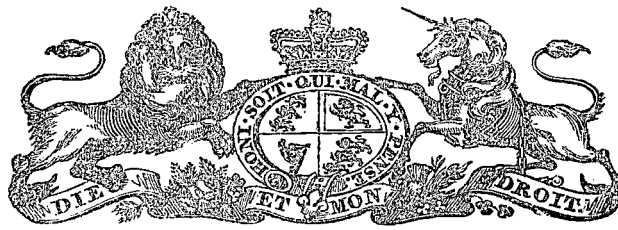


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1861.

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T A S M A N I A.

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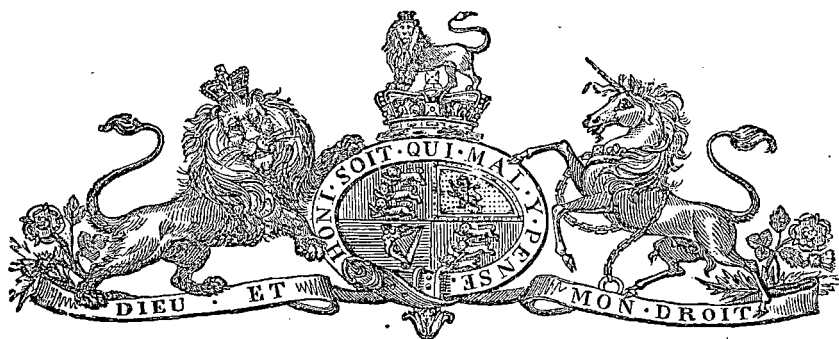
DEGREE OF ASSOCIATE OF ARTS.

REPORT OF THE EXAMINERS.

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Laid upon the Table by Mr. Innes, and ordered by the House to be printed,  
2 October, 1861.





## TASMANIAN COUNCIL OF EDUCATION.

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### DEGREE OF ASSOCIATE OF ARTS.—SEPTEMBER, 1861.

IN conformity with the Rules and Regulations of the Tasmanian Council of Education, the Council have directed the publication of the Names of the Candidates who have passed the Examination for the Degree of Associate of Arts to the satisfaction of the Examiners, and upon whom that Degree has been conferred accordingly :—

#### FIRST CLASS.

WILLIAM KNIGHT, Age 16.—Hutchins School, Hobart Town : Rev. J. Buckland, Head Master. The Council's Gold Medal awarded for Latin.

WILLIAM RIGGALL, Age 17.—Horton College, Ross : S. Fiddian, Esq., Head Master. The Council's Gold Medal awarded for Greek ; a Second Prize of Books, of the value of £5, for Latin ; and a Prize of Books, of the same value, for English.

#### SECOND CLASS.

PETER J. DOUGLAS, Age 17.—Horton College, Ross : S. Fiddian, Esq., Head Master. Awarded a Prize of Books, of the value of £5, for English ; also, a Prize of Books, of the same value, for French.

ARTHUR W. CLEVELAND, Age 15.—Church Grammar School, Launceston : Rev. F. W. Quilter, Head Master.

#### THIRD CLASS.

JAMES HAMILTON, Age 18.—Hutchins School, Hobart Town : Rev. J. Buckland, Head Master. Awarded a Prize of Books, of the value of £5, for Geology.

WILLIAM W. PERKINS, Age 18.—Hutchins School, Hobart Town : Rev. J. Buckland, Head Master.

JOHN A. McQUEEN, Age 16.—Horton College, Ross : S. Fiddian, Esq., Head Master.

EMANUEL LEVY, Age 16.—High School, Hobart Town : Rev. R. D. Harris, M.A., Rector.

On the recommendation of the Examiners, the Council's Certificate of Merit has been awarded to—

WILLIAM P. WATERFIELD, Age 15, who was unsuccessful in obtaining the Degree.

The Report of the Examiners, the Examination Papers, and the Regulations for the Examination, are annexed.

By Order of the Council,

MURRAY BURGESS, *Secretary.*

24th September, 1861.



## TASMANIAN COUNCIL OF EDUCATION.

*Hobart Town, 15th November, 1860.*

## DEGREE OF ASSOCIATE OF ARTS.

THE second Examination for the Degree of Associate of Arts will take place some time between the first day of September and the last day of November, 1861. The conditions upon which honors are given, prizes are awarded, and the Degree is granted, are stated in the Rules and Regulations of the Council, a copy of which will be furnished by the undersigned on application.

A list of subjects and books is appended. It must, however, be clearly borne in mind, that to obtain the Degree it is only necessary to pass in four of these subjects, of which Latin or Mathematics must be one.

By Order of the Council,

MURRAY BURGESS, *Secretary.*

## PRELIMINARY EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

PREVIOUSLY to the examination for the Degree of Associate of Arts, every Candidate will be required to satisfy the Examiners in—

1. Reading aloud a passage from some English Prose Author. All that is required from Candidates is that they should pronounce correctly, articulate distinctly, and read intelligibly.
2. Writing from dictation.

3. The Analysis and Parsing of a passage from some standard English Author.
4. The first four Rules of Arithmetic, Simple and Compound.
5. Geography. Under this head a competent knowledge will be required of the chief ranges of mountains, the principal rivers, the principal towns, and the coast line of one or more of the countries in the following list:—England, Scotland, Ireland, Europe, Asia, Africa, North America, South America, Australasia.
6. The outlines of English History since the Conquest; that is to say, the succession of Sovereigns, the chief events, and some account of the leading men in each reign.

## EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

The examination for those Students who have satisfactorily passed the Preliminary Examination will comprise the subjects mentioned in the following ten sections, in four of which at least, Latin or Pure Mathematics being one, the Candidate must satisfy the Examiners:—

- |   |                               |
|---|-------------------------------|
| 1. English.   | 7. The Elements of Chemistry. |
| 2. Latin.   | 8. Zoology and Botany.        |
| 3. Greek.   | 9. Drawing and Architecture.  |
| 4. French, German, or Italian.                              | 10. Geology.                  |
| 5. Pure Mathematics.  |                               |
| 6. The Elementary Principles of Hydrostatics and Mechanics. |                               |

## PRIZES.

1. Prizes of the value of £20 each, to consist of the Council's Gold Medal and Books of the value of £10, will be awarded to those Candidates who most distinguish themselves in the following subjects:—(1.) English. (2.) Latin. (3.) Greek; and (4.) Mathematics. These Prizes, however, will not be awarded to any Candidate who shall not be placed by the Examiners in the First Class of the Associate of Arts.

2. Second Prizes of Books, of the value of £5 each, will, at the discretion of the Examiners, be also given in the above four-mentioned subjects.

3. Subject to the stipulations laid down in Clause 1, the Council's Gold Medal will be awarded to the Candidate who shall most distinguish himself in some one of the subjects in Section 4, French, German, or Italian. It is clearly to be understood, however, that only one Medal will be awarded for the Section, which will be gained by the Candidate who displays the highest proficiency in the language in which he submits himself to be examined.

4. Prizes of the value of £5 each will, at the discretion of the Examiners, be awarded to the Candidates who most distinguish themselves in Sections 6, 7, 8, 9, and 10; namely,—the Elementary Principles of Hydrostatics and Mechanics; the Elements of Chemistry, Zoology, and Botany; Drawing and Architecture; Geology. In the event of any Candidate being specially recommended by the Examiners as displaying a high order of proficiency in one or other of the above subjects, the Council will be prepared to award their Gold Medal to such Candidate.

## SKETCH of the second Examination for the Degree of ASSOCIATE of ARTS.

ENGLISH.—The Candidate will be examined in the Etymology and Grammatical construction of the Language; in English History, from the Conquest to the Accession of Henry VIII.; and will be required to write a short original Composition, or a Report founded upon some abstract of facts furnished to him. He will also be examined in Physical, Commercial, and Political Geography. Books recommended, Trench on the Study of Words, (3s. 6d., Parker) Morell's Grammar and Analysis, with Graduated Exercises, (2s. 6d., Constable) Cornwell's School Geography (3s. 6d., Simpkin & Co.), and Hughes's Physical Geography (3s. 6d., Longman.)

LATIN.—Virgil, *Æneid*, Book VI., or Horace Odes, Books I. and II.; and Sallust, *Jugurthine War*, or Cicero, *Orations against Catiline*, 1, 2, and 3. Questions will also be given on the parsing, and the historical and geographical allusions. An easy passage for translation from some other Latin author, and a passage of English for translation into Latin. Candidates for Honors will be required to satisfy the Examiners in all the four books above named.

GREEK.—Xenophon's *Anabasis*, Book II.; and Homer's *Iliad*, Book I., or Herodotus, Book II., first seventy-six Sec-

tions. Questions on the parsing and the historical and geographical allusions. An easy passage for translation from some other Greek author. Candidates for Honors will be required to satisfy the Examiners in all the three books above named.

FRENCH.—Passages will be given from Voltaire's *Charles XII.* and Vinet's *Chrestomathie* for translation into English, with questions on the parsing, and the historical and geographical allusions. Also, a passage from some other French author for translation into English, and from some English author into French.

GERMAN.—Passages will be given from Schiller's *Revolt of the Netherlands*, or *Wallenstein*, with questions on the parsing and the historical and geographical allusions. Also, a passage from some other German author for translation into English, and from an English author into German.

ITALIAN.—Candidates in this Section will be examined in Silvio Pellico, with questions on the parsing, and grammatical construction; also, a passage from some other Italian author for translation into English, and from an English author into Italian.

PURE MATHEMATICS.—Questions will be set in Euclid, Books I. II. III. IV., Arithmetic and Algebra. Candidates for Honors will also be required to satisfy the Examiners in



Euclid, Books VI. and XI., as far as Proposition xxi.; Plane Trigonometry, the use of Logarithms, and Mensuration.

**NATURAL PHILOSOPHY.**—The Candidate must be prepared to answer questions set in the first 394 Sections of Golding Bird's Natural Philosophy, 4th edition, 1854. (12s. 6d., Churchill.)

**CHEMISTRY.**—The Candidate will be examined in Inorganic Chemistry. Book recommended: Wilson's Chemistry, 3s., (Chambers' Educational Course.)

**ZOOLOGY AND BOTANY.**—Elementary questions will be set on the description and classification of animals, their habits and geographical distribution; and on the mercantile and industrial uses of animal products. Also, the description and

classification of plants, their uses, and geographical distribution. Plants, and parts of plants, will be given for description. Text Books: Milne Edwards' Zoology, (7s. 6d., Renshaw), and Lindley's Elements of Botany, (12s., Bradbury).

**DRAWING AND ARCHITECTURE.**—Drawing from the Flat, from Models, from Memory, and in Perspective; and Drawing from Plans, Sections, and Elevations. Design in Pen and Ink and in Colour. A fair degree of skill in freehand drawing will be required, in order that a Student may pass in this Section.

**GEOLOGY.**—The Candidate will be examined in Page's Introductory Text Book, (1s. 6d.,) and Advanced Text Book of Geology, 5s., (Blackwood.)

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## EXAMINERS' REPORT.

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MR. PRESIDENT AND MEMBERS OF THE TASMANIAN COUNCIL OF EDUCATION.

BEFORE detailing the results of the Examination for the Degree of Associate of Arts which has just concluded, the Examiners desire to offer a few prefatory remarks.

The method of Examination remained the same as last year, no alteration having recommended itself to the Examiners.

The subjects of Examination and the Text Books prescribed also remained unchanged.

The Examiners, however, in the revising the mark-value attached to the several subjects unanimously determined to raise that attached to Greek and to French, the former from 600 to 800 marks, placing it on an equality with Latin, and the latter to 500 from 400, at which it stood last year on a par with Geology and Chemistry.

They were induced to adopt these increased values mainly from considering how much time and labour are expended at school in the acquisition of these languages compared with the few weeks necessary (say for example) to master a Text Book on Geology.

As 300 marks were thus added to the full number attainable, and added in subjects which are universally taught in schools; the Examiners raised by 200 marks the standard for each class in the final list: an increase not fully warranted by the above-named addition of marks, but fully justified if we take into consideration the fact that Candidates this year had all the experience of last year's published papers to guide them in this preparation.

The important Rule laid down last year that no marks obtained in any subject, less than the number requisite for satisfying the Examiners in that subject, should be reckoned for the Degree, was strictly enforced: and the attention of Candidates cannot be too often directed to it.

We now come to the

### PRELIMINARY EXAMINATION.

For this Twelve Candidates presented themselves out of Sixteen who had entered their names.

The Examination comprised,—Reading aloud, Writing from Dictation, and a very simple paper of questions in the Analysis of English Sentences, corrections of faulty Spelling and Grammar, English History, Geography, and the first Four Rules of Arithmetic.



The Reading aloud was generally fair, the principal defect observed by the Examiners being an indistinctness of articulation in some of the Candidates, due probably to want of practice. The Analysis and also the Writing from Dictation were also satisfactory.

Only two Candidates failed to satisfy the Examiners; one from deficient knowledge in History and Geography, and errors in writing from Dictation; the other from bad blunders in Arithmetic, coupled with the fact that only one question in Geography was attempted, though the answer to that was in the main correct.

On the whole the Preliminary Examination showed a considerable improvement on that of last year; but it must be patent to every one who looks at the papers that, with good training and proper attention on the part of the learner, not only a large proportion, but the whole of the questions might easily be answered.

### THE GENERAL EXAMINATION,

For which ten Candidates, one more than last year, had qualified themselves, commenced on Tuesday, the 10th September, the Monday having been occupied by the Preliminary Examination. One Evening Paper was necessary, in order that the Examination might be concluded within the week, and a second was necessitated by the discovery that one of the Candidates, from a cause which the Examiners were bound to respect, could not attend at the time fixed for one of his subjects.

We shall specify the results of the Examination in each subject before stating the general result and commenting thereon.

#### I. ENGLISH LANGUAGE AND LITERATURE, (including Geography, Physical, Political, and Commercial, and English History from the Conquest to the Accession of Henry VIII.)

Ten Candidates; two passed with credit, one was rejected, mainly from deficient answering in History and Geography.

The Papers were on the whole satisfactory and much superior to last year's, the average of the marks obtained by the Candidates being 553 against 434, and the highest number attained by any Candidate 764 against 631, out of 1000 full marks.

The Text Books prescribed in English are however very brief and easily mastered; and the Examiners would strongly recommend that in addition to them some portion of a standard English Author should be prescribed, to be worked up with Grammar and Dictionary, just as Candidates work up their Xenophon or their Cicero.

The want of a fixed Text Book in History is much felt, as it is difficult to be certain that Candidates have had the opportunity of learning the answer to every question set, while the books studied by them vary so widely.

The standard for passing with credit was this year raised from one-half to three-quarters of full marks, the Examiners considering that this standard ought to be attained, as the Examination, wherever Text Books were prescribed, was strictly confined to them.

The answering of two Candidates, Douglas and Riggall, was of nearly equal merit; that of the former slightly superior; but, as he was not placed in the First Class for the Degree, the Gold Medal cannot be given to him. Under these circumstances, the Examiners recommend that a Prize of Books of the value of £5 be awarded to each.

#### II. LATIN.

Ten Candidates; three passed with credit, two were rejected, failing utterly in answering simple grammatical questions, though the translations of both were passable.



In this subject also the general answering shows an advance on last year's ; the average being 461 against 309, and the highest 645 against 547 out of the full marks 800. Considering, however, how large a proportion of this and of the Greek Paper consisted of Elementary Questions, for which full marks ought to be obtained, the Examiners judged it right to raise the standard for credit from half to two-thirds of full marks.

The Gold Medal, awarded by the Council, is won by Knight: and Riggall, the second on the list, is so nearly equal to him, that the Examiners recommend him for a Second Prize of Books.

### III. GREEK.

Six Candidates ; two passed with credit, two were rejected, again from deficiencies in Grammar. The answering exhibits an improvement on last year's, though not so marked as in Latin : the defects observable are mainly in ground work in Grammar, and in parsing ; the Syntax is pretty well understood.

Riggall, as first on the list, is entitled to the Council's Gold Medal.

### IV. MATHEMATICS.

Ten Candidates ; three passed with credit, one was rejected.

The answering was inferior to last year's ; the average being 260 to 295, and the highest 449 against 550, out of 800 marks.

The work of the Candidates was marred by the same defects as were noticed last year ; want of clearness and precision, and the omission of steps in demonstration : while faults of downright carelessness were more prevalent in this than in the preceding Examination.

### V. NATURAL PHILOSOPHY.

Two Candidates ; one passed, one was rejected. The answering this year confirms what was indicated last year, namely, that this subject, (at least as treated in the Text Book prescribed) is quite beyond the grasp of Candidates at the age at which they present themselves for this Examination.

### VI. FRENCH.

Ten Candidates ; six passed with credit, none were rejected.

The result shows an improvement on last year's Examination, but the same defect is again observable, namely, a want of command over the idioms and the syntax of the language.

Douglas is recommended for a Prize of Books.

### VII. GEOLOGY.

Five Candidates ; four passed with credit, one was rejected.

The result is on the whole satisfactory ; the papers of those who passed displaying a fair amount of knowledge of the leading principles of the science. The main deficiency was in the mode of treatment of questions of a general character.

The first on the list, Hamilton, is recommended for a Prize of Books.

### VIII. DRAWING AND ARCHITECTURE.

Two Candidates ; both passed.

The questions set were upon the whole satisfactorily answered, particularly when it is borne in mind that no books have been prescribed for study.



In the Drawing of Plan and Elevation great deficiency was apparent, which was not surprising as the Candidates were totally unacquainted with the use of Drawing Board, Square, and Scale.

Their copying from the flat, and their knowledge of perspective, was creditable; but neither the Drawing from memory nor the design in pen and ink exhibited any special merit.

It will be seen from these special reports that on the whole the Examination of this year is more satisfactory than the last, and this is borne out by the Class List, in which the names of eight out of ten Candidates appear against four out of nine last year.

The defects observed are in style rather than in knowledge.

The Examiners have had to find fault with frequent inattention to the printed directions ; and have found throughout the papers a tendency to verbiage. This arises from an over anxiety on the part of the Candidates to get pen to paper instead of taking time to think quietly over the bearing of a question with a view to answering it as clearly and as concisely as possible. Again this overhaste leads to blunders which it is impossible to attribute to ignorance, but for which nevertheless marks must be deducted, such as, mis-spelling of ordinary English words, grammatical blunders, omission of words rendering sentences wholly unintelligible.

For such faults however the best remedy is the practice of writing answers, which we would strongly recommend to the attention of those preparing Candidates for another Examination.

We have now to give in detail the Special and the General Class Lists.

### SPECIAL CLASS LISTS.

The names in the First Class are arranged in order of merit, those in the Second in alphabetical order, and the names of those who failed to satisfy the Examiners for the Degree are omitted.

| GREEK.  | LATIN.  | ENGLISH.  | MATHEMATICS.  |
|---|---|---|---|
| I.<br>Riggall, William.<br>Knight, William.     | I.<br>Knight, W.<br>Riggall, W.<br>Cleveland, Arthur W.   | I.<br>Douglas, P. J. }<br>Riggall, W. } æq.   | I.<br>Levy, E.<br>Riggall, W.<br>Knight, W.                                     |
| II.<br>Cleveland, Arthur W.<br>Hamilton, James. | II.<br>Douglas, Peter J.<br>Hamilton, James.<br>McQueen, John Arch.<br>Perkins, W. W.                     | II.<br>Cleveland, A. W.<br>Knight, W.<br>Levy, E.<br>McQueen, J. A.<br>Perkins, W. W. | II.<br>Cleveland, A. W.<br>Douglas, P. J.<br>Hamilton, James.<br>McQueen, J. A. |
| NATURAL<br>PHILOSOPHY.                          | FRENCH.   | GEOLOGY.  | DRAWING AND<br>ARCHITECTURE.  |
| I.<br><br>II.<br>Perkins, William W.            | I.<br>Douglas, P. J.<br>Cleveland, A. W.<br>Knight, W.<br>Levy, Emanuel.<br>Perkins, W. W.<br>Riggall, W. | I.<br>Hamilton, James.<br>Knight, W.<br>Perkins, W. W.<br>Levy, E.                    | I.<br><br>II.<br>Douglas, J. P.<br>McQueen, J. A.                               |
|   | II.<br>Hamilton, James,<br>McQueen, John A.   | II.   |   |



## GENERAL CLASS LIST.

## FIRST CLASS.

| NAME.                            | AGE. |   | SCHOOL.                  | SCHOOLMASTER.     |
|----------------------------------|------|---|--------------------------|-------------------|
| 1. Knight .. <i>Marks.</i> 2722. | 16   | Gold Medal for Latin.   | Hutchins School, Hobart. | Rev. J. Buckland. |
| 2. Riggall .. 2645.              | 17   | Gold Medal for Greek.<br>Recommended for Prizes<br>of Books for Latin and<br>English. | Horton College, Ross.    | S. Fiddian, Esq.  |

## SECOND CLASS.

|                     |    |   |                                       |                     |
|---------------------|----|---|---------------------------------------|---------------------|
| 1. Douglas . 2197.  | 17 | Recommended for Prizes<br>of Books for English<br>and French. | Horton College, Ross.                 | S. Fiddian, Esq.    |
| 2. Cleveland. 2162. | 15 |   | Church Grammar School,<br>Launceston. | Rev. F. W. Quilter. |

## THIRD CLASS.

|                    |    |  |                          |                    |
|--------------------|----|--|--------------------------|--------------------|
| Hamilton ... 1720. | 17 | Recommended for Prize<br>of Books for Geology. | Hutchins School, Hobart. | Rev. J. Buckland.  |
| Perkins .... 1665. | 17 |  | Ditto.                   | Ditto.             |
| McQueen .. 1506.   | 16 |  | Horton College, Ross.    | S. Fiddian, Esq.   |
| Levy..... 1489.    | 16 |  | High School, Hobart.     | Rev. R. D. Harris. |

A very instructive lesson for future Candidates, on the wisdom of concentrating their energies on a few subjects, may be deduced from the following observations on the marks of the above Class List :—

1. Only one Candidate presented seven subjects. He failed in three, and his name does not appear in the Class List.

2. Four Candidates presented six subjects. One only passed in six. Of the others each failed in one subject. One of them heads the Second, another the Third Class; and in these two cases had the labour spent on the sixth subject in which they failed, been devoted to the other five instead, they would each undoubtedly have been a Class higher.

3. The Candidate who heads the list could have dispensed with the marks in one subject, and still have been placed in the First Class.

Five subjects then, well selected and thoroughly studied, are sufficient to place a Candidate in the First Class, and are as many, it would appear, as can generally be studied with advantage. The Examiners would strongly recommend that as a general rule, more be not attempted. A satisfactory knowledge of five subjects should be attainable by a boy of fair ability and application before he is 16, and thus he would be enabled after taking the Degree of Associate of Arts, to devote two years to studying for the Tasmanian Scholarships, and yet become a Candidate before the age of 18, so as to have, if necessary, three opportunities of competing for these great Prizes offered by Tasmania to industry and talent.

The Examiners cannot conclude their Report, without acknowledging the great trouble which has been taken in the Government Printing Office to ensure secrecy, and to meet every wish of the Examiners respecting the Papers of this Examination, or without adverting to the admirable manner in which these Papers, especially the Greek (printed on this occasion for the first time in Tasmania), have been prepared under the superintendence of Mr. Roberts.

Signed for the Examiners,

M. H. IRVING, *Chairman.*

23rd September, 1861.



*EXAMINATION for the Degree of Associate of Arts.—September, 1861.*

**TABULATED RESULTS.**

| NAME AND MOTTO.                         | AGE. | SCHOOL.                           | TEACHER.           | English.                 | Latin. | Greek. | French. | Pure Mathematics. | Elementary Principles of Hydrostatics and Mechanics. | Drawing and Architecture. | Geology. | TOTAL No. OF MARKS. | RESULT.              |  |
|---|------|-----------------------------------|--------------------|--------------------------|--------|--------|---------|-------------------|--|---------------------------|----------|---------------------|----------------------|--|
|   |      |                                   |                    | Maximum Number of Marks. |        |        |         |                   |  |                           |          |                     |                      |  |
|   |      |                                   |                    | 1000                     | 800    | 800    | 500     | 800               | 400  | 400                       | 400      | 5100                |                      |  |
| Knight, William—Spirate secundi         | 16   | Hutchins School, Hobart           | Rev. J. Buckland.  | 551                      | 645c   | 539c   | 309c    | 391c              | —  | —                         | 287c     | 2722                | First Class.         |  |
| Riggall, William—Nil desperandum, 2     | 17   | Horton College, Ross              | S. Fiddian, Esq.   | 761c                     | 639c   | 595c   | 253c    | 397c              | —  | —                         | —        | 2645                | First Class.         |  |
| Douglas, Peter J.—Excelsior, 1          | 17   | ditto                             | ditto              | 764c                     | 574    | n.p.   | 371c    | 321               | —  | 167                       | —        | 2197                | Second Class.        |  |
| Cleveland, Arthur W—Nil desperandum, 1  | 15   | Church Grammar School, Launceston | Rev. F. W. Quilter | 504                      | 618c   | 462    | 310c    | 268               | —  | —                         | —        | 2162                | Second Class.        |  |
| Hamilton, James—Enitar ut vincam, 1     | 18   | Hutchins School, Hobart           | Rev. J. Buckland.  | n.p.                     | 536    | 493    | 229     | 163               | —  | —                         | 299c     | 1720                | Third Class.         |  |
| Perkins, William W.—Enitar ut vincam, 2 | 18   | ditto                             | ditto              | 536                      | 433    | —      | 270c    | n.p.              | 156  | —                         | 270c     | 1665                | Third Class.         |  |
| McQueen, John A.—Dum spiro spero        | 16   | Horton College, Ross              | S. Fiddian, Esq.   | 588                      | 355    | —      | 217     | 165               | —  | 181                       | —        | 1506                | Third Class.         |  |
| Levy, Emanuel—Fides, 2                  | 16   | High School, Hobart               | Rev. R. D. Harris. | 529                      | n.p.   | —      | 274c    | 449c              | —  | —                         | 237c     | 1489                | Third Class.         |  |
| Waterfield, Wm. P.—Fides, 1             | 15   | Private School, Green Ponds       | Kemmis, H., Esq.   | 435                      | 369    | n.p.   | 229     | 215               | n.p.   | —                         | n.p.     | 1248                | Certificate of Merit |  |

NOTE.—n.p. not passed. c passed with credit. — subject not attempted by Candidates.

M. H. IRVING, *Chairman of the Board of Examiners.*



## DIRECTIONS TO CANDIDATES.

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I. Look carefully at the annexed Time Table, in which the hours are fixed for the subjects of Examination on each day, and always *be at your seat in the Examination Room five minutes before the time.*

II. When the Questions are given you, read them over carefully, and *mark those which you think you can answer best ; and do them first.* If, after that, you still have time to spare, try some of the others.

III. Before you begin to write your answers, insert in the blank spaces at the top of your paper,—

1. The *motto* by which you are known in the Examination.
2. The *subject* in which the questions are set which you are about to answer.
3. The number of the question. Not more than one question is to be answered on each sheet.

IV. In writing your answers,—Write only on the ruled side of the paper.

V. As soon as notice is given, (which will be five minutes before the end of the time), finish your papers, and see that they are numbered rightly, and in their proper order.

VI. You are not to leave the Room until the Examination is closed, except by special permission of the Examiners.

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*N.B.—Candidates are strictly forbidden to communicate with one another during the Examination. Any Candidate taking an unfair advantage will be dismissed from the Examination.*

[ TIME TABLE—OVER. ]



# *EXAMINATION for the Degree of Associate of Arts,—September, 1861.*

## T I M E T A B L E.

| <i>Monday, 9th September.</i>                            | <i>Tuesday, 10th September.</i>                              | <i>Wednesday, 11th September.</i>      | <i>Thursday, 12th September.</i>            | <i>Friday, 13th September.</i>             | <i>Saturday, 14th September.</i>                           |
|--|--|--|---|--|--|
| <p><b>10 to 12.</b><br/>PRELIMINARY<br/>EXAMINATION.</p> | <p><b>9 to 12.</b><br/>FRENCH.</p>                           | <p><b>9 to 12.</b><br/>LATIN, I.</p>   | <p><b>9 to 12.</b><br/>GREEK, I.</p>        | <p><b>9 to 12.</b><br/>MATHEMATICS, I.</p> | <p><b>9 to 1.30.</b><br/>DRAWING AND<br/>ARCHITECTURE.</p> |
| <p><b>2 to 5.</b><br/>PRELIMINARY<br/>EXAMINATION.</p>   | <p><b>2 to 5.</b><br/>ENGLISH HISTORY AND<br/>GEOGRAPHY.</p> | <p><b>2 to 5.</b><br/>LATIN, II.</p>   | <p><b>2 to 5.</b><br/>ENGLISH LANGUAGE.</p> | <p><b>2 to 5.</b><br/>MATHEMATICS, II.</p> | <p><b>2 to 5.</b><br/>DRAWING AND<br/>ARCHITECTURE.</p>    |
|  |  | <p><b>7 to 9 P.M.</b><br/>GEOLOGY.</p> |   |  | <p><b>10 to 1.</b><br/>NATURAL PHILOSOPHY.</p>             |
|  |  |  |   |  | <p><b>7 to 9.</b><br/>GREEK, II.</p>                       |



## TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.—SEPTEMBER, 1861.

**Preliminary Examination.**

MONDAY, 9TH SEPTEMBER, 1861. 10 A.M. to NOON.

Analyse and parse this passage :—

“How fell these creatures out? Whence grew this so bloody combat? Here was neither old grudge, nor present injury. What then is the quarrel? Surely, nothing but that which should rather unite or reconcile them—one common nature.”

Point out the errors, of whatever kind, in the following notice, give the corrections, and write it out in the proper form :—

Whereas nicklas macloud having lost a purse and Also a pockit book of papers which they are of no Use only too the owner, any one that shoud find the same are requested to bring it to his werehouse oposite the houses that are Burnt down in liverpool street wich i will be Hapy to reward fore there Trubble.

MONDAY, 10TH SEPTEMBER, 1861. 2 P.M. to 5 P.M.

1. Name the Sovereigns of England from John to Charles I., giving the date of accession in each case.
2. Mention any important events that occurred in the history of England from A.D. 1600 to A.D. 1700.
3. Give some account of Queen Philippa, Wat Tyler, Lady Jane Grey, John Milton, Titus Oates, Lord Nelson.
4. Mention any three great battles that were fought by English armies —(1.) Against Scotland. (2.) Against France. (3.) In civil war; giving such a description of each as may include at least the cause and the issue of the battle.
5. Name the chief rivers of England, the chief mountains of Scotland, and the chief cities of Ireland, describing the position of each.
6. Draw an outline map of Africa, showing the position of Algiers, Liberia, Natal, the Quorra, and the Mozambique Channel.
7. Through what countries and into what seas do the following rivers flow :—The Volga, the Vistula, the Dnieper, the Ganges, the Amoor, the St. Lawrence, the Amazon?
8. Describe the positions of Amsterdam, Southampton, Rome, Jersey, the Andes, Lyons, New Orleans, Labrador, Queensland, Jamaica, Otago, Canton, Point de Galle, the Adriatic.
9. Subtract 9949008 from ten millions and one hundred; also £81654 17s 8½d. from £92345 0s. 10d.
10. Divide 3407264 by 438, and £13065 2s. 3d. by 17.
11. Make up the following account :—
 

|                               | £ | s. | d. |
|-------------------------------|---|----|----|
| 7½ lbs. Tea, at 3s. 10d. .... |   |    |    |
| ¾ lb. Spices, at 2s. 4d. .... |   |    |    |
| 15 lbs. Candles, at 8½d. .... |   |    |    |
| 104 lbs. Sugar, at 4¼d. ....  |   |    |    |
|                               | £ |    |    |
12. There were exported from Hobart Town, in the first quarter of 1861, 400 tuns sperm oil, valued at £33,380, and 8 tuns black oil, valued at £340 5s. Required the price per tun of sperm and black oil respectively.



## DEGREE EXAMINATION.

**French.**

TUESDAY, 10TH SEPTEMBER, 1861. 9 A.M. to 12 A.M.

1. Translate into English the following passage from Vergniaud's Speech on the Massacres of September :—

“Savez-vous, citoyens, comment disposent de la liberté des citoyens ces hommes qui s'imaginent qu'on a fait la révolution *pour eux* : qui croient follement qu'on a envoyé Louis XVI. au Temple pour les intrôner eux-mêmes aux Tuileries ? Savez-vous comment sont décernés les mandats d'arrêt ? La commune de Paris s'en repose à cet égard sur son comité de surveillance. Ce comité de surveillance, par un abus de tous les principes, ou une confiance bien folle, donne à des individus le terrible droit de faire arrêter ceux qui leur paraîtront suspects. Ceux-ci le subdélèguent encore à d'autres affidés, dont il faut bien seconder les vengeances, si l'on veut en être secondé soi-même. Voilà de quelle étrange série dépendent la liberté et la vie des citoyens ; voilà entre quelles mains repose la sûreté publique ! Les Parisiens aveuglés osent se dire libres ! Ah ! ils ne sont plus esclaves, il est vrai, des tyrans couronnés, mais ils le sont des hommes les plus vils, des plus détestables scélérats. Il est temps de briser ces chaînes honteuses, d'écraser cette nouvelle tyrannie ; il est temps que ceux qui ont fait trembler les hommes de bien, *tremblent* à leur tour. Je n'ignore pas qu'ils ont des poignards à leurs ordres. Eh ! dans la nuit du 2 Septembre, dans cette nuit de proscription, n'a-t-on pas *voulu* les diriger contre plusieurs députés, et contre moi ! Ne nous a-t-on pas *dénoncés* au peuple comme des traîtres ! Heureusement c'était en effet le peuple qui était là ; les assassins étaient occupés ailleurs.”

2. Parse and analyse the first portion of the first sentence down to “*pour eux*,” and conjugate the verbs which it contains. Parse “*tremblent*,” “*voulu*,” and “*dénoncés*.”
3. State briefly the causes which led to the French Revolution, and the principal events up to the crisis at which this Speech was delivered.
4. To what party did Vergniaud belong ? From whence did that party derive its designation ? Who were its other great leaders ? And what was their fate ?
5. Translate the following passage :—

“Trois puissans rois menaçaient ainsi l'enfance de Charles XII. Les bruits de ces préparatifs consternaient la Suède, et alarmaient le conseil. Les grands généraux étaient morts ; on avait raison de tout craindre sous un jeune roi, qui n'avait encore donné de lui que de mauvaises impressions. Il n'assistait presque jamais dans le conseil que pour croiser les jambes sur la table ; distrait, indifférent, il n'avait paru prendre part à rien.

“Le conseil délibéra en sa présence sur le danger où l'on était : quelques conseillers proposaient de détourner la tempête par des négociations ; tout d'un coup le jeune prince se lève avec l'air de gravité et d'assurance d'un homme supérieur, qui a pris son parti : ‘Messieurs, dit-il, j'ai résolu de ne jamais faire une guerre injuste ; mais de n'en finir une légitime que par la perte de mes ennemis. Ma résolution est prise : j'irai attaquer le premier qui se déclarera ; et quand je l'aurai vaincu, j'espère faire quelque peur aux autres.’ Ces paroles étonnèrent tous ces vieux conseillers ; ils se regardèrent sans oser répondre. Enfin, étonnés d'avoir un tel roi, et honteux d'espérer moins que lui, ils regurent avec admiration ses ordres pour la guerre.”

6. Who were the three kings here alluded to ? And what were the circumstances which led to their alliance against Charles XII ?
7. How did Charles prepare to resist his enemies ? When did he leave Stockholm for his first Campaign ? Describe the action by which that Campaign was opened ?
8. Analyse the following sentence :—

“Le czar en se *créant* ainsi de nouveaux états *tendait* toujours la main au roi Auguste ; il lui *persuada* de *venir* à Grodno. Le roi Auguste y vint avec quelques troupes, accompagné du général Schulembourg, que son passage de l'Oder *avait rendu* illustre dans le nord.”

Conjugate the Future, Preterite Definite, and Imperfect Subjunctive of each of the Verbs which it contains ?



## 9. Correct the following sentences :—

Heureux les princes qui n'ont usés de leur pouvoir que pour faire du bien.  
 Il s'est formée une tumeur; il s'est élevées des questions.  
 Les jours qu'il a vécus, qu'il a parlés avec ses amis.  
 Et plus loin des laquais l'un et l'autre s'agaçans,  
 Font aboyer les chiens.  
 Sonvent du naturel les auteurs s'écartans  
 Sont forcé d'obéir au mauvaise goût du temps.  
 Tous le dignités que tu m'as demandé,  
 Je te les ai, sur l'heure et sans peine accordé.  
 Les livres que vous m'avez ordonnés d'envoyer ont été remises ce matin.

## 10. Translate into French :

On a day when her parents had gone to dine in the world, the charming Miss entertained some comrades of the pension; and I advised myself to send up a little repast suitable to so delicate young palates. Her lovely name is Blanche. The veil of the maiden is white. I determined that my dinner should be as spotless as the snow. At her accustomed hour, I sent up a little *potage à la Reine Blanche* as white as her own tint, and confectioned with the most fragrant cream and almonds. I then offered up a *filet de Merlan*, of which my charming Miss tasted with pleasure. I followed this by two little *entrées* of sweet bread and chicken; and the only brown thing which I permitted myself was a little roast of lamb, which I laid in a meadow of spinaches, ornamented with daisies and other savage flowers. After this came my second service, a basket containing little cakes of apricots, which, I know, all young ladies adore, and a jelly of marasquin, bland, insinuating, intoxicating as the glance of beauty. And when the ice was brought in, I stood at the door to watch the effect of this entry. It was but a cry of admiration. The three young ladies filled their glasses with the sparkling Ay, and carried me in a toast. I heard it. I heard Miss say, "Tell Monsieur Alcide that we thank him—we admire him" My feet almost failed me as she spoke.—[*Thackeray*.]

11. Give the Preterite and Participle Passive of each of the following verbs :—*Vendre, Venir, Acquérir, Courir, Perdre, Jouir, Mourir, Ouvrir, Vêtir, Mouvoir, Sursoir, Valoir, Voir*.  
 12. Give the Feminine of the following adjectives :—*Bénin, Caduc, Doux, Faux, Favori, Frais, Franc, Gentil, Grec, Jaloux*.

## 13. Translate into French the following sentences :—

I thank you for the steps which you have taken.  
 I thank you for the steps which you have had the goodness to take.  
 I send you the books which you have desired.  
 I send you the books which you have appeared to desire.  
 The airs which she has sung.  
 The airs which she has heard sung.  
 I have offered to her my house which she has refused.  
 I have offered her my house which she has refused to accept.  
 The lesson which you have wished me to study.

## 14. What are the Rules for the use of the Subjunctive Mood? Give examples.

## 15. How is the verb "to be" rendered in French, in such cases as the following :—

I *am* hungry. My hands *are* cold. She *is* right. How far *is* it from Calais to Paris?  
 How long *has he been* dead? She *has been* talking these two hours. It *is* very cold. How  
 are you? It *is* very unfortunate. It *is* three o'clock.



**History and Geography.**

TUESDAY, 10TH SEPTEMBER, 1861. 2 P.M. to 5 P.M.

*[Dates should be given in every case.]*

1. Write a short historical sketch, showing the relative position of the kingdoms of England and France from 1415 to 1452.
  2. Describe the character of King John, and the chief events of his reign.
  3. What was the object, and what the result of the Crusades? What English monarchs or princes engaged in these wars?
  4. Mention any famous Scots and Welshmen whose names appear in the history of England, with a brief account of each.
  5. "Strongbow and Ireland." What had the one to do with the other?
  6. What English chroniclers or poets flourished before Henry VIII.?
  7. What events are connected with the following places:—Bordeaux, Ravenspur, Mortimer's Cross, Clarendon, Evesham, Caernarvon, Berkeley Castle, Bosworth?
  8. Give some account of the Lollards, the Empress Matilda, Anselm, Margaret of Anjou, William of Wykeham.
  9. What encouragement did Henry VII. give to maritime discovery, and with what result?
- 
10. What are the chief sources of the mineral wealth of England?
  11. What are the chief exports and imports of England, and the countries which respectively receive and supply them?
  12. What are the boundaries of France?
  13. Describe the course of a ship sailing from Venice to St. Petersburg. What would be the direct line of a land journey between the same two places?
  14. Explain (with instances) the meaning of the following terms:—steppe, plateau, sound, estuary, creek, llanos, delta.
  15. Where are the following places, and what special interest or importance attaches to any of them?—Jellalabad, Quito, Inverness, Badajos, Lucknow, Loffoden Isles, Elba, Leyden, Quebec, Aix la Chapelle.
  16. What are the trade winds, the gulf stream, the monsoons, the belt of calms?
  17. Where are palm oil, mahogany, ivory, sponge, tobacco, gold, diamonds, found?
  18. What countries are separated by the following Straits—Cattegat, Lancaster Sound, Straits of Malacca, Straits of Yenikale, Bass's Straits, Straits of Bonifacio.
  19. Where are the principal groups of coral islands? Give some account of them.
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## Latin.—I.

WEDNESDAY, 11TH SEPTEMBER. 9 A.M. to 12 A.M.

[N.B.—Candidates will first attempt Questions 1, 2, 3, 4. Candidates for Honors, who have to present both Authors, are to omit 5 and 6, or 7 and 8, as well as 12 and 13, or 14 and 15. In parsing or deriving, be sure to make your answers full.]

VIRGIL, Æneid VI. HORACE, Odes I. II.

1. Give the principal parts of *veho*, *pascor*, *orior*, *retineo*, *peto*.
2. Give the 3rd plur. perf. indic. act. of *sto*; the 2nd sing. fut. perf. act. of *cresco*; the 2nd plur. fut. indic. pass. of *quatio*; the perf. part. pass. of *domo*.
3. Write down the Latin numerals, from one to twenty.
4. Put the following sentences into Latin :—

Tell me whether he is come. I fear that he is not come. They took two sesteritia apiece. Anybody can do this. Before the Fire of London.

5. Translate—

Fit gemitus. Tum membra toro defleta reponunt,  
 Purpureasque super vestes, velamina nota,  
 Conjiciunt: pars ingenti subiere feretro,  
 Triste ministerium; et subjectam more parentum  
 Aversi tenuere facem. Congesta cremantur  
 Thurea dona, dapes, fuso crateres olivo.  
 Postquam collapsi cineres, et flamma quievit,  
 Reliquias vino et bibulam lavere favillam;  
 Ossaue lecta cado texit Corynæus ahenō.  
 Idem ter socios pura circumtulit unda,  
 Spargens rore levi et ramo felicis olivæ,  
 Lustravitque viros, dixitque novissima verba.

6. In the above passage, parse *subiere*, *facem*, *congesta*, *lavere*.

7. Translate—

Ad quæ Priamides: "Nihil o tibi amice relictum;  
 Omnia Deiphobo solvisti et funeris umbris.  
 Sed me fata mea et scelus exitiale Læonæ  
 His mersere malis: illa hæc monumenta reliquit.  
 Namque, ut supremam falsa inter gaudia noctem  
 Egerimus, nosti; et nimium meminisse necesse est.  
 Quum fatalis equus saltu super ardua venit  
 Pergama, et armatum peditem gravis attulit alvo:  
 Illa, chorum simulans, evantes orgia circum  
 Ducebat Phrygiæ; flammam media ipsa tenebat  
 Integrem, et summa Danaos ex arce vocabat.

8. Parse the words in the sixth line of the above extract.
9. Give the geographical position and the modern names of *Eridanus*, *Palus Mæotis*, *Caïeta*.
10. Explain the historical allusions in the following lines :—

"Vis et Tarquinius reges, animamque superbam  
 Ultoris Bruti, fascisque videre receptos?"  
 "Ille triumphatâ Capitolia ad alta Corintho  
 Victor aget currum, cæsis insignis Achivis."  
 "Geminos Scipiadas, cladem Libyæ."

11. Derive and explain the following words :—*Trivia*, *numen*, *trifauci*, *tremefacio*, *discrimen*, *exsanguis*.



## 12. Translate—

Teucer Salamina patremque  
 Quum fugeret, tamen uida Lyæo  
 Tempora populea fertur vinxisse corona,  
 Sic tristes affatus amicos :  
 “ Quo nos cunque feret melior fortuna parente  
 Ibimus, o socii comitesque !  
 Nil desperandum Teucro duce et auspice Teucro ;  
 Certus enim promisit Apollo,  
 Ambiguam tellure nova Salamina futuram.  
 O fortes pejoraque passi  
 Mecum sæpe viri, nunc vino pellite curas ;  
 Cras ingens iterabimus æquor.”

13. In the above passage, explain why fugeret is in the Subjunctive Mood. Write a geographical note upon Salamis. Parse “auspice,” “pejora,” “pellite.”

## 14. Translate—

Quid quisque vitet, nunquam homini satis  
 Cautum est in horas : navita Bosporum  
 Pœnus perhorrescit, neque ultra  
 Cæca timet aliunde fata,  
 Miles sagittas et celerem fugam  
 Parthi, catenas Parthus et Italum  
 Robur ; sed improvisa leti  
 Vis rapuit rapietque gentes.  
 Quam pæne furvæ regna Proserpinæ  
 Et judicantem vidimus Æacum,  
 Sedesque discretas piorum, et  
 Æoliis fidibus querentem  
 Sappho puellis de popularibus  
 Et te sonantem plenius aureo,  
 Alcææ, plectro dura navis,  
 Dura fugæ mala, dura belli !

15. In the above, explain the government of “homini,” “robur,” “mala.”  
 16. Give the geographical position and the modern name of the Bosphorus, Gades, Cantabri.  
 17. Give the derivation and meaning of “quadrimum,” “plectrum,” “contaminatus,” “iniquus,” “trabalis,” “insignis.”  
 18. Explain the historical allusions in the following :—

Tibur Argeo positum colono—  
 regnata Laconi  
 Rura Phalanto.

## 19. Translate—

“Biduo post Ariovistus ad Cæsarem legatos mittit: Velle se de his rebus, quæ inter eos agi cœptæ neque perfectæ essent, agere cum eo: uti aut iterum colloquio diem constitueret, aut, si id minus vellet, e suis legatis aliquem ad se mitteret. Colloquendi Cæsari causa visa non est, et eo magis, quod pridie ejus diei Germani retineri non poterant, quin in nostros tela conjicerent. Legatum e suis sese magno cum periculo ad eum missurum, et hominibus feris objecturum, existimabat. Commodissimum visum est C. Valerium Procillum, C. Valeri Caburi filium, summa virtute et humanitate adolescentem, cujus pater a C. Valerio Flacco civitate donatus erat, et propter fidem et propter linguæ Gallicæ scientiam, qua multa jam Ariovistus longinqua consuetudine utebatur, et quod in eo peccandi Germanis causa non esset, ad eum mittere, et M. Mettium, qui hospitio Ariovisti utebatur. His mandavit, ut quæ diceret Ariovistus, cognoscerent, et ad se referrent. Quos quum apud se in castris Ariovistus conspexisset, exercitu suo præsentem conclamavit: Quid ad se venirent? an speculandi causa? Conantes dicere prohibuit et in catenas conjecit.”



## Latin.—II.

WEDNESDAY, 11<sup>TH</sup> SEPTEMBER. 2 P.M. to 5 P.M.

[*N.B.*—Candidates will first attempt questions 1, 2, 3, 4. Candidates for Honors, who have to present both authors, are to omit 5 and 6 or 7 and 8, as well as 12 and 13 or 14 and 15. In parsing or deriving be sure to make your answers full.]

SALLUST.—Jugurthine War. CICERO.—Orations against Catiline.

1. Decline consul, ager, acies, locus.
2. Compare dignus, malus, acer, prope.
3. What case of the person and what of the thing do you place after—adimere, to take away ; suadere, to persuade ; opus est, there is need ; pœnitere, to repent ; circumdare, to put round ; minari, to threaten ? (Write down the verb with the proper case of aliquis and aliquid, thus dare alicui aliquid.)
4. Mention six Latin perfects formed by reduplication.

## 5. Translate literally,—

“Romani ex improvise pulveris vim magnam animadvertunt, nam prospectum ager arbustis consitus prohibebat. Et primo rati humum aridam vento agitari : post ubi æquabilem manere, et, sicuti acies movebatur, magis magisque adpropinquare vident, cognita re, properantes arma capiunt, ac pro castris, sicuti imperabatur, consistunt. Deinde, ubi propius ventum, utrimque magno clamore concurritur. Numidæ tantummodo remorati, dum in elephantis auxilium putant ; postquam eos impeditos ramis arborum, atque ita disiectos circumveniri vident, fugam faciunt : ac plerique, abjectis armis, collis, aut noctis, quæ jam aderat, auxilio integri abeunt. Elephantum quatuor capti, reliqui omnes, numero quadraginta, interfecti. At Romani, quamquam itinere atque opere castrorum et prælio fessi lassique erant ; tamen, quod Metellus amplius opinione morabatur, instructi intentique obviam procedunt.”

6. In this extract parse fully the words arbustis, cognita, concurritur, opere, opinione.

## 7. Translate literally,—

“Africam initio habuere Gætuli et Libyes, asperi, inculti ; queis cibus erat caro ferina, atque humi pabulum, uti pecoribus. Hi neque moribus, neque lege, neque imperio cujusquam, regebantur : vagi, palantes, qua nox coëgerat, sedes habebant. Sed, postquam in Hispania Hercules, sicuti Afri putant, interiit, exercitus ejus, compositus ex variis gentibus, amisso duce, ac passim multis, sibi quisque, imperium petentibus, brevi delabatur. Ex eo numero Medi, Persæ, et Armenii, navibus in Africam transvecti, proximos nostro mari locos occupavere. Sed Persæ intra oceanum magis : iique alveos navium inversos pro tuguriis habuere, quia neque materia in agris, neque ab Hispanis emendi aut mutandi copia erat : mare magnum et ignara lingua commercia prohibebant. Hi paullatim per connubia Gætulos secum miscuere ; et, quia sæpe, tentantes agros, alia, deinde alia loca petiverant, semet ipsi Nomadas adpellavere.”

8. In this extract parse fully the words pecoribus, cujusquam, transvecti, miscuere, tuguriis.
9. Give the meaning and the derivation of grassor, magistratus, dissensio, saltuosus, inopia, vexillum, aruspex, impedimenta.
10. Hannibal Italiæ opes maxime adtrivit. In what war ? between what dates ? by what battles ?
11. Give the position relatively to Egypt and to one another of Leptis, Cyrene, and the two Syrtes.
12. Translate literally,—

“Itaque, illorum responsis, tunc et ludi decem per dies facti sunt ; neque res ulla, quæ ad placandum Deos pertineret, prætermissa est : iidemque jusserunt, simulacrum Jovis facere majus, et in excelso collocare, et, contra atque ante fuerat, ad Orientem convertere ; ac se sperare dixerunt, si illud signum, quod videtis, solis ortum, et forum, curiamque conspiceret, fore, ut ea consilia, quæ clam essent inita contra salutem Urbis atque imperii, illustrarentur, ut a senatu populoque Romano perspicere possent. Atque illud ita collocandum consules illi locaverunt : sed tanta fuit operis tarditas, ut, neque a superioribus consulibus, neque a nobis ante hodiernum diem, collocaretur.”



13. In this extract parse fully *Deos, majus, inita essent, ortum, superioribus*.

14. Translate literally,—

“Etenim jamdiu, patres conscripti, in his periculis conjurationis insidiisque versamur: sed, nescio quo pacto, omnium scelerum ac veteris furoris et audaciæ maturitas in nostri consulatûs tempus erupit. Quod si ex tanto latrocinio istè unûs tolletur; videbimur fortasse ad breve quoddam tempus curâ et metu esse relevati: periculum autem residebit, et erit inclusum penitus in venis atque in visceribus reipublicæ. Ut sæpe homines ægri morbo gravi, cum æstu febrique jactantur, si aquam gelidam biberint, primo relevari videntur, deinde multo gravius vehementiusque affligantur; sic hic morbus, qui est in republicâ, relevatus istius pœnâ, vehementius, vivis reliquis, ingravescet.”

15. In this extract parse fully *insidiis, pacto, erupit, vehementius, ingravescet*.

16. Give the meaning and the derivation of *talares, præceps, judico, illecebræ, naufragus*.

17. *Ultus est hujus victoriæ crudelitatem postea Sulla*. When? in what way? to what victory is allusion made? and by whom was it won?

18. *Aurelia via*. Whither did this road lead? and through what country?

19. Translate into Latin,—

When the Capuans found themselves blockaded their spirits fell and they again sent an urgent message to Hannibal. In an assault upon the Roman lines he was beaten off with loss. And now only one hope remained. It was possible that if he threatened Rome itself the besieging army might be recalled to defend the Capital. Accordingly he sent the Capuans notice of his purpose by means of a pretended deserter, and the next morning the Proconsuls saw his camp on Mount Tifata empty. They thought probably that he had returned to the South. But they soon discovered the truth from country people, who came in full of horror to tell that Hannibal's wild Numidians and monstrous elephants were in full march for Rome.

## Geology.

WEDNESDAY, 11TH. SEPTEMBER, 1861: 7 P.M. to 9 P.M.

1. State any facts which have been ascertained with regard to variations in the temperature of the crust of the Globe at different depths, and mention any causes which would account for alterations in climate in the same locality at different periods.
2. Enumerate the principal agencies by which modifications of the Earth's crust are produced.
3. Give the meaning of the terms, Dip, Anticlinal, Synclinal, Overlap, Escarpment, Outlier; illustrating your description, if necessary, with sketches.
4. Draw a fault affecting any set of Rocks, on which there lie unconformably newer beds which cover all the ground, and are not affected by the fault.
5. Give definitions of the terms Conglomerate, Breccia, Porphyry, Oolite.
6. Name the ordinary mineral constituents of the following Rocks:—Granite, Syenite, Greenstone, Gneiss, Mica Schist.
7. Upon what principles are stratified Rocks classed?
8. Give the range in time of the following Fossils:—Graptolites, Trilobites, Ammonites, Lingulæ; and point out the earliest appearance of Fishes, Reptiles, Mammals, Birds.
9. Name a few Fossils characteristic of Silurian, Devonian, and Carboniferous Formations.



10. Describe briefly the Carboniferous Formation, enumerating its principal sub-divisions, describing their predominant lithological character, and mentioning any valuable products obtained from them.
11. State two theories explanatory of the formation of Coal.
12. Mention any general characters distinguishing Palæozoic, Fishes, Corals, and Plants, from those in the Neozoic Formations.
13. State and illustrate any resemblance between the Oolitic Fauna of Europe and that still existing in any other part of the World.
14. What is the age of the Nummulitic Limestone?
15. What peculiar climatical conditions existed during Pleistocene times over what are now the temperate regions of the Northern Hemisphere? What proofs have we of it?
16. Mention any Formation in which either of the following Fossils occur :—Labyrinthodon, Ichtyosaurus, Megatherium, Mastodon.

**Greek.—I.**

THURSDAY, 12TH SEPTEMBER, 1861. 9 A.M. to 12 A.M.

HOMER, Iliad, Book I. HERODOTUS, Book II. §§. 1—76.

[N.B.—In parsing a verb state the tense, mood and voice, and give the present, the future, and the perfect, and 2 aorist active, and the perfect passive; if the active voice is not used then whatever present, future, perfect, and aorist are employed. In parsing a noun or an adjective state the case, gender, and number, and give the nominative and genitive singular. All Candidates should attempt Questions 1 and 2 before proceeding. Candidates for Honors who have to present both books are to omit questions 3 and 4 and 10 and 11.]

1. Decline throughout the participle ἐλθών, the adjective βαρύς, these nouns χεῖρ, στόμα, and the pronoun οὗτος.
2. Write down the 2 person sing. Imperative First Aor. Mid. of βουλεύω, 2 Aor. Inf. Act. of δίδωμι, Perf. Inf. Pass. of τύπτω, and the 1st Aor. Imperative Pass. 3rd Person Plur. of θανμάζω.
3. Translate literally—

Καὶ δὴ μοι γέρας αὐτὸς ἀφαιρήσεσθαι ἀπειλείς  
 ὦν ἐπὶ πολλὰ ἑμὸ γήσα, δόσαν δέ μοι ὤϊες Ἀχαιῶν.  
 Οὐ μὲν σοὶ ποτὲ ἴσον ἔχω γέρας, ὅππότε Ἀχαιοί  
 Τρώων ἐκπέρσωσ' ἐνναϊόμενον πολυλίσθρον·  
 Ἀλλὰ τὸ μὲν πλεῖον πολυαΐκος πολέμοιο  
 Χεῖρες ἐμαὶ διέπουσ', ἀτὰρ ἦν ποτὲ δασμὸς ἵκηται  
 Σοὶ τὸ γέρας πολλὸ μείζον, ἐγὼ δ' ὀλίγον τε φίλον τε  
 Ἔρχομαι ἔχων ἐπὶ νῆας, ἐπεὶ κε κάμω πολεμίζων.  
 Νῦν δ' εἰμι Φθίηνδ', ἐπεὶ ἦ πολλὸ φέρτερόν ἐστιν  
 Οἴκαδ' ἵμεν σὺν νηυσὶ κορωνίσιν, οὐδέ σ' οἴω  
 Ἐνθάδ' ἄτιμος ἐὼν ἀφενος καὶ πλοῦτον ἀφύζειν."

4. Parse the verbs in the first four lines of this extract.



## 5. Translate literally—

“Ὡς εἰπὼν ἐν χερσὶ τίθει, ὃ δ' ἐδέξατο χαίρων.  
 Παῖδα φίλην. τοὶ δ' ὤκα θεῶ κλειτὴν ἐκατόμβην  
 Ἐξείης ἔστησαν εὐδμητον περὶ βωμόν,  
 Χερνίφαντο δ' ἔπειτα καὶ οὐλοχύτας ἀνέλοντο.  
 Τοῖσιν δὲ Χρύσης μεγάλ' εὐχέτο, χεῖρας ἀνασχών.  
 “Κλυθὶ μεν, ἀργυρότοξ', ὃς Χρύσῃν ἀμφιβέβηκας.  
 Κίλλαν τε Ζαθέην, Τενέδοιό τε ἴφι ἀνάσσεις.  
 Ἡμεῖν δὲ ποτ' ἐμεῦ πάρος ἔκλυες εὐξαμένοιο,  
 Τίμησας μὲν ἐμὲ, μέγα δ' ἵψαο λαὸν Ἀχαιῶν.  
 Ἦδ' ἔτι καὶ νῦν μοι τόδ' ἐπικρήνηον ἐέλδωρ  
 Ἦδη νῦν Δαναοῖσιν ἀεικέα λοιγὸν ἀμυνον.”

## 6. Parse the verbs in the first four lines of this extract.

## 7. Give the meaning and the derivation of κακκείοντες, ἀμφικύπελλον, ἀργυρόπεζα, χαλκοβατής, ἐκατηβόλος, μέρος.

## 8. Where are these places,—Lemnos, Pylus, Olympus?

## 9. Who were Briareus and Hephaestus? and what is the legend told about each in Homer?

## 10. Translate literally—

λέγεται δὲ αὕτη ἡ πόλις εἶναι μητρόπολις τῶν ἄλλων Αἰθιοπῶν. οἱ δ' ἐν ταύτῃ Δία θεῶν καὶ Διόνυσον μούρους σέβονται, τούτους τε μεγάλως τιμῶσι καὶ σφί μαντήιον Διὸς κατέστηκε. στρατεύονται δ' ἐπεὰν σφεας ὁ θεὸς οὗτος κελεύῃ διὰ θεσπισμάτων καί, τῇ ἄν κελεύῃ, ἐκείσε. Ἀπὸ δὲ ταύτης τῆς πόλιος πλέων, ἐν ἴσῳ χρόνῳ ἤξις ἐς τοὺς Αὐτομόλους, ἐν ὅσῳ περὶ ἐξ Ἐλεφαντίνης ἦλθες ἐς τὴν μητρόπολιν τὴν Αἰθιοπῶν. τοῖσι δὲ Αὐτομόλοις τούτοις οὐνομά ἐστι Ἀσμάχ' δύναται δὲ τοῦτο τὸ ἔπος κατὰ τὴν Ἑλλήνων γλῶσσαν, οἱ ἐξ ἀριστερῆς χειρὸς παριστάμενοι βασιλεῖ.

## 11. Parse the first seven verbs in this extract.

## 12. Translate literally—

ἐν ὁτέοισι δ' ἂν οἰκίοισι αἰέλουρος ἀποθάνῃ ἀπὸ τοῦ αὐτομάτου, οἱ ἐνοικέοντες πάντες ξυρέονται τὰς ὀφρύδας μούνας παρ' ὁτέοισι δ' ἂν κύων πᾶν τὸ σῶμα καὶ τὴν κεφαλὴν, Ἀπάγονται δὲ οἱ αἰέλουροι ἀποθανόντες ἐς ἱρὰς στέγας, ἐνθα θάπτονται ταριχευθέντες ἐν Βουβάστι πόλι' τὰς δὲ κύνας ἐν τῇ ἐνωτῶν ἕκαστοι πόλι θάπτουσι ἐν ἱρήσι θήκησι. ὡς δὲ αὐτως τῇσι κυσὶ οἱ ἰχθυεταὶ θάπτονται. τὰς δὲ μυγαλάς καὶ τοὺς ἱρηκας ἀπάγουσι ἐς Βουτοῦν πόλιν τὰς δὲ ἱβίς ἐς Ἑρμέω πόλιν. τὰς δὲ ἄρκτους εἰούσας σπανίας, καὶ τοὺς λύκους, οὐ πολλὰ τέφ. εἰόντας ἀλωπέκων μέζονας, αὐτοῦ θάπτουσι τῇ ἂν εὐρεθῶσι κείμενοι.

## 13. Parse the first eight verbs in this extract.

## 14. Give the meaning and the derivation of φιλότεκνος, συμβώτης, ἐπέτειος, καταπειρητήρια, ἀμπέλινος, πυρκαϊή.

## 15. Where are Dodona, Arabia, Elephantina.

## 16. What is the story told about Psammitichus? and about Zeus κριοπρόσωπος?

## 17. Mention any six peculiar forms of declension in Ionic as compared with Attic Greek with examples from Homer or Herodotus.

## 18. In what case would you place the governed nouns in each of the following:—Better than I. Take hold of the door. Remember thee. I taught the man a lesson. You gave your brother money. I have a pain in my head.

## 19. Give the above expressions in Greek.

## 20. Show how the following Greek roots appear in English:—σοφ-ος, λογ-ος, φυ-ω, πολυ-ς, χρονο-ς.



## Greek.—II.

SATURDAY, 14TH SEPTEMBER, 1861. 7 P.M. to 9 P.M.

## XENOPHON, Anabasis, Book II.

## 1. Translate literally—

“Ο δὲ δὴ ἔγραψα, ὅτι βασιλεὺς ἐξεπλάγη τῇ ἐφόδῳ, τῇδε δὴλον ἦν. Τῇ μὲν γὰρ πρόσθεν ἡμέρᾳ πέμπων τὰ ὄπλα παραδιδόναι ἐκέλευε, τότε δὲ ἅμα ἡλίῳ ἀνατέλλοντι κήρυκας ἐπειμψε περὶ σπονδῶν. Οἱ δ' ἐπεὶ ἦλθον πρὸς τοὺς προφύλακας, ἐζήτουν τοὺς ἄρχοντας. Ἐπειδὴ δὲ ἀπήγγελλον οἱ προφύλακες, Κλέαρχος, τυχὼν τότε τὰς τάξεις ἐπισκοπῶν, εἶπε τοῖς προφύλαξι κελεύειν τοὺς κήρυκας περιμένειν, ἄχρις ἂν σχολάσῃ. Ἐπεὶ δὲ κατέστησε τὸ στράτευμα ὥστε καλῶς ἔχειν ὁρᾶσθαι πάντῃ φάλαγγα πυκνὴν, τῶν δὲ ἀόπλων μηδένα καταφανῆ εἶναι, ἐκάλεσε τοὺς ἀγγέλους, καὶ αὐτὸς τε προῆλθε, τοὺς τε εὐοπλοτάτους ἔχων καὶ εὐειδεστάτους τῶν αὐτοῦ στρατιωτῶν, καὶ τοῖς ἄλλοις στρατηγοῖς ταῦτα ἔφρασεν.

## 2. Translate literally—

Πρὸς ταῦτα ἀπεκρίναντο οἱ Ἕλληνες, ἔλεγε δὲ Κλεάνωρ ὁ Ὀρχομένιος. “ὦ. κάκιστε ἀνθρώπων Ἀριαῖε καὶ οἱ ἄλλοι, ὅσοι ἦτε Κύρου φίλοι, οὐκ αἰσχύνεσθε οὔτε θεοὺς οὔτ' ἀνθρώπους, οἵτινες, ὁμόσαντες ἡμῖν τοὺς αὐτοὺς φίλους καὶ ἐχθροὺς νομεῖν, προδόντες ἡμᾶς σὺν Τισσαφέρνει τῷ ἀθεωτάτῳ τε καὶ πανουργοτάτῳ, τοὺς τε ἄνδρας αὐτοὺς, οἷς ὤμνυτε, ἀπολωλέκατε, καὶ τοὺς ἄλλους ἡμᾶς προδεδωκότες ξὺν τοῖς πολεμίοις ἐφ' ἡμᾶς ἔρχεσθε.” Ὁ δὲ Ἀριῖος εἶπε. “Κλέαρχος γὰρ πρόσθεν ἐπιβουλεύων φανερὸς ἐγένετο Τισσαφέρνει τε καὶ Ὀρόντῳ καὶ πᾶσιν τοῖς ξὺν τούτοις.”

## 3. Parse the following verbs:—ἀποτμηθέντες, κατεγέλα, ἔζευγμένην, χαρίζονται, ὠπισθοφυλάκει, διεσπάρθαι.

## 4. Give the derivation and the meaning of πιστός, ἀδιάβατος, εὐεργέτης, φιλοφρονούμενος, αὐτομολεῖν, ῥαθυμεῖν.

## 5. Give accurately the geographical position of Boeotia, Opus, Thessaly, the Isthmus, Leontini, Orchomenus.

## 6. Give the nominative and the genitive, and name the case of προῖοῦσι, πλείους, κέρατι, γεγονότες, μέγαν, ἐπίχαρι.

## 7. Translate—

καὶ ὑποδομήσαν τῇ ἐκείνου γνώμῃ τὸ πάχος τοῦ τείχους ὅπερ νῦν ἔτι δὴλόν ἐστι περὶ τὸν Πειραιᾶ· δύο γὰρ ἅμαξαι ἐναντία ἀλλήλαις τοὺς λίθους ἐπῆγον· ἐντὸς δὲ οὔτε χάλιξ οὔτε πηλὸς ἦν, ἀλλὰ ξυνοικοδομημένοι μεγάλοι λίθοι καὶ ἐν τομῇ ἐγγώνιοι σιδήρῳ πρὸς ἀλλήλους τὰ ἔξωθεν καὶ μολύβδῳ δεδεμένοι. τὸ δὲ ὕψος ἡμῖν μάλιστα ἐτελέσθη οὐ διανοεῖτο. ἐβούλετο γὰρ τῷ μεγέθει καὶ τῷ πάχει ἀφιστάναι τὰς τῶν πολεμίων ἐπιβουλὰς ἀνθρώπων τε ἐνόμιζεν ὀλίγων καὶ τῶν ἀχρειοτάτων ἀρκέσειν τὴν φυλακὴν τοὺς δ' ἄλλους ἐς τὰς ναῦς ἐσέχεσθαι.

## 8. Give the precise English equivalents for μὴ ποίει—τὸ ποιῆσαι—οὔποτε ποιήσω—ποιήσεαι ἂν—οὔπω ποιήσωμεν—οὐ μὴ ποιήσωμεν.

## 9. Give the Greek for—They were marching ten days. He was able to do these things. It is permitted you to depart. Whoever marches with me will receive the same pay. He was glad to receive this, being worth very much.

## 10. Give the meaning and the derivation of the following grammatical words:—Grammar, Syntax, Aorist, Ellipse, Asyndeton, Heteroclite.



**English Language.**

THURSDAY, 12TH SEPTEMBER, 1861. 2 P.M. to 5 P.M.

1. Give Morell's definitions of the following terms:—Language, an Adjective, a Preposition, a Sentence.
  2. Furnish three examples of each of the following classes of words:—Rational Class Names, Names of Actions, Compound Relative Pronouns, Adverbs of Probability.
  3. Give a tabular classification of Conjunctions; explain the words you employ, and give one example of each class.
  4. In any alphabet when do you call letters redundant? Name the redundant letters of the English alphabet, and show that they are so.
  5. Name the mutes. Which of them are sharp? And which of them guttural?
  6. When do you call a verb Irregular? Into how many classes are Irregular Verbs divided, and how do you distinguish these classes?
  7. What is the meaning of the following terminations: -et, -en, -tude, -fold? To what language does each belong? To what kind of words is it appended? And what kind of words does it form?
  8. Are derivatives ever made without adding to the root? If so, how? And give examples of the process.
  9. "In a word, whatsoever convenience may be thought to be in falsehood and dissimulation, it is soon over; but the inconvenience of it is perpetual, because it brings a man under an everlasting jealousy and suspicion, so that he is not believed when he speaks truth nor trusted when perhaps he means honestly."  
Analyse this sentence according to Morell's second and third schemes.
  10. Give six examples of words illustrative of the saying that "Language is fossil Poetry."
  11. Give six examples of words the signification of which has deteriorated.
  12. Give the etymology of these words—simple, quarrel, bayonet, library, bishop, palsy, palliate, allegiance, derive, wrong.
  13. Give the history of the words church, tariff, alligator, mob, classic, disaster.
  14. Distinguish between invention, discovery; felicitate, congratulate; discernment, discretion.
  15. Write an account of a boat such as would convey a clear notion of its form, construction, and utility to a person who had never seen one.
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## Mathematics.—I.

FRIDAY, 13TH SEPTEMBER, 1861. 9 A.M. to NOON.

1. Prove that if two triangles have two sides of the one equal to two sides of the other, each to each, but the angle contained by the two sides of the one of them greater than the angle contained by the two sides equal to them of the other, the base of that which has the greater angle shall be greater than the base of the other.
2. Prove that if the square described upon one of the sides of a triangle be equal to the squares described upon the other two sides of it, the angle contained by these sides is a right angle.
3. Prove that if a straight line be bisected and produced to any point, the rectangle contained by the whole line thus produced and the part of it produced, together with the square of half the line bisected, is equal to the square of the straight line which is made up of the half and the part produced.
4. Draw a straight line from a given point, either within or without the circumference, which shall touch a given circle.
5. Describe an isosceles triangle having each of the base angles double of the third angle.
6. Give Euclid's definitions of a right angle: a circle: straight lines equally distant from the center of a circle: an oblong: a tangent to a circle: a complement of a parallelogram.
7. What do you mean by the Greatest Common Measure of two or more numbers? Find that of 2541, 58191, and 87.
8. Reduce to its simplest form—

$$\frac{\frac{1}{2} + \frac{1}{4} + \frac{1}{6}}{1 + \frac{1}{3} + \frac{1}{5}} - \frac{\frac{1}{8} + \frac{1}{10} + \frac{1}{12}}{\frac{1}{7} + \frac{1}{9} + \frac{1}{11}}$$

9. Multiply and divide 3·17096 by 47·39208.
10. Find the square root of 63·541 to five places of decimals.
11. What decimal of a pound is  $\frac{2}{3}$  of 16s. 4½d.?
12. At the close of this day what decimal of a year will there be still remaining to the present year.
13. Find by actual multiplication the fourth power of  $x + 2y - 3z$ .
14. Divide  $x^5 + 32y^{10}$  by  $x + 2y^2$ .
15. Find the value of  $\left\{ \sqrt{a^3 b^3 c^3 (ac^2 + 2b^2 c + a^2 b)} \right\}^5$  when  $a=4$ ,  $b=2$ ,  $c=1$ .
16. Solve the following Equations:—

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

17. Of the Candidates who present themselves for an examination, one-seventh are rejected. The remainder are distributed into three classes. The number in the first class is one-third of that in the second and the third put together and exceeds by two the number of the rejected. Had the number in the second been one more, and that in the third one less, they would have been equal.

Required the total number of Candidates, the number of those rejected, and that in each class.

18. In an arithmetical series the fifth term is the square of the second, and the sixth term diminished by unity is twice the third term:

Find the first term of the series and the common difference.



## Mathematics.—II.

FRIDAY, 13TH SEPTEMBER, 1861. 2 P.M. to 5 P.M.

1. The side walls of a room are 30 feet 6 inches long, and the end walls 20 feet 9 inches, and the height to the ceiling is 17 feet 4 inches. Find the number of cubic yards of air in the room.
2. In the last example, assuming the weight of 100 cubic inches of air to be 30.5 grains, find the weight of air in the room, by Avoirdupois Weight.
3. Explain clearly what is meant by a Logarithm. Show in what way Logarithms to one base may be converted to Logarithms to another base.
4. In your tables you find opposite to the number 35723 the figures 5529479, and opposite to 35724 the figures 5529601. In the adjoining column you find—

|      |    |
|------|----|
| Pro. |    |
| 122  |    |
| 1    | 12 |
| 2    | 24 |
| 3    | 37 |
| 4    | 49 |

Find the Logarithms of 35.72343 and of 3.572331.

5. In a school there are 10 boys in the sixth form, 20 in the fifth, and 30 in the fourth. In how many different ways could you choose an eleven, so as to have 3 from the sixth form and 4 from each of the others?
6. What is a Series in Geometrical Progression? Show that if each term in such a Series be subtracted from the following term, the successive differences will be in Geometrical Progression.
7. Write down the middle term of  $(a^{\frac{1}{2}} - x^{\frac{1}{2}})^{12}$ ; and the 5th term of  $(x + \frac{1}{x})^6$
8. Find two numbers such that their sum is 39 and the sum of their cubes 17199: also a number such that its cube added to its square is 9 times the number next above it.
9. Solve the following Equations :

$$(1.) \quad \frac{\sqrt{x^2 - 16}}{\sqrt{x - 3}} + \sqrt{x + 3} = \frac{7}{\sqrt{x - 3}}$$

$$(2.) \quad x^2 + \frac{1}{x^2} - a^2 - \frac{1}{a^2} = 0$$

10. Prove that if two triangles have one angle of the one equal to one angle of the other, and the sides about the equal angles proportionals, the triangles are equiangular, and have those angles equal which are opposite to the homologous sides.
11. Prove that if from any angle of a triangle a straight line be drawn perpendicular to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.
12. Hence find the area of a triangle in terms of the sides and the radius of the circumscribed circle.
13. Prove that if three straight lines all meet in a point, and a straight line stands at right angles to each of them at that point, the three lines are in one and the same plane.
14. Define a cone, a sphere, parallel planes, a pyramid.
15. Given  $\cos. A = c$ , find  $\sin. A$ ,  $\tan. A$ ,  $\sin. (180 - A)$ ,  $\cos. (180 + A)$ ,  $\cos. (90 - A)$
16. Prove that  $\tan. (45 - A) = \sqrt{\frac{1 - \sin. 2 A}{1 + \sin. 2 A}}$
17. Given  $a$  and  $b$  two sides of a triangle, and  $C$  the angle between them. Find the area.
18. Hence calculate the number of acres, roods, and perches in a parallelogram, two sides of which are half a mile and a quarter of a mile respectively, and the included angle  $45^\circ$ .



**Natural Philosophy.**SATURDAY, 14<sup>TH</sup> SEPTEMBER. 10 A.M. to NOON.

1. When do you call a body elastic? Describe an experiment by which the elasticity of ivory balls is proved.
  2. What particular kind of attraction is called adhesion? Describe an experiment by which its existence is shown and draw a diagram to illustrate your description.
  3. A mass of lead weighs, at the surface of the earth, 1000 pounds. If carried to the moon what attraction would the earth exercise on it? Prove your answer, assuming the radius of the earth to be 4000 miles and the distance of the moon 240,000 miles.
  4. Explain why a beam may bear a heavier weight if a portion of its center be removed.
  5. What is the meaning, in Natural Philosophy, of the name "crystal." Enumerate, and distinguish the various systems of crystals.
  6. What is the unit of pressure adopted in England? How many such units make a pound Troy? how many a pound Avoirdupois?
  7. "A point will be kept at rest if acted on by three pressures, represented in magnitude and in direction by the three sides of a triangle taken in order." Explain fully what is meant by this proposition, and state the proposition on which it depends.
  8. Find the position of the centre of gravity of a leaf of a dining table of mahogany, of uniform density, 4 feet long, 3 feet wide, and 1 inch thick.
  9. A body weighs in one scale 9 pounds, in the other 8 pounds, what is the true weight of the body?
  10. Of which mechanical power is the steelyard an example? Describe its construction.
  11. Distinguish between a spur wheel, a crown wheel, an annular wheel, and a bevil wheel.
  12. Write down the three Laws of Motion.
  13. A stone is dropped from the top of a cliff, and is observed to strike the surface of the sea in  $5\frac{1}{2}$  seconds. Required the height of the cliff.
  14. Why is the flight of a round bullet from a smooth bore gun uncertain? How is this remedied?
  15. Describe the gridiron pendulum. What is the object of it?
  16. What are the laws concerning pressure on fluids?
  17. What is meant by the specific gravity of a substance? By what method may the specific gravity of a substance heavier than water be ascertained?
  18. Write down as nearly as you can—
    1. Number of Pounds required to break an iron wire  $\frac{1}{16}$ th of an inch in diameter.
    2. " " to change the shape of an inch cube of malleable iron.
    3. Length of the seconds' pendulum at London.
    4. Specific gravity of Gold.
    5. " of Oak.
    6. " of Marble.
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**Drawing and Architecture.—I.**

SATURDAY, 14TH SEPTEMBER, 1861.

9 A.M. to NOON.

1. Draw the annexed Plan and Elevation, to a scale of four feet to one inch.
2. Make a careful Sketch, from memory, of a bush cart, laden with firewood in logs. Suppose the shafts to be propped up, and the spectator standing so as to see the front and side of the object.
3. Design, in pen and ink, an arrangement of vine leaves and fruit, suitable for an ornamental border; a portion only of one side and end. Show particularly the treatment of the subject at the angle.

NOON to 1.30 P.M.

1. What may the Science of Architecture be considered to comprehend?
2. From whom did the Romans derive their knowledge of Architecture?
3. What is an Arch?
4. Illustrate the method of striking the following Arches:—the semicircular, segmental, and equilateral pointed.
5. Name the three principal Orders; state to what Architecture they belong, and how they are respectively distinguished.
6. Give the *essential* divisions and the subservient parts of each in a complete Order.
7. Explain the term 'Module' and its use in reference to the Orders.
8. What is a Portico? and explain, in reference thereto, the following terms:—*tetrastyle*, *hexastyle*, and *octostyle*.
9. Into how many periods or styles may English Mediæval Architecture be divided? name them in order of succession.
10. What are the principal features of Gothic Architecture?
11. What is meant by the Byzantine Architecture and to what era does it refer?
12. Who was Palladio? When and where did he flourish?

**Drawing and Architecture.—II.**

SATURDAY, 14TH SEPTEMBER, 1861. 2 P.M. to 5 P.M.

1. Explain what is meant by the terms "horizontal line" and "vanishing point."
2. How many kinds of Angles are there?
3. What is a Superficies?
4. What is a Cube?
5. Is it the purpose of Art to represent objects as they are, or as we see them?
6. How do you measure relative distances from the eye? Illustrate the principle in drawing a Cube. How do right angles appear when seen obliquely? Give an example.
7. Under what circumstances do you see a Circle in its true form? Take a tumbler and prove the example, and show when the apparent form of a Circle differs from its real form.
8. When does it appear only as a straight line?
9. Explain the difference between Shade and Shadow.
10. When Shades and Shadows increase in depth, is that increase gradual or sudden?
11. What form does a cast shadow portray?
12. Why may Painting be compared to Language?
13. What is Imitation? Give an instance.
14. Can any picture be good which deceives by its imitation?
15. Are ideas of Beauty the subject of Moral or Intellectual perception?
16. What is the meaning of the term "Execution?" Explain some of the qualities which are dependent upon Execution.
17. What are Space and Size dependent on, and what destroys them?
18. Make copies of the objects placed before you.





*Tasmanian Council of Education, Hobart Town,  
12th March, 1861.*

THE Council of Education have directed the publication of the following Scheme of Examination for the Degree of Associate of Arts for the Year 1862.

The Conditions upon which the Degree is granted, and Honours and Prizes are awarded, are also published for general information.

By Order of the Council,

MURRAY BURGESS, *Secretary to the Council.*

*SKETCH of the Examination for the Degree of ASSOCIATE OF ARTS for the Year 1862.*

ENGLISH.—The Candidate will be examined in the Etymology and Grammatical construction of the Language; in English History, from the Accession of Henry VIII. to death of Charles II.; and will be required to write a short original Composition, or a Report founded upon some abstract of facts furnished to him. He will also be examined in Physical, Commercial, and Political Geography. Books recommended: Trench's English; Past and Present, (3s. 6d., Parker) Morell's Grammar and Analysis with the Exercises, (3s. 6d., Constable) Cornwell's School Geography, (3s. 6d., Simpkin & Co.) and Hughes's Physical Geography, (3s. 6d., Longman.)

LATIN.—Virgil, *Æneid*, Book II., Horace, Odes, Books III. and IV.; and Livy, Book XXI. Questions will also be given on the parsing, and the historical and geographical allusions. A passage for translation from some other Latin author; and a passage of English for translation into Latin.

GREEK.—Xenophon's *Anabasis*, Book IV.; Homer's *Iliad*, Book IV.; and Euripides *Hecuba*. Questions on the parsing and the historical and geographical allusions. A passage for translation from some other Greek author.

FRENCH.—Passages will be given from Voltaire's *Charles the XII.* and Madame de la Rochejaquelein's *Memoirs of the Vendean War*, for translation into English; with questions on parsing, and the historical and geographical allusions. Also a passage from some other French author for translation into English, and from some English author into French.

GERMAN.—Passages will be given from Schiller's *Revolt of the Netherlands*, or *Wallenstein*, with questions on the parsing and the historical and geographical allusions; also a passage from some other German author for translation into English, and from an English author into German.

ITALIAN.—Candidates in this Section will be examined in Silvio Pellico, with questions on the parsing, and grammatical construction; also a passage from some other Italian author for translation into English, and from an English author into Italian.

PURE MATHEMATICS.—Questions will be set in Euclid, Books I. II. III. IV., Arithmetic, and Algebra. Candidates for Honours will be required to satisfy the Examiners in Euclid, Books VI. and XI., as far as proposition xxi., Plane Trigonometry, the use of Logarithms, and Mensuration.

NATURAL PHILOSOPHY.—The Candidate must be prepared to answer questions set in Newth's first Book of Natural Philosophy.

CHEMISTRY.—The Candidate will be examined in Inorganic Chemistry. Book recommended: Wilson's Chemistry, (3s., Chambers' Educational Course.)

ZOOLOGY AND BOTANY.—Elementary questions will be set on the description and classification of animals, their habits and geographical distribution; and on the mercantile and industrial uses of animal



products. Also, the description and classification of plants, their uses, and geographical distribution. Plants, and parts of plants, will be given for description. Text Books: Milne Edwards's Zoology, (7s. 6d., Renshaw) and Lindley's Elements of Botany, (12s., Bradbury).

**GEOLOGY.**—The Candidate will be examined in Page's Introductory Text Books of Geology, (5s., Blackwood).

**DRAWING AND ARCHITECTURE.**—Drawing from the Flat, from Models, from Memory, and in Perspective, and Drawing from Plans, Sections, and Elevations. Design in Pen and Ink and in Colour. A fair degree of skill in freehand drawing will be required in order that a Student may pass in this section.

## PRELIMINARY EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

Previously to the examination for the Degree of Associate of Arts, every Candidate will be required to satisfy the Examiners in—

1. Reading aloud a passage from some English prose author.
2. Writing from dictation.
3. The Analysis and Parsing of a passage from some standard English author.
4. The first four Rules of Arithmetic, Simple and Compound.
5. Geography. Under this head a competent knowledge will be required of the chief ranges of mountains, the principal rivers, the principal towns, and the coast-line of one or more of the countries in the following list:—England, Scotland, Ireland, Europe, Asia, Africa, North America, South America, Australasia.
6. The outlines of English History since the Conquest; that is to say, the succession of Sovereigns, the chief events, and some account of the leading men in each reign.

## EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

The examination for those Students who have satisfactorily passed the preliminary examination will comprise the subjects mentioned in the following ten sections, in four of which at least, Latin or Pure Mathematics being one, the Candidate must satisfy the Examiners:—

- |                               |   |
|-------------------------------|---|
| 1. English.                   | 6. The Elementary Principles of Hydrostatics and Mechanics. |
| 2. Latin.                     | 7. The Elements of Chemistry.                               |
| 3. Greek.                     | 8. Zoology and Botany.                                      |
| 4. French, German or Italian. | 9. Drawing and Architecture.                                |
| 5. Pure Mathematics.          | 10. Geology.  |

## PRIZES.

1. Prizes of the value of £20 each, to consist of the Council's Gold Medal and Books of the value of £10, will be awarded to those Candidates who most distinguish themselves in the following subjects:—(1.) English. (2.) Latin. (3.) Greek; and (4.) Mathematics. These Prizes, however, will not be awarded to any Candidate who shall not be placed by the Examiners in the First Class of the Associate of Arts.

2. Second Prizes of Books, of the value of £5 each, will, at the discretion of the Examiners, be also given in the above four-mentioned subjects.

3. Subject to the stipulations laid down in Clause 1, the Council's Gold Medal will be awarded to the Candidate who shall most distinguish himself in some one of the subjects in Section 4, French, German, or Italian. It is clearly to be understood, however, that only one Medal will be awarded for the Section, which will be gained by the Candidate who displays the highest proficiency in the language in which he submits himself to be examined.

4. Prizes of the value of £5 each will, at the discretion of the Examiners, be awarded to the Candidates who most distinguish themselves in Sections 6, 7, 8, 9, and 10; namely,—the Elementary Principles of Hydrostatics and Mechanics; the Elements of Chemistry, Zoology, and Botany; Drawing and Architecture; Geology. In the event of any Candidate being specially recommended by the Examiners as displaying a high order of proficiency in one or other of the above subjects, the Council will be prepared to award their Gold Medal to such Candidate.