau a ̀ ~ \pi о \lambda \lambda a ̀ ~ \pi a \tau \rho \partial ̀ s ~ \pi \rho o ̀ s ~ \tau a ́ \emptyset o v ~ к т \varepsilon \rho i ́ \sigma \mu a \tau a ; ~$
 $\mu \eta \nu \mu \varepsilon i{ }^{\prime}$ 'Ор́́бтоv таи̃та $\pi \rho \circ \sigma \theta \varepsilon i v a \iota ~ т \iota \nu a ́$.







X0. $i \delta \varepsilon \theta^{\prime} \dot{\partial} \pi \eta \pi \rho 0 \nu \varepsilon \varepsilon^{\prime} \mu \varepsilon า a i$
тò $\delta v \sigma \varepsilon ́ \rho \iota \sigma \tau o v ~ a i ̉ \mu \alpha ~ \phi v \sigma \omega ̃ \nu ~ " A \rho \eta s . ~$
$\beta \varepsilon \beta a ̈ \sigma \iota \nu$ ảpтı $\delta \omega \mu a ́ \tau \omega \nu$ v̇ $\pi \sigma \sigma \tau \varepsilon \gamma \circ \iota$
$\mu \varepsilon \tau a ́ \delta \rho о \mu о \iota \kappa а \kappa \omega ั \nu ~ \pi а \nu о v \rho \gamma \eta \mu a ́ т \omega \nu$.
ăфиктои кі́ves.


$\pi a \rho a ́ \gamma \varepsilon \tau \alpha l ~ \gamma a ̀ \rho ~ \varepsilon ̇ v \varepsilon ́ \rho a \nu$
סо $\lambda \iota o ́ \pi o v s$ áp $\omega \gamma$ ós عїб $\sigma \tau \varepsilon ́ \gamma a \varsigma$,
 ขєокбขךтоv аЇนa $\chi \varepsilon \iota \rho о 亢 ̃ \nu ~ \varepsilon ̌ \chi ~ \chi \omega \nu . ~$
ó Maías dè $\pi a \stackrel{\zeta}{\zeta}$


2. (a) $\tau a ̀ \mu \eta \tau \rho \partial{ }_{s}, \eta^{*}$ * :--Explain the usage. (b) tins ávoías :-How do you construe. (c) $\pi \rho o ̀ s ~ \dot{\eta} \delta o v \eta \eta v:-G i v e ~ t h e ~ f o r c e ~ o f ~ \pi \rho o ̀ s . ~(d) ~ \mu ' ~$


3. Name accurately the metre of ext. (A) ; give the scheme of it; and scan the first four vss. of the same ext. Write an account of the plot of the Electra.
4. Discuss the meaning and interpretation of the following extt., severally:-(a) $\dot{\rho} \tilde{a}$ viv $\mu$ óvov $\dot{\varepsilon} \lambda \lambda \varepsilon \lambda \varepsilon \mu \mu \varepsilon ́ v o v . ~(b) ~ т o ̀ ~ ' E \lambda \lambda a ́ \delta o s ~ \pi \rho o ́ \sigma \chi \eta \mu ' ~$


5. Write explanatory notes on the following expressions and allu-



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6. Explain severally the use of $(1)$ the Genitive in :-( $\alpha$ ) оiт $\mu \eta \tau \rho \partial{ }_{s}$



7. (a) Explain the force of ov $\mu$, and state the difference in meaning when used with the Fut. Ind. and the Aor. Subj. (b) Accentuate the following words and give their different meanings according to accentuation :-ovкovv, $\dot{a} \gamma \omega v, \dot{a} \lambda \lambda a, \dot{\varepsilon} \pi \iota$, voo $\omega v, ~ i \delta o v, ~ \mu \varepsilon v \omega$.
 $\tau \mu \omega \rho \circ \dot{\mu} \mu \varepsilon \nu o \iota$.-State the canon for the usage, severally.

## 9. Translate:-





















10. Explain what is meant by the following:-(1) тò $\beta \tilde{\eta} \mu \alpha$. (2)
 (7) $\mu i \mu o v s ~ \gamma \varepsilon \lambda o i ́ \omega v . ~(8) ~ \tau a ̀ ~ \mu v o т и ̆ p ı a . ~(9) ~ \pi \rho о \beta o v ́ \lambda \varepsilon v \mu a . ~(10) ~ \psi ท ̉ \phi ı \sigma \mu a . ~$

FIRST YEAR.
LATIN.-CICERO.-SELECT LETTERS.
Thursdat, April 2nd:-Morning, 9 to 12.
Examiner,
Rev. George Cornish, LL.D.

1. Translate, expanding and translating the superscriptions:-
(A)

OICERO ATTICO S.
Aviam tuam scito desiderio tui mortuam esse et simul, quod verita sit ne Latinae in officio non manerent et in montem Albanum hostias non adducerent. Eius rei consolationem ad te L. Saufeium missurum esse arbitror. Nos hic te ad mensem Ianuarium exspectamus, ex quodam rumore an ex litteris tuis ad alios missis, nam ad me de eo nihil scripsisti. Signa, quae nobis curasti, ea sunt ad Caietam exposita. Nos ea non vidimus: neque enim exeundi Roma potestas nobis fuit. Misimus qui pro vectura solveret. Te multum amamus, quod ea abs te diligenter parvoque curata sunt. Quod ad me saepe scripsisti de nostro amico placando, feci et expertus sum omnia, sed mirandum in modum est animo abalienato: quibus de suspicioniBus, etsi audisse te arbitror, tamen ex me, quum veneris, cognosces.
(B) M. TULLIUS M. F. CICERO S. D. CN. POMPEIO CN. F. MAGNO IMPERATORI.
S. T. E. Q. V. B. E. Ex litteris tuis, quas publice misisti, cepi una cum omnibus incredibilem voluptatem: tantam enim spem ocii ostendisti, quantam ego semper omnibus te uno fretus pollicebar. Sed hoe scito, tuos reteres hostes, novos amicos, vehementer litteris perculsos atque ex magna spe deturbatos iacere. Ad me autem litteras, quas misisti, quam. quam exiguam significationem tuae erga me voluntatis habebant, tamen mihi scito iucundas fuisse: nulla énim re tam laetari soleo quam meorum officiorum conscientia, quibus si quando non mutue respondetur, apud me plus officii residere facillime patior. Illud non dubito, quin, si te mea summa erga te studia parum mihi adiunxerint, res publica nos conciliatura coniuncturaque sit. Ac ne ignores quid ego in tuis litteris desiderarim, scribam aperte, sicut et ruea natura et nostra amicitia postulat.
(C) MARCUS Q. FRATRI S.
Tenio nunc ad id, quod nescio an primum esse debuerit. O iucundas mihi tuas de Britannia litteras! Timebam Oceanum, timebam littus insulae. Reliqua non equidem contemno, sed plus habent tamen spei quam timoris, magisque sum sollicitus exspectatione ea quam metu. Te vero $\dot{\imath} \pi \delta ́ \vartheta \varepsilon \sigma \iota \nu$ scribendi egregiam habere video. Quos tu situs, quas naturas rerum et locorum, quos mores, quas gentes, quas pugnas, quem vero ipsum imperatorem babes! Ego te libenter, ut rogas, quibus rebus vis adiuvabo et tibï versus quos rogas, $\gamma \lambda a \tilde{\kappa} \kappa^{\prime}$ e $\varepsilon \iota^{\prime}$ ' $A \vartheta \not \vartheta \dot{p} v a s, ~ m i t t a m$. Sed heus te, celari videor a

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te. Quomodonam, mi frater, de nostris versibus Caesar? nam primum librum se legisse scripsit ad me ante, et prima sic, ut neget se ne Graeca quidem meliora legisse. Reliqua ad quemdam locum $\dot{\rho} \not \imath^{\imath} v \mu$ и́tepa. Hoc enim utitur verbo. Dic mihi verum, num aut res eum aut $\chi$ aрaкt ${ }^{2} \rho$ non delectat? Nihil est quod vereare. Ego enim ne pilo quidem minus me amabo. Hac de re $\phi \iota \lambda a \lambda \eta \vartheta \omega \varsigma$ et, ut soles, scribe fraterne.
2. Explain the references in the following extracts:-(a) In Albanum montem hostias. (b) Togulam illam pictam. (c) Publicanos. (d) Oistophoro Pompeiano. (e) Archilochio edicto. ( $f$ ) Ad tabulam Valeriam.

3. Explain carefully the construction of the words in Italics :-(a) Spem otii ostendisti. (b) Quibus si non mutue respondetur. (c) Buthroti domum parasti. (d) Legationes reiectum iri puto. (e) Anicato nullo loco defui. $(f)$ Quid Tulliola mea fiet? ( $g$ ) Utinam ea res ei voluptati sit.
4. Give the derivation and meaning of:-Belle, palimpsesto, andabata, creterrarum; celebritatem, hostias, misellae, putidiusculus;-explain the force of the terminations of the two last.
5. Parse the following verbs :-mandaras, expertus est, vererere, accesserit, facito, prodesset, luxerunt, exegero, complectare, comosse.
6. (a) Expand the following, and give the dates according to our method of reckoning:-(1) D. a. d. VI. K. Decemb. (2) A. d. III. Non. Oct. (3) Idibus Sextilibus. (4) Pr. Kal, Mai. (5) In a. d. XV. Kal. Novembr. (b) Expand and explain, and state the approximate value of:-H.S. centiens. (c) Where were the following places:-Buthrotum, Dyrrachium, Thessalonica, Cyzicus, Stabianum.
7. (a) Decline:-Lepus, lepor, (explain the formation of the Nominative) potus, unus, quis. (b) Write down the (1st sing) Imperf. Subjunct., Perf. Indic., Fut. Indic., with the supine of:-rumpo, utor, fero, nitor. (e) State the fundamental distinction between the Dative and Ablative, and name their leading uses.
8. A sketch of the life of Cicero.

## INTERMEDIATE EXAMINATION.

LATIN.-HORAOE.-EPISTLES, BOOK I.
Thursday, April 2nd:-Morning, 9 to 12. Examiner, $\qquad$ Rev. Pbofessor Cornise, LL.D.

1. Translate:-
(A) Quinque dies tibi pollicitus me rure futurum, Sextilem totum mendax desideror. Atqui

Si me vivere vis sanum recteque valentem, Quam mihi das ægro, dabis ægrotare timenti, Mæeenas, veniam, dum ficus prima calorque Designatorem decorat lictoribus atris, Dum pueris omnis pater et matercula pallet, Officiosaque sedulitas et opella forensis Adducit febres et testamenta resignat. Quod si bruma nives Albanis illinet agris, Ad mare descendet vates tuus et sibi parcet Contractusque leget; te; dulcis amice, reviset Cum Zephyris, si concedes, et hirundine prima. Non quo more piris vesci Calaber jubet hospes, Tu me fecisti locupletem. "Vescere sodes."
"Jam satis est." "At tu quantum vis, tolle." "Benigne."
"Non invisa feres pueris munuscula parvis."
"Tam teneo dono, quam si dimittar onustus."
"Ut libet; hæc porcis hodie comedenda relinques."
(B) Qui melior servo, qui liberior sit avarus, In triviis fixum quum se demittit ob assem, Non video; nam qui cupiet, metuet quoque; porro, Qui metuens vivet, liber mihi non erit unquam. Perdidit arma, locum virtutis deseruit, qui Semper in augenda festinat et obruitur re.
Vendere quum possis captivum, occidere noli ; Serviet utilliter: sine pascat durus aretque, Naviget ac mediis hiemet mercator in undis; Annonæ prosit ; portet frumenta penusque. Vir bonus et sapiens audebit dicere, "Pentheu, Rector Thebarum, quid me perferre patique Indignum coges ?" "Adimam bona." "Nempe pecus, rem, Lectos, argentum : tollas licet." "In manicis et
Compedibus sævo te sub custode tenebo."
(C) Hoc quoque te manet, ut pueros elementa docentem Occupet extremis in vicis balba senectus. Quum tibi sol tepidus plures admoverit aures, Me libertino natum patre et in tenui re Majores pennas nido extendisse loqueris, Ut quantam generi demas, virtutibus addas; Me primis Urbis belli placuisse domique;
Corporis exigui, præcanum, solibus aptum,
Irasci celerem, tamen ut placabilis essem.
Forte meum si quis te percontabitur ævum, Me quater undenos sciat implevisse Decembres, Collegam Lepidum quo duxit Lollius anno.

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2. Write explanatory notes on the words in italics in the above ex tracts.
3. Construe the words in italics in :-(a) Nodosa corpus nolis prohibere cheragra. (b) Laevo suspensi Loculos tabulamque lacerto. (c) Mutat quarata rotundis. (d) Quid mihi Celsus agit? (e) Quo mihi fortunam si non conceditur uti? ( $f$ ) Cui placet alterius sua nimirum est odio sors. (g) Scribe tui gregis.
4. How do you explain the following? (a) Regia Sardes. (b) Atqui rerum caput hoc erat. (c) Natus moriensque fefellit. (d) Cæsaris genibus minor. (e) Si curas esse quod audis. ( $f$ ) Hæc tibi dictabam. ( $g$ ) Quod te per genium obsecro. (h) Domini deduxit febres.
5. Give the meaning and derivation of the following words :-Salebras, catellam, periscelidem, planum, praecanum, diludia, puteal, sollemne, personam, catellus, peregre.
6. State the difference in meaning between:-(a) rēge, rěge; nitere, nitēre ; concīdo, concĭdo; sēde, sěde ; sōles, sŏles ; pendēre, pendĕre. (b) alius, alter ; alii, ceteri ; omnis, totus : tres libri, and terni libri; nonnunquam, interdum, aliquando. (c) metuo ei-eum; caveo ei,-eum ; consulo ei, eum, in eum.
7. (a) Write down the Gen. Sing. and Plu. of :-cinis, humus, humor, vulnus, paterfamilias. (b) Decline:-creber, excors, and, in their various forms, glomus and penus. (c) Give the diminutives of :-corpus, asinus, canis, catena, mater. (d) Parse:-Sodes, satus, utere, arcesse, torquebere, contuderit, fatus.
8. A short account of Horace ; name the most eminent of his contemporaries at Rome in literature and politics.

## THIRD YEAR.

LATIN.-PLAUTUS.-AULULARIA.
Thursday, April 9th:-Morning, 9 to 12.
Examiner, .........Rev. George Cornish, LL.D.

1. Translate into English:-
(A) eu. Heia, Megadore, haud decorum facinus tuis factis facis, ut inopem atque innoxium abs te atque abs tuis me irrideas: nam de te neque re neque verbis merui, ut faceres quod facis.
ME. Neque edepol ego te derisum venio, neque derideo,

Neque dignum arbitror. EU. Cur igitur poscis meam gnatam tibi? me. Ut propter me tibi sit melius, mihique propter te et tuos. eu. Venit hoc mihi in mentem, Megadore, ted esse hominem divitem, factiosum: me item esse hominem pauperum pauperrumum : nunc si filiam locassim meam tibi, in mentem venit, te bovem esse, et me esse asellum : ubi tecum coniunctus siem, ubi onus nequeam ferre pariter, iaceam ego asinus in luto; tu me bos haud magis respicias, gnatus quasi nunquam siem; et te utar iniquiore, et meus med ordo irrideat; neutrubi habeam stabile stabulum, siquid divorti fuat: asini me mordicibus scindant, boves incursent cornibus. Hoc magnum est periclum, me ab asinis ad boves transcendere. BE. Quam ad probos propinquitate proxume te adiunxeris, tam optimum est.
(B) Hoc est servi facinus frugi, facere, quod ego persequor; néc morae moléstiaeque impérium herile habeat sibi. Nam qui hero ex senténtia servire servus postulat: in herum matura, in se sera, condecet capéssere; sin dormitet, ita dormitet, sérvom sese ut cogitet. Nam qui amanti hero servitutem servit, quasi ego servio, si herum videt superare amorem, hoc servi esse officium reor: retinere ad salutem; non eum, quo incumbat, eo impellere. Quasi pueris, qui nare discunt, scirpea induitur ratis, qui laborent minus: facilius ut nent et moveant manus : eodem modo servom ratem esse amanti hero æquom censeo, ut toleret, ne pessum abeat, tanquam * * * * heri imperium ediscat, ut, quod frons velit, oculi sciant; quod iubeat, citis quadrigis citius properet persequi.
(C) Ev. Sat habeo. Age nunc, loquere, quid vis. L.y. Si me novisti minus,
genere qui sim gnatus : hic mihi est Megadorus avonculos; meus fuit pater Antimachus ; ego vocor Lyconides;
mater est Eunomia. Ev, Novi genus: nunc, quid vis, id volo noscere. Ly. Ex te filiam tu habes. eu. Imo eccillam domi. LY. Eam tu despondisti, opinor, meo avonculo. bu. Omnem rem tenes.
LY. Is me nunc renuntiare repudium iussit tibi.
ev. Repudium, rebus paratis, exornatis nuptiis?
Ut illum di immortales omnes deaeque, quantum est, perduint, quem propter hodie auri tantum perdidi, infelis, miser! LY. Bono animo es, benedice! Nunc, quae res tibi et gnatae tuae bene feliciterque vortat......Ita di faxint, inquito.
ev. Ita di faciant! ly. Et mihi ita di faciant! Audi nunc iam.
2. (a) Write explanatory notes on the words and phrases in italics in the
above extt. (b) Name the metre of ext. (B), giving the scale, and scan the first four verses.
3. Parse the following verbs, and give their equivalents in the ordinary forms of the language:-Scibas, sis, respexis, potesse, vadarier, mutassis, duit, edim, impetrassere, rescisse, benedice.
4. Explain the grammatical construction of the following extt., and point out any peculiarities that occur:-(a) Discrucior animi. (b) Eius honoris gratia feci. (c) Implevisti fusti fissorum caput. (d) Tum me faciat, quod volt, magnus Jupiter. (e) Juxta rem mecum tenes super Euclionis filia. ( $f$ ) Quid tibi meam tactio.
5. (a) Give the distinction between foris crepuit and fores pulsavit. (b) Explain the following expressions:-(1) Renuntiare repudium. (2) Scribam dicam. (3) Pices divitiis supero. (4) Novi Sycophantias. (5) Artem facere ludicram. (6) Quasi laterna Punica. (7) Pro re nitorem et gloriam pro copia. (8) Ita me bene Laverna amet.
6. Explain such forms as the following:-Ted, med, preti, injurium, avom, temperi, quoi, reii, tuais, mi.
7. Give the derivation and exact meaning of:-Mecastor, edepol, germanam, imo, zamiam, palam, clam, tigillo, temeti, Lucina.
8. (a) Give instances of nouns - (1) Redundant in number ; (2) Defective in case; (3) Redundant in case; (4) Defective in number; (5) Differing in meaning according to number. (b) Write down the Pres. Inf. of-nactus, pactus, fatus, satus, fultus, tostus, lotus, situs.
9. Express in Latin-(a) He was within an ace of being struck. (b) He caused me much fear, from which I soon recovered. (c) The more he has, the more he wants. (d) He went away without speaking.

## B.A. ORDINARY EXAMINATION. <br> LATIN.- $\{$ TACITUS.-ANNALS, BOOK I. <br> $\{$ JUVENAL.-SATIRES VIII. AND X. <br> Thursday, April 9th:-Morning, 9 to 12.

Examiner,
Rev. George Cornish, LL.D.

## 1. Translate:-

(A) Nam senem Augustum devinxerat adeo, uti nepotem unicum Agrippam Postumum, in insulam Planasiam proiecerit, rudem sane bonarum artium et robore corporis stolide ferocem, nullius tamen flagitii conpertum. At hercule Germanicum Druso ortum octo apud Rhenum legionibus
inposuit adscirique per adoptionem a Tiberio iussit, quamquam esset in domo Tiberii filius iuvenis, sed quo pluribus munimentis insisteret. Bellum ea tempestate nullum nisi adversus Germanos supererat, abolendae magis infamiae ob amissum cum Quintilio Varo exercitum quam cupidine proferendi imperii aut dignum ob praemium. Domi res tranquillae, eadem magistratuum vocabula; iuniores post Actiacam victoriam, etiam senes plerique inter bella civium nati : quotus quisque reliquus qui rem publicam vidisset?
(B) At Romae 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 ludificetur, dissideat interim miles neque duorum adulescentium nondum adulta auctoritate comprimi queat. Ire ipsum et opponere maiestatem imperatoriam debuisse cessuris, ubi principem longa experientia eundemque severitatis et munificentiae summum vidissent. An Augustum fessa aetate totiens in Germanias commeare potuisse : Tiberium vigentem annis sedere in senatu, verba patrum cavillantem? satis prospectum urbanae servituti : militaribus animis adhibenda fomenta, ut ferre pacem velint.
(C) At Germanicus legionum, quas navibus vexerat, secundam et quartam decimam itinere terrestri P. Vitellio ducendas tradit, quo levior classis vadoso mari innaret vel reciproco sideret. Vitellius primum iter sicca humo aut modice adlabente æstu quietum habuit : moximpulsu aquilonis, simul sidere æquinoctii, quo maxime tumescit Oceanus, rapi agique agmen. Et opplebantur terræ: eadem freto, litori, campis, facies; neque discerni poterant incerta ab solidis, brevia a profundis. Sternuntur fluctibus, hauriuntur gurgitibus ; jumenta, sarcinæ, corpora exanima interfluunt, occursant. Permiscentur inter se manipuli, modo pectore modo ore tenus exstantes, aliquando subtracto solo disjecti aut obruti. Non vox et mutui hortatus juvabant, adversante unda; nihil strenuus ab ignavo, sapiens ab imprudenti, consilia a casu differre: cuncta pari violentia involvebantur. Tandem Vitellius in editiora enisus eodem agmen subduxit. Pernoctavere sine utensilibus, sine igni, magna pars nudo aut mulcato corpore, haud minus miserabiles quam quos hostis circumsidet: quippe illis etiam horestæ mortis usus, his inglorium exitium. Lux reddidit terram, penetratumque ad amnem Visurgin quo Cæsar classe contenderat. Impositæ dein legiones, vagante fama submersas; nec fides salutis, antequam Cæsarem exercitumque reducem videre.

2 (a) Point out the locality of the events described in ext. (C). (b) Show that the reading Visurgin caunot be correct. What river is supposed to have been the one referred to? (c) Define the geographical situations of:-Planasia, Nauportus, Treveri, Vetera, Pandateria. Give modern names when you can.
3. Construe carefully the following extt:-(a) Claris Scriptoribus memorata sunt. (b) Abolendae infamiae. (c) Quo levior classis vadoso mari
innaret vel reciproco sideret. (d) Trudebantur in paludem gnaram vincentibus, iniquam nesciis, ni Cæsar productas legiones instruxisset. (e) Utque signis et aquilis per superbiam inluserit. Give the various constructions of nouns with illudere.
4. Explain the meaning of the following:-(1) Centesimam rerum venalium. (2) Judicia majestatis. (3) Decumana porta. (4) Struendum vallum, petendus agger. (5) Sodales Titios. (6) Populo et plebi quadringenties tricies quinquies. (7) Pretia vacationum, (8) Flamines et sacerdotes.
5. Point out some of the peculiarities of the style of Tacitus which distinguish him from the writers of the golden age of Latinity.
6. Translate:-
(D) Rarus enim ferme sensus communis in illa

Fortuna. Sed tesecenseri laude tuorum,
Pontice, noluerim sic, ut nihil ipse futuræ
Laudis agas. Miserum est aliorum incumbere famæ,
Ne collapsa ruant subductis tecta columnis.
Stratus humi palmes viduas desiderat ulmos.
Esto bonus miles, tutor bonus, arbiter idem
Integer; ambiguæ si quando citabere testis
Incertæque rei, Phalaris licet imperet, ut sis
Falsus, et admoto dictet perjuria tauro,
Summum crede nefas animam præferre pudori
Et propter vitam vivendi perdere causas.
Dignus morte perit, coenet licet ostrea centum
Gaurana et Cosmi toto mergatur aheno.
(E) Unus Pellæo juveni non sufficit orbis: Astuat infelix angusto limite mundi, Ut Gyari clausus scopulis parvaque Seripho:
Quum tamen a figulis munitam intraverit urbem, Sarcophago contentus erit. Mors sola fatetur, Quantula sint hominum corpuscula. Creditur olim Velificatus Athos, et quidquid Grecia mendax
Audet in historia: constratum classibus isdem Suppositumque rotis solidum mare: credimus altos Defecisse amnes epotaque flumina, Medo Prandente, et madidis cantat quæ Sostratus alis. Ille tamen qualis rediit Salamine relicta, In Corum atque Burum solitus sævire flagellis Barbarus, Eolio nunquam hoc in carcere passos, Ipsum compedibus qui vinxerat Ennosigæum? Mitius id sane, quod non et stigmate dignum Credidit. Huic quisquam vellet servire Deorum!
7. Explain the words in italics in the above extt.
8. (a) Explain, with examples, the construction with the following, severally:-avarus, similis, expers, miseret, interest, expedit, jubeo, promitto. (b) State the deficiency of the Latin language in participles. How does it supply their absence? (c) State and illustrate the difference of use between the Gerund and Gerundive.

## FIRST YEAR.

## GREEK AND LATIN PROSE COMPUSITION.

> Wednesday, April 1st:-Afternoon, 2 to 4 . Examiner,..................................Rev. George Cornish, LL.D.

## (A) Translate into Greek:-

1. He that loves not his father and mother is a bad citizen.
2. The king was pleased with those who managed well the affairs of the state, but annoyed at the wicked being prosperous.
3. The general and his soldiers marched into the enemy's country and laid waste the greater part of it.
4. Let us pursue what is good, but shun what is bad; for this is disgraceful, whilst that is honourable.
5. The same things are not always in the power of the same men.
6. The king bimself will treat the citizens well.
(B) Translate into Latin :-
7. Carthage in Africa and Corinth in Greece were taken by the Romans in the same year.
8. The Peloponnesian war was waged between the Athenians and the Lacedæmonians and lasted twenty-seven years; and then Athens was conquered.
9. That night he dreamt a fearful dream; and the next day, early in the morning, he left the town and went home.
10. He sent envoys to the general to sue for peace, which be would not grant.
11. It is the duty of good citizens to watch over the interests of the common-wealth and to guard it from all ill.
12. So liberal was he and so attached to his country that he gave all his property as a gift to the state.
13. In doubtful affairs we have need of deliberation in order to avoid mistakes.
14. He was of noble birth, endowed with great mental and physical powers but of a bad and depraved character.


## THIRD YEAR.

## LATIN PROSE COMPOSITION.

Thursdat, April 9th:-Afternoon, 2 to 4.
Examiner,
Rev. George Cornish, LL.D.
Translate into Latin :-
(A) I went down yesterday to the Peiræus with Glaucon. We had finished our prayers, and satisfied our curiosity, and were returning to the city, when Polemarchus caught sight of us at a distance, and told his servant to run and bid us wait for him. The servant came behind me, and took hold of my cloak, and said, "Pulemarchus bids you wait." I turned round and asked him where his master was. "There he is," he replied, "coming on behind ; pray wait for him.". "We will wait," answered Glaucon. Soon afterwards Polemarchus came up, with Adeimantus the brother of Glaucon, and Niceratus the son of Nicias, and a few other persons, apparently coming away from the procession.

(B) Cæsar, on one occasion when some persons were calumniating Brutus to him, at a time when the conspiracy was really forming, would not listen to them, but touching his body with his hand he said to the accusers, "Brutus waits for tbis dry skin," by which he intended to signify that Brutus was worthy of the power for his merits, but for the sake of the power would not be ungrateful and a villain. Now those who were eager for the change, and who looked up to Brutus as the chief person, did not venture to speak with him on the subject, but bv night they used to fill the tribunal and the seat where he sat as prætor with writings, most of which were to this purport : "You are asleep, Brutus," and "you are not Brutus."

## B. A. ORDINARY EXAMINATION.

## LATIN PROSE COMPOSITION.

Wednesday, April 8th :-Afternoon, 2 to 4.
Examiner,
Rev. George Cornise, LL.D.

## Translate into Latin :-

At Rome, after the recovery of Capua, the attention of the senate and people was fixed upon Spain as much as upon Italy; and it was resolved that the army there should be recruited, and a general despatched. It was not, however, so clear whom they should send, as that, since two great generals had fallen within thirty days, he who was to supply their place, should be chosen with extraordinary care. As some named one man, others another, it was at last determined that the people should hold an assembly to create a proconsul for Spain ; and the consuls proclaimed a day for the assembly. At first they had expected that those who believed themselves worthy of so important a command, would give in their names. As this expectation was defeated, their sorrow for the disaster sustained was renewed and also their regret for the generals lost. Accordingly the people sorrowfully, and almost at a loss what to decide upon descended into the Campus Martius, on the day of the election; and, turning towards the magistrates, looked round upon the countenances of their leading men, Who were anxiously gazing at each other, and murmured that their fortunes were so fallen, and such despair was felt for the state, that no one ventured to accept the command in Spain ; when suddenly P. Cornelius, son of that Publins who had fallen in Spain, then about twenty-four years of age, declaring himself a candidate, took his station on an eminence whence he: could be seen. The eyes of the whole assembly were directed towards him, and by acclamations and tokens of favor they augured a happy and prosperous command.

## B.A. ORDINARY EXAMINATION.

## GENERAL PAPER.

Thursday, April 9th:-Afternoon, 2 to 4.

Examiner
Rev. George Cornish, LL.D.

1. Write down the names of the principal Greek cities in Asia Minor, and mention the tribes by whom they were severally founded.
2. Describe the mode of making laws under the Athenian constitution, and point out the distinction between $\pi \rho \circ \beta o v i \lambda \varepsilon v \mu a, \psi \eta{ }^{\phi} \phi \iota \sigma \mu a$, and ขб $\mu$ оз.
3. State the distinctive features of the social life, government, and foreign policy of Athens and Sparta.
4. Give a summary, accompanied with dates, of the events by which the Athenians, Lacedæmonians, Thebans, and Macedonians, acquired in succession the sovereignty of Greece.
5. In what year, of the life of Demosthenes and of the reign of Philip, and in what year before Christ, were the Olynthiacs spoken? What was the state of Greece at that time?
6. Give the dates of the following events:-The expulsion of the Tarquins ; taking of Rome by the Gauls; defeat of Pyrrhus ; the second Punic War; the destruction of Carthage; the conspiracy of Catiline.
7. Enumerate the cases governed by the propositions $\pi a \rho a ́$, and $\pi \rho o ́ s$, respectively, and state their differences of meaning with the different cases.
8. What is the construction with verbs that signify emotion, perception, \&c., and with the verbs $\lambda a i \theta \dot{\alpha} \nu \omega, \phi \theta a ́ \nu \omega$, and $\tau v \gamma \chi a \nu \omega$ ?
9. What traces of a locative case exist in Greek and Latin? Give instances.
10. What are the various meanings of the Middle Voice in Greek? Are there any traces of such a voice in Latin?
11. Give the definitions and terminations of Inceptive, Frequentative, and Desiderative verbs in Latin.

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12. Account for the long penultimate of the Inf. Mood of the 1 st, 2 nd, and 4th Conjugations.

FIRST YEAR,
HISTORY.-HISTORY OF GREECE AND ROME.
Thursday, April 2nd:-Afternoon, 2 to 4.
Examiner, $\qquad$ Rev. George Cornish, LL.D.

1. (a) Define the geographical position of:-Phocis, Doris, Acarnania, Agina, Cythera, Zacynthus. (b) Name the chief rivers of Greece. (c) An account of the physical geography and natural productions of Greece.
2. (a) Name the different periods in Grecian history. (b) At what date, and with what events, does Grecian history proper begin? (c) What were the earliest Governments among the Greeks.
3. By what wars, and within what dates, did Sparta become the dominant power in the Peloponnesus? Give some account of Lycurgus.
4. (a) State what you know of the early history of Attica. (b) What important reforms did Solon effect? (c) Who was Cylon?
5. Write short historical notes, with dates, on any four of the following :(1) Ladé, (2) Marathon, (3) Ægina, (4) Salamis, (5) Platæa, (6) Eurymedon, (7) Corcyra, (8) Sphacteria, (9) Syracuse, (10) Agospotami.
6. (a) Give an account of the foundation of Rome and of its first form of government. (b) By what form of government, and under what circumstances, was this followed?
7. Mention, with dates, some of the early and most important Italian conquests of Rome by which she prepared the way for her ultimate supremacy over the whole of Italy. At what date had she gained this supremacy?
8. An account of any two of the following:-(1) Consul, (2) Dictator, (3) Tribunus plebis, (4) Decemviri, (5) Agrarix Leges.
9. What causes brought Rome and Carthage into collision? Name the chief foreign possessions of the latter at the beginning of the Punic Wars. What was the main result to Rome of the first Punic War?
10. Short historical notes, with dates, and geographical notes on any four of the following:-(1) Agates Iusulæ, (2) Eryx, (3) Saguntum, (4) The Alps, (5) The Trebia, (6) Trasimenus, (7) Metaurus, (8) Cannæ.
B. A. EXAMINATION FOR HONOURS IN CLASSICS, 1874.

LATIN PROSE COMPOSITION.
Mondat, April, 13th:-Morning, 9 to 12.
Examiner. $\qquad$ Rev. George Cornisn, LL.D.

Translate into Latin :-
(A) The best way in the world for a man to seem to be any thing, is really to be what he would seem to be, It is hard to personate and act a part long; for where truth is not at the bottom, nature will always be endeavouring to return, and will peep out and betray herself one time or other. Therefore, if any man think it convenient to seem good, let him be so indeed, and then his goodness will appear to ever body's satisfaction; so that upon all accounts sincerity is true wisdom. Particularly as to the affairs of this world, integrity hath many advantages over all the fine and artificial ways of dissimulation and deceit; it is much the plainer and easier, much the safer and more secure way of dealing in the world : it has less of trouble and difficulty, of entanglement and perplexity, of danger and hazard in it; it is the shortest and nearest way to our end, carrying us thither in a straight line, and will hold out and last longest. The arts of deceit and cunning do continually grow weaker and less effectual and serviceable to them that use them ; whereas integrity gains strength by use, and the more and longer any man practiseth it, the greater service it does him, by confirming his reputation, and encouraging those with whom he hath to doto repose the greatest trust and confidence in him, which is an unspeakable advantage in the business and affairs of life.
(B) While the two armies fronted each other, and were on the very eve of battle, a hind came running down from the mountains between the two opposing lines, with a wolf in chase of her. She ran in among the Gaulish ranks, and the Gauls transfixed her with theirlong javelins. The wolf ran towards the Romans, and they instantly gave free passage to the beast which had given suck to the founder of their city, and whose image they had only in the preceding year set up beneath that very sacred fig-tree in the comitium, which tradition pointed out as the scene of the miracle. "See," cried out one of the soldiers, "Diana's sacred hind has been slain by the barbarians, and will bring down her wrath upon them : while the Roman wolf, unhurt by sword or spear, gives us a fair omen of victory, and bids us think on Mars and Quirinus our divine founder." So the Roman soldiers, as encouraged by a sign from the gods, rushed cheerfully to the onset.


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(A) Plautus :-Aulularia, Act IV, sce. 8 and 9.
(B) Terence:-Adelphi, Act IV., sc. 5, vss. 1-25.
2. (a) Discrucior animi ; animo male est; cum animo investigare:-Explain these usages severally. (b) Pices divitiis:-What is the allusion, and what other reading is there? (c) Vestitu et creta; Huic leges cogunt nubere hanc;-explain. (d) Name the metre employed in the above extracts and scan the first five vss. of ext. (A).

Translate:-
(C) Juvenal:-Sat. X., vss. 28-53.
(D) Persius:-Sat. V., vss. 30-51.
(E) Horace :-Satt., Book I., Sat. VI., vss. 71-89.
3. (a) "Sapientibus :"-Give an account of them. "Sarana:"-Derive and explain. "Defossa in loculis sportula":-Interpret, and explain the meaning of sportula. (b) "Non equidem dubites":-Note the peculiarity. Explain also the following from Persius:-(1) Hortante Camena. (2) Succinctis Laribus. (3) Frige Cleanthea. (4) Exossatus ager. (5) Varo producis Genio. (c) Cite from other parts of Horace's writings references to his birth, education, and social position at Rome.
4. Translate Virgil:-历neid, Book IV., vss. 648-674.
5. Under what syntactical heads would you put the several genitives fol-lowing:-(a) Filius Ciceronis.(b) Spes Salutis. (c)Notus in fratres animi paterni. (d) Homines insueti laboris. (e) Fortissimus Græcorum. (f) Capitis damnare.
6. State, citing illustrations, constructions permissible in poetry, but not allowed in prose.

## LATIN PROSE WRITERS.

## Friday, April 17th:-Afternoon, 2 to 5. <br> Examiner, <br> Rev. Georae Cornish, LL.D.

Translate into English, adding a brief comment where any peculiar form or construction seems to you to require it:-
(A) Cicero :-De Officiis, Book II., Chap viii., $\S \S 28$ and 29 , down to putare singuli,
2. "Ex ea urbe triumphari ;" "Ex Transalpinis bellis triumpharunt":-Distinguish, and give the import of the preposition in each expression, Explain the special historical events to which Cicero refers in this ext.
(B) Cicero:- De Imp. Cn. Pomp., Chap, xxii,, §§ 65-66. Cum. imperio:-Explain.
(C) Livy:-Book-XXI., Chap, xxxviii., and (D) XXII., Chap. xxxix., down to memoria,
3. (a) Ext. (c); (1) Quidam auctores;-who in particular? (2) Taurinis in Italiam degressum, (3) Poenino. (Is the orthography correct?) (4) Per Cremonis jugum. Explain the geographical references, and trace Hannibal's route from the Rhone to Northern Italy.
4. In what form is ext, (D) reported? Turn it into the opposite form and state the rules for so doing.
(E) Tacitus:-Histories, Book $\mathrm{I}_{\mathrm{a}}$, Chap. xxx ,
(F) Tacitus:-Annals, Book II, Chap, xxiii.

5, Explain (1) Tribunal Epidaphnæ. (2) Saliari carmine. (3) Triumphalia insignia. (4) Sodales Titios, (5) Haustae aut obrutae urbes. (6) Hasta et sector. (7) Urgentibus mathematicis. (8) Urbano militi.

GREEK PROSE WRITERS.
Monday, April 20th:-Morning, 9 to 12.
Examiner, ................................. Gev. George Cornish, LL.D.

1. Translate, adding an explanatory note where you deem it necessary, the following extracts :-
(A) Thucydides:-Book I., chap. cxx.
(B) Herodotus:-Book IX., chap. Ixxxvii.
(C) Xenophon :-Hellenics, Book II., chap. ii., §§ 5-9.
 (Poppo):-How is the use of the optative to be explained? juoia $\tau \tilde{r}$ $\pi i \sigma \tau \varepsilon$, the MSS.; j $\mu$ oí $\tau \tilde{\eta} \pi i \sigma \tau \varepsilon \ell$, Poppo and others:-which is the preferable reading, and why? (b) At what point in his First Book does Thucydides connect with and continue the narrative of Herodotus. What chapters of this Book are comprised in the חpooíuov or Preface, and with what object were they written?
2. Write explanatory notes, historical, etymological or grammatical, on the following extracts from Thucydides, Herodotus and Xenophon :






3. Translate:-
(D) Aschines :-Contra Ctesiphontem (Ed. Teubner.) §§ 161-162.
(E) Demosthenes:-De Corona (Ed. Tauchnitz.) pp. 278-9.Avir $\eta \tau \omega \bar{\nu} \pi \varepsilon \rho i ̀$ down to $\mu \eta \lambda^{\lambda} \lambda a \theta \varepsilon i ̃$.
4. (a) Give the respective dates of the delivery of these two orations. (b) What were the strong points in the speech of Æischines, and how were they treated by Demosthenes? (c) Explain the following:

 (8) тìv Mvбต̃ข $\lambda$ عíav.
5. Translate :-
(F) Plato:-De Republica, Book II., chap. xiv, down to $\pi 0 \lambda \dot{v} \gamma \varepsilon$.

Aristotle:-Nicomachean Ethics, Book II., chap. iii., down to ôaa a $\lambda \lambda \alpha \pi$ робтіөєтає.
7. (a) Whence the term Nicomachean Ethics? (b) Sketch the planof Books I. and II. (c) Define and explain the following terms used by Aristotle :- $\pi \rho \circ a i \rho \varepsilon \sigma \iota \varsigma$, $\varepsilon v \varepsilon ́ \rho \gamma \varepsilon \iota a u, ~ T \varepsilon ́ \lambda o s, ~ \mu \varepsilon ́ \theta o \delta o s, ~ o i ~ a ́ \pi o ̀ ~ \tau \tilde{\omega} v ~ a ́ \rho \chi \hat{\omega} v$


## GENERAL PAPER.

Monday, April 20th:-Afternoon, 2 to 5.

7. (a) Give the proper definltion of Comparative Philology. (b) Mention any erroneous ideas about the mutual relationship of the Greek, Latin, French and Teutonic languages that have been exploded by Comparative Philology. (c) Classify the letters of the Greek Alphabet; and state, with illustrations, what you know of Grimm's law for the interchange of Consonants in the Greek and cognate languages.
2. (a) What is meant by Dialects, as applied to language, and how may their origin be accounted for? (b) Name the chief Greek dialects and specify the Geographical limits within which they were spoken. (c) Assign to their dialects the following:-(1) $\mu \circ \bar{v} \circ a, \mu \circ i \sigma a$,



2. Parse, and give attic equivalents of the following from-Pindar
 $\pi a \rho \tilde{\eta} \mu \varepsilon \nu, \mu \dot{\varepsilon} \sigma \rho a, \dot{\imath} \pi \nu \omega, \tau \omega \varsigma_{,} \tau \tilde{\omega}$.
3. Translate:-
(C) Aristophanes:-Ranæ, vss. 640-662.


5. Translate:-
(D) Sophocles:-Ancigone, vss. 1115-1153.
(E) Aeschylus:-Septem contra Thebas, vss. 854-873.
(F) Aeschylus:-Prom. Vinct., vss. 802-818.
(G) Euripides:-Hippolytus, vss. 734-755.
6. (a) In ext. (D), explain the use of $\dot{\alpha} \gamma a \lambda u c$. vss. 966, Antigone, for $\pi a \rho a ̀$, Wunder reads $\pi a ́ p$; Jelf suggests $\pi a ́ \rho a$. Interpret the passage according to both readings. In vss. $1123,1125,1142$, note the force of the prepositions, and comment on any peculiarity you have noted in Sophocles in the use of prepositions. (b) Short geographical notes on extt. (F) and (G). (c) Point out any peculiar forms you observe in the extt. of question 5 .
6. Translate :-
(H) Hesiod:-Opera et Dies, vss. 491-509.
7. Write etymological notes on:- $\dot{\varepsilon} \pi a \lambda \lambda^{\varepsilon} a, \lambda \varepsilon \sigma \sigma \chi m, \lambda \varepsilon \pi \tau \tilde{\eta}$, $\delta v \sigma \eta \lambda \varepsilon \gamma^{\prime} \varepsilon \varepsilon$,

8. Name the metre, write down the scale, and scan each of the following extracts:-

 $\dot{\varepsilon} \xi \Leftarrow \sigma \omega ̈ \sigma a l ~ \tau о v ̀ \varsigma ~ \pi о \lambda i \tau a \varsigma ~ \kappa a ̉ \emptyset \varepsilon \lambda \varepsilon \tau \nu ~ \tau a ̀ ~ \delta \varepsilon i ́ \mu a \tau a . ~$
$\kappa \varepsilon і ̈ ~ \tau \iota \varsigma ~ v ̋ \mu a p \tau \varepsilon ~ \sigma ф а \lambda \varepsilon i \varsigma ~ \tau \iota ~ \Phi \rho v v i \chi o v ~ \pi a \lambda a i \sigma \mu a \sigma \iota v . ~$

 sиaтрıbìv ápүòv $\pi о \iota \varepsilon і ̈ \vartheta a \iota ~$ тарафроvoüvtos ảv $\delta \rho$ ós.
(c) ă $\gamma \varepsilon$ òn $\chi a i \rho \omega \nu$ A $\dot{\sigma} \chi \dot{\jmath} \nu \varepsilon \varepsilon \chi \bar{\omega} \rho \varepsilon$, $\kappa a i ~ \sigma \omega ̈ \xi \varepsilon \varepsilon \pi o ́ \lambda u v ~ \tau \grave{\eta} \nu \dot{\eta} \mu \varepsilon \tau \varepsilon ์ \rho a \nu$
 roùs ávontous. $\pi 0 \lambda \lambda o i \delta^{\prime}$ عioiv.


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concludes that they were at the outbreak of the struggle, "on the whole equally matched." What causes operated to the defeat of Carthage?
10. What causes led to the abolition of the old Republic and the establishment of the monarchy under Julius Cæsar and his successors? Give an account of the State of Rome at this period in respect of religion, literary culture, and material resources.

## MATHEMATICS AND NATURAL PHILOSOPHY.

## FIRST YEAR.

## EUCLID-ARITHMETIC.

Wednesdat, April 8th:-Morning, 9 to 12.
Examner,..........................................Alexander Johnson, LL.D.

1. If a right line be divided into any two parts, the sum of the squares of the whole line and one part is equal to twice the rectangle under the whole line and that part together with the square of the other.
a. The square of the sum of two lines, the sum of their squares, and the square of their difference, are in arithmetical progression.
2. The sum of the opposite angles of a quadrilateral inscribed in a circle is equal to two right angles.
a. Prove the converse.
3. In a given circle inscribe a regular pentagon.
4. Define duplicate ratio, and prove geometrically that the duplicate ratio of two lines is the same as the ratio of their squares.
5. Divide a given straight line similarly to a given divided line.
6. Upon a given straight line describe a polygon similar to a given one, and similarly situated. (N. B. Explain the force of the last two words.)
7. Construct a triangle similar to a given one, and of twice its area.
8. Add together $\frac{1}{2}+2 \frac{1}{4}+1 \frac{\pi}{8}$, and from the sum subtract half the product of $1 \frac{1}{4}$ and $\frac{9}{9}$.
9. Reduce $.263^{\prime}$, to a vulgar fraction, and verify the result.
10. If the rent of 42 acres, 3 roods, 21 sq. perches of land be $\$ 85$, how much land may be rented at the same rate for $\$ 364$.
11. Find in feet the length of the side of a square whose area is one acre.

12. Compare $\frac{1}{2} \sqrt{2}$ and $\frac{1}{3} \sqrt{27}$, ascertaining which is the greater.
13. The length of a floor exceeds the breadth by 4 feet; if each had been increased by a foot the area of the room would have been increased by 27 square feet; find its origizal dimensions.
14. Find the least common multiple of $6\left(x^{2} y+x y^{2}\right), 9\left(x^{3}-x y^{2}\right)$, $4\left(y^{3}+x y^{2}\right)$.
15. Find the value of $\frac{x+y}{y}-\frac{2 x}{x+y}+\frac{x^{2} y-x^{3}}{x^{2} y-y^{3}}$

## INTERMEDIATE EXAMINATION.

## EUCLID-ARITHMETIC.

Wednesday, April 8th:-Morning, 9 to 12.
Examiner,............................................Alexander Jounson, LL.D.

1. The perpendicular to the diameter of a circle at its extremity, falls without the circle; and no straight can be drawn from the extremity between that perpendicular and the circumference so as not to cut the circle.
2. If two chords in a circle intersect one another the rectangles under their segments are equal.
(a) If the diagonals of a quadrilateral intersect one another, so that the rectangle under the segments of the one is equal to the rectangle under the segments of the other, then the opposite angles of the quadrilateral are together equal to two right angles.
3. About a given circle describe a triangle equiangular to a given triangle.
4. Parallelograms having the same altitude are to one another as their bases.
5. From a given straight line cut off one-fifth.
6. If two similar parallelograms have a common angle, and be similarly situated, they are about the same diagonal.
7. If the homologous sides of two similar triangles be as 4 to 5 , and the area of the smaller contain 100 square inches, how many square inches are there in the area of the other?
8. Two parallel chords of a circle are six and eight inches long respectively, and they are one inch apart; find the diameter of the circle.
9. Find the interest on $£ 98.15 \mathrm{~s} .10 \mathrm{~d}$. for 5 months at $4 \frac{1}{2}$ per cent. per annum.
10. Find a mean proportional between $\cdot 235$ and $\cdot 00786$.
11. Divide half the difference of $5 \frac{3}{4}$ and 45 by four times the sum of $\frac{5}{7}$. and $\frac{3}{8}$.
12. If 20 men in three weeks earn $£ 887 \mathrm{~s} .4 \mathrm{~d}$., in how many weeks will 14 men earn $£ 120$ ?
13. Give and prove the rule for division of decimal fractions.

INTERMEDIATE EXAMINATION, 1874.
TRIGONOMETRY-ALGEBRA.
Thursdat, April 9th:-Morning, 9 to 12.
Examiner,....................................Alexander Jounson, LL.D.

1. Assuming the value of $\pi$, calculate, without employing any formula, the distance of the sun, being granted that an angle of 1 " subtends an are of 444 miles at that distance.
2. Prove $\cos A=1-2 \sin 2 \frac{1}{2} A$.
3. The hypotenuse and one angle of a right angled triangle are 60 feet, and $35^{\circ} 15^{\prime} 25^{\prime \prime}$ find the side opposite the angle.
4. Calculate by logarithms the value of

$$
\frac{0^{\prime \prime} .003702 \sin }{15 \sin 1^{\prime \prime} \sin } \frac{(\alpha-\beta)}{a \sin \beta}
$$

where $a=66^{\circ} 33^{\prime}$ and $\beta=38^{\circ} 31^{\prime}$.
5. The distances of a given station from two objects situated at opposite sides of a hill are 1,128 and 936 yards respectively: the angle at the station subtended by their distance is $64^{\circ} 28^{\prime}$, find their distance.
6. Find the height of a tower on the top of a hill, the length of the measured horizontal base being 240 feet, and the angles of elevation of the top of the hill and the top of the tower from the nearer station being $48^{\circ}$ $20^{\circ}$ and $61^{\circ} 25^{\prime}$, and the angle of elevation of the top of the tower from the farther station being $33^{\circ} 45^{\prime}$.
7. Solve the equations

$$
\begin{gathered}
\frac{4 x+7}{19}+\frac{5-x}{3+x}=\frac{4 x}{9}: \\
\frac{x-7}{x+7}=\frac{2 x-15}{2 x-6}-\frac{1}{2(x+7)} \\
a x-b y=c^{2}, \frac{a}{b+y}-\frac{b}{a+x}=0
\end{gathered}
$$

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8. Simplify $\frac{2 \frac{1}{3}-\frac{1}{2}(x-2)}{\frac{1}{3}(x+1)-4 \frac{1}{2}}$
9. Compare $\sqrt{5}, 2 \sqrt[3]{\frac{3}{8}}$ and $3\left(4 \frac{1}{2}\right)^{-\frac{1}{6}}$, and arrange them in the order of magnitude.
10. $A$ and $B$ can do a piece of work together in 12 days, which $B$, working for 15 days and $C$ for 30 would together complete ; if they worked all three together they would finish it in ten days: in what time could they separately do it.
11. Find the greatest common measure of $x^{4}-2 x^{3}+x^{2}-8 x+8$ and $4 x^{3}-12 x^{2}+9 x-1$.
12. Resolve $4 x^{2}-4 x-3$ into elementary factors.

## THIRD YEAR.

## ASTRONOMY-OPTICS.

$$
\text { Wednesday, April 1st :-9 to } 12 \text { a.m. }
$$

Examiner,
Alexander Johnson, LL.D.

1. Distinguish between a sidereal, a solar, and a mean solar day; also between a tropical and a sidereal year.
2. Name the principal planets in the order of their distances from the Sun, and dividing them into two groups as Interior and Exterior, state the leading points of difference between the groups.
3. Describe Foucault's pendulum proof of the Rotation of the Earth.
(a) Calculate in miles per hour the velocities of two pointson the Earth's surface, one at the Equator, the other in latitude $45^{\circ}$.
4. Account for the phases of the Moon.
5. Investigate the principle of the method by which the distance of the Moon from the Earth is ascertained.
6. Explain the principle of Halley's method for finding the distance of the Earth from the Sun by a transit of Venus.
7. Assuming the distance of the Earth from the Sun to be $91 \frac{1}{2}$ millions of miles, the greatest and least apparent semi-diameter of Venus to be $28 . " 5$ and 4." 7 ; find the distance of Venus from the Sun.
8. Describe the Newtonian telescope, and find its magnifying power.
9. Given the focal lengths of the object-glass and eye-glass of a microscope, and the position of the object, how would you calculate the magni-
fying power and length of the microscope when used by a person of aver. age sight ?
10. A watch-glass of 5 inches curvature is filled with spirits of turpentine, and a beam of parallel rays falling on the surface of the liquid is brought to a focus at a distance of 10.5 inches; find the index of refraction.
11. The deviation of a ray of light passing nearly perpendicularly through a thin lens is constant, when the distance of the ray from the axis is given.
12. State the laws of refraction of light, and describe the experimental proof of them.

THIRD YEAR.
MECHANICS-HYDROSTATICS.
Thursday, April 2nd:-Morning 9 to 12.
Examiner, Alexander Johnson, LL.D.

1. The moment of the resultant of any number of parallel forces with respect to any plane, is equal to the sum of tne moments of the component forces with respect to that plane.
2. A uniform bar 4 feet long, weighs 10 lbs ., and weights of 30 lbs . and 40 lbs ., are hung from its two ends; where must the fulcrum be placed to produce equilibrium ?
3. Describe the Roman steeljard, and show how it is graduated.
4. In the screw, find the ratio of the Power to the Resistance parallel to the axis.
(a) If the interval between the threads be 1-11th of an inch, and the circumference of the circle described by the Power be 2 feet; what Resistance will a Power of 13 lbs. sustain?
5. Define specific gravity, quantity of matter and quantity of motion,
(a) Find the momentum of a cubic foot of copper (sp. gr. 8.9) moving with a velocity of 1407 yards per minute, the volume being measured in cublic inches.
6. Define a constant force, and prove

$$
v=f t . ; s=\frac{v t}{2}
$$

7. Find the error in a day produced by a change of length in a seconds pendulum.
8. In a Papin's digester, the area of the valve is one square inch and its distance from the fulcrum is 2 inches; calculate the position of the weight ( 4 lbs. ) if we wish the water to boil at a temperature of $240^{\circ}$ Fah., whic's
corresponds to a pressure of 51 inches of mercury, the barometer standing at 29 inches.
9. State the principles from which the formulæ connecting the volumes, pressures, temperatures, and specific gravities of a mixture of gases are obtained, and deduce those necessary in calculating the pressure of a mixture of two gases which occupies a volume of 300 inches and is formed by 100 cubic inches of another gas (pressure 29.5) and 150 cubic inches of another gas (pressure 13.2) at the same temperature. Make the calculation.
10. Describe the method of finding specific gravities, by the Hydrostatic balance, $1^{\circ}$ for bodies heavier, $2^{\circ}$ for bodies lighter than water.
11. If a homogenous body flont in a liquid, its whule volume will be to that of the part immersed, in the inverse ratio of the specific gravities of the body and of the liquid,
12. Describe the experimental proof of Boyle and Mariotte's law.

## B, A. ORDINARY EXAMINATION. <br> ASTRONOMY-OPTIOS. <br> Wednesday, April 1st:-Morning, 9 to 12.

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Examiner, Alexander Jounson, LL.D.

1. Define refraction, parallax, precession, nutation, and aberration, and state their effects severally on the apparent position of a heavenly body.
2. Investigate the method of finding the distance of Jupiter from the Sun.
3. Describe and account for the phases of Mars.
4. Taking the Sun's horizontal parallax as 8 ." 9 , his mean diameter as $32^{\prime} 34 . " 6$ and the diameter of the Earth as 7926 miles, calculate the diameter of the Sun in miles.
5. Describe the lunar method of finding the longitude of a place.
6. State- $l^{\circ}$, the instruments and measurements by which the Sun's daily motion among the stars may beascertained; $2^{\circ}$ the method of ascertaining from time to time the relative distances of the Earth andSun; $3^{\circ}$, the mode of testing Kepler's first Law for the Earth from the results of these observations.
7. Describe the Gregorian Telescope, and find its magnifying power if the focal length of the object speculum be 4 feet, of the eye glass be $\frac{1}{2}$ inch, and of the secondary speculum be 3 inches.
8. Define, and find a formula for the magnifying power of a convex lens.


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8. A body A, weighs in air 7.55 lbs . in water 5.17 lbs ., and in another liquid 6.35 lbs . ; find from these data the specific gravities of $A$ and $B$.
9. The specific gravity of aqueous vapour is 0.622 , the weight of 100 cubic inches of dry air at the temperature 60 Fahr. and pressure 30 inches is 31.0117 grains ; hence calculate the weight of a cubic foot of moist air when the barometer stands at 29.52 and the thermometer at $56^{\circ}$ Fahr., the elastic force of the vapour being 0.402 .
10. Explain the principle of the ordinary Hydrometer used in determining the specifie gravity of liquids.
11. Find the pressure on a rectangular surface immersed in a liquid, and having two opposite sides horizontal.
12. Describe the barometer gauge used for the boilers of steam engines, and show how to graduate it:

## B.A. AND THIRD YEAR ORDINARY EXAMINATIONS.

## LIGHT-HEAT.

Thursday, April 2nd :-2 to 4 P.M.

1. Describe experiments to show that the colour of bodies is not inherent ${ }_{t}$ in them, but is derived from the light that falls on them. Explain the physical cause of colour according to the wave theory, and state the analogy in sound.
2. Describe any two experiments showing the re-composition of white light.
3. State the principles of spectrum analysis briefly. Describe an experiment showing the reversion of the sodium line ; state the general principle explaining it ; and apply it to account for the dark lines in the solar spectrum.
4. Describe an experiment with a knife edge showing on a screen the phenomena of diffraction, and explain them.
5. How is polarized light distinguished from ordinary light, physically and theoretically? State also the physical and theoretical differences between plane polarized, circularly, and elliptically polarized light.
6. In a polariscope the analyser is turned until the beam of light which, has passed through the polarizer cannot be transmitted to the eye or screen. a plate of mica is then put between the polarizer and analyser, and the light passes; explain this.
7. A glass vessel full of mercury at the temperature $40^{\circ} \mathrm{C}$. contains 2 lbs . of it, to what temperature (centigrade) ought it to be raised in order that


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which a cubic inch of the steam arising from it will occupy, the sp. gr. being ' 622 ; assuming the equation

$$
V=\frac{W}{5.375 s} \times \frac{460}{p}
$$

7. The greatest and least allitudes at Greenwich of the Pole star being $52^{\circ} 58^{\prime} 38^{\prime \prime} .31$ and $50^{\circ} 0^{\prime} 8^{\prime \prime} .49$, calculate the latitude, correcting for refraction from the tables, for temp. $50^{\circ}$ and pressure $29 \cdot 6$ inches.
8. The distances of a given station from two objects situated at opposite sides of a bill are 1,128 and 936 yards respectively : the angle at the station subtended by their distance is $64^{\circ} 28^{\prime}$, find their distance.
9. Find the beight of a tower on the top of a hill, the length of the mea sured horizontal base being 246 leet, and the angles of elevation of the top of the bill and the top of the tower from the nearer station being $48^{\circ} 20^{\circ}$ and $61^{\circ} 25^{\prime}$, and the angle of elevation of the top of the tower from the farther station being $33^{\circ} 45^{\prime}$.

## FIRST YEAR.

## HONOUR EXAMINATION IN GEOMETRY,

Friday, April 17th:-Morning, 9 to 12.

## Examiner, ........................................Alexander Johnson, LL.D.

1. Given the base and sum of sides of a triangle; the polar of the vertex with respect to oue extremity of the base as origin always touches a fixed circle.
2. Given a circle and the lengths of the three diagonals of a quadrilateral inscribed in it ; construct the quadrilateral.
3. If on the three diagonals of a complete quadrilateral, as diameters, circles be described, they shall have the same radical axis, and cut orthogonally the circle circumscribing the triangle formed by the three diagonals.
4. If two circles do not meet one another, any system of circles cutting them orthogonally always passes through two fixed points on the line joining the centres of the two circles.
5. Inscribe in a given polygon anotber of the same number of sides, so that each of its sides shall pass through a given point.
6. The base of a triangle passes through a fixed point, the base angle move on two fixed straight lines, and the sides pass through two fixed points, which lie on a straight line passing through the intersection of the two fixed lines; find the locus of the rertex.
7. In a given circle inscribe a triangle having its base parallel to a given line and its two sides passing through two given points, not both situated on a line parallel to the given line.
8. Given a straight line and two points on the same side of it; find a point in the given line at which the two given points shall subtend a maximum angle.
9. If $D_{1}, D_{2}, D_{3}, D_{4}$, denote the distances of the centre of the circumscribed circle of any triangle from the centre of the four circles touching the sides ; prove that

$$
D_{1}^{2}+D_{2}^{2}+D_{3}^{2}+D_{4}^{2}=12 R^{2}
$$

10. Inscribe in any triangle a parallelogram of given species.
11. The diagonals of a quadrilateral inscribed in a circle are as the sums. of the rectangles under the pairs of sides terminated in such diagonal.
12. Given the base and vertical angle of a triangle ; find the locus of the: intersection of its perpendiculars.

FIRST YEAR.
HONOUR EXAMINATION IN ALGEBRA.
Friday, April 24th:-Morning 9 to 12.
Examiner, ...................................Alexander Johnson, LL.D.

1. Solve the equations:

$$
\begin{aligned}
& \frac{1}{\sqrt{1-x+1}}+\frac{1}{\sqrt{1+x}-1}=\frac{1}{x} \\
& \left\{\frac{x-\sqrt{x^{2} y^{2}}}{x+\sqrt{x^{2} y^{2}}}=x, \frac{x}{y}=\sqrt{\frac{1+x}{1-y}}\right\}
\end{aligned}
$$

2. A steamer on a river travels a distance of 180 miles and back in 26 hours; it travels 3 miles with the stream in the same time as 2 against it. Find the veloeity of the stream, and the times of going and returning.
3. The sum of an infinite Geometric series is 3 , and the sum of its first two terms is $2 \frac{2}{3}$; find the series.
4. Given $a$ and $b$ the first two terms of an Harmonic Progression; find the $n^{\text {th }}$ term.
5. Out of 17 consonants and 5 vowels, how many words can be made having two consonants and one vowel in each?
6. Expand $\frac{1}{\sqrt[3]{ } a x-x^{2}}$ by the Binomial Theorem.
7. Find $n$ in a series of powers of $x$ from

$$
x=1 n-\frac{1}{2} n^{2}+\frac{1}{3} n^{3}-\frac{1}{4} n^{4}+\& c .
$$

8. Extract the square root of 25400544 in the senary scale.
9. A number consisting of an even number of digits in a system whose radix is $r$ is divisible by $r+1$, if the digits equidistant from each end are the same.
10. If $P$ represent the population of any place at a certain time, and every year the number of deaths is $\frac{1}{p}$,h , and the number of births ${ }_{q}{ }_{q}^{\text {th }}$ of the whole population at the beginning of that year; find the amount of the population at the end of $n$ years from that time.
11. Prove that for any base

$$
\log (1+y)=A\left(y-\frac{1}{2} y^{2}+\frac{1}{3} y^{3} \& c .\right)
$$

a. Assuming $A=1$ calculate the base.
12. Assuming the Binomial Theorem to be true for a positive index prove that it is true for a negative.

## HONOUR EXAMINATION.

## ASTRONOMY-OPTICS.

Friday, April 17th:-Morning, 9 to 12.

## Examiner,

Alex. Johnson, LL.D.

1. State what is meant by the equatorial intervals of the wires in a Transit Instrument; show how they are found, and get a formula for applying them in star observations generally. Why and how must this formula be modified for the moon?
2. Examine the varying relations between the motions of the mean and the true sun arising from the obliquity of the ecliptic alone, and show that the equation of time vanishes four times in the year.
3. If $\phi$ be the astronomical latitude of any place on the earth and $e$. be the compression of the section made by the meridian plane, prove that the radius of curvation at the place is given nearly by

$$
\rho=a\left(1-2 e+3 e \sin ^{2} \phi\right)
$$

4. Assuming that light traverses the;radius of the earth's orbit in 8 m .18 s . deduce the constant coefficient of aberration, and then determine the aberration of a given star in longitude.

$$
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$$

5. Investigate formulæ connecting the geocentric and heliocentric latitudes and longitudes of a planet.
6. Find the length of time a star whose N. P. D. is $81^{\circ} 29^{\circ} .5$ will be above the horizon at a place whose latitude is $51^{\circ} 45^{\circ} .5$.
7. At a place in lat. $42^{\circ} 34^{\prime} \mathrm{N}$, the altitude of Aldebaran (Dec. $16^{\circ} 12^{\prime} 36^{\prime \prime}$
N.) was found by observation to be $39^{\circ} 2^{\prime} 10^{\prime \prime}$, when its hour angle was 3 h .25 m .40 s . What was the latitude of the place?
8. Rays of light are incident on a concave spherical mirror, whose radius is $r$, parallel to the axis, show that the equation of the caustic is

$$
27 r^{2} y^{2}=\left\{4\left(x+y^{2}\right)-a^{2}\right\}^{3}
$$

and trace the form of the curve.
9. Investigate the condition of minimum deviation for a ray of light passing through a prism in a principal plane.
10. Explain the method of measuring the minimum deviation of a ray of light passing through a prism, and of thence determining the index of refraction of the medium.
11. Investigate the form of a lens of given focal length in order that the aberration of a given direct pencil of parallel rays may be the least possible.
12. Investigate the order of the colours in the primary and in the secondary rainbow.

THIRD YEAR.
HONOUR EXAMINATION.
MECHANICS, HYDROSTATICS.
Friday, April 24 Th :-Morning, 9 to 12.
Examiner,......................................ALEXANDER JoHnsOn, LL.D.

1. A heavy elastic ring is placed round a smooth vertical cone, and descends by its own weight; find the position of equilibrium.
2. Find the centre of gravity of the solid formed by the revolution round the axis of $y$ of the cycloid

$$
y=\sqrt{2 a x-x^{2}}+a \operatorname{vers}^{-1} \frac{x}{a}
$$

3. When a system of forces acting on a rigid body is reducible to a single resultant, find the equation of the line in wnich it acts.
4. Find the equation to the catenary when the unit of mass varies as $x \cos \phi$, where $\phi$ is the angle of inclination of the element of the curve at any point to the horizon.
5. Apply the principle of Virtual Velocities to determine the position of equilibrium of a particle attracted towards two centres of force.
6. A cylinder rests with its base on a smooth inclined plane; a st.ing attached tc its highest point, and, passing over a pulley at the top of the inclined piane hangs vertically and supports a weight; the portion of the string between the cylinder and the pulley is horizontal; determine the conditions of equilibrium.
7. A particle moves under the action of given forces, such as occur in nature, on a given smooth surface, prove, (1) that the velocity at any point will depend only on the initial circumstances of projection, and (2) that the normal pressure is given by the equation

$$
\frac{v^{2}}{\rho}=K^{\lambda}+Y_{\mu}+Z \nu+R
$$

Give the physical interpretation of this equation.
8. Find the Brachistochrone for two given points, the particle being under the action of gravity only. (N.B. Employ the calculus of variations.)
9. Prove the relation in elliptic motion between the true and eccentric anomalies

$$
\tan \frac{A}{2}=\sqrt{\frac{1+e}{1-e}} \tan \frac{u}{2}
$$

10. Prove that if a body revolve round the earth its velocity cannot exceed 7 miles a second, and if the body come close to the Earth its velocity cannot be less than 5 miles a second without falling upon it.
11. A hollow cube is very nearly filled with fluid, and rotates uniformly about a diagonal which is vertical; find the pressure on one of the upper faces.
12. If a prismatic diving bell of given volume $V$ full of air be sunk to a depth so that the distance between the surfaces of the water within and without the bell is $K$; find the volume of air which must be forced into the bell, in order that $\frac{1}{\pi}$ th of its volume may be free from water,
13. A sphere is just filled with homogeneous fluid; determine the resultant of the pressures upon either of the hemispheres into which it is divided by a vertical plane.


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14. "Which of the dialects of the Anglo-Saxon is specially the parent of the English language ?"
15. Mention the inflectional changes that were made when the AngloSaxon passed into Semi-Saxon.
16. Mention the principal changes made by the transition of the Saxon into the English.
17. When did the literary language of Scotland begin to deviate from that of England.
18. Mention the different stages that mark the introduction of French words into the English tongue.
19. What is the rule that has been given to distinguish the Latin words borrowed from the French from the words borrowed from the Latin directly?

## INTERMEDIATE EXAMINATION.

## ENGLISH LITERATURE.

Monday, April 13th:-Morning 9 to 12.

## Examiner,

Ven. Archdeacon Leach, D.C.L.

1. What estimate is formed of the Celtic literature of Scotland during the Anglo-Saxon period? What appears to be the accepted conclusion in regard to the poems of Ossian ?
2. What do the relics of the Celtic literature of Ireland consist of ?
3. Give some account of the life and literary works of Alcuin and Joannes Scotus Erigena.
4. Give the substance of the remarks on the natural development of literary cultivation among a people.
5. How is the introduction of monstrous and imaginary beings and superstitions powers found into all early poetry, accounted for?
6. Give some account of the literary works of King Alfred, Lanfranc Anselm, Duns Scotus and Michael Scot.
7. Mention the form and peculiarities of Anglo-Sax vetion.
8. Give what you recollect in regard to the language, subject-matter and influence of the poetical works of the Troubadours and Trouvères.
9. Mention the literary works of Wycliffe.
10. Give some account of the French romances that celebrate King Arthur and his knights.


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11. Mention the principal cautions given for the use of metaphors.
12. Give the substance of what is said on technical language, with reference to the theological style.
13. What are loose sentences and those of a periodic structure?
14. How is the distinction of poetry or prose stated and illustrated?
> B.A. ORDINARY EXAMINATION.

> HISTORY AND ENGLISH LITERATURE. (MARSH'S LECTURES). Monday, April 13th:-Morning, 9 to 12. Examiner,....................................Ven. Archdeacon Leach, D.C.L.

1. Give the names of the chief authorities for the Saxon conquest of Britain;-whatestimate is made of the value of their evidence, severally? Give the argument and conclusion.
2. State the reasons for the belief that Anglo-Saxon was indigenous"a new speech resulting from the fusion of many separate elements."
3. Upon what grounds is it held that a considerable Celtic element was blended with the speech of the Saxons?
4. How is it shown that the change which took place in the grammatical forms of our language was due materially to external causes?
5. Mention the conditions under which a knowledge of the etymology of words assists in forming a just conception of their meaning.
6. What reasons are assigned for the comparatively late cultivation of English literature?
7. Give the substance of the remarks on Tyndale's translation of the New Testament.
8. Mention the principal causes that have led to the adoption into English of so large a proportion of foreign words.
9. Give the substance of the remarks on the subject of a scientific nomenclature.
10. Mention the theories that have been suggested to explain the origin of inflectional forms.
11. How is the absence of rhyme in Greek and Latin poetry accounted for?
12. Give the substance of the remarks on the versification of the poem called Ormulum.
13. Give the rule, that, in Anglo-Saxon, governs the employment of alliteration.
14. Distinguish rhythm and metre.
15. Give the rules laid down for translation.
16. What reasons are given against attempting a new translation of the Bible?
B.A. ORDINARY EXAMINATION.

HISTORY AND ENGLISH LITERATURE.
(GIBBON):
Thursday, April 23rd :-Morning, 9 to 12.
Examiner, $\qquad$ Ven. Archdeacon Lefíu; D.C.L.

1. Give some account of the life and character of the Antonines and of the general condition of the Empire under their government.
2. 2. Give a historical sketch of the Pretorian guards.
1. Give an account of the persecutions of the Christians, and of the events that led to the toleration of Christianity.
2. Name the immediate successors of Augustus down to Vespasian, describe their character generally, and show in what respects the interests of literature and arts were favored by Vespasian.
3. What are supposed to have been the political reasons that induced Constantine to remove the seat of government? Show how that event and the subsequent division of the empire operated disadvantageously to the cultivation of Roman literature and art.

6: Describe the character of Valentinian, and his efforts to oppose the decay of Roman learning.
7. What was the fate of the Latin tongue in the Eastern division of the Empire?
8. Give the history of the Code the Pandects and the Institutes of Justiian, and mention the parts into which the subject matter of the Institutes is divided.
9. Mention the principle causes that tended to preserve for Europe the Latin tongue.

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## B.A. ORDINARY EXAMINATION.

## HISTORY AND ENGLISH LITERATURE.

(HUME).
Thursday, April 23rd :-Afternoon, 2 to 5.
Examiner, $\qquad$ Ven. Archdeacon Leach, D.C.L.

1. Mention the principal events that occurred in the reign of Henry II.
2. Give the history of the transactions in connection with Edward I.'s claims of feudal superiority over Scotland.
3. State the claim avowed by Edward III. upon the crown of France, and the events supposed by Hume to be the real causes of the war with that country.
4. Give a historical sketch of the Military adventures of the Black Prince.
5. Mention the principal points in Hume's descriptio of the character of Edward III.
6. Mention the causes of the popular insurrections in the reign of Richard II., the principal events and termination of the insurrections.
7. Describe the progress of the Reformation in Scotland during the reign of Elizabeth and the policy of the Queen in regard to the affairs of that country.
8. Give an account of the arbitrary measures of James II. and of the affair of the second declaration of indulgence.
9. State the principal points in the history of the Convocation of the Church of England.
10. What, according to Hume, was one of the worst effects of the Hanoverian Succession? Mention some of the events that corroborate his opinion.
11. Give Pitt's plan of the Campaign for the conquest of Canada.
12. Mention the principal causes of discontent that led to the war in America in 1775.


> LANGUAGE (ANGLO-SAXON). Wednesday, April 8th:-Morning, 9 to 12.

Examiner.
Ven. Archdeacon Leach, D.C.L.

1. How is the English language related to the Anglo-Saxon? 1. With regard to its vocabulary, 2. with regard to Grammar?
2. 3. Which are the Anglo-Saxon articles? 2. Explain the various uses to which they are severally applied.
1. Give examples of the different modes in which Secondary Names were formed.
2. What peculiarities are to be remarked in the formation of Proper Names ? and give examples.
3. How are degrees of Comparison indicated in adjectives and adverbs?
4. How are the Proaouns of the First and the Second Persons declined?
5. How are the Simple and the Complex orders of verbs distinguished?
6. Conjugate the verbs "wesan," "beon," "weorthan."
7. How is the Gerund formed, and what are its uses and significations?
8. What cases do the following prepositions govern?-"æfter," "bi," " mid," " of," " to," " on," " fram," " with ?"
9. What grammatical peculiarities are to be remarked in the following phrases?- "se Johannes," "thu the eart," "tha waes sum Consul Boethius waes haten," "hes seo meawle," "this falc is heardes mōdes," "fugel fetherum deal," "tha ne mihton hig him andswarian," seo hine axode hlàfes," "hwaet sceal ic singan," "Utan biddan God."
10. Translate the following passage :-
"And forthan the seo onfangennys thæs rices is of Godes godnesse, rihtlice is hēr bæftan gecweden on endebyrdnesse thæs godspelles, La hu omot ic don thæt ic wille? Dyslic bith mannes ceast ongean Godes godnesse. Sum ceorung mihte beon, gif he his behant ne gelæste, ac nà, theah the he mare ne sealde; be tham is gyt gelimplice gecweden, oththe thin eage is yfel, forthan the ic com God? Ne ouhebbe hine nan mann on his weorcum, ne on langsumum theowdome thonne ses Sothfæstnys clypath, thus beath tha endenextan fyrmeste, and the fyrmestan endenexta. Efne nu, theah we witan hu fela Gōd aththe hu micele we gefremedon nyte we theah gyt mid hwilcere sweathancolnysse se upplica Dema tha afandath; and witodlice gehwilcum men is thearle to blissigenne, theah the he endenext on Godes rice sy geendebyrd."

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## ENGLISH LANGUAGE.

Examiner, $\qquad$ Ven. Archieacon Leach, D.C.L. Wednesday, April, 8TH:-MORNING, 9 TO 12.

1. What answer would you give to the objection that the study of the past history of the language is useless?
2. Show the principal differences in regard to inflection, 1 , between An-glo-Saxon and Semi-Saxon ; 2, between Semi-Saxon and the present English.
3. State the rules laid down by Tyrwhitt for the reading of the verses of Chaucer.
4. How did it hæppen that so great a number of French words was introduced into the English of the time of Chaucer?
5. Give some examples of the double adoption of Latin words.
6. How is the excellence of the English translation of the Bible accounted for?
7. Give examples of new Latin words introduced at the period of the Reformation that have maintained their ground, and examples of those that have disappeared.
8. How does it happen that so few words have been borrowed from the Germans?
9. Give some examples of words returning to the language after having disappeared.
10. Give the substance of Dr. Trench's general remarks on the subject of the gains and losses of languages.
11. Give some examples of proper names forming new words and of words that, by change of accent, grow each into two.
12. What causes may be assigned for the disuse of words?
13. What causes may be assigned for the disuse of forms or powers of a language?
14. Give an exposition of the idiom "many a youth."
15. Give some examples of words that have changed their meaning.
16. Give the substance of the remarks on phonetic writing.
17. Show how the spelling of words has sometimes been affected by wrongly assumed derivations.


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7. Give the history of the translation of the Bible now used.
8. Write out an analytical account of the tragedy of Macbeth with critical remarks on the characters and action of the play.
9. What peculiarities mark the dramatic literature of England in the times immediately subsequent to the restoration ?-their causes-the controversy that thence arose, and by whom conducted?
10. How does Dr. Johnson defend Pope's translation of Homer?
11. What forms the basis of the leading story of the Faerie Queen of Spencer? Give the subject matter of the FirstBook.
12. Give the names of the principal theological writers of the first half of the 17 th century.

## ENGLISH HISTORY.

Fridat, April 24 th : -Afternoon, 2 to 5.
Examiner, $\qquad$ Ven. Archieacon Leach, D.C.L.

1. (a) What are the only certain means of knowing the remote origin of a people? (b) How is the connection of the Britons with the Celts of Gaul shown?
2. Mention the principal things known in regard to the religion and manners of the German races that invaded England.
3. Give the substance of what is said of the history of Normandy.
4. State the matter of Controversy between Henry I. and the Pope.
5. Mention the principal points in the history of Simon De Monfort, Earl of Leicester.
6. Describe the character of Edward I., and mention the chief points in the writs he issued for a Parliament.
7. What is said of the life and character of Lord Cobham?
8. The Battle of Bosworth, its antecedent circumstances and its consequences?
9. Give the names of the leading Members of the House of Commons in the early part of the reign of Charles I., and mention the circumstances that led to the passing of the Petition of Right.
10. What was the Triple Alliance ; and what was the conduct of Charles II. in regard to it?
11. Mention the principal incidents in the history of the Duke of Monmouth.


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13. Discuss the legitimacy of the following argument:-"If the universe is the result of unconscious forces, there can be no break in the development of organic forms: but there is no such break; and therefore the universe is the result of unconscious forces."
14. Analyse the following Sorites into its constituent syllogisms :"Wilkes was a favourite of the populace;
A favourite of the populace must understand how to manage them; He who understands how to manage them must know their character; He who knows their character must hold them in contempt ; Therefore Wilkes must have held them in contempt."
15. Distinguish (a) logical and non-logical, (b) purely logical and semilogical, fallacies.
16. Point out the nature of each of the following fallacies, and the class to which it belongs:-
(a) Whatever is believed among all nations is a truth; But the existence of God is not believed among all nations: Therefore the existence of God is not a truth.
(b) The evidence of $A$ is insufficient to prove the prisoner's guilt: and so also is the evidence of $B$, as well as that of each of the other witnesses ; but the whole evidence against the prisoner is made up of that of these witnesses; therefore the whole evidence is insufficient to prove his guilt.

## THIRD YEAR.

## MORAL PHILOSOPHY.

 Monday, April 13th:-Morning, 9 to 12.
## Examiner

J. Clark Murray, LL.D.

1. What are the three phenomena presented in the ethical consciousness?
2. Describe the consciousness of moral obligation in its distinctive feature, as it appears in minds of the highest moral type.
3. Show that this distinctive feature in the consciousness of moral obligation is incompatible (a) with the theory of Hobbes, and even (b) with that of Occam.
4. Show that there are different subjective standards of duty in different minds.
5. Discuss the question, whether it is necessary to find the supreme objective standard of duty before classifying duties.

6. Explain the distinction between the three classes of the qualities of matter.
7. Deduce the primary qualities of matter in detail.
8. Name and state the two laws of actual reproduction.
9. (a) Describe the process of generalization. (b) State the antagonistic doctrines of Nominalism and Conceptualism. (c) Show that Conceptualism arises from ambiguity of terms.
10. (a) What is meant by the regulative faculty? (b) What are the criteria by which its cognitions are distinguished?
11. What are the conditions of positive thought?
12. State the condition of relativity, illustrating it with reference either to Time, or to Space, or to Degree.
13. Deduce the principle of causality from the Law of the Conditioned.

## B.A. ORDINARY EXAMINATION.

 STEWART'S OUTLINES OF MORAL PHILOSOPHY.Monday, April 13th:-Afternoon, 2 to 5. Examiner,
J. Olare Murray, LL.D.

1. Classify the active powers.
2. (a) Distinguish the desires from the appetites. (b) Enumerate the most important natual desires. (c) Explain what is meant by an artificial or secondary desire.
3. Distinguish instinctive and deliberate resentment.
4. Explain what is meant (a) by self-love, (b) by selfishness.
5. (a) Distinguish different senses in which the word reason is employed, and (b) explain in what sense reason can be said to be the source of our moral ideas.
6. What constitutes (a) the beauty of Virtue, (b) the deformity of Vice.
7. Discuss the question whether moral obligation can arise from the command of God.
8. Mention some of the evidences of the wisdom'and unity of God.
9. Explain Optimism in its two forms, stating which of these is adopted by Stewart.
10. Discuss the question with respect to the permission of moral evil.
11. (a) What two circumstances chiefly distinguish justice from the other virtues? (b) What special science investigates the rules of justice? (c) From what code have the technical language and arrangements of that science been copied ?
12. (a) State the different opinions of the ancients concerning the Sovereign good. (b) What do they all acknowledge?
13. Mention some mental qualities, having no moral desert in themselves, which are necessary to happiness.
14. When is an action said to be absolutely right; when, relatively right?
B. A. HONOUR EXAMINATIONS IN MENTAL AND MORAL PHILOSOPHY, 1874.

ANCIENT PHILOSOPHY AND PLATO'S THE ATETUS.
Tuesday, March 31st:-Morning, 9 to 12.
Examiner, $\qquad$ J. Clark Murray, Ll.d.

1. (a) What was the earliest school of Greek Philosophy? (b) With whom and (c) in what century did it originate?
2. Sketch the pre-Socratic Philosophy of Greece, stating the distinctive principles of the different schools, and their relation to each other.
3. Sketch the life and general character of Socrates, discussing his relation to Aristophanes, and the probable causes of his condemnation.
4. Describe the Socratic method, both in its negative and in its positive aspect.
5. (a) Name the different schools of incomplete Socratics, and the most prominent representatives of each school. (b) State the distinctive characteristics of each.
6. (a) Who was the founder of the Stoical school, and what was the origin of their name? (b) What was their division of Philosophy? (e) Sketch their Ethics, in its fundamental !principle and most important applications.
7. Distinguish the Epicurean Ethics from that of the earlier Hedonists.
8. (a) Sketch the three periods in the life of Plato, and (b) the three corresponding periods in the development of his Philosophy. (c) To which of these periods does the Theætetus belong?
9. (a) What is the question raised by Socrates in the dialogue? (b) What are the answers of Theætetus?
10. (a) What is the doctrine of a great sophist with which the Platonic Socrates identifies the first answer of Theætetus? (b) What is the doctrine of Heraclitus, with which that doctrine of the great sophist is further identified?
11. (a) Explain the statement that we perceive things "through the senses, not by them." (b) Point out how this leads the Platonic Socrates to recognise a priori elements in knowledge.
12. Explain and criticise the Protagorean doctrine of Homo Mensura.

HISTORY OF MODERN PHILOSOPHY.
Friday, April 24th:-Afternoon, 2 to 5.
Examiner,....................................................... Clark Murray, LL.D

1. Sketch the philosophy of Descartes, showing especially (a) its starting point, (b) its principle of certainty, (c) the position which the idea of God holds in it.
2. (a) On what grounds may Descartes be considered as the founder of a new epoch in Philosophy? (b) Point out the prominent defects in his philosophy:
3. How is the dualism, inherent in the Cartesian system, removed (a) by Geulinx, (b) by Malebranche?
4. (a) By what philosopher was Cartesianism reduced to its logical consequences? (b) State the most prominent points in his'Philosophy, explaining especially his conceptions of Suostance, Attributes, and Modes.
5. (a) What-notion forms the central point in Hume's philosophizing? (b) Sketch his critique of that notion.
6. "Consistently, therefore, Oondillac calls men perfect animals, and the lower animals imperfect men." Explain this statement.
7. (a)How did Leibnitz explain the relation of soul and body? (b) By whom was the Philosophy of Leibnitz put into systematic shape?
8. Sketch Kant's Critique of the Practical Reason.

## LOCKE'S ESSAY ON THE HUMAN UNDERSTANDING.

Friday, April 24th;-Morning, 9 to 12.
Examiner, $\qquad$ J. Olark Murray, LL.D.

1. (a) In what sense does Locke use the word idea? (b) Compare that with the Platonic and Kantian use of the word.

2. (a) Distinguish an inference of the reason from an inference of the understanding. (b) What are the three forms of inferences of the reason?
3. (a) Define an Idea, and (b) show how the Ideas are obtained from the inferences of the reason.
4. (a) What is meant by the antinomy of the pure reason? (b) How does Kant solve the first two, and the second two, antinomies respectively?
5. (a) On which of the arguments for the existence of God do the others ultimately fall back? (b) Point out the inconclusiveness of that argument itself.
6. (a) State the physico-theological argument, and (b) show how it requires to be supplemented.
7. What is meant by the regulative use of the Ideas?

## KANT'S METAPHYSIC OF ETHICS.

Friday, April 17th:-Afternoon, 2 to 5.
Examiner,
J. Clark Murray, LL.D.

1. (a) Distinguish legality and morality. (b) State the supreme principle of law, and that of morals. (c) Show that the former principle is analytic, the latter synthetic.
2. (a) Distinguish law and maxim. (b) Explain why morals contain no law for actions, but merely for maxims.
3. What are the ends whose essence it is to be duties?
4. (a) What is the apparent contradiction in the notion of a duty which man owes to himself? (b) Explain how the contradiction is solved.
5. (a) Distinguish the determinate and indeterminate duties which man owes to himself. (b) Classify the former.
6. Discuss any of the questions of casuistry connected with the duty of self-preservation.
7. Explain the amphiboly of certain reflex moral notions, whereby man regards duties which he owes only to himself as if they were duties which he owes to other beings.
8. (a) What are the two great offices due to men as men? (b) Explain how their influence on the relations of men is somewhat antagonistic. (c) How may they be blended together?
9. Why does the Methodology of Ethics require both Didactics and Ascetics?
10. Explain the didactical methods of Ethics.


## MODERN LANGUAGES AND HEBREW.

## FIRST YEAR.

FRENCH.
Thursdat, April 16th :-Morning 9 to 12.
Examiner,
P. J. Darey, M.A., B.C.L.

## 1. Translate into English:

Je suis fort (1) redevable à vos feux généreux.
Cet obligeant amour a de quoi me confondre,
Et j'ai regret, monsieur, de $n^{\prime} y$ pouvoir répondre.
Je vous estime autant qu'on saurait (2) estimer ;
Mais je trouve un obstacle à vous pouvoir aimer.
Un coeur, vous le savez, à deux ne saurait être,
Et je sens que du mien Clitandre s'est fait maitre.
Je sais qu'il a bien moins de mérite que vous, Que j'ai de (3) méchants yeux pour le choix d'un êpoux; Que par cent beaux talents, vous devriez me plaire: Je vois bien que j'ai tort, mais je n'y puis que faire;
Et tout ce que sur moi pent le raisonnement,
C'est de me vouloir mal d'un tel aveuglement.
2. To what part of speech does fort belong? What is its etymology? What are its two synomyms in French? To what other part of speech does it often belong? When? (2) What is the infinitive of that verb? For what other verb is it used here? In what tense can this verb be used for that other one? (3) Why not des méchants yeux?
3. Write in full the Past participle, the Preterite definite and Subjunctive present of plaire, prendre, tenir, devoir, s'en aller, and vivre.
4. When do the French write proper names in the plural? And when in the singular, although preceded by the plural article? Give three examples.
5. State the general rule to write compound nouns in the plural in French. Mention the 5 special rules. Give examples.

## 6. Translate into English:

Il manie bien sa langue. Se mettre en quatre pour quelqu'un. Il est toujours bien mis. Mesurer les autresà son aune. Manger de la vache enragée. And in French: Fair words break no bones. Hunger will break through stone walls. To keep a sharp look-out. Lightly come, lightly go.
7. Translate into English:

J'aime tout de bon l'adorable Henriette. Le sage n'a garde de prendre aucune ombre d'ennui de tout ce qui n'est pas pour dépendre de lui. Quand on est honnête homme on ne veut rien devoir à ce que des parents ont sur nous de pouvoir.
8. Translate into French :

They go bare-foot and bare-head. His father is a barrister. The honest man is esteemed, even by those who have no probity. Self-love and pride are always the offspring of a weak mind. Can anyone contemplate the heavens without being convinced that the universe is governed by a supreme and divine Intelligence. I want shoes that I can put on easily. Formerly the education of females was much neglected, but now it is very much attended to. Let us be wiser hereafter.

SECOND YEAR.
FRENCH.
Thursday, April 16th:-Morning 9 to 12.
Examiner, $\qquad$ P. J. Darex, M.A., B.C.L.

1. Translate into English:

Il n'est plus temps : il (1) sait mes ardeurs insensées.
De l'austère pudeur les bornes sont passées:
J'ai déclaré ma honte aux yeux de mon vainqueur,
Et l'espoir malgré moi s'est glissé dans mon cœur (2).
Toi-même rappelant ma force défaillante,
Et mon âme déjè sur mes lèvres errante, (3)
Par tes conseils flatteurs tu m'as su ranimer:
Tu m’as fait entrevoir que je pouvais l'aimer (1). Phedre A. iii, sc. 1.
2. To whom do il and $l$ refer? (2) Why had l'espoir glissé dans son coour?
(3) Explain fully this verse.
3. What grammatical remark do you make on this verse :

Madame, oubliez-vous
Que Thésée est mon père, et qu'il est votre époux?
4. Give the definition of Memoirs? Who are the three first writers of Memoirs inFrance ? What are the subjects of their writings? What difference is there between a memoir and a history? Who is the first (in date) French historian ? When did he live? What did he write abont?
5. Who is considered the last troubadour in France? Where did he pass a great part of his life? What is the character of his poetry? What grand historical fact terminate writings of the troubadours?
6. Explain fully when the French use the Imperfect and the Pluperfect of the Subjunctive. Give three examples. State the exception to that rule. Give two examples.
7. Translate into French :

That lady has given herself fine dresses. They have succeeded one another. They have hurt one another. These are the answers which I had forseen they would give you. Have you read the books which I advised you to read?

Explain fully how you write the Past Participles contained in the above sentences. State the rules.
8. Translate into English

S'en prendre à quelqu'un. Trouver à redire. Y aller de. Cette affaire traine en longueur. Mettre à bout la patience de quelqu'un. Garder une poire pour la soif. La pelle se moque du fourgon. Qui se ressemble s'assemble. And in French: A good reputation is better than riches. The better the day the better the deed. He was born with a silver spoon in his mouth.
9. Translate into French :

I was born in the Kingdom of Goiama, at no great distance from the fountain of the Nile. My father was a wealthy merchant, who traded between the inland country of Afric and the ports of the Red Sea. He was honest, frugal, and diligent, but of mean sentiments and narrow comprehension, he desired only to be rich, and to conceal his riches, lest he should be spoiled by the governors of the province. "Surely," said the prince, " my father must be negligent of his charge, if any man in his dominions dares take that which belongs to another. Does he not know that kings are accountable for injustice permitted as well as done?" Johnson, Rasselas.

THIRD AND FOURTH YEARS.
FRENCH.
Thursdat, April 16th:-Morning, 9 to 12.
Examiner, $\qquad$ P. J. Darey M.A., B.C.L.

Translate into French -

1. By this time the unfortunate Moses was undeceived. He now saw that he had been imposed upon by a prowling sharper, who, observing his figure, had marked him for an easy prey. I therefore asked him the circumstances of his deception. He sold the horse, it seems, and walked the fair in search of another. A reverend looking man brought him to a tent, under pretence of having one to sell. "Here," continued Moses, "we met another man very well dressed, who desired to borrow twenty pounds upon these, saying that be wanted money, and would dispose of them for a
third of the value. The first gentleman who pretended to be my friend whispered me to buy them, and cautioned me not to let so good an offer pass. I sent for Mr. Flamborough, and they talked him up as finely as they did me; and so at last we were persuaded to buy the two gross between us.

Goldsmith, The Vicar of Wakefield.
2. What rank does Mme. de Staël occupy as a writer? Where was she born? What year? What was her father? What education did she receive? Name five of her works? Which is looked upon the bost? Where did she travel? And where did she die? What connexion is she of a very pre-eminent French political man of the present day?
3. Mention six great French authors of the present century, with the names of some works which have rendered them famous.
4. Translate into English:

Ces bruyères, ces champs, ces vigues, ces prairies,
Ont tous leurs souvenirs, et leurs ombres chéries.
Là mes sceurs folâtraient, et le vent dans leurs jeux,
Les suivait en jouant avec leurs blonds cheveux;
La, guidant les bergers au sommet des collines,
J'allumais des bûchers de bois mort' et d'épines
Et mes yeux, suspendus aux flammes du foyer,
Passaient heure après heure à les voir ondoyer;
Là contre la fureur de l'aquilon rapide,
Le saule caverneux nous prêtait son tronc vide,
Et j'écoutais siffler dans son feuillage mort
Des brises dont mon âme a retenu l'accord.
Voilà le peuplier qui, penché sur l'abíme,
Dans la saison des nids nous berçait sur sa cime,
Le ruisseau dans les prés dont les dormantes eaux
Submergeaient lentement nos barques de róseaux,
Le chêne, le rocher, le moulin monotone,
Et le mur au soleil, où dans les jours d'automne,
Je venais sur la pierre, assis près des vieillards
Suivre le jour qui meurt de mes derniers regards.
Lamarting.
5. Translate in English: Il en veut à tout le monde. Il y va de son tout J'ai beau parler, il ne m'écoute pas. Me ferez-vous part des notuvelles? Sa bibliothèque est sens dessus dessous. And in French: He broke through all those difficulties. I have the honour to acknowledge the receipt of your letter of the tenth instant. We must not always take things literally. Let us come to a right understanding. This is something to the purpose.

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## JUNIOR CLA.SS.

GERMAN.
Monday, April 20th:-Aftarnoon, 2 to 5.

## Examiner,

C. F. A. Markgrat, M.A.
I. Translate into English :-

Beippiel von Enthaltiamfeit.



 Durf leciztert, (prada) er: "Soll idj Der (Einzige fein, Derb) ba trinfta)?"

 toir find nifjt burfig; wir Galten uns nid)t für fterblid, führt uns ein foldeer sönige)!"

Heinsius.
" (5roße StäDted ${ }^{\text {, }}$ ) reidje R(tüter,"d)
\&ubwig, seerr zu Baiern, (prad),
"Sdaffen, סáß mein Land ${ }^{\text {d }}$ Den euren WSobl nid)t ftegta) an Sdäken nadj."
Gberbard, Der mit dem ßarte, Wïrtemberg's geliebter \$err, Spraw): "MRein Rand hat fleine Städted, Trägts ${ }^{\text {a }}$ ) nidat Berged filberjdjwer.
Dod ein Rleinod Gälta)'s verborgen, Dá in Wäldernd nod fo grós §a) mein şaupt ${ }^{\text {a }}$ ) fannas) füfulid legen эedem Unterthan in S(j)оор." Und es rief ber frert von Sadjent, Der von Baiern, Der vome) Rbein:
"(5raf im Bart, ibr feio ber reicjfite ! Euer \&and trägt © Cbelitein." Justinus Kerner,
(a.) State the Tenses and give the Present Infinitives of the verbs thus marked in the two pieces above. Give also the Perfect Participles of fam, befand, bradjte, fah, fprad, trinft, ftebt nadj, trägt, bält, fann.
(b.) Which pronouns does the article Der supply?
(c.) శुubrt uns ein foldjer Rönig:-Construct the sentence with the conunction roent ; and decline ein foldfer Rönig in the four cases singular.
(d.) State the gender, number, and case of the nouns thus marked in both pieces.
(c.) Instance other contractions of the def, article with prepositions.
II. 1. Give the gender, meaning, nd Nominative Plural of : Freumf .
 Wand, Gott, Eifje, Nadjbar, Hebung,-and the Nominative Singular of:Bänder, (5ejpräthe, Namen, શ̌füfe, 刃ölfer, Röwen, Geifter, Dornen, Ebelleute, Feiden, $\mathfrak{U}$ nfänger, Rünfte, -State also which of the nouns belong to the strong, and which to the weak declension.
2. Decline in the Sing. and Plural:-the swift (fdunell) messenger (Bote, m.)-that useful science-many a green leaf.
3. Give the 2nd Sing. and the 1st Plural of all Tenses of the Indicative of "borlefen."
4. Parse, and give the derivation of:-burfteit, gerwandt, muften, zog, auf, fannte, trieb, gibit, zerriffen, nabmen, läffit, zerbrad, verboten, ritt, ver, jpridft, geftorben, idienen, fā, bilft.
5. What are prineipal and dependent sentences? Explain.
III. Translate into German :-

I will show you our garden, I believe, you have not yet seen it. There (it) stands a very large lime-tree before the village-church. Where do you come from, and where will you go to? The journey by water from Mayence to Cologne is very pleasant. The first navigators were very courageous men. This peasant's fields have no hedges. The servant hung the chandelier into the large saloon, and put the lamp on the table of the sittingroom. Copy this exercise. I cannot advise you that. Is it already halfpast twelve? No, it is only a quarter to twelve. He (is) departed on the first of May and arrived on the twentieth. What did you think when you heard this news? Is this the house, which you are going to (will) buy? Did Perf.) your friend give you back the book which you (have) lent him the other day?

SENIOR CLASS.
GERMAN.
Monday, April 20 th :-Afyernoon, 2 to 5.
Examiner, $\qquad$ C. F. A. Markgraf, M.A.
I. Translate into German :-

If reading is to be instructive, it must be done with selection. (The) autumn deprives the trees of their leaves. We sat under the shade of a very old oak. He boasted of high courage, and mocked those who confessed their weakness. They were flattered and threatened in turn; but they remained true (faithful) to their duty and honour. We thought our
friend had recovered ; but to-day we heard to our great regret, that he has: died. No good man abuses the power which he holds (has) over his fellowcreatures. I was just going to write to you when your letter arrived. These people are worthy of assistance, for they are innocent of (att, Dat.) their misfortune. From the eminence on which we stood, we perceived far below in the valley a pleasant little village which lay half-hidden among fruit-trees, and from whose church-tower the evening-bell sounded up to us through the still air.
II. Translate from Lessing's ", Minna von Barnhélm":Act II., Scene I., Pages 23-24.
${ }^{0}$ III. Grammar.

1. (a.) Which verbs require to be followed by the Nominative as Predicate? (b.) Mention twelve verbs which govern the Dative only: ( 0. .) Which verbs govern two Accusatives (both denoting the same object)?
2. From what kinds of words may adjectives be derived ? State the prefixes used, and give the respective meanings of the affixes bar, en , em , baft, idjt, ig, ifd), lid, fam,-adding their English equivalents.
3. Translate:-the end of this book-the advice of him who has so much experience-a yard of the finest linen-the environs of Mayence-you may go instead of me-a few of our friends-the empire of Austria-at the news of the king's death-he thought of going there.
4. Translate and explain the construction of the following sentences :CS loith ein §rrthum fein. Du wirft bid) wohl verhort habenDufpridft uno igr jdforigt! -

- Er fam gefahren-man bat ibn reden Laffen.

5. When is the Perfect Indicative used in German?
6. I see him coming-it is nowhere to be found-who teaches you to draw -we spoke to him without knowing him-you wordd have been obliged to write -we have been living here for five years. - Translate the above sentences, and state in regard to each the rules in support of the German construction.
IV. Literature.
7. State the periods (giving their data and subdivisions) into which the history of German Literature may properly be divided.
8. What dialects formed the principal constituents of the Old High German during the Frankish period? What literary memorials have been handed down from that time, and what can you say as to their particular character and form?
9. Assign the causes which produced the decadence of Mediæval poetry as represented by the 'Minnesong.'
10. Give a short account, with dates, of the lives and writings of Albrecht von Haller, Gessner, Lichtenberg, and von Kleist.


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## SENIOR CLASS.

## HEBREW.

Thursday, April 16th: Morning, 9 to 12.
Examiner,
Rey. A. De Sola, LL.D.

1. Translate literally Genesis I, from verse 24 to 31 .
2. Analyze fully verses 25,26 , showing difference between למיגח and למינהו ; giving form of without ו conversive; showing difference between $\begin{array}{r}\text { b } \\ \text { בהמח ,דמות and and } \\ \hline \pi\end{array}$
3. Write out the irregular verb | in |
| :---: |
| Kal form. |
4. Translate literally Psalms 2,3 and 4.
5. Write out a verb ' guttural (e. g. $\boldsymbol{\pi}$ לש) in Niphal form, pret. tense:
6. Show the relation of the substantive to the adjective ; of the abstract to the concrete.
7. Explain how the genitive is expressed by circumlocution, and by subordination to the governing noun in the construct case, and show how the construct case is used for other relations besides that of the genitive.
8. Write out the noun $\rceil^{2}$ מ sing. and pl. with pronominal fragments attached (sing. and pl.)
9. Explain the changes of consonants and doubling of consonants in the formation of words; aspiration and its removal ; and the peculiarities. of guttarals.
10. Write out a verb $y$ doubled, (e. g. Dוב) in Kal form, future tense.

## 11. Translate into Hebrew :

A sage was asked (...ל ולw) who are the most honorable, the wise or the rich. He replied, the wise. They said to him, If so, why are the wise at the doors of the rich oftener (יותר ממח) than the rich are at the doors of the wise. He answered, The wise know the value of riches, but the rich do not know the value of wisdom.
12. Translate into English:

$$
\begin{aligned}
& \text { אדון על כל־נברא אדון עלינו } \\
& \text { כמד נוֹרא שמך על כל-חארץ מלק } \\
& \text { כי אליך החוד ויפרץ פרץ } \\
& \text { על השמים מול מראה עּ ציצו }
\end{aligned}
$$

CHEMISTRY AND NATURAL SCIENCES.

FIRST YEAR.
ELEMENTARY CHEMISTRY.
Wedirsday, April 15th:-Morming, 9 to 12.
Examiner.
..B. J. Harringtom, B.A., Ph.D.

1. What are the relations of the axes in the square prismatic, the oblique prismatic, and the rhombohedral systems of crystallisation.
2. What is the best method of preparing pure Silica?
3. How is Hydric Sulphide prepared, and what are its properties ?
4. State fully the distinctions between Orthophosphates, Metaphosphates: and Pyrophosphates.
5. Describe some experiments, shown in the class-room, illustrating the powerful affinity of Chlorine for Hydrogen.
6. What metals decompose water at ordinary temperatures? Describe the preparation of one of them.
7. Give the composition and uses of the principal salts of Barium and Strontium.
8. Explain the reactions indicated by the following formule:-

$$
\begin{gathered}
\mathrm{CaCO}_{3} \mathrm{CO}_{2} \mathrm{H}_{2} \mathrm{O}=\mathrm{CaH}_{2}\left(\mathrm{CO}_{3}\right)_{2} . \\
\mathrm{CaH}\left(\mathrm{CO}_{3}\right)_{2}+\mathrm{CaH} \mathrm{H}_{2} \mathrm{O}_{2}=2 \mathrm{CaCO}_{3}+2 \mathrm{H}_{2} \mathrm{O} .
\end{gathered}
$$

9. Give the symbols and atomic weights of Zinc, Mercury, Copper and Gold.
10. What are the best tests for Bromine, Iodine, and Arsenic?

INTERMEDIATE EXAMINATION.
BOTANY.
Wednesday, April 15th:-Morning, 9 to 1.
Examiner, $\qquad$ J. W. Dawson, LL.D., F.R.S.

1. State the characters of Anophytes and Gymnosperms. What plants represent these groups in Canada?
2. State the characters and place in the system of Leguminosæ, Rosacez, Ericacex, Cyperacex, and give some Canadian examples of these orders.

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3. By what microscopic characters can the wood of Exogens, Endogens and Acrogens be distinguished ?
4. Name the circles of organs in a perfect flower, and describe fully the structures of the Anther and Pollen.
5. Explain Coalescence and Adnation of the parts of the flower, with examples.
6. Explain the terms Raceme, Testa, Pappus, Coma.
7. State the division of the Phaenogamous Series into Classes, and give the characters of the classes.
8. In what Canadian natural orders do we find Siliques, Drupes, Legumes, Ringent Corollas, or Cruciferous Flowers. Dessribe one of these structures.
9. Describe in detail the Capsule of a Moss or the Flower of a Pea.
10. Describe the specimens exhibited, in relation to the forms of their leaves, and their inflorescence ; and refer two of them to their series, classes, and orders.

## THIRD YEAR. <br> ZOOLOGY.

Wednesday, April $15 \mathrm{th}:-$-Afternoon, 2 to 5.
Examiner, $\qquad$ J. W. Dawson, LL.D., F.R.S.

1. Describe the Corallum of an Anthozoon and state what structures in the Hydrozoa correspond to it.
2. Name the classes of Acephalous Mollusca and describe a typical example of one of them.
3. How is respiration performed in Cephalopoda, Annelida and Discophora.
4. Name and refer to their place in the classification, the animals producing Sponge, Red Coral, Silk, Canadian and Oriental Pearls.
5. Describe the external structures of Insects, and the stages of their metamorphosis.
6. State the distinctive characters of the class Reptilia, and its division into orders, with the distinction between the Batrachians and reptiles proper,
7. Characterise the Rodentia and Ruminantia, with examples.
8. How are the Protozoa distinguished from other animals,
9. What are the characteristic differences between the shells of Lamellibranchiata and those of Brachiopoda.
10. By what characters are Trilobites, Amphipods and Decapods distinguished from each other.
11. Describe the specimens exhibited, and tabulate them in their places in the classification.
B.A. ORDINARY EXAMINATION.

GEOLOGY.
Wednesdat, April 15th:-Morning, 9 to 1.
Examiner, $\qquad$ J. W. Dawson, LL.D., F.R.S.

1. State the geological relations of the following formations: Zechstein, Wenlock, Caradoc, Ludlow,-and describe one of them.
2. State in order the portions of the geological scale of chronology represented in the Province of Quebec, with their general geographical distribution.
3. Describe the Post-pliocene deposits of Canada and Western Europe and explain the various theoretical views as to the climate which they indi cate.
4. State the subdivisions of the Tertiary in France, and their supposed, equivalents in England and America.
5. Give a detailed account of any genus of reptiles of the Mesozoic period.
6. Explain the origin of volcanic dykes.
7. Describe the Lower Laurentian, stating its characteristic rocks, minerals, and fossils.
8. State in order the Upper Silurian Formations represented in Ontario, with their general geographical distribution.
9. State the subdivisions of the Carboniferous in Nova Scotia, and their equivalents in Europe.
10. Explain the mode of formation and occurrence of Coal and Clayironstone.
11. Give in a tabular form the Geological and Zoological or Botanical selations of Ammonites, Phacops, Lepidodendron, Dendrerpeton, Cephalaspis, Columnaria.
12. State what you know of the Fossils and Rocks exhibited.
B.A. HONOUR EXAMINATIONS IN GEOLOGY AND NATURAL HISTORY, 1874.

MINERALOGY.

Tuesday, March 3lst :-9 a.m. and 2 p.m.
Examiners,
(A. R. C. Selwyn, F.G.S.
Examiners,...................
G. F. Armstrong, M.A., F.G.S.
B. J. Harrington, B.A., Ph.D.

1. Describe chemically the more important Ores of Copper.
2. State the composition of Serpentine and Talc, and their usual modes of occurrence.
3. Wbat are the more important minerals containing Fluorine, Chromium, and Boracic Acid?
4. Name and describe the Native Sulphides of Lead, Zinc, and Mercury.
5. Of what mineral species are the following varieties:-Adularia, Aventurine, Kaolin, Augite, Asbestus, Emery, Cinnamon-stone. Give shortly their varietal characters in tabular form.
6. How would you most readily distinguish Calcite from Dolomite ${ }_{r}$ Orthoclase from Labradorite, Apatite from Pyrozene?
7. State the chemical composition of Cryolite, Mispickel, and Ankerite.
8. Describe the following minerals, more especially with reference to their Physical Properties and Geological Relations:-Orthoclase, Analcime, Ilmenite, Arragonite, Muscovite.
9. Describe the more important minerals of the Coal and Bitumen series.
10. State in tabular form the leading groups of Minerals according to the chemical classification, with an example of each.

## Specimens at 2 p.m.

Give the names of the Specimens exhibited (Nos. 1 to 10), and the characters on which your determination is founded.

LITHOLOGY AND PHYSICAL GEOLOGY.
Mondat, April 6th :-9 a.m. to 12, and 2 to 5 p.m.
Examiners $\qquad$ $\{$ A. R. C. Selwyn, F.G.S.
$\left\{\begin{array}{l}\text { G. F. Armstrong, M.A., F.G.S. } \\ \text { B. J. Harrington, B.A., Ph.D. }\end{array}\right.$

1. State the distinction between Acidic and Basic rocks, and classify the ordinary Igneous rocks under these heads.
2. Name the more important Metamorphic rocks containing Orthoclase, Hornblende, Quartz and Mica. Describe one with its geological relations in Canada.
3. What are the constituent minerals and geological relations of Basalt, Dolerite, Felsite, Hornbleade Schist and Ophiolite?
4. What are the causes of Combs, Horses and Slickensides in Mineral veins?
5. Describe the structures indicated by the terms Oolitic, Basaltic, Amygdaloidal, Porphyritic.
6. Explain shortly the differences between the contents of mineral veins at the outcrop and at greater depths.
7. Explain shortly the relations between Oxide of Iron and Organie Matter as producing the colours of rocks.
8. State the principal effects of Denudation in modifying the relief of continents.
9. What are the principal points to be observed in studying a section of Stratified Rocks?
10. What in studying Igneous Dykes?

SPECIMENS AT 2 P.M.
Name the specimens exhibited, and state their constituent minerals or other matters, with their probable geological relations.

GEOLOGY AND PALAONTOLOGY.
Friday, April $17 \mathrm{th}:-9$ a.m. to 1 p.m., and 2 to 5 p.m.

$$
\text { Examiners,................................................... R. Selwyn, F.G.S. } \begin{aligned}
& \text { G. Armstrong, M.A., F.G.S. } \\
& \text { B. J. Harrington, B.A., Ph.D. }
\end{aligned}
$$

1. What is the lithological distinction between the Lower and Upper Laurentian, and what are the characteristic rocks of the Huronian in the typical. district of Georgian Bay?

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2. Explain the chronological relations of the Quebec group to the rocks of the New York series as given in Dana.
3. State the geographical and geological position of the Trenton limestone in Canada, and explain the structure and mode of deposition of the Gray Trenton.
4. Explain the peculiarities of the geological structure of St. Helen's Island.
5. State the peculiar conditions of deposit indicated by the Salina group and the Corniferous Limestone,
6. Explain the connection of Underlays, Ironstones and Shelly Bituminous Limestones with Ooal beds.
7. Enumerate the characteristic fossils of the Niagara Limestone and Lower Carboniferous Limestone.
8. State the geological position and probable American equivalents of the Menevian, Arenig and Llandovery formations.
9. In what formations in Canada do the following genera occur: Calamites, Chonetes, Productus, Eurypterus, Conocephalites, Trinucleus, Cephalaspis, Hylonomus.
10. Tabulate the sub-divisions of the Carboniferous and Permian in Europe,

## EXAMINATION IN SPECIMENS.

Refer the specimens exhibited, Nos. 1 to 10, to their geological formations, and name the fossils contained in them.

## GEOLOGY AND PALEONTOLOGY.

 Friday, April 24 th :-9 a.m. to 12; and 2 to 5 p.m.(A. R. C. Selwyn, F.G.S.

G. F. Armstrong, M.A., F.G.S.
(B. J. Harrington, B.A., Рh.D.

1. State the Geographical Distribution of the Trias in Eastern North America, and its special characteristics in Nova Scotia and in Virginia.
2. Describe the English Lias and its characteristic Fossils.
3. What are the precise relations of the Wealden to the other members of the Mesozoic in Western Europe?
4. State shortly the special characters of the Cretacequs in the South of England, New Jersey and Vancouver Island.


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b. A cube of 3 inches side standing on the horizontal ;plane with two of its faces parallel to the vertical plane.
c. A triangular prism resting on one of its long faces, the surface of the triangular end being at $50^{\circ}$ to the vertical plane. The end is an equilateral triangle of $4: 28$ inches edge, and the length of the prism is 6.15 inches.
3. A stick of timber is 3 inches square at base, and 7 inches high. Give the true shape of a section made by a plane entering at one angle of the top, and emerging at the opposite angle of the base.

Note. All dimensions to be taken on the $\frac{1}{2}$ inch diagonal scale. Neatness and accuracy are essential.

## SECOND YEAR.

DRAWING.
Friday, April 10th:-Morning, 9 to 12.
$\qquad$

1. Project orthographically :-
a. A cube of 3.75 inches side, having two of its adjacent faces at $15^{\circ}$ and $75^{\circ}$ respectively to the vertical, when standing on a plane inclined at $30^{\circ}$ to the horizontal plane.
b. Two circular slabs of stone, one 5 inches diameter and $1 \cdot 75$ inches thick, and the other 3.15 inches diameter and 1.25 inches thick, standing one on the other, when their circular faces are inclined at $40^{\circ}$ to the horizontal plane.

## 2. Project isometrically :-

a. A circular cylinder 3.15 inches diameter and 5.31 inches long, when lying so that its end is vertical.
b. An octagonal slab of $2 \cdot 63$ inches side upon which stands an octagonal column of 2 inches side and 9.75 inches high, the centres of the two objects being coincident.
3. Project perspectively; supposing the height of the eye of the spectator to be 6 feet and the picture distance 8 feet :-
a. A cross having equal arms 5 feet long and 1.5 feet square, from the intersection of which rises an upright of the same scantling, and equal in height to the length of the arms. The cross is lying on the horizontal with the end of one of its arms parallel to the picture plane, and 6 feet on the left of the spectator.


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## MIDDLE YEAR.

## SURVEYING AND LEVELLING.

Saturday, April 11 th :-Morning, 9 to 12.

## Examiner,

G. F. Armstrong, M.A., C.E.

1. What are "bench-marks," and what is their use ? Enumerate the different kinds of Levelling-Staves used, and state which you prefer, and why?
2. What is the use of triangulation, and in what manner is it carried out? Illustrate by a diagram, how, when the measured base is unavoidably short, the sides of the principal triangle, may be made rapidly to increase without admitting any ill-conditioned triangles.
3. Explain how you would ascertain the height of a hill by means of boiling water in the absence of any tables of value.
4. How is the Theodolite superior to the Sextant in measuring the angle between two places of different elevation?
5. What is the advantage of setting up a Level at equal distances from the forward and back staves?
6. Show, by an example, how the lengths of two sides that have been omitted may be ascertained in a needle-survey, by means of a changed meridian.
7. Explain minutely, and illustrate by diagrams, the construction of a Dumpy Level.
8. What are the adjustments of the Transit-Theodolite and how made? What adjustments are common to the Transit-theodolite and the Dumpy Level ?

Note.- In addition to this paper, a Plan and Section were plotted by each student from notes supplied, and there was also a viva voce examination in the practical use and adjustment of instruments.

## Ba. Sc. EXAMINATION.

PRINCIPLES OF MECHANISM.
Friday, April 10th:-Morning, 9 to 12.
Fif Examiner,............................................G. F. Armstong, M.A., C.E.

1. In the communication of motion by contact of surfaces, show that the angular motions of the pieces are inversely as the segments into which the common normal divides the line of centres.
2. If the connecting rod $P Q$, of a crank-axle constrained to move in a right line become infinite, show that the travel of $Q$, estimated by its distance from $D$, the further end of the crank's throw, is represeated by the expression:

$$
\mathrm{DQ}=a(1-\cos \theta)
$$

where $a$ is the length of the crank, and $\theta$ the angle between the crank and the path of $Q$.
3. The circular motion of a cam being uniform, show how a reciprocating piece driven by it may be made to have its velocity varied at pleasure.
4. In rolling contact show that the curves must be so formed that the point of contact shall always lie on the line of centres.
5. Explain the action of the knuckle-joint, as employed in the powerloom to cause two oscillations in the reciprocating piece for each revolution of the arm with which it is connected.
6. Explain fully the cause of the existence of "dead-points" in the conversion of reciprocating into circular motion by means of the crank and axle.
7. Show that the involute of the circle enables us to solve the problem of the form of teeth for the transmission of motion in combinations of wheelwork.
8. Explain how Watt effected the parallel motion of two connecting rods attached to the beam of an engine, and indicate how the principle may be extended so as to be applicable to modern expansion engines having two cylinders.
9. Describe the "odotongraph," and point out generally the principles upon which its application depends.
10. Explain fully the principle of the Blanchard turning-lathe.
11. Show that, however unequal the rate at which two axes connected by a Hooke-joint may be revolving, they will coincide in relative positions four times in one revolution.
12. Explain the following terms:-
"Guide-pully," "Worm-wheel," "Escapement," "Frisket-frame," "Aggre -gate-motion," "Fusee."

BA. Sc. EXAMINATION.
CONSTRUCTION.
Fridat, April, $10 \mathrm{th}:-$ Afternoon, 2 to 5.
Examiner, $\qquad$ G. F. Armstrong, M.A., C.E,

1. What general properties should the timber to be used in railway construction possess?

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2. Mention some leading authorites on railway specifications and contracts?
3. Point out how the dressing of stone comes to be a most important faature of construction.
4. What tools are most employed in the setting out of works, and what are their respective uses?
5. What clauses, in reference to "clearing," should you deem it necessary to insert in a specification?
6. How is pig-icon prodnced, and what are its characteristics when suitable for (a) Foundry purposes, and (b) the manufacture of malleable iron?
7. What points require attention in the design of castings? and how may castings be best tested?
8. State how the appearance of pig-iron, intended for castings for engineering purposes, would influence you in its selection.
9. How is a " puddle-ball" converted into a " bloom"?
10. Describe the manufacture of rails from bar iron.
11. What is the object of "faggoting" and how is the strength of boiler-plate ensured?
12. Name the usual qualities of malleable iron to be met with in the market, and state the uses for which each is adapted.

Note.-Answers should be concise, and, as far as possible, illustrated by diagrams and sketches.

## Ba. Sc. EXAMINATION.

## GENERAL PAPER.

Saturday, Aprif 11th:-Morning, 9 to 12.
Examiner,
G. F. Armstrong, M.A., C.E.

1. Show how to find the latitude of a place by means of one meridian altitude of a star.
2. What is the prismoidal formula, and what is its application?
3. Explain the system of setting out curves by angles at the circumference. What is the " angle of deflection"?
4. How would you determine the necessary depth of the key-stone (a) for a single arch, and (b) for a series of arches ?
5. Describe the method of ranging and setting out a tunnel.
6. State and illustrate the general conditions of the equilibrium of a structure.
7. What drawings are usually prepared before the erection of a skewarch, and what particulars do they embody?
8. Describe generally the methods of setting out "half-breadths."
9. What are the essential parts of a canal-lock?
10. How can the meridian be found by equal altitudes of a star?
11. Describe generally the mode of tunnelling in a soft material.
12. What are the best kinds of timber to select in the following positions :-entirely immersed in water, in mud, between wind and water, and exposed solely to atmospheric action ?
Note.-Answers should, as far as possible, be illustrated by diagrams and sketches.

BA. Sc. EXAMINATION.
CONSTRUCTION.
Examiner, $\qquad$ G. F. Armstrong, M.A., O.E.

1. Point out the importance of the subject of foundations and state what materials afford a good, and what a bad foundation.
2. How would you treat the case of a good bearing stratum underlying soft and bad ground of considerable depth?
3. Discuss generally the subject of the function and arrangement of "footings."
4. What do you consider to be the best disposition of timber in platforms for foundations?
5. How would you determine the necessary thickness of a bed of concrete upon which you were about to place a structure?
6. Describe the mode of making concrete blocks and the different methods of placing them in position.
7. Into what classes may piles be divided? Give examples of each, and their application.
8. Describe the essential parts of Nasmyth's steam-hammer pile-engine, and state what are its special advantages.
9. What is the general test of a pile being sufficiently driven, and how would you determine the safe load for a pile by Saunder's formula?

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10. Describe the application of the screw to some forms of piles, and state to what extent any given screw-pile may be safely loaded.
11. Describe Triget's method of sinking pile-cylinders as improved by Hughes, and point out in what respect it differs from Dr. Potts' method.
12. What is a " coffer-dam," and how would you determine its necessary dimensions in any particular case?

Note.-Answers should be concise, and, as far as possible, illustrated by sketches.

## Ba. Sc. EXAMINATION. <br> DRA WING. <br> Saturday, April 18th:-Afternoon, 2 to 5.

Examiner,
G. F. Armstrona, M.A., C.E.

1. Project isometrically :
(a.) An octagon 200 ft . side, surrounded by houses 70 ft . high, extending back 50 ft . The roofing of the houses has a pitch of one fourth its span, and where its continuity is broken, the ends are finished off with hips, and not with gables. The octagon lies square with the cardinal points, and streets 80 ft . wide enter it from north, south, east and west, having houses on either side of them of the same description as those round the octagon. Scale 40 ft . to the inch.
(b.) A one-storied cottage without roof, so as to show the internal arrangements, containing two main rooms, each about 22 ft . by 18 ft . with dressing-rooms attached, about 11 ft . wide, and bathroom not less than 10 ft . square. The building is to be surrounded by an arcade verandah, nowhere less than 8 ft . wide; the plinth to be $2 \frac{1}{2} \mathrm{ft}$. high, and the main rooms not less than 20 ft . to the wall-plate. All other details at discretion. Scale 8 ft . to the inch.
2. Project perspectively:-
(a.) Eight pieces of timber, each $9 \mathrm{in} . \times 6 \mathrm{in}$. square, and 9 ft . long, stacked two and two so as to form a rectangular crib, one angle of which is on the picture plane directly in front of the spectator. Scale $\frac{1}{2}$ in. to the foot.
(b.) A series of three semicircular arches on rectangular piers, forming part of a viaduct. The arches are 24 ft . span, and the piers are rectangular $18 \mathrm{ft} . \times 3 \mathrm{ft}$. and 50 ft . high to the springing. Other details at pleasure. The face of the arches is to be perpendicular
to the picture plane at a suitable distance on the right of the spectator to show the full extent of the object. Scale $\frac{1}{8}$ in. to the foot.
Note. One example at least from each of the foregoing questions must be drawn.

In question (2) the height of the eye, and the picture distance are discretional, but must be suitably chosen to show each object to the best advantage.

BA. Sc. EXAMINATION.
(ENGINEERING AND MINING COURSES.)
Saturday, April 18th:-Morning, 9 to 12.
Examiner,
G. F. Armstrong, M.A., C.E.

1. If any number of couples act in the same plane, the moment of their resultant equals the sum of their several moments.

A horizontal line is drawn from a point A to the right, and forees of 5 lbs ., 12 lbs ., and 19 lbs . act vertically upwards on it, and of 10 lbs ., and 20 lbs . vertically downwards on it, the former at distances of 2 ft ., 5 ft ., and 14 ft ., and the latter at distances of 8 ft ., and 20 ft ., from A. Determine the resultant, when an additional force of 6 lbs. is applied vertically downwards, 10 ft . to the right of A .
2. Determine the resultant of any system of forces acting in a plane.

Four forces represented by $1,2,3$, and 4 , act on a point. The directions of the first and third are at right angles to each other ; and so are the directions of the second and fourth; and the second is inclined at an angle of $60^{\circ}$ to the first. Find the magnitude and direction of the resultant.
3. Show how to find the centre of a system of parallel forces, when acting through points that lie in a straight line.

A, B, C, D, are the angular points taken in order of a square, one of whose sides is $a$; parallel forces of $5,9,7$, and 3 lbs . act at the angular points respectively. Find their centre,-supposing 5 and 9 to act in the same direction, and 7 and 3 in the opposite direction.
4. If a plane curve revolve about an axis fixed in its plane, the volume of the solid described is foand by multiplying the area of the curve by the length of the path of its centre of gravity.

A parallelogram and a triangle, on the same base and between the same parallels, revolve around the base as an axis, Compare the solids they generate.

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5. Friction may be considered as "statical" and "dynamical." Point out the relationship between the two states, and explain what is meant by "the cone of resistence."

There is a beam of oak, $(\mathrm{sp}, \mathrm{gr} .=9344) 30 \mathrm{ft}$. long $\times 2 \mathrm{ft} . \times 1 \mathrm{ft} . ;$ at right angles to its face, passes an axle of wrought iron, the part of which within the beam is 8 in : square, the projecting part on each side is 6 in . diameter and 6 in . long, and its axis is situated 10 ft. from A, at which end is exerted a force of $5,000 \mathrm{lbs}$. Find the force at B that will just keep the beam from turning when $\mu=.62$; the bearing being of oak.
6. If W is the weight of a cubic toot of earth, and $\phi$ its natural slope, the pressure produced on the vertical face of a retaining wall, by earth that does not rise above its summit, and which has a horizontal surface, is the same as that produced by a fluid, the weight of a cubic foot of which is = $W \tan { }^{2}\left(\frac{\pi}{4}-\frac{\phi}{2}\right)$

A revetment wall is 30 feet high and 6 feet thick. On one side of it, earth of mean quality is supported level with the top, and on the other side, the earth takes its natural slope, and rises to the height of 5 ft . ; will the wall stand or fall, supposing the weight of a cubic foot of the earth to be 120 lbs ., and that of the wall 130 lbs. ?
7. Show that it is necessary for the equilibrium of an arch, that the " line of pressure " be perpendicular to each voussoir-joint.

Deduce the conditions of equilibrium of the equilibrated arch.
8. Explain the action of friction in the case of the arch.

The radius of a semi-circular arch is 11 ft ; the thickness at the crown 18 in, ; the masonry is built level with the crown, and the weight of a cubic foot of the material is 120 lbs .-Determine the point of rupture and horizontal thrust, taking 1 foot length of the arch.
9. Deduce the law according to which the tension in the Catenary varies from point to poiut, and state what modifications in the conditions of the general problem are introduced in practice.

The points of suspension of a Catenary, in the same horizontal plane, are 800 ft . apart, and the tension at the lowest point is equal to the weight of 1600 ft . of the chain. Determine the versed sine of the curve.
10. Explain and illustrate the meaning of "moment of inertia."

A cast-iron fly-wheel (sp.gr. $=7$ 7. 2.) consists of a rim, 4 spokes at right angles to each other, and an axle; the external and internal radii of the rim are 4 and $3 \frac{1}{2} \mathrm{ft}$. respectively, and its thickness, 8


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7. Give a simple method for determining whether a mineral is a Silicate or not.
8. Name six minerals producing characteristic sublimates in open tubes, and describe the sublimate in three cases,
9. State fully the blowpipe characters of the following minerals :-

| Ilmenite. | Gypsum. |
| :--- | :--- |
| Pyromorphite. | Garnet. |
| Cassiterite. | Tourmaline. |
| Fluorite. | Stilbite. |

10. Give the blowpipe characters of the specimens exhibited.

Determination of minerals in the afternoon, from 2 to 5 .

## SECOND YEAR.

ASSAYING.
Saturdat, April 18th:-Morning, 9 to 12.
Examiner,
B. J. Harrington, B.A., Ph.D.

1. What precautions are to be taken in sampling ores?
2. Describe the scorification assay for silver, when large quantities of Zinc and Copper are present.
3. How would you determine the amount of Zine in a sample of Blende rich in Iron?
4. What is the best way of effecting the decomposition of \$ulphuretted Copper ores ?
5. What metals interfere with the assay of Copper ores with Cyanide of Potassium ?
6. Describe fully the assay of an Iron ore in the wet way.
7. How would you determine the amount of Gold in an Auriferous Mis-
pickel ? pickel?
8. What are the materials requisite for the assay of Lead and Antimony ores ?
9. How would you determine the value of the ores exhibited?

BA. So. EXAMINATION.
MINING.
Saturpay, April 11 th:-Morning, 9 to 12.
Examiner, $\qquad$ B. J. Harrington, B.A, Ph. D.

1. Explain fully the conditions requisite for natural ventilation in mines.
2. Describe the ordinary methods of lighting mines.
3. What are the best forms and dimensions for ladders, and how should they be arranged in the ladder-way?
4. What form of pump is used during the sinking of shafts? Describe its different parts, stating the advantages of its use.
5. How may broken bore-rods or tubular lining be withdrawn from boreholes ?
6. What are some of the precautions to be taken in the use of wire ropes for hoisting ?
7. Describe the construction of a horse-whim.
8. Give two methods for working very thick seams of coal.
9. Describe fully a good form of waggon for use in a coal mine, giving dimensions and weight.
10. What do you understand by the terms lagging, gob-road, winze, stope, and.jig-brow ?

Notr.-The answers should be illustrated by drawings, as far as possible.

BA. Sc. EXAMINATION.
METALLURGY.
Saturday, April 11th:-Afternoon, 2 to 5.
Examiner.. $\qquad$ B. J. Harrington, B.A., Ph. D.

1. Describe the construction of the blast furnace.
2. What are the causes of cold-shortness and red-shortness in iron, and in what does foundry pig differ from forge pig?
3. Describe fully the Bessemer process for the manufacture of steel.
4. What do you understand by "coming to nature"?

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5. State the composition of the following alloys:--Aluminium-bronze, pewter, type-metal, gun-metal and Mosaic gold.
6. Describe the Freiberg amalgamation process for the extraction of silver.
7. Give the details of the Belgian process for the extraction of zinc from its ores.
8. Explain the following terms :-Fire-bridge, Hlue-bridge, bloom, bulldog, and tough-pitch.
9. How should the ores exhibited be smelted?
10. What is the origin of the metallurgical products exhibited?

## Ba. Sc. EXAMINATION.

## MINERAL SURVEYING AND DRAWING.

Friday, April 10th:-afternoon, 2 то 5.
Examiners $\qquad$ G. F. Armstrong, M. A., C.E.
B. J. Harrington, B.A., Ph.D.

1. Describe Casertelli's Miner's-compass, and point out in what respects all needle instruments fail in accuracy when employed in mining surveys.
2. What particulars should a good mineral survey embody?
3. How would you connect the underground work with the surface-survey, in the case of a deep pit without adits?
4. Explain the method of conducting an underground survey with the Theodolite, and state what alterations you would deem necessary in an ordinary Transit, so as to adapt it to that purpose.
5. The accompanying sketch represents a plan and sections of a piece of coal-bearing country. From it, on a scale of $\frac{1}{16}$ inch to a foot, construct, in isometrical projection, a drawing, showing the features of the strata and surface ; colour each stratum appropriately, printing the name and depth by the side of each.
6. Draw isometrically 30 feet of a circular shaft 15 feet internal diameter; the masonry being 10 inches thick and the interstices of 3 inches, between it and the sides of the excavation, being filled in with concrete. The shaft is divided into four parts by two walls of dressed ashlar, each course being 9 inches thick and 12 inches deep, and so built as to form an independent arch with a rise of 1 foot in the centre. Shew through a rectangular hole in the side of the shaft, the arrangement of the dividing walls.

Scale $\frac{1}{4}$ inch to a foot.


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8. Explain the terms Monadelphous, Syicarpous, Gymnospermous, as applied to the flower, and the modifications ofparts by which these arrangements are produced.
9. Describe the Exalbuminous Seed, stating its normal structure, and some of its modifications.
10. Explain the Natural System in Botan!, and name and characterise the classes of plants.
11. Describe the principal forms of Indeteminate Inflorescence.
12. In what Natural Families do we find Sliques, Didynamous Stamens, Labiate Corollas, or Pappus-bearing Achenes Describe one of these structures.
13. State the characters of any Canadin Exogenous Order, with examples.
14. State what you know of the specimens exhibited.

## M.D., O.M., PRIMARY EX」MINATION.

## MATERIA MEDICA.

Saturday, March 21st, 1874 :-10 to $11 \frac{1}{2}$ a.m.
Examiner, $\qquad$ ...... Prof. Wu. Wigart, M.D., L.R.C.S.E.

1. In what ways may remedies act so as to bring about their remote effects? What are the proofs?
2. How are narcotics classified? Give the influences that modify their action, and the rules for their administration.
3. Mention the ingredients in the following Antiperiodics, and the mode of preparing the first three: Anarcotina, Fari et Quiniæ Oitras, Liquor Arsenici hydrochloricus, Vinum Quiniæ, Tinctura Uinchonæ Composita.
4. Write in Latin the Pharmacopœial names of blue stone, white vitriol hippo, Tartar emetic, Virginia snake root, alum, mustard and Baker's salt. State the peculiarities of each as an emetic, and the special cases where it might be beneficial as such.
5. Relate the main points in the folloving derangements-Angina Antimonialis, Ecthyma Tiglium, Iodism, Colia Pictonum and Quininism.
6. Name the chief alkaloids used in practie, and state what are their medicinal properties, doses and officinal preparations.


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## M.D., C.M., PRIMARY EXAMINATION.

## INSTITUTES OF MEDICINE.

Saturday, Maroh 21 st $1874:-4.30$. to 6 p.m.
$\qquad$

1. Name the muscles of ordinary inspiration, and state minutely the changes which the air undergoes after being once inspired.
2. Describe the minute structure of the mucous membrane of the stomach and the composition and functions of its principal secretion-
3. Describe the anatomical structure of the various forms of nervous tissue.
4. What is meant by accommodation of vision, and how is it effected?
5. Explain the symptoms which would result from a transverse section of one lateral half of the spinal cord, say in the middle of the dorsal region.
6. What conditions commonly give rise to amyloid degeneration, and how may this change be recognized?

## M.D., O.M., FINAL EXAMINATION. tHEORY AND PRACTICE OF MEDICINE.

$$
\text { March } 23 \mathrm{Rd}, 1874:-3 \text { то } 4 \frac{1}{2} \text { P.m. }
$$

Examiner,<br>$\qquad$ Prof. R. P. Howard, M.D., L.R.C.S.E.

1. Enumerate the Exanthemata; state the day upon which their respective eruptions appear, and describe their eruptions and sequelæ.
2. Give the physical signs of Pneumonia in stage of engorgement ; of Pleurisy in stage of effusion; of acute Endocarditis, and of chronic Mitral disease.
3. Sketch the treatment of acute Pneumonia, and of Diphtheria.
4. Describe the morbid anatomy of Pleurisy, of Cirrhosis of the Liver, and of Typhoid Fever.
5. Mention the varieties of Bright's Disease, and the characters of the urine in each; detail the features of Uræmic Coma and its treatment.
6. What are the Neuroses? Describe the predisposing and exciting causes of Spasmodic Asthma and its treatment during and in the intervals of the fits.
M.D., C.M., FINAL EXAMINATION.

OBSTETRICS.
Tuesday, 24 th March, 1874 : - 11.30 A.m. to 1 P.m.
Examiner, .Professor D. C. MacCallum, M.D., M.R.C.S.L.

1. Give the causes of Funis presentation, the symptoms by which it is recognized, and the treatment to be adopted in this complication of labour.
2. Describe the early changes which take place in the Ovule as the result of impregnation.

3 In how many positions may the shoulder present at the brim of the pelvis ? How would you distinguish them from each other, and what proceedings would you adopt to correct this malposition of the child?
4. Give the characters separately of the Ovate, Cordiform and Masculine pelvis, and mention the difficulties which each presents to the passage of the child?
5. Describe the appearances presented by the Fœotus at the third, seventh, and ninth months respectively of utero gestation.
6. What conditions of the soft parts of the mother may prolong labour $\mathrm{i}_{\mathrm{n}}$ the second stage? Describe how each condition is to be overcome.
M.D., C.M., FINAL EXAMINATION.

Tuesday, March 24 tH : -3 to $4 \frac{1}{2}$ P.M.
SURGERY.
Examiner, ............ Professor Grorge W. Campbell, A.M., M.D., L.R.C.S., Edinburgh, Dean of Medical Faculty.

1. In what diseases or accidents is Laringotomy or Tracheotomy advisable? What is the difference between the operations, and what are the risks attending their performance?
2. How are Gunshot wounds of the chest divided? What are the symptoms and treatment of penetrating wounds, attended by wounded Lung?
3. Give the division of Ulcers. To which class is skin-grafting chiefly applicable, how is it performed, what is the progress of the graft, and its effects upon the Ulcer?

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4. What are the symptoms of Septic disease occurring after injury or surgical operations? How is its occurrence to be guarded against, and what is its treatment?
5. Describe the symptoms of the different forms of Dislocation of the Shoulder, and the best methods of reduction.
6. Where is Collis' fracture situated, what injury to the usefulness of the hand is likely to result from it, and how is this to be guarded against in the treatment?

## M.D., C.M., FINAL EXAMINATION.

## MEDICAL JURISPRUDENCE AND HYGIENE. <br> Saturday, February 28th.

Examiner,
Professor George E. Fenwick, M.D.

1. Mention the signs of death, and give the value of each, as indicative of that state.
2. Mention the changes which occur after death attributable to decomposition in the order of their occurrence. What circumstances favour or retard putrefaction?
3. Mention the structural diseases of the heart, and other causes, which acting directly upon that organ may occasion sudden death.
4. Mention the various causes, accidental and otherwise, which may result in death from apnœa.
5. Mention the probabilities of survivorship, where two persons perish by the same accident, as afforded by age and sex; and the degree in which such probability is affected by the nature of the accident.
6. A body is found dead: mention the circumstances to be observed with a view of determining by what agency it became divested of life.

## M.D., O.M., FINAL EXAMINATION.

 PRACTICAL CHEMISTRY.
## February 14 thi.

Examiner, $\qquad$ Professor G. P. Girdwood, M.D., M.R.C.S.L.

1. Name the base and acid respectively in the solutions marked $a$ and $\boldsymbol{b}$, giving the reactions by which you recognize each.


FIRST YEAR.
LEGAL HISTORY.
Friday, March 6тh, 1874:-3 то 6 p.m.
Examiners, $\qquad$ \{ Professor Lafrenayk. $\{$ E. Lareau, Lecturer.

1. Nommez les grandes Ordonnances qui ont été publiées au XVI siècle dans l'ordre civil, avec la date respective de leur publication.
2. Quelles sont les matières principales qui sont traitées dans ces ordon nances?
3. Quelles sont les principales sources du droit canadien ?
4. Quelle est la date de la rédaction de la Coutume de Paris et celle de sa réformation?
5. A quelle date remonte l'introduction de la Coutume de Paris en Canada quand a-t-elle été reformée dans la colonie et quelle est la date de son abolition?
6. En combien de titres se divise la Coutume de Paris ; et énumérez le matières qui font l'objet de ces titres?
7. A quelle année remonte la création du Conseil Supérieur de Québec?
8. Quelle était la composition du Conseil Supérieur de Québec ; et énumerez ses principales attributions?
9. Quelles étaient les attributions et pouvoirs du Gonverneur, de l'Intendant, et du Procureur du Roi sous la domination française.
10. Quels sont les principaux changements constitutionnels ou formes de gouvernement qui se sont succédés depuis l'établissement de la Colonie jusqu'à 1759.
11. Enumérez les différentes formes de gouvernement quise sont succédées depuis la cession du Canada à l'Angleterre jusqu'à 1867.
12. Depuis qu'elle année avons nous le gouvernement responsable en Canada?
$\qquad$
FIRST YEAR.
COMMERCIAL LAW.
Monday, March 16te; 3 to 6 P.M.
Examiner, $\qquad$ Profesor Wortele, Q.C., B.C.L OBLIGATIONS.
13. What are the principal divisions of contracts?
14. How is consent manifested; and what invalidates it ?
15. What difference is there between the incapacity resulting from insanity and that-resulting from interdiction for prodigality?
16. What obligations can a married woman contract without her husband's authorization?
17. What is understood in our law as the cause of obligations; and what cause or consideration of a contract is unlawful?
18. What is the effect of a contract for the alienation of property?
19. What contracts can be impeached by creditors; and in what cases is there a presumption of fraud?
20. When is a debtor in default?
21. What is the measure of damages ; and for what damages does a debtor become liable in cases of breach of contract?
22. What is the effect of a resolutive condition?
23. What is the difference between a term and a suspensive condition?
24. When is the benefit of a term forfeited ?
25. What is the nature of the obligation arising from the common offence of two or more persons?
26. What exceptions may, and what may not, be pleaded by a joint and several debtor?
27. What is the effect of a release granted to one of a number of joint and several debtors.

FIRST YEAR.
LEGAL LOGIC.
Examiner, $\qquad$ Professor Gonzalif Doutre, D.C.L.

1. Qu'est-ce que la Logique judiciaire?
2. Qu'est-ce qu'un argument?
3. Quels sont les principes des arguments?
4. Quelle différence faites vous entre un syllogisme et un enthymème ?
5. Qu'est-ce qu'une définition?
6. En quoi consiste l'étymologie et de quel avantage est-elle en logique ?
7. L'intention de la loi peut-elle être expliquée d'après l'ordre dans lequel diverses choses sont exposées, si oui, dites comment vous le démontrerez en logique ?
8. Pouvez-vous conclure d'une chose qui est dans la loi, l'exclusion de celles qui n'y sont pas comprises, Démontrez le par un argument?
9. En logique, pouvez-vous d'abord conclure d'un cas à un autre semblable et ensuite raisonner d'un cas au cas contraire? Comment appelerezvous ces deux genres d'argument?
10. Quel est l'argument à fortiori?
11. Combien d'objets a l'argument ad impossibili?
12. La loi cesse-t-elle d'avoir son effet lorsque le motif de cette loi a cessé? Démontrez le par un argument.

## FIRST YEAR.

## CIVIL CODE.

Examinatur,
Prof. H. F. Ratnville.

1. Par quelles lois sont régis les biens meubles et immeubles situés en Bas-Canada?
2. Suivant quelles lois doivent être faits les actes quant ì leur forme?
3. Comment s'acquiert la qualité de sujet britannique?
4. Quels sont les effets de la mort civile?
5. Que doit contenir l'acte de mariage?
6. Quels sont les effets de la reparition de l'absent après le jugement d'envoi en possession provisoire?
7. Quel prêtre ou ministre est compétent à célébrer un mariage ?
8. Pour quelles causes une femme peut-elle demander la séparation de corps?
9. Quelles personnes ne peuvent être tutrices?
10. De quelle manière un mineur est-il émancipé?

## SECOND YEAR.

## ROMAN LAW.

March 17th:-Afternoon, 3 to 6.
Examinateur,........................................Prof. C. A. Groffrion, B.C.L.

1. Quels sont les objets du Droit, et établissez-les relations qui éxistent entre ces différents objets au point de vue du Droit?
2. Quelles sont les différentes espèces de choses, et définssez chaque
espéce?
3. Qu'est ce que le droit de propriété, comment s'acquiert-il sur les
choses, les différents attributs en sont-ils susceptibles de division?
4. Définssez ce que l'on entend par servitude, et nommez les princi-
pales servitudes urbaines et rurales.
5. Que faut-il entendre par usucapion et prescription; les deux s'ap-
pliquaient-elles aux mêmes biens?
6. Expliquez les différentes manières de tester reconnues à Rome
depuis sa fondation à Justinien?
7. Quelles étaient les personnes capables de tester?
8. Quelles étaient les dispositions essentielles à la validité d'un test-в
ment?
9. Qu'est ce qu'un testament inutile, rompu et annulé (inutile,
suptum et irritum)?
10. Qu'entend-on par testament inofficieux iet par quelle procédure
etait il mis de coté?
11. Dites quels sont les effets du cautionnement entre les cofidéjusseurs
12. Comment s'éteint le contrat de cautionnement ?
13. Quelle différence y a t-il entre la caution légale et la caution judiciaire.
14. Dans quel cas le gage estil admis à la place de la caution?
15. Les cautions conventionnelles sont elles contraignables par corps; Quid, des cautions légales et judiciaires?

## SECOND YEAR.

CONSTITUTIONAL LAW.
Wednesdax, 4 th Maroh, 3 to 6 P.M.
Examlners
\{ Professor Carter, Mr. Archibald.

1. What are the different branches of the Legislature under the British Constitution, and explain the principal functions of each.
2. What is the authority of the Crown in regard to calling, adjourning, proroguing and dissolving Parliament?
3. Supposing ministers having the confidence of Parliament should advise measures which, in the opinion of the Crown, would prove disastrous to the country, what course or eourses would be open to the Crown to follow?
4. What are the three great maxims of Parliamentary Government? and point out briefly the beneficial consequences resulting from their operation.
5. What do you understand by privilege of Parliament?
6. Give a short account of the form of government among the Saxons.
7. Define Prerogative and Parliamentary Government, and show the main points of difference between them.
8. What is allegiance? Is it due to the person or to the office of the Sovereign ? and develope an argument in support of your opinion.
9. What is the effect of naturalization in a foreign state, with regard to the tie of allegiance?

## SECOND AND THIRD YEARS.

COMMERCIAL LAW.

## Monday, March 16 th ; 3 to 6 P.M.

Examiner,
Prof. Wurtele, Q.C., B.C.L.
BILLS OF EXCEANGE.

1. What bills of exchange and promissory notes are negotiable; and how can negotiable paper be transferred?
2. What is the peculiar eharacteristic of negotiable paper; and when does this characteristic commence to operate and cease?
3. What is an acceptance for honor; and what is the undertaking, and what are the rights of the acceptor for honor?
4. When is the holder bound to prove consideration?
5. When can the drawer avail himself of the want of protest?

PARTNERSHIP.
6. What is the effect of an agreement excluding a partner from participation in the profits ; and of one exempting a partner from liability for losses?
7. When there is no special agreement, what are the powers of individual partners ; and how are third persons affected by their acts?
8. What is an anonymous partnership according to our law,"and what is it under the French Code?
9. When can a dissolution be demanded before the expiration of the stipulated term?
10. What are the powers and rights of a partner after the dissolution 1 and when are third persons not affected by it?

CORPORATIONS.
11. What is a corporation, and how are they constituted?
12. How are corporations divided ; and what are their various kinds
13. How are the powers of a corporation exercised ?
14. What is the principal privilege of a corporation?
15. Under what disability do corporations lie with respect to real estate?

SECOND YEAR.
MEDICAL JURISPRUDENCE.
Examiner, $\qquad$ Professor Gonzalve Doutre, D.C.L.

1. En quoi consistent les questions d'indentité en médicine légale?
2. Quelle distinction faites vous entre les violences, conps et blessures sur la personne, quant à la peïne?
3. Qu'exige-t-on en Canada pour la constatation des décès ?
4. Dans quels cas les exhumations judiciaires ont elles lieu?

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5. Lorsque les circonstances du fait de l'accident n'ont pu être determinées, comment réglez vous les questions de suivie en droit civil?
6. Qu'est-ce qai constitute le viol en droit criminel? Quel âga diovent avoir la victime et le coupable?
7. Le Code Civil admet-il comme motif d'opposition son mariage, d'autre maladie que la démence? Indiquez les.
8. Quels sont les cas de nullité de mariage ?
9. Quels sont les cas de séparation de corps?
10. La capacité de recevoir par donation ou legs est-elle subordonnée à l'évènement de la naissance ou de la conception?
11. Quelle différence faites vous entre l'avortement et l'infanticide?
12. Faut il que l'avortement ait et eu lieu pour que la femme ou son complice soit coupable?

## SECOND AND THIRD YEARS.

 CIVIL CODE.Examinateur, $\qquad$ Prof. Rainville.

1. Comment des objets mobiliers peuvent-ils devenir immeubles par destination?
2. A qui appartiennent les isles et attérissements qui se forment dans les fleuves ou les rivières?
3. Quelles sont les obligations de l'usufruitier ?
4. Comment s'éteint l'usufruit?
5. Quelles sont les personnes capables de tester?
6. Combien y a-t-il de formes de testament dans notre droit?
7. Quels biens peut-on donner par testament?
8. Le legs d'une chose qui n'appartiendrait pas au testateur est-il valide ?
9. Comment un testament peut-il être revoqué?
10. Quelles sont les obligations de l'exécuteur-testamentaire?

## SECOND AND THIRD YEARS. INTERNATIONAL LAW AND COMMEROIAL SALE. <br> Wednesday, March 11 th: -3 to 6 P. M.

Examiner $\qquad$ Pbofessor Kerr.

1. Give a definition of the Contract of Sale? What concurrence of elements is necessary? What is a Commercial Sale under the Law of Quebec?
2. Give the rules applicable to Commercial Sales of things lost or stolen.
3. What is the difference between the law of England and that of Quebec with reference to an offer to sell, with delay, to the person to whom such offer is made, to accept?
4. When was the Statute of Frauds passed? How was it introduced into this Province? How and in what manner has it been modified or changed?
5. State the difference between Acceptance and Receipt under the Statute of Frauds?
6. What must the memorandum in writing under Art. 1235 contain? How must it be signed ? When must it be made ?
7. What are the rights, privileges and immunities of Ambassadors? What are the rights, duties and privileges of Consuls?
8. What is the meaning of the word Extradition in International Law. What proceedings are necessary in order to obtain the Extradition of an offender seeking refuge in Canada after his commission of a crime in the United States?
9. What is the difference between private property on sea and on land belonging to either of the belligerents during war?
10. What law governs the interpretation of Wills or Contracts?
11. Can land in the United States be affected by a judgment pronounced in Canada? What is the effect upon land in foreign countries of an assignee being appointed to the bankrupt estate of the owner at the place of his domicile?
12. What is the lex fori? in what cases is it applicable as a general rule?

THIRD YEAR.
ROMAN LAW.
MARCH $17 \mathrm{TH}:-3$ to 6 р.m.
Examiner. $\qquad$ C. A. Geoffrion, D.C.L.

1. Combien y a-t-il d'espèces d'obligations, et donnez la définition de chacune?
2. Quelle différence y a-t-il entre l'obligation conjointe et l'obligation solidaire, les stipulants dans ces sortes d'obligations peuvent-ils s'obliger à la même chose sous des modalités différentes?
3. Qu'entend-on par stipulations inutiles, et donnez en quelques exemples?

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4. Expliquez ce qu'il faut entendre par quasz contrat et quasi delit et rapportez quelques-unes des principales dispositions de la loi Aquilia.
5. Qu'est-ce que le mutuum et le commodatum ; à qui sont les risques de la chose dans l'un et l'autre contrat?
6. Veuillez expliquer ce que l'on entend par mandat, ee que l'on pent faire et ne peut pas faire par mandataire, et en quoi il differe du louage d'ouvrage?
7. Expliquez en quoi différent la vente et l'échange et quelles sont les règles de droit applicables aux deux contrats ?
8. Qu'entendez-vous par lex commissoria ou pacte commissoire ; avaitil lieu de plein droit ou faillait-il une stipulation expresse?

THIRD YEAR.

## LEGAL HISTORY.

Fridat, Maroh 6th, $1874:-3$ to 6 p.m.
Examiners,
$\{$ Professor Lafrenaym.
\{ E. Lareau, Lecturer.

1. Dans quel ordre s'établissent les privilèges sur les biens meubles?
2. Dans quel ordre s'établissent les créances priviligiées sur les int meubles?
3. Quelle différence établissez vous entre le privilège et l'hypotheque ; donnez la définition de l'un et de l'autre?
4. Combien distingue t-on de sortes d'hypotheque ; et donnez la definitiou de chacune d'elle?
5. Quand l'action hypothecaire est elle admise et quel est son objet ?
6. Quelles sont les exceptions que le tiers détenteur peut opposer à celu qui poursuit hypothécairement ; donnez la définition de ces diverses excep. tions?
7. Quels sont les droits exemptés de la formalité de l'enregistrement ?
8. Comment s'eteignent les privilèges et hypothèques?
9. De combien de manières peut se faire l'enregistrement d'un acte et déterminez en la difference?
10. Quelles sont les causes qui interrompentla prescription; quelles sont les causes qui suspendent le cours de la prescription?


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13. What was the original meaning of the word felony, and state how that signification has been changed, and point out an important change in procedure, resulting from such change.
14. Are there any circumstances in which intoxication may be pleaded in palliation of an offence? If so, what are they?
15. What is a libel? What acts will amount to a publication? Can the Defendant plead the truth of the publication? and give reasons for your opinion. Is there any difference between the civil and criminal action in relation to this matter? and give reasons for such difference.
*The first ten questions are for the ordinary examination, the whole paper for the medal.

## THIRD YEAR.

## CIVIL PROCEDURE.

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\text { Monday, March 9Th:-3 to } 6 \text { p.m. }
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Examiner, Professor Gonzalve Doutre, D.C.L.

1. Qu'est-ce qu'un désistementet quand l'employez vous?
2. Quand le délaissement peut-il avoir lieu en justice?
3. Quelle différence faites vous entre un Bref de Mandamus et un Bref de Quo Warranto.
4. Quelle est la procédure pour obtenir un jugement final de séparation des biens?
5. Quelle est la difference entre un jugement de ratification de titre et un décret du Shérif?
6. Qu'est-ce que la ventilation?
7. Qu'est-ce qu'une action en bornage et que faut-il faire pour que les frais d'action soient à la charge du défendeur ?
8. Combien d'enchères aux ventes ou licitations judiciaires?
9. Comment procédez vous au partage et licitation des biens en commun?

Io. Quelle différence existe-t-il entre le texte anglais et le texte français dans le Code de Procédure au sujet des poursuites entre locateurs et locataires?
11. Quand l'avocat doit-il être muni d'une procuration spéciale pour procéder?
12. Si le notaire refuse de déposer en Cour l'acte impugné de faux comment l'y contraindrez-vous?

2. What is the reason inducing Courts in one country adjudicating upon contracts made and to be performed in another to take into consideration the Law of that other country?
3. What is the Right of Jurisdiction of a State; to what objects does it extend, and over what individuals have its laws power?
4. What is the theory recognized with respect to the public and private ships of the State on the ocean, or in a foreign port?
5. In sales by brokers what constitutes the Memorandum in writing? Who signs such Memorandum? Can there in such sale be such a variance in what constitutes the Memorandum as to destroy its effect.
6. What is the Vendor's Lien? When does it exist? When is it extinguished?


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[^0]:    The Chapman Gold Medal, for the Classical Languages and Literature.
    The Prince of Wales Gold Medal, for Logic and Mental and Moral Philosophy.
    The Anne Molson Gold Medal, for Mathematics and Natural Philosophy.
    The Shakspere Gold Medal, for the English Language, Literature and History.
    The Logan Gold Medal, for Geology and other Natural Sciences.
    In the event of there being no candidate for any Medal, or of none of the candidates fulfilling the required conditions, the Medal will be withheld, and the proceeds of its endowment for the year may be devoted to prizes in the subjects for which the Medal was intended. For details, see announcements of the several subjects below.
    2. Honours, of First or Second Rank, will be awarded to those Matriculated Students who have successfully passed the Examinations in any Honour Course established by the Faculty, and have also passed creditably the ordinary Examinations in all the subjects proper to their year.

[^1]:    9. GEOLOGY AND NATURALHISTORY. (LOGAN PROFESSORSHIP OF GEOLOGY.)
    Professor J. W. Dawson, LL.D., F.R.S., F.G.S.
    10. Botany,-(Second Year).
    (1) Histology, Morphology and Physiology of the Plant, or description of its
[^2]:    * From the Surplus income of the Logan Medal Fund.

[^3]:    Gcology and Paheontology.-J. W. Dawson, LL. D., F. R. S., Professor. English Language,-Ven. Archdeacon Leach, LL. D., Professor. German.-C. F. Markgraf, M. A., Professor.
    Mathematics and Natural Philosophy.-Alexander Johnson, LL. D., Professor French. -P. J. Darey, M. A., Professor.
    Civil Engineering and Applied Mechanics.-G. F. Armstrong, M.A., C. E., F.G.S., Professor.

    Practical Chemistry.-Gilbert P. Girdwood, M.D., Professor.
    Assaying and Mining.-Bernard I. Harrington, B. A., Ph. D., Lecturer.
    Assistant to Professor of Engineering.-C. H. McLeod, Bachelor of Applied Science.

[^4]:    * Alphabetically arranged.

[^5]:    * Deceased.

[^6]:    All the preceding regulations and privileges apply to female as well as to male students.

[^7]:    *Excent in the case of Teachers in training for the Academy Diplowa, who may receive a sum not exceeding $£ 20$.

[^8]:    a. "Die Moosrofe," by Krummacher.
    ъ. "Die (Gefdia)te bes alten Wulfes," by Lessing, (Fable VI.).

