(No. 41.)



1885.

## PARLIAMENT OF TASMANIA.

## ASSOCIATE OF ARTS DEGREE:

REPORT FOR 1884.

Presented to both Houses of Parliament by His Excellency's Command.



### TASMANIAN COUNCIL OF EDUCATION.

### DEGREE OF ASSOCIATE OF ARTS, DECEMBER, 1884.

**T**N conformity with the Rules and Regulations of the Tasmanian Council of Education, the Council has directed the publication of the names of the under-mentioned Candidates who have passed the Examination for the Degree of Associate of Arts to the satisfaction of the Examiners, and upon whom the Degree has been conferred accordingly :--

### FIRST CLASS.

WALTER THOMAS PRICE. JOHN THOMAS WILSON. JAMES EDWARD MILES ROCHE. BEATRICE MARY HUDSPETH. JOHN ROBERTS ALLPORT.

SECOND CLASS.

Walter John Johnstone. Charles Ernest Kean.

### THIRD CLASS.

REGINALD MAURICE RITCHIE. HAROLD HALE. CAROLINE WEBSTER SMALLHORN. MINA CLARE TWENTYMAN.

By Order of the Council,

GEORGE RICHARDSON, Secretary.

Hobart, December, 1884.

### TASMANIAN COUNCIL OF EDUCATION.

Examination for the Degree of Associate of Arts, December, 1884.

#### EXAMINERS' REPORT.

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

HAVING concluded the Examination for the Associate of Arts Degree, we have now the honour to present to you our Report.

The Examination began on Thursday, December 4, and was continued till Saturday, December 13.

Eighteen Candidates presented themselves, of whom 4 were females. One of the Candidates. was over 19, and therefore in the following reports and averages no account is taken of his work.

I. ENGLISH HISTORY AND GEOGRAPHY.—Seventeen Candidates presented themselves. All passed; four with credit. Full marks, 1100. Highest obtained, 835. Average obtained, 659. In these subjects a large amount of solid useful information was displayed by nearly all the Candidates; but in each department of them W. T. Price and Beatrice Mary Hudspeth stand pre-eminently first.

II. LATIN. - Fourteen Candidates. Nine passed; one with credit. Full marks, 800. Highest obtained, 545. Average, 439.

The average this year is rather low, chiefly owing to the large number of those who failed to pass altogether. Nevertheless several very creditable papers were sent up; those of Wilson are particularly deserving of honourable mention.

III. GREEK.—Nine Candidates. Six passed; one with credit. Full marks, 800. Highest obtained, 534. Average, 453.

The answers to the questions on this subject by the several Candidates correspond very closely in merit with those in Latin, saving that in the unprepared passages Roche and Price exhibited greater command over the language than Wilson, although the last has a minuter acquaintance with its details.

IV. FRENCH.-Seventeen Candidates. Twelve passed; three with credit. Full marks, 550. Highest obtained, 444. Average, 317. Here again the average is somewhat low, notwithstanding the very high marks obtained by Beatrice Hudspeth and by Wilson.

V. GERMAN.-Four Candidates. All passed; with credit, one. Full marks, 550. Highest obtained, 422. Average, 300. All the Candidates did well in the questions on the Grammar, but the translations, except by Beatrice Hudspeth, were inferior. Miss Hudspeth's paper is excellent, displaying much thoroughness and scholarship combined with style.

VI. ITALIAN.-Eight Candidates. Seven passed; with credit, two. Average, 326. The papers of Beatrice Hudspeth and Price were very creditable, showing a good knowledge of the language, especially in the translations from English into Italian. Caroline Smallhorn's translation at sight of Italian prose was the best.

VII. PURE MATHEMATICS.—Presented by 17. Passed, 13; with credit, 5. Full marks, 1000. Highest obtained, 636, by Wilson. Average, 397.

VIII. NATURAL PHILOSOPHY.—Presented by 2. Both passed; one with credit, being Wilson. Full marks, 250. Highest obtained, 132. Average, 112.

IX. CHEMISTRY.—Presented by 9. Passed, 5; with credit, 2. Full marks, 125. Average, The work has been carefully studied, but bears traces of a want of experimental knowledge; 115. as, for instance, when phosphorus is described as a gas.

X. GEOLOGY .- Presented by 3. Passed, 2, both with credit,-viz., Anderson and Price.

XI. DRAWING.—Three candidates. All passed; one with credit. The drawings from the "Flat" were exceptionally good, particularly those of Mina Clare Twentyman and Roche. From the plaster model Roche deserves mention, and Caroline Smallhorn also in outline; but the latter's attempt at shading is very inaccurate. Roche is also best in perspective, and is recommended for a prize.

XII. MUSIC.—Two candidates. Both passed with credit. Full marks, 400. Highest obtained, 370. Average, 315.

On adding together the number of Marks obtained by the Candidates in the several subjects presented by them, it was found that the following were classifiable in this order :---

·	Marks.
FIRST CLASS.— Price, W. T	3611
Wilson, J. T.	311 <b>3</b>
Roche, J. E. M	
Hudspeth, Miss B. M.	2787
Allport, J. R.	2358
SECOND CLASSJohnstone, W. J.	2314
Kean, C. E	2231
THIRD CLASS.— Ritchie, R. M.	1856
Hale, Harold	1662
Smallhorn, Miss C. W.	1462
Twentyman, Miss M. C.	1460

The following Table shows how this Examination bears comparison with former years :---

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	No. of Candidates.	Rejected at Pre- liminary.	Admitted to A.A. Examination.	Passed.	First Classes.	Second Classes.	Third Classes.	Highest Marks ohtained.	Average of all who passed.	Highest Marks yet gained.	Highest Average yet reached.
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883	11       14       17       12       18       18       25       21       17       24       13	0 2 1 0 2 0 2 0 0	$     \begin{array}{r}       11 \\       12 \\       16 \\       12 \\       18 \\       16 \\       18 \\       25 \\       20 \\     \end{array} $	$ \begin{array}{c} 9\\10\\13\\9\\14\\15\\16\\22\\18\\15\\13\\10\\\end{array} $	3 4 5 10 8 14 10 9 7 6	1 1 7 5 3 5 7 2 5 4 2 3	5 5 1 0 3 0 1 6 3 2 4 1	2821 3295 3082 3442 3308 3631 3611 3573 4069 3384 3221 3217	2075 2228 2357 2565 2511 2532 2532 2532 2532 2536 2475 2288 2530	Ë.	in

\* Average, 1860-1871.

The Prizes which by the Council's Regulations must be awarded, are :-

nos which by the obtained income materies awarded, are.
The Council's Gold Medal W. T. Price.
First Prize for English W. T. Price.
First Prize for Latin J. T. Wilson.
First Prize for Greek
First Prize for French Beatrice M. Hudspeth.
First Prize for German Beatrice M. Hudspeth.
First Prize for Italian Beatrice M. Hudspeth.
First Prize for Mathematics J. T. Wilson.
llowing Prizes, which are by the Council's Regulations left to the discretion of the

The following Prizes, which are by the Council's Regulations left to the discretion of Examiners, have been thus awarded :---

Second Prize for English	Beatrice M. Hudspeth.
Second Prize for French	
Second Prize for Italian	W. T. Price.
Second Prize for Mathematics	W. J. Johnstone.
Prize for Geology	W. T. Price.
Prize for Drawing	J. E. M. Roche.
Prize for Music	Beatrice M. Hudspeth.
	1

SPECIAL PRIZE.

Silver Medal as Senior Female Associate of the year .... Beatrice Mary Hudspeth.

Full Tables of the results will be found appended to this Report.

For the Examiners,

Hobart, December, 1884.

J. E. BROMBY, D.D., Chairman.

### EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS, 1884.

### GENERAL CLASS LIST.

AGE. No. NAME. MARKS. AWARDS. 1 Sept. 1884 yrs. mths. Council's Gold Medal. First Prize for English. Second Prize for Italian. Prize for Geology. First Prize for Latin. First Prize for Greek. First Prize for Mathematics. Second Prize for French. Prize for Natural Philosophy Council's Gold Medal. 1 Price, Walter Thomas..... 16 5 3611 2 Wilson, John Thomas..... 3113 15 9 Second Prize for Frencn. Prize for Natural Philosophy. Prize for Drawing. Council's Silver Medal as Senior Female Associate of Roche, Ja Miles 3 James Edward 17 2 3074 the year. First Prize for French. First Prize for German. 4 Hudspeth, Beatrice Mary 17 8 2787 First Prize for Italian. Second Prize for English. Prize for Music. Allport, John Roberts..... 5 17 2 2358 CLASS. SECOND 6 Johnstone, Walter John...  $15 \ 11$ 2314 Second Prize for Mathematics. Kean, Charles Ernest 18 7 8 2231 THIRD CLASS. 8 Ritchie, Reginald Maurice 18 1 1856 9 Hale, Harold ..... 17 5 1662 Smallhorn, Webster 10 Caroline 18 6 146211 Twentyman, Mina Clare 18 11 1460

FIRST CLASS.

Hobart, December, 1884.

J. E. BROMBY, D.D., Examiner-in-Chief.

# SPECIAL CLASS LIST.

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								s			
English.	Latin.	Greek.	French:	German.	Italian.	Mathematics.	Natural Philosophy.	Chemistry.	Geology.	Drawing.	Music.
FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FINST CLASS.
Price Hudspeth, Miss Wilson	Wilson	Wilson	Hudspeth, Miss Wilson Smallhorn, Miss	Hudspeth, Miss	Hudspeth, Miss Price	Wilson Johnstone Price	Wilson	Ritchie	Price	Roche	Hudspeth, Miss Twentyman,Mis
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-											
SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS
Roche	Price Roche Twentyman,Miss Ritchie Kean	Roche Price Kean Allport Johnstone	Roche Ritchie Hale Price Kean	Roche Price	Smallhorn, Miss Roche Allport Kean	Aliport Hudspeth, Miss Ritchie Roche Hale	Price	Price Keen Wilson	None	Smallhorn, Miss Twentyman,Miss	None
Smallhorn, Miss Fwentyman, Miss	Johnstone Allport Hale	Jonne 1	Johnstone Allport			Twentyman, Miss					-
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Hobart, December, 1884.

J. E. BROMBY, D.D., Examiner-in-Chief.

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## TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION for the Degree of Associate of Arts, December, 1884.

No.	NAME.	DATE OF BIRTH.	SCHOOL.	TEACHER. [Maximum No. of Marks	1100 English.	8 Latin.	Greek.	2 French.	German.	<b>2</b> 1talian.	<ul> <li>Pure Mathe-</li> <li>matics.</li> </ul>	<ul> <li>Natural</li> <li>Philosophy.</li> </ul>	0 Chemistry.	Ceology.	<b>5</b> Drawing.	<b>400</b> <i>Music.</i>	TOTAL.	CLASS.
1	Price, Walter Thomas	4 Apr. 1868	Horton College	W. W. Fox, Esq., B.A.	835 c	524	462	200	262	383 c	528 c	92	 99	136			3611	First.
2	Wilson, John Thomas .	27 Nov. 1868	Church Grammar	Rev. W. H. Savigny, M.A.	776 c	545 c	534 c	400 c			636 c	132 <i>c</i>	90				3113	First.
3	Roche, James E. M.	23 July, 1867	School, Launceston High School	E. Edmondson, Esq.	690 ·	469	505	344	274	316	289	_	n.p.	_	187 c		3074	First.
4	Hudspeth, Beatrice Mary	11 Jan. 1867	Ladies' College	Miss Moss	829 c	_		444 c	422 c	400 c	352			_	—	370 c	2817	First.
5	Allport, John Roberts	18 July, 1867	Horton College	W. W. Fox, Esq., B.A.	<b>551</b>	399	417	266	-	, 313	412	_	_	n.p.		-	2358	First.
6	Johnstone, Walter John	8 Oct. 1868	Church Grammar	Rev. W. H. Savigny, M.A.	694	420	366	267	—	—	567 c	_	n.p.	_	_	_	2314	Second.
7	Kean, Charles Ernest	7 Jan. 1866	School,Launceston High School	E. Edmondson, Esq.	721	439	434	283		263	n.p.		91		_		2231	Second.
8	Ritchie, Reginald M.	11 Aug. 1866		Rev. W. H. Savigny, M.A.	624	454	-	296			341	—	141 c		_	_	1856	Third.
9	Hale, Harold	27 Mar. 1867	School, Launceston Hutchins' School	Rev. J. V. Buckland, B.A.	719	36 <b>7</b>	-	290			286	_		_			1662	Third.
10	Smallhorn, Curoline W.	15 Mar. 1866	Private	Miss Oldham	580	-	-	386		344	n.p		_	_	152	_	1462	Third.
11	Twentyman, Miss Clare	1 Oct. 1865	Private	Mrs. Twentyman	ō77	—		311		_	200			_	112	260	1460	Third.

TABLE OF MARKS.

Hobart, December, 1884.

NOTE. -c passed with credit. n.p. not passed.

J. E. BROMBY, D.D., Examiner-in-Chief.

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#### EXAMINATION PAPERS.

### Etalian.

### Four hours. REV. T. KELSH, Examiner.

1. Translate--

La prigion fu sì bella ove si pose

L'alma gentil, sì fece agli occhi forza

Ch' altri fermossi a risguardar la scorza

E non l'interne sue bellezze ascose.

Ma poichè il verno *fe*' sparir le rose, E il lume de' begli occhi omai s'ammorza,

Quel chiaro spirto il suo vigor rinforza

E mostra gioje che sin qui nascose. Quindi modestia e cortesia si scorge

E dell'altre *mirtudi* il sacro coro

Che quaggiù valor dona e grazia porge.

Cieco è ben chi non vede il bel tesoro.

Io ringrazio il destin che a ciò mi scorge;

E s'amai prima il corpo, or l'alma adoro.

2. Parse the words in italics.

3. Give the rules for abbreviating bello - grande - santo - quello - uno - buono.

- 4. Explain and illustrate by examples the different meanings of certo galante propriobuono - gentile - povero - according as they are placed before or after the noun.
- 5. Write out the Determinate Preterite Indicative of Procurarselo Rendervisi Fuggirsene -Pentirsi.
- 6. When do the conjunctive pronouns mi ti ci vi si precede the reflective verb, and when are they used as suffixes?
- 7. Give instances of peculiar meanings of the preposition tra.
- 8. Translate-

Bartolo era marito da render contenta la giovinetta sua sposa, nè mancavale mai di quelle finezze e di que' riguardi che son cari alle donne, specialmente tenendola in quell'onore, e in quella dignità che mostrasse in pubblico quant' egli apprezzassela e avessela cara. Ma l'ozio, in che vivea nella casa del suocero, gli fu quasi cagione di perdersi ; poichè fra i recenti amici, che pel novello suo stato, ebbe occasione d'amnettere in casa, ve n'ebbe di quelli che trascinaronlo sovente per vie piene di pericoli e di rimorso. Che se si tenne saldo nell'interno del cuore a certi principii in esso ben radicati di quella fedeltà a'suoi più delicati doveri di cittadino, che li furono seminati dalla probità di suo padre, molti altri ne dimenticò, o mise in non cale a suo gran danno e disdoro. La giovanile baldanza si getta alcuna volta in certi varchi, dai quali si crede uscire a sua voglia, e non s'avvede che tardi d'essere arreticata in forti maglie che le si serrano addossa quando meno s'avvisa. E non di rado avvenne, ch'egli dovesse e al consiglio e al senno della sua donna l'uscirne netto, perchè ella passati i primi anni del matrimonio, misesi alla magnanima impresa di rattenere le avventataggini e le sciocche valenterie del marito.

9. Parse le si serrano - arreticata - s'avvisa - l'uscirne - avessela.

10. Translate into Italian-

" My Dear Friend-I send you this by a safe hand, and I request that you will show the bearer of it every possible kindness and courtesy-you who are affability personified, above all, to the brave; and the hand that will deliver it to you, though so small and white, is nevertheless so strong that it leaves the print of its five fingers on whatever it seizes. understand. Adieu. Yours, &c."

I recollect having heard my father say, "he lives like a lord, and acts like a rascal."

They murdered several who, being awakened, had taken up arms. Another would not have pardoned you as easily as I have done.

You would have spoken differently had you seen me in Rome.

He spends more than he gains. Your father is more learned than I. You will give it to her. Ask it of him. It appears to me that the things have changed, for I happened to be at home, and it annoyed him to look at her. Being on the point of leaving, I said to him, " Be pleased, Sir, to wait a little," but he replied, very curtly, " No !"

## Pon=metallic Chemistry.

### Three hours.

### H. C. KINGSMILL, M.A., Examiner.

- 1. Name the elements which are gaseous at ordinary temperatures, and mention some of their principal characteristics; also give their chemical symbols and atomic weights. What relation is there between their atomic weights and densities?
- 2. Give examples showing that a solid, a liquid, or a gas may be the result of the combination of two solids; of a solid and a gas; or of two gases.
- 3. By what experiments may it be shown (1) that animals exhale carbonic dioxide, (2) that plants under certain conditions exhale oxygen? What are these conditions?
- 4. Some bodies during combustion give out a brilliant light; others give out much heat but little Give examples. How can you account for the difference? light.
- 5. How may the density of a compound gas be computed from the atomic weights of its elements? Find the density of steam as compared with that of hydrogen at the same temperature?
- 6. If we have a mixture of carbonic dioxide and carbonic oxide gases, describe an arrangement (1) by which the carbonic oxide may be separated from the mixture, (2) by which it may be dried?
- 7. What property is possessed in common by chlorine, ozone, sulphurous acid?
- 8. Describe a process by which alcohol may be obtained pure from a mixture of alcohol and water.
- 9. Explain the meaning of the terms acids, bases, salts. What are the most convenient tests by which we can ascertain to which of these classes a given substance belongs?
- 10. What decompositions can be effected by heating the following substances :-- Potassic chlorate, Manganic dioxide, Mercuric oxide, Ammonic nitrate, Calcic carbonate? Illustrate each case by an equation.

11. What is indicated by the terminations—ous, ic, ide, ite, ate? Illustrate by examples.

12. Describe the ammonia and the ether freezing machines.

### German.

#### Four hours.

JOHN A. JACKSON, B.A., Examiner.

1. Translate-

"Wer da?" sagte diese Erscheinung. "Deinesgleichen," war meine Antwort, "wenn du der wirklich bist, dem du gleich siehst!'

"Dahinaus geht der Weg nicht. Was hast du hier zu suchen?" "Was hast du hier zu fragen?" versetzte ich trotzig.

"Der Mann betrachtete mich zweimal vom Fuss bis zum Wirbel. Es schien, als ob er meine Figur gegen die seinige, und meine Antwort gegen meine Figur halten wollte—"Du sprichst brutal, wie ein Bettler," sagte er endlich. "Das mag seyn. Ich bin's noch gestern gewesen."

"Der Mann lachte. "Man sollte darauf schwören," rief er, "du wolltest auch noch jetzt für nichts Bessers gelten.'

"Für etwas Schlechteres also"-Ich wollte weiter.

"Sachte, Freund! Was jagt dich denn so? Was hast du für Zeit zu verlieren?"

"Ich besann mich einen Augenblick. Ich weiss nicht, wie mir das Wort auf die Zunge kam, " das Leben ist kurz," sagte ich langsam, " und die Hölle währt ewig."

2. Translate-

### Carlos.

Oft hab' ich mit mir selbst gerungen, oft Um Mitternacht, wenn meine Wachen schliefen, Mit heissen Thränengüssen vor das Bild Der Hochgebenedeiten mich geworfen, Sie um ein kindlich Herz gefleht-doch ohne Erhörung stand ich auf. Ach, Roderich ! Enthulle du dies wunderbare Räthsel Der Vorsicht mir-Warum von tausend Vätern Just eben diesen Vater mir? Und ihm Just biesen Sohn von tausend bessern Söhnen? Zwei unverträglichere Gegentheile Fand die Natur in ihrem Umkreis nicht. Wie mochte sie die beiden letzten Enden Des menschlichen Geschlechtes-mich und ihnDurch ein so heilig Band zusammen zwingen? Furchtbares Loos? Warum musst' es geschehn? Warum zwei Menschen, die sich ewig meiden, In einem Wunsche schrecklich sich begegnen? Hier, Roderich, siehst du zwei feindliche Gestirne, die im ganzen Lauf der Zeiten Ein einzig Mal in scheitelrechter Bahn Zerschmetternd sich berühren, dann auf immer Und ewig auseinander fliehn.

#### 3. Translate---

Des langen Gaukelspiels müde, nahm der Minister jetzt einen ernsthaftern Ton an und bedrohte den Halsstarrigen mit dem ganzen Zorne des Monarchen, wenn er auf seiner Widersetzung beharren würde. "Tief genug," erklärte er, "habe sich die Majestät des Kaisers erniedrigt, und, anstatt durch ihre Herablassung seine Grossmuth zu rühren, nur seinen Stolz gekitzelt, nur seinen Starrsinn vermehrt.

4. Translate into German-

Railways were then unknown; people travelled either by post horses or by coaches, in either case at a cost very much greater than by railway. Many persons never travelled at all. The expense of carrying goods was very great; heavy goods could only be sent by sea or by navigable rivers and canals. This made many things, especially coals, extremely dear. Lighter goods were conveyed by huge broad-wheeled waggons, often drawn by six horses. Much land now highly cultivated was then waste, and that which was cultivated was not nearly so well farmed as now. Traffic by sea has increased in the same proportion as that by land, so that a voyage to America is now a matter of no more time, and much greater certainty, than a voyage to Spain or Portugal was to many persons still in middle life.

- 5. State the general rules for determining according to their terminations the gender of German feminine nouns.
- 6. Mention any peculiarities which occur to you in the use in German of the nominative, genitive, and dative cases of proper names of persons.
- 7. What are the principal terminations of German derivative adjectives.
- 8. Name six adjectives formed with the vowels a, o, or u, which do not modify these vowels in the comparative and superlative degrees.
- 9. What peculiarities occur in the conjugation of the following verbs ?—(1) antworten, fürchten;
  (2) tanzen; (3) handeln; (4) verbs of foreign origin ending in iren; (5) belohnen, entgehen;
  (6) brennen, wissen.
- 10. Decline in the singular and plural the personal pronouns er sie es.
- 11. Write down the first person present indicative, the first person imperfect indicative, and the past participles of the following verbs:—Frühstücken, liebkosen, muthmassen, wetterleuchten, willfahren, frohlocken, anvertrauen, fehlschlagen.
- 12. Distinguish between (1) ankommen and herankommen; (2) ausgehen and heraus- or hinausgehen; (3) ausrufen and herausrufen; (4) unterlassen and herunterlassen; (5) vorziehen and hervorziehen.
- 13. Translate into German-(1) The coronation of King Edward the Fifth. (2) The republic of Switzerland. (3) Your father became a soldier; what has become of your brother? (4) I am going to Launceston to-morrow, and am to see your friends the day after. (5) You must have taken the book, or I should have seen it. (6) A man satisfied with his lot is always happy. (7) Is Hilda the child to be praised? (8) My copybook remained lying on the table. (9) Let him take his punishment. (10) When he has money he spends it; when he had bread he gave it away. (11) I do not know either of them. (12) Have you any more children? (13) A relation of yours. (14) Cut my hair, please. (15) The judge had the man brought before him. (16) I saw him last Sunday, the 10th of July. (17) That book is not to be seen. (18) How do you like being in this city? I have only been here three days, but I have been in Melbourne many weeks. (19.) Come to me on Friday and tell me the result of your efforts; if successful I promise you that your father will never more be annoyed by a repetition of the unpleasantness which has taken place; if you should not meet with success than I shall take care that you shall not be a loser by your generosity.
- 14. The prepositions in auf and an govern both the dative and accusative cases. What general rules do you know showing when the dative and when the accusative is to be used?

### English.

#### Four hours.

#### DR. BROMBY, Examiner.

#### THE ENGLISH LANGUAGE—Twenty Essays of Lord Bacon.

- 1. What is an ejaculation? How may an interjection be made to have almost the same force as an ejaculation? What is an expletive?
- 2. When are the forms beside and toward preferable to besides and towards? Explain the origin of the s in such words.
- 3. How can other parts of speech be converted into conjunctions? Give examples of different parts of speech so converted.

4. Give examples of-

- (a)A noun sentence as an object.
- An adjective phrase as a predicate. (b)
- (c) A noun phrase in apposition.
- (d) A noun phrase in the possessive case.
- An adjective sentence as a subject. (e)
- 5. Separate by a hyphen the following words :--- Descend, abscond, distinct, discuss, distant, distress.
- 6. Explain the preposition in such phrases as a jewel of a man gave me this bonnet; a rascal of a cabman overcharged me two shillings.
- 7. Analyse the following sentences according to the appended directions :-

Men's thoughts are much according to their inclinations; but their deeds are after (a)as they have been accustomed. And, therefore, as Machiavel well noteth, there is no trusting to the force of nature, except it be corroborate by custom.

(b) It is a way that some men have to glance and dart at others by justifying themselves by negatives.

(c) Some have in readiness so many tales and stories, as there is nothing they would insinuate, but they can wrap it into a tale.

- Directions for Analysis.—Mark off six columns; in the first insert in order all the constituent sentences of the passages, distinguishing them by letters; in the second, state what kind of sentence each is; in the third, place the subject of the sentence with its attributes; in the fourth, the predicate; in the fifth, the object with its attributes, specifying whether it is direct or indirect; in the sixth, any adverbial extension, distinguishing time, place, manner. If any subject, object, or adverbial extension be a sentence, represent it in its proper columns by the letter which denotes it. Supply all ollipses in brackets all ellipses in brackets.
- 8. Derive the following words :- Essay, allay, friar, eclipse, check-mate, diary, cunning, Sibyl, flashy, haberdasher, ruminate, aculeate.
- 9. Quote the last words of Augustus Cæsar, of Vespasian, of Galba, of Septimius Severus. What does Tacitus say of Tiberius on his death-bed?
- 10. Bacon says that prosperity is the blessing of the Old Testament, adversity of the New. Support this statement by quotations from the Scriptures.
- 11. Bacon writes :—" The proof is best when men keep their authority toward their children, but not their purse." Name the figure of speech here, and define it. What is meant by "proof"?
- 12. Bacon writes :—" If a man can be pa God's rest." Comment upon this. -" If a man can be partaker of God's theatre, he shall likewise be partaker of
- 13. Account for the words "choleric" and "melancholy" having such different meanings, although from the same root. What is the meaning of "splendida bilis "?
- 14. What is meant by the following :---Magna civitas, magna solitudo ?---Commit the beginnings of actions to Argus, the ends to Briareus.

15. Translate-

Optimus ille animi vindex, laedentia pectus Vincula qui rupit, dedoluitque semel.

Ultima primis cedebant.

## Name the authors, and the person of whom the last was said.

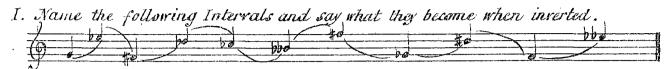
16. Whom does Bacon call cumini sectores? Name three principal ones.

## MUSIC

## DEGREE OF ASSOCIATE OF ARTS. 1884.

J. Summers Esq. Mus. Bac. Examiner,

THREE HOURS.



- II. Write the signatures of the following keys .\_ C# minor . I'minor . Brajor . Et minor .
- III. Figure, give the root, and resolve the following chord, and by three enharmonic changes of the same chord modulate into three other different keys...



V. Give examples of Diatonic and Chromatic semitones.

TI. What are the leading notes to the following keys? C\*. Gb . B. D\*.

VII. Add Treble, Alto, and Tenor to the following Bass . (compressed score) - 100

VIII. Harmonise the following air in four parts. (compressed score)

IN Five the names of some of the most celebrated early writers on Music, and mention some of the facts which we learn from their works.

X Mention some of the best Composers and Professors of the present day. If you have heard any of the Professors whom you have mentioned, state your opinion of their comparative merits.

### Pure Mathematics,-I.

#### Three hours.

H. C. KINGSMILL, M.A., Examiner.

1. Find the value when x = -1 and y = -2, of  $\frac{9x^2 - 6xy - 3y^2}{27x^3 - y^3} + \frac{\sqrt[3]{x^6y^6}}{\sqrt{(10y)^2 + 39x}}$ .

- 2. Find the G.C.M. of  $x^5 + 4x^4 + 5x^3 x^2 4x 5$ , and  $x^6 x^4 x^3 + x$ ; and the L.C.M. of  $6(a^6 a^4b^2)$ ,  $4ab(a^4 ab^3)$ ,  $9b^4(a^2 + 2ab + b^2)$ .
- 3. Simplify-

(1) 
$$\frac{1}{2b^2} \left( \frac{a}{a-b} - \frac{a-b}{2b} + \frac{a^2+b^2}{2b(a+b)} - 1 \right).$$
  
(2)  $\frac{x^2+2x-3}{x^2+x-20} \times \frac{x^2-4x}{x^2-1} \div \frac{x^2+3x}{x^2-4x-5}.$ 

4. Solve the equations-

1) 
$$\frac{x+3}{x+1} - \frac{x+1}{x-1} = \frac{x+2}{x} - \frac{x+3}{x+1}$$
.  
2)  $\sqrt{x+9} + \sqrt{4-x} = 1$ .  
3)  $3x - 4y = 7$ ;  $2y - 5x = 7$ .  
4)  $x^3 - y^3 = 64$ ;  $x - y = 4$ .

- 5. A telegraph wire between two places is supported by posts at equal intervals. If the intervals had been 16 feet less, or 44 feet greater, the number of posts would have been respectively 3 more and 6 less. Find the distance between the places.
- 6. Show that  $27^{\frac{1}{4}} > 243^{\frac{1}{7}}$ . Find the value of  $3\sqrt{18} + \sqrt{32} \sqrt[4]{64}$ , and extract the square root of  $13 + 4\sqrt{3}$ .
- 7. Assuming that  $a^m \times a^n = a^{m+n}$ , and  $a^m \div a^n = a^{m-n}$  for positive integral values of m and n, prove that  $a^o = 1$ ,  $a^{-m} = \frac{1}{a^m}$ ,  $a^{\frac{1}{m}} = \sqrt[m]{a}$ .
- 8. Given bx a = y, b ay = x, and ax + by = x y; find the relation independent of a and b which must exist between x and y.
- 9. Extract the square root of  $(2x^3 + x^2 + 1)^2 4x(1 + x^2 2x^3)$ .
- 10. An article is bought at a certain price, and then sold for 22 shillings, and by this a certain amount is gained per cent. If it had cost 5 shillings less and had been sold for 18 shillings, 10 per cent. more would have been gained. What must have been the cost of the article?

11. If 
$$a:b::c:d$$
, show that  $\frac{(a^2-b^2)(a^2-c^2)}{(b^2-d^2)(c^2-d^2)} = \frac{a^2}{d^2}$ .

12. If the sum of n + 1 terms of an A.P. whose first term is a be equal to a, show that the sum of the next n terms is  $-\frac{2n^2}{n+1}a$ .

### French.

#### Four hours.

#### DR. BROMBY, Examiner.

1. Translate-

J'aime les soirs sereins et beaux, j'aime les soirs Soit qu'ils dorent le front des antiques manoirs

Ensevelis dans les feuillages ; Soit que la brume au loin s'allonge en bancs de feu ;

Soit que mille rayons brisent dans un ciel bleu

A des archipels de nuages.

Oh ! regardez le ciel ! cent nuages movants,

Amoncelés la haut sous le souffle des vents,

Groupent leurs formes inconnues;

Sous leurs flots par moments-flamboie un pâle éclair, Comme si tout à coup quelque géant de l'air

Tirait son glaive dans les nues.

Puis voilà qu'on croit voir, dans le ciel balayé, Pendre un grand crocodile au dos large et rayé, Au trois rangs de dents acérées;

Sous son ventre plombé glisse un rayon du soir ; Cent nuages ardents luisent sous son flanc noir

Comme des écailles dorées.

Ces nuages de plomb, d'or, de cuivre, de fer,

Où l'ouragan, la trombe, et la foudre, et l'enfer

Dorment avec de sourds murmures,

C'est Dieu qui les suspend en foule au cieux profonds, Comme un guerrier qui pend aux poutres des plafonds

Ses retentissantes armures.

#### VICTOR HUGO.

2. Translate—

Tantôt les chaînes du Liban s'élèvent presque perpendiculairement sur la mer avec des villages et de grands monastères suspendus à leurs précipices ; tantôt elles s'ecartent du rivage, forment d'immenses golfes, laissent des marques verdoyantes ou des lisières de sable doré entre elles et les flots. Des voiles sillonnent ces golfes, et vont aborder dans les nombreuses rades dont la côte est dentelée. La mer y est de la teinte la plus bleue et la plus sombre, et quoiqu'il y ait presque toujours de la houle, la vague, qui est grande et large, roule à vastes plis sur les sables et réfléchit les montagnes comme une glace sans tache. Ces vagues jettent partout sur la côte un murmure sourd, harmonieux, confus, qui monte jusque sous l'ombre des vignes et des caroubiers, et qui remplit les campagnes de vie et de sonorité.

LAMARTINE.

- 3. Mention tense, mood, and voice of the following verbs, and give infinitive, participles, and 1st sing. pres. and preterite definite indicative active of, in (1) dorent, ensevelis, soit, s'allonge, mouvants, connues, flamboie, pendre, luisent, dorment, retentissantes; in (2) s'élèvent, ait, réfléchit.
- 4. Translate into French-

"I will own frankly, Mr. Balfour," replied Morton, "much of this sort of language, which, I observe, is so powerful with others, is entirely lost on me. It is proper you should be aware of this before we commune further together." (The young clergyman here groaned deeply). "I distress you, Sir," said Morton; "but perhaps it is because you will not hear me out. I revere the Scriptures as deeply as you or any Christian can do. I look into them with humble hope of extracting a rule of conduct and a law of salvation. But I expect to find this by an examination of their general tenor, and of the spirit which they uniformly breathe, and not by wresting particular passages from their context, or by the application of particular phrases to circumstances and events with which they have often very slender relation."

OLD MORTALITY.

- 5. Write out the whole of the following tenses :- Pret. indef. indic. of aller; imperative, positive and negative, of s'en aller; imperf. subj. of résoudre; pres. indic. of remplir; conditional of dormir; pres. subj. of retentir; pret. def. of mettre; fut. indic. plaire.
- 6. From what three words does the verb être borrow its tenses? In what tenses does each word occur?
- 7. Name the  $\check{o}$  words which serve in French to strengthen a negation, and derive each.
- 8. Derive also the following words from their ultimate roots :- Jeu, avant, semaine, oiseau, tôt, aujourd'hui, demain, jadis, souvent, rue, acharnement. Give the English of everything.
- 9. What is the difference between ou and où; plutôt and plus tôt; pêcheur and pécheur; quoique and quoi que.
- 10. Give three examples of French participles used as prepositions. They may, however, retain their character as participles; if so, how would they be written? Illustrate by examples.

11. Illustrate by examples the conditional mood in French, both in the present and in the past tense.

- 12. Give the feminine forms for-Pareil, exprès, trompeur, accusateur, enchanteur. malin, fou, consolateur, mou, Grec, pécheur, pêcheur, complet. Put into French-Mrs. Browning is a distinguished poet.
- 13. Give the adverbial forms of poli, expres, bref, lent, notant, véhément, complet.
- 14. When the letter c is to be pronounced soft before an a, by what symbol is the circumstance indicated? Mention also its technical name.

#### Three hours.

#### H. C. KINGSMILL, M.A., Examiner.

#### EUCLID-Books I.-IV. ARITHMETIC.

- 1. Define right angle, rectangle, rhombus.
- 2. If from the extremities of one side of a triangle there be drawn two straight lines to meet within the triangle, these two lines will be together less than the other two sides of the triangle, but will contain a greater angle.

If from any point within a triangle straight lines be drawn to the angular points of the triangle, the three lines so drawn will be together less than the sum of the three sides of the triangle, but greater than half their sum.

3. In any right angled triangle the square on the side subtending the right angle is equal to the squares on the sides containing the right angle.

If squares be described on the sides of any triangle, as in the above proposition, and adjacent corners of the figure joined, prove that each of the three triangles thus formed will be equal in area to the original triangle.

4. If a straight line be divided into two equal parts, and also into two unequal parts, the rectangle contained by the unequal parts, together with the square on the line between the points of section, is equal to the square on half the line.

Prove the geometrical equivalent of the formula  $(a + b) (a - b) = a^2 - b^2$ .

- .5. If two circles intersect, the straight line that joins their points of intersection is at right angles to the straight line that joins their centres.
- 6. Upon a given straight line describe a segment of a circle containing an angle equal to a given angle.

Through two given points draw two straight lines (one through each) so as to make with a given straight line a triangle equiangular to a given triangle.

- 7. Inscribe a regular hexagon in a given circle.
  - Show how to inscribe in a given circle three equal circles touching the given circle and each other.
- \*8. Divide £36,818 9s.  $3\frac{3}{4}d$ . by 2403, and prove the result by Practice.

$$\begin{array}{l} \text{49. Find the value of (1) } \frac{19}{24} + \frac{7}{36} + \frac{10}{21} + \frac{17}{63} + \frac{1}{56} \\ \text{(2) } \cdot 11 \div \cdot 00037. \\ \text{(3) } \left(1 + \frac{8}{7 \cdot 75}\right) \div \frac{2 \cdot 25 \text{ of } \cdot 1}{1 \cdot 75 - \cdot 8}. \end{array}$$

- 10. In a room 24 feet by 18 feet and  $9\frac{1}{2}$  feet high there are three windows each 6 feet by 4 feet, and a door  $7\frac{1}{2}$  feet by 4 feet. Find the quantity of paper  $23\frac{1}{2}$  inches wide required for the walls and ceiling.
- 11. Out of a salary of 30 guineas a quarter, how much will be saved in a year when the expenditure is at the rate of 6s.  $6\frac{2}{4}d$ . a day?
- 12. Find the present value of £264 19s.  $0\frac{3}{4}d$ , due 7 years hence, at  $5\frac{1}{4}$  per cent. simple interest, and prove the result.

#### Mathematics.—III.

#### Four hours.

### H. C. KINGSMILL, M.A., Examiner.

EUCLID-VI., XI. TRIGONOMETRY, LOGARITHMS.

- 1. If two triangles have one angle in each equal, and the sides about the equal angles proportional, prove that the remaining angles are equal.
- 2. Describe a rectilineal figure similar to a given figure A, and equal to another, B.
- .3. If two parallelograms have two sides of one reciprocally proportional to two sides of the other, and the angles contained by those sides supplemental, prove the parallelograms equal.
- 4. Find a mean proportional to two given straight lines.
- 5. OS and OT are a pair of tangents to a circle whose centre is C; OC meets the circle in A and B, and meets ST in R. Prove that OC, OT, OR are the arithmetic, geometric, and harmonic means between OA and OB.

- 6. Define a locus. If one angle of a parallelogram be given in magnitude and position, and the ratio of the sides is given, find the locus of the opposite angle.
- 7. If two lines intersect on a plane, and a line be drawn perpendicular to both at their intersection, prove that this line is perpendicular to the plane.
- 8. Prove  $\cos (A B) = \cos A \cos B + \sin A \sin B$ .
- 9. Obtain the sine and cosine of 285°.
- 10. In any triangle prove  $\frac{\tan \frac{1}{2}(A B)}{\tan \frac{1}{2}(A + B)} = \frac{a b}{a + b}$ .
- 11. The sides of a triangle are 425, 681, and 324 feet: find the angle opposite the greatest side.
- 12. If the radius of a circle = 1 foot, find the area of a regular octagon inscribed in it in square feet to four decimal places.
- 13. Express  $\cos 4a$  in terms of  $\cos a$ .
- 14. Define Circular Measure.

Prove that the circular measure of an angle less than 90° is intermediate in magnitude between the sine and tangent.

- 15. Prove that the diameter of the circle circumscribing the triangle ABC =  $\frac{a}{\sin A}$ .
- 16. Assuming De Moivre's theorem, prove that if  $2 \cos a = x + \frac{1}{x}$ , then  $2 \cos na = x^n + \frac{1}{x^n}$ .

### Geology.

#### Three hours.

### DR. BROMBY, Examiner.

- 1. What natural operations are going on on this earth's surface now, which enable the geologist to interpret the phenomena left by preceding ages?
- 2. Give in detail what you know of the earth's atmosphere.
- 3. By how many miles does the Equatorial diameter of the earth exceed the Polar? To what cause is that difference due?
- 4. What is the mean density of the earth? What the mean density of the crust? State what you know of the effects of compression which would lead to the conclusion that the materials in the interior of the globe are different in kind or condition from those in the crust.
- 5. Enumerate the various ingredients held in chemical solution in sea water.
- 6. What is a Polypodom? Name the principal species of corals which are active in raising coral reefs.
- 7. In what respects does gneiss differ from granite? What conclusion should we draw from this circumstance respecting their original formation?
- 8. What are the chief characteristics of the Oolitic system? Name its three main groups. Under what circumstances must they have been deposited?
- 9. What is nummulitic limestone? Where found? of what thickness? and in what geological system?
- 10. Describe the nature and extent of the upheavals which have taken place in South America. To what geological era must they be referred by their contents? How is it shown whether they were slow or sudden? Describe some modern change in the earth's surface produced by earthquakes.
- 11. Describe the Great Dismal Swamp of America, mentioning its extent and constituent materials.
- 12. Explain the following Geological terms—talus, breccia, steatite, filicoid, fucoid, eozoic, eolian, mammillary, outcrop, placoid, antholite, pisiform, facet, vesicular, tufa, fauna.
- 13. What useful materials are obtainable from the Silurian, and from the Triassic systems?
- 14. How are the flint nodules, so commonly found in chalk, accounted for ?
- 15. How are the beds of rock-salt supposed to have been formed? Give the thickness of the Cheshire salt beds.
- 16. Name the minerals and fossils now shown to you.

### Latin.—I.

### Four hours. Dr. Bromby, *Examiner*.

#### 1. Translate---

(A) Cum praeterveherer navibus Galliae oram, ad famam hujus hostis in terram egressus, praemisso equitatu, ad Rhodanum movi castra. Equestri proelio, qua parte copiarum conserendi manum fortuna data est, hostem fudi ; peditum agmen, quod in modum fugientium raptim agebatur, quia assequi terra non poteram, regressus ad naves, quanta maxima potui celeritate, tanto maris terrarumque circuitu in radicibus Alpium obvius fui. Huic timendo hosti utrum, cum declinarem certamen, improvisus incidisse videor an occurrere in vestigiis ejus, lacessere ac trahere ad decernendum? Experiri juvat utrum alios repente Carthaginienses per viginti annos terra ediderit, an iidem sint qui ad Aegates pugnaverunt insulas, et quos ab Eryce duodevicenis denariis aestimatos emisistis ; et utrum Hannibal hic sit aemulus itinerum Herculis, ut ipse fert, an vectigalis stipendiariusque et servus populi Romani a patre relictus : quem nisi Saguntinum scelus agitaret, respiceret profecto, si non patriam victam, domum certe patremque et foedera Hamilcaris scripta manu, qui jussus a consule nostro praesidium deduxit ab Eryce ; qui graves impositas victis Carthaginiensibus leges fremens maerensque accepit ; qui decedens Sicilia stipendium populo Romano dare pactus est.

> (B) Urget diem nox et dies noctem, neque est Levare tenta spiritu præcordia. Ergo negatum vincor ut credam miser, Sabella pectus increpare carmina Caputque Marsa dissilire nenia. Quid amplius vis? O mare, o terra, ardeo, Quantum neque atro delibutus Hercules Nessi cruore, nec Sicana fervida Virens in Ætna flamma; tu, donec cinis Injuriosis aridus ventis ferar, Cales venenis officina Colchicis. Quæ finis aut quod me manet stipendium ? Effare : jussas cum fide pœnas luam.

(C) Prima Syracosio dignata est ludere versu Nostra, neque erubuit silvas habitare, Thalia. Quum canerem reges et prœlia, Cynthius aurem Vellit, et admonuit: "Pastorem, Tityre, pingues Pascere oportet oves, deductum dicere carmen." Nunc ego (namque super tibi erunt, qui dicere laudes, Vare, tuas cupiant, et tristia condere bella.) Agrestem tenui meditabor arundine Musam. Non injussa cano. Si quis tamen hæc quoque, si quis Captus amore leget, te nostræ, Vare, myricæ, Te nemus omne canet; nec Phœbo gratior ulla est, Quam sibi quæ Vari præscripsit pagina nomen.

"Daphni, quid antiquos signorum suspicis ortus? Ecce Dionæi processit Cæsaris astrum, Astrum, quo segetes gauderent frugibus, et quo Duceret apricis in collibus uva colorem. Insere, Daphni, piros; carpent tua poma nepotes." Omnia fert ætas, animum quoque: sæpe ego longos Cantando puerum memini me condere soles: Nunc oblita mihi tot carmina; vox quoque Mœrin Jam fugit ipsa; lupi Mœrin videre priores. Sed tamen ista satis referet tibi sæpe Menalcas.

2. Translate, explain, and refer to the context-

(D)

- (a)
- Sectus flagellis hic triumviralibus,
- Præconis ad fastidium,
  - Arat Falerni mille fundi jugera, Et Appiam mannis terit.
- (b)
- Quique vos bubus veneratur albis, Clarus Anchisæ, Venerisque sanguis, Imperet, bellante prior, jacentem Lenis in hostem.
- (c) Claudite jam rivos, pueri ; sat prata biberunt.
- (d) Candidus insuetum miratur limen Olympi, Sub pedibusque videt nubes et sidera Daphnis.

- (e) Hispani sine ulla mole, in utres vestimentis conjectis ipsi cætris suppositisincubantes, flumen tranavere.
- (f) Nec, qui paululum titubassent, hærere afflicti vestigio suo possent.
- 3. Derive the following words, giving the English for them and for their roots; and, where necessary, showing the connexion :--Amphora, hornus, medulla, interminatus, emancipatus, anceps, certamen, arbitrium, virgultum, sublimis, passim, pacti, videlicet, magister, surgo, sumo, bitumen, nuper.
- 4. Distinguish between the meanings of stipendiarius and vectigalis; vitula, juvenca; inserui, insevi; cutis, pellis; sumo, capio; dryas, hamadryas; fallo, decipio; perculsus, percussus: and, according to the quantity of the penultimate, of reduce, fretum, placent, jacere, levi, leporem, notus, procerum, decoris: also between pedēs and pedēs, domūs and domŭs.
- 5. Give the perfect, supine, and infinitive mood of—Deposco, enitor, perfringo, sentio, exigo, transeo, audeo, attero, evincio. Also the genders of mons, pons, frons, pes, manus, compes, silex, collis, tellus, laus. Parse premeretur, patereris, nascere, contingere.
- 6. Comment briefly on the following :- Deus nobis hæc otia fecit -- nec cura peculi -- cum placidum ventis staret mare -- jurgia Codri -- necte tribus nodis ternos colores -- nimium vicina Cremonæ -- numeros memini, si verba tenerem -- avarus ut Chremes -- positasque vernas, ditis examen domus, circum renidentes Lares -- serpente fugit alite -- spargens Avernales aquas -- irresectum pollicem -- unde tibi reditum certo subtemine Parcæ rupere -- Spartacus acer -- altera jam teritur bellis civilibus ætas -- Phocæorum exsecrata civitas -- efficaci do manus scientiæ -- infamis Helenæ Castor offensus vice -- optat quietem Pelopis infidus pater -- voles ense pectus recludere -- certus undenos decies per annos orbis cantus refert -- deformis ægrimoniæ dulcibus alloquiis.
- 7. Whereabouts were the following :- Ariminum, Molossia, Lesbos, Arar, Oaxis, Hebrus, Pactolus, Eryx, Saguntum.
- 8. Give six examples of a being changed into i in composition, and six of it being changed into e.
- 9. Put into Latin—At what o'clock do we dine to-day? He hindered me from learning by heart that ode of Horace What! can any animal leap 20 feet high! I am going to-day to play a game of cricket These poems are hard to translate into English He is not worthy of being admitted into our club We set ourselves to get this work done What a reproach it is to have told a falsehood! He was the first to mount his horse He has the greatest difficulty in getting up in the morning They do nothing but laugh at us.

**Latin.**—II. Three hours. Dr. BROMBY, *Examiner*.

J. Translate-

Neque id statim legenti persuasum sit, omnia quæ magni auctores dixerint, utique esse perfecta. Nam et labuntur aliquando, et oneri cedunt, et indulgent ingeniorum suorum voluptati : nec semper intendunt animum, et nonnunquam fatigantur ; cum Ciceroni dormitare interim Demosthenes, Horatio vero etiam Homerus ipse, videatur. Summi enim sunt, homines tamen ; acciditque iis, qui, quicquid apud illos repererunt, dicendi legem putant, ut deteriora imitentur (id enim est facilius) ac se abunde similes putent, si vitiis magnorum consequantur. Modeste tamen et circumspecto judicio de tantis viris pronunciandum est, ne (quod plerisque accidit) damnent, quæ non intelligunt. Ac, si necesse est in alterutramerrare partem, omnia eorum legentibus placere, quam multa displicere, maluerim.

#### 2. Translate—

Est locus (Inachiæ dixerunt Tænara gentes) Quâ formidatum Maleæ spumantis in auras It caput, et nullos admittit culmine visus. Stat sublimis apex, ventosque imbresque serenus Despicit, et tantum fessis insiditur astris. Illic exhausti posuere cubilia venti; Fulminibusque iter est : medium cava nubila montis Insumsere latus : summos nec præpetis alæ Plausus adit colles, nec rauca tonitrua pulsant. Ast ubi prona dies, longos super æthera fines Exigit, atque ingens medio natat umbra profundo. Interiore sinu frangentia litora curvat Tænaros, expositos non audax scandere fluctus. Illic Ægeo Neptunus gurgite fessos In portum deducit equos: prior haurit arenas Ungula; postremi solvuntur in æquora pisces.

- 3. Put into Latin—What still more than his wars and conquests has made the name of Tarquinus Priscus illustrious, are the great works which he designed and executed to increase the extent and splendour of the city. He continued the building of the stone walls, which had been interrupted by the Sabine war; and he began to fortify those parts, which had not been protected by nature. Tradition represents him as being just as ambitious, and as fond of display after his accession, as he had been before : hence the rites of religion, which had been plain and simple, were in his reign clothed with splendour; bloody sacrifices were introduced, and it was then that the Romans first represented their gods in human forms.
- 4. Translate into Latin verse-

My heart is wasted with my woe, There is no rest for me below, When the long dun wolds are ribbed with snow, And loud the Norland whirlwinds blow, Alone I wander to and fro,

#### Oriana.

Ere the light on dark was growing, At midnight the cock was crowing, Winds were blowing, waters flowing, We heard the steeds to battle going, Aloud the hollow bugle blowing,

Oriana.

In the yew-wood, black as night, Ere I rode into the fight, While blissful tears blinded my sight, By starshine and by moonlight, I to thee my troth did plight, Oriana.

### Greek.—I.

#### Four hours. Dr. BROMBY, Examiner.

### 1. Translate-

(A) 'Εσκήνουν δὲ ἐν τῷ αἰγιαλῷ πρὸς τῷ θαλάττῃ εἰς δὲ τὸ πόλισμα ἂν γενόμενον οὐκ ἐβούλοντο στρατοπεδεύεσθαι, ἀλλὰ ἐδόκει καὶ τὸ ἐλθεῖν ἐνταῦθα ἐξ ἐπιβουλῆς εἶναι, βουλομένων τινῶν κατοικίσαι πόλιν. Τῶν γὰρ στρατιωτῶν οἱ πλεῖστοι ῆσαν οὐ σπάνει βίου ἐκπεπλευκότες ἐπὶ ταύτην τὴν μισθοφορὰν, ἀλλὰ τὴν Κύρου ἀρετὴν ἀκούοντες, οἱ μὲν καὶ ἀνδρας ἄγοντες, οἱ δὲ καὶ προσανηλωκότες χρήματα, καὶ τούτων ἕτεροι ἀποδεδρακότες πατέρας καὶ μητέρας, οἱ δὲ καὶ τέκνα καταλιπόντες ὡς χρήματ' αὐτοῖς κτησάμενοι ῆζοντες ἐπόθουν εἰς τὴν Ἑλλάδα σώζεσθαι.

(B) Ἐντεῦθεν οἱ λοχαγοὶ ἡγεῖσθαι ἐκέλευον, καὶ οὐδεἰς ἀντέλεγε. Καὶ ὃς ἡγεῖτο, παραγγείλας διαβαίνειν, ἦ ἕκαστος ἐτύγχανε τοῦ νάπους ὤν θᾶττον γὰρ ἂν ἀθρόον ἐδόκει οὕτω πέραν γενέσθαι τὸ στράτευμα, ἢ εἰ κατὰ τὴν γέφυραν, ἢ ἐπὶ τῷ νάπει ῆν, ἐξεμηρύοντο. Ἐπεὶ δὲ διέβησαν, παριῶν παρὰ τὴν φάλαγγα ἔλεγεν. "᾿Ανδρες, ἀναμμνήσκεσθε, ὅσας δὴ μάχας σὺν τοῖς θεοῖς ὑμόσε ἰόντες νενικήκατε, καὶ οἱα πάσχουσιν οἱ πολεμίους φεύγοντες, καὶ τοῦτο ἐννοήσατε, ὅτι ἐπὶ ταῖς θύραις τῆς Ἐλλάδος ἐσμέν. ᾿Αλλ' ἕπεσθε ἡγεμόνι τῷ Ἡρακλεῖ καὶ ἀλλήλους παρακαλεῖτε ὀνομαστί. Ἡδύ τοι ἀνδρεῖόν τι καὶ καλὸν νῦν εἰπόντα καὶ ποιήσαντα μνήμην ἐν οἶς ἐθέλει παρέχειν ἑαυτοῦ."

(C) φεῦ φεῦ.

κακόν γε θνητοῖς τὸ νέον, ἐν δὲ τῷ νέφ τὸ μὴ δίκαιον ὅστις ἀνθρώπων ἔχει. ἐγὼ δὲ ταρβῶ μὴ τὸ δουλεύειν μέ σοι λόγων ἀπώσῃ, πολλ' ἔχουσαν ἕνδικα, ἡν δ' αῦ κρατήσω, μὴ 'πὶ τῷδ' ὄφλω βλάβην οἱ γὰρ πνέοντες μεγάλα τοὺς κρείσσους λόγους πικρῶς φέρουσι τῶν ἐλασσόνων ὕπο ὅμως δ' ἐμαυτὴν οὐ προδοῦσ' ἁλώσομαι. εἶπ', ὥ νεᾶνι, τῷ σ' ἐχεγγύψ λόγψ πεισθεῖσ' ἀπωθῶ γνησίων νυμφευμάτων; ὡς ἡ Δάκαινα τῶν Φρυγῶν μείων πόλις, τύχη θ' ὑπερθεῖ κἅμ' ἐλευθέραν ὁρῷς; ἢ τῷ νέψ τε καὶ σφριγῶντι σώματι πόλεώς τε μεγέθει καὶ φίλοις ἐπηρμένη οἶκον κατασχεῖν τὸν σὸν ἀντὶ σοῦ θέλω; πότερον খν' αὐτὴ παῖδας ἀντὶ σοῦ τέκω δούλους, ἐμαυτῷ γ' ἀθλίαν ἐφολκίδα;

(D) ούδ' έτι πῦρ ἐπιβώμιον ἐν Τροία θεοίσιν λέλαμπεν καπνώ θυώδει. βέβακε δ' Ατρείδας ἀλόχου παλάμαις. αὐτά τ' ἐναλλάξασα φόνον θανάτω πρός τέκνων άπηύρα θεού θεού νιν κέλευσμ' έπεστράφη μαντόσυνον, ὅτε νιν 'Αργόθεν πορευθείς 'Αγαμεμνόνιος κέλωρ άδύτων έπιβας κτάνεν, ματρός φονεύς, ῶ δαίμον, ῶ Φοίβε, πῶς πείθομαι; πολλαὶ δ' ἀν' Ἑλλάνων ἀγόρους στοναχὰς μέλπουτο δυστάνων τεκέων άλοχοι έκ δ έλειπον οίκους προς άλλον ευνάτορ'. ουχι σοι μόνα δύσφρονες επέπεσον, ού φίλοισι, λύπαι νόσον Έλλας ἔτλα νόσον διέβα δε Φρυγών προς ευκάρπους γύας σκηπτός σταλάσσων τον "Αιδα φόνον.

- (Ε) ένθ' αῦτ' ἄλλ' ἐνόησε θεὰ γλαυκώπις 'Αθήνη, ώς 'Οδυσεύς έγροιτο, ίδοι τ' εύώπιδα κούρην, ή οι Φαιήκων άνδρων πόλιν ήγήσαιτο. σφαίραν ἕπειτ' ἕρριψε μετ' ἀμφίπολον βασίλεια ἀμφιπόλου μὲν ἅμαρτε, βαθείη δ' ἔμβαλε δίνη, αί δ' ἐπὶ μάκρὸν ἄυσαν. ὁ δ' ἔγρετο δίος 'Οδυσσεύς. έζόμενος δ' ώρμαινε κατά φρένα καὶ κατὰ θυμόν. " ὦ μοι ἐγώ, τέων αὖτε βροτῶν ἐς γάῖαν ἰκάνω; ή ρ' οι γ' ύβρισται τε και άγριοι ουδε δικαιοι, ήε φιλόξεινοι, καί σφιν νόος έστι θεουδής; ώς τέ με κουράων ἀμφήλυθε θῆλυς ἀυτή, νυμφάων, αί έχουσ' όρέων αίπεινα κάρηνα καὶ πηγὰς ποταμῶν καὶ πίσεα ποιήεντα. ή νύ που άνθρώπων είμι σχεδον αύδηέντων; άλλ' άγ' έγων αυτός πειρήσομαι ήδε ίδωμαι." ώς είπων θάμνων ύπεδύσετο δίος 'Οδυσσεύς.
- Parse the following verbs :—κατειργασμένους, ἀπολοῦνται, ἐφορῶν, ἀπειρήκεσαν, ἔχοντας, μολεῖν κατέβη, ἀφείλου, ἀγκώσας, φανήσεται, συσταθησόμενος, and the two verbs ἴσθι.

(In parsing, give the future, perfect, and aorist in use.)

- 3. Give, as in Attic use, the future, perfects both active and passive, and aorists, both active and passive, of τυγχάνω, ἄγω, κρίνω, φέρω, στρέφω, τίθημι, ἀποκτείνω, σπείρω, πράττω.
- Write down the different Moods of the 1 Aor. Pass. of ἀναλίσκω, 2 Aor. Act. of βαίνω, Perf. Pass. of φαίνω, 2 Aor. Mid. of λαμβάνω, Perf. Mid. of ἀπόλλυμι, Fut. Mid. of ἀγωνίζω.
- 5. Write out all the persons of 1 Aor. Subj. Act. of ὑβρίζω, 2 Aor. Subj. Pass. of σφάλλω, 2 Aor. Opt. Mid. of γίγνομαι, Fut. Ind. of κάμνω, 1 Aor. Imp. Mid. of συνδέω, Pres. Opt. Act. of ὀγκόω (contracted form), Pres. Ind. Act. of δίδωμι.
- 6. Write out the cases of  $\nu \dot{a}\pi \sigma \varsigma$ ,  $\beta \sigma \bar{\nu} \varsigma$ ,  $\ddot{\sigma} i \varsigma$ , &  $\nu a \bar{\nu} \varsigma$ , all in the Attic form.
- Derive fully χρυσήλατος, ἐφολκίς, ἁμίλλα, δεξίμηλος, αὐθέντης, Χερρόνησος, λῷον, ὄργυια, παντοδαπός, μάντις, αὐτόματος, ἐξαπίνης, ἀκέραιος, λαφυροπωλείν.
- 8. When an adverb is employed as a preposition, what case does it govern? Give three examples.
- 9. Of what tense practically in Attic Greek are  $a\pi\epsilon_{\mu\nu}$ ,  $\xi\phi_{\nu\nu}$ ,  $\xi\delta_{\nu\mu\alpha}$ ,  $\delta_{\nu}$ ,  $\delta_{\nu}$ ?
- 10. Distinguish between διδάξω & ομαι'; κατηγορείν & διαβάλλειν; λόγισαι & λογίσαι; ταῦτα & ταυτά; ἅπαντα & ἀπαντῷ.

- 11. Put into Greek :--- The Thracians gave hostages at the demand of the Greeks --- They burnt whatsoever they saw combustible --- There was a fountain of sweet water, flowing abundantly --- Going out every day with their beasts of burden, they carried off tearlessly wheat, barley, wine, and figs; for the country produced all good things, except oil.
- 12. Restore to the original lambics—
  - For clever for such purposes is the continental
  - Soul of women, from which things I will stop thee :
  - And this house of the daughter-of-Nereus shall not at all assist thee ;
  - Not altar, nor shrine; but thou shalt die.
- 13. What is meant by "continental" in the above passage? Name the figure which makes it agree with "soul" instead of with "women."

### Batural Philosophy.

Three hours.

H. C. KINGSMILL, M.A., Examiner.

- 1. If three forces acting at a point be in equilibrium, and a triangle be constructed having its sides parallel to the direction of the forces, prove that its sides will be also proportional to their magnitudes? Show that the resultant of any two forces cannot be less than their difference.
- 2. Define a moment; and show that if the algebraic sum of the moments of any number of forces vanishes about each of the angular points of a triangle, then the forces must be in equilibrium.
- 3. Two strings at right angles have their upper ends fixed at two points in the same horizontal line, and their lower ends fastened to a weight which hangs freely. The lengths of the two strings are as 5 to 4. Compare the tensions on them.
- 4. A beam, of length 10 feet and weight 200 lbs., whose centre of gravity is 4 feet from one end, is supported in a horizontal position by two props, one at each end. Find the pressures on the props.
- 5. Find the centre of gravity of a uniform triangular plate. Show also that three equal particles, one at each vertex of the triangle, have the same centre of gravity as the triangle itself.
- 6. Find the ratio of the power to the weight in the wheel and axle. The radii of a wheel and axle are 30 and 6 inches respectively, and the strings which go round them have their lower ends fastened to the extremities of a beam which, hanging freely, rests in a horizontal position. Find the ratio in which the beam's centre of gravity divides its length. The beam AB is 3 feet long, and the string from the wheel is joined to A, that from the axle is joined to B.
- 7. What are meant by velocity, mass, and momentum? Compare the momentum of a shot weighing 100 lbs. moving with a velocity of 1000 feet a second, with that of a train weighing 100 tons and moving with a velocity of 60 miles an hour.
- 8. Assuming the formula  $s = \frac{1}{2}gt^{2}$  for a falling body, prove that  $v^{2} = 2gs$ , first stating clearly the exact meaning of the quantities g, t, s, and v.

A particle is dropped from a height 12g above a horizontal plane. Find at what point of its descent its velocity is just half that with which it reaches the ground.

- 9. A solid cylinder of uniform material will float in water with its axis vertical, and 2 inches more than half its length immersed; and again, it will float in oil of specific gravity 75 with 16 inches of its length immersed. Find its length and its specific gravity.
- 10. Describe the single-barrelled air-pump. After six strokes are completed it is found that the density of air in the receiver is one-tenth of what it was initially. Compare, using logarithms if necessary, the volumes of the barrel and receiver.

#### Mistory and Geography.

#### Four hours.

DR. BROMBY, Examiner.

- 1. The earth is said to be an oblate spheroid. What is the meaning of this phrase? Give three reasons which prove that the earth is spherical.
- 2. Name the five great oceans of the earth. Which is the largest, and which the smallest? What is the difference between a gulf and a bay? Define the geographical terms delta, affluent, estuary, antarctic, dune, dike.
- 3. Where and what are the following :--Jungfrau, Kronstadt, Loire, Mosambique, Oural, Lucca Saone, Tokat, Iona, Hankow, Stralsund, Gottingen, Foochow, Faroe, Aboukir, Ebro Austerlitz, Chili, Bocca Tigris, Palmas?

- 4. Mention anything which has made the following places remarkable :-- Corunna, Quebec, Aboukir, Potsdam, Khartoum, Geneva. State also the principal manufactures in the following places :-- Witney, Leipsic, Xeres, Leeds, Xalapa, Damascus. Mention the countries in which the above are situated.
- 5. Give a brief account of the River Nile. Through what regions does it flow? Map it out, and mark down the principal towns upon its banks.
- 6. Draw a map of Africa, and mark thereon the principal rivers, mountain ranges, bays, outlying islands, and ten principalities.
- 7. Draw up a list of the Sovereigns of England from King John to the present time, affixing the dates of their accession.
- 8. Give short sketches of the histories of Richard I., II., and III.
- 9. Trace the steps of the Reformation in England from the reign of Richard II. to the end of that of Charles II.
- 10. Who was the Duke of Monmouth? What was his history?
- 11. Identify the following personages by some characteristic fact :-- Van Artevelde, Van Tromp, Eugene Beauharnais, Rupert, Havelock, Richlieu, Charles V., Earl of Essex, Waller, John Ball, Godoy, Prince George of Denmark.
- 12. In what reigns did the following events take place? Give a short account of each :--Introduction of printing into England, Siege of Hull, Passing of the Conventicle Act, Burning of Cranmer, Conquest of Wales, Battle of Stanford Bridge, Protectorate of Somerset, England placed under interdict, First appointment of itinerant justices.

#### Greek,—II.

#### Three hours. Dr. BROMBY, *Examiner*.

1. Translate—

"Αρτι δὲ τούτων γιγνομένων ἠγγέλλοντο ὑπὸ τῶν σκοπῶν οἱ Νεφελοκένταυροι προσελαύνοντες, οὺς ἔδει πρὸ τῆς μάχης, ἐλθεῖν τῷ Φαέθοντι. Καὶ δὴ ἐφαίνοντο προσίοντες, θέαμα παραδοζότατον, ἐξ ἕππων πτερωτῶν καῖ ἀνθρώπων συγκειμένοι· μέγεθος δὲ τῶν μὲν ἀνθρώπων ὅσον τοῦ Ροδίων κολοσσοῦ ἐξ ἡμισείας ἐς τὸ ἄνω, τῶν δὲ ἕππων ὅσον νεὼς μεγάλης φορτίδος. Τὸ μέντοι πλῆθος αὐτῶν οὐκ ἀνέγραψα, μή τῷ καὶ ἄπιστον δόξῃ, τοσοῦτον ῆν. 'Ηγεῖτο δὲ αὐτῶν ὁ ἐκ τοῦ Ζωδιακοῦ τοξότης. Ἐπεὶ δὲ ἤσθοντο τοὺς φίλους νενικημένους, ἐπὶ μὲν τὸν Φαέθοντα ἑπεμπον ἀγγελίαν αὖθις ἐπιέναι, αὐτοὶ δὲ διαταξάμενοι τεταραγμένοις ἐπιπίπτουσι τοῖς Σεληνίταις, ἀτάκτοις περὶ τὴν δίωξιν καὶ τὰ λάφυρα διεσκεδασμένοις· καὶ πάντας μὲν τρέπουσιν, αὐτὸν δὲ τὸν βασιλέα καταδιώκουσι πρὸς τὴν πόλιν καὶ τὰ πλεῖστα τῶν ὀρνέων αὐτοῦ κτείνουσι· ἀνέσπασαν δὲ καὶ τὰ τρόπαια καὶ κατέδραμον ἕπαν τὸ ὑπὸ τῶν ἀραχνῶν πεδίον ὑφασμένον, ἐμὲ δὲ καὶ δύο τινὰς τῶν ἐταίρων ἐζώγρησαν.

2. Translate—

λέγοιμ άν άρχη δ ήδε μοι προοιμίου. είθ' είχες, ώ τεκούσα, βελτίους φρένας. το μέν γάρ είδος αίνον άξιον φέρειν Έλένης τε καί σοῦ, δύο δ' ἔφυτε συγγόνω, άμφω ματαίω Κάστορός τ' οὐκ ἀξίω. ή μέν γαρ άρπασθείσ' έκοῦσ' ἀπώχετο, συ δ' άνδρ' άριστον Έλλάδος διώλεσας, σκηψιν προτείνουσ', ώς ύπερ τέκνου πόσιν ἕκτεινας ου γάρ, ώς ἕγωγ', ἴσασιν εΰ, ήτις, θυγατρός πρίν κεκυρώσθαι σφαγάς, νέον τ' άπ' οίκων άνδρος έξωρμημένου, ξανθόν κατόπτρω πλόκαμον έξήσκεις κόμης. γυνή δ' απόντος ανδρός ήτις έκ δόμων ές κάλλος ἀσκεῖ, διάγραφ' ὡς οὖσαν κακήν. ούδεν γάρ αύτην δεί θύρασιν εύπρεπες φαίνειν πρόσωπον, ήν τι μη ζητή κακόν. μόνην δὲ πασῶν οἶδ ἐγὼ σ' Ἑλληνίδων, εί μέν τὰ Τρώων εὐτυχοῖ, κεχαρμένην, εί δ' ήσσον' είη, συννεφούσαν όμματα, 'Αγαμέμνον' οὐ χρήζουσαν ἐκ Τροίας μολείν. καίτοι καλώς γε σωφρονείν παρείχέ σοι.

3. Translate into Greek—

I am, he said, by birth a Cyprian, and having set out from my country for the sake of commerce, with a boy, whom you see, and with many other domestics, I sailed into Italy carrying a varied cargo on board a great ship, which perhaps you have seen wrecked at the mouth of the river. As far as Sicily we had a prosperous voyage; but thence having been caught with a violent gale we were carried out to sea for three days, when, having fallen foul of a rock, we made land with difficulty, and only two of us were saved, the others having died. And having buried our comrades, and built a shrine to Neptune, we are living this kind of life, gardening potherbs, and feeding on fishes and hard shell fruits. The wood is large, as you see, and it has many vines, from which a pleasant wine is produced. Perhaps, too, you saw the spring of very beautiful and very cool water. And we make a bed from the leaves. We catch also birds and live fishes.

### **Brawing**.

### FROM THE FLAT.

Two hours.

H. HUNTER, Examiner.

Copy the outline of figures given, the size of the originals, but without any means of measurement.

### PERSPECTIVE.

Two hours.

The following Problems are to be worked, to a scale of half an inch to the foot :---

1. Put into parallel perspective a pyramid with base 4 feet square and height 8 feet, to be  $1\frac{1}{2}$  feet within the "transparent plane," and the nearest angle 3 feet to left of the spectator. "Horizontal line," 5 feet; "distance," 8 feet.

2. A square of 4 feet to be placed at any angle to the "transparent plane," but one angle touching it, 3 feet below the eye, and 2 feet to the right of "centre;" distance 5 feet.

3. A vertical plane, 7 feet high and 6 feet wide, standing at right angles to the "picture plane," 10 feet to right of "centre," the nearest edge 3 feet beyond the "picture plane." "Horizontal line," 5 feet; "distance," 12 feet.

4 In the centre of the above figure, show a square of 3 feet, with its sides parallel to those of the outer figure.

Within this smaller square, draw a circle (from a proper plan) touching each side of the square.

Questions.

1. In Geometry (which is the groundwork of Perspective), how many degrees is the circumference of a circle always supposed to contain?

2. Show with your compasses how you draw a line making an angle of  $60^{\circ}$  with another line.

3. What are "visual rays?" and what is the utmost angle they form ?

FROM THE MODEL.

Three hours.

Draw the plaster cast given, and shade as much as time will allow. The Examiner will indicate the size the drawing is to be made.

### TASMANIAN COUNCIL OF EDUCATION.

Hobart, 20th August, 1883.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS, 1884.

THE Council of Education have directed the publication of the following Regulations and Scheme of Examination for the Degree of Associate of Arts for the year 1884.

By Order of the Council,

GEORGE RICHARDSON, Secretary.

#### **REGULATIONS.**

The Degree of Associate of Arts shall be open to persons of any age: but Candidates for that Degree above the age of nineteen years, who may take honors, shall be placed in separate class lists, and shall not be eligible for any Prizes that may be awarded by the Council.

The first day of September in each year is fixed and appointed as the date upon which the ages of Candidates for the Degree of Associate of Arts shall in each year be ascertained and computed.

In determining the Classes, account will be taken of every part of the Examination; but no credit will be given for knowledge in any subject unless the Candidates pass in that subject, attaining the standard of marks to be fixed by the Council.

Every successful Candidate for the Degree of Associate of Arts shall receive a Certificate of having obtained such Degree; and such Certificate shall be under the Seal, and signed by the President of the Council. The Certificate shall specify the subjects in which the Candidate has passed, and the Class attained.

Candidates who at any Examination for the Degree of Associate of Arts have passed in any of the subjects, though tailing to obtain the Degree, shall be entitled to receive a Certificate in the following form :--

CERTIFICATE OF SUBJECTS PASSED IN THE EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

Whereas by the Regulations of the Tasmanian Council of Education no person is entitled to obtain the Degree of Associate of Arts unless he (or she) has at one and the same Examination passed in four at least of the subjects prescribed for the Examination for the said Degree, English being one: and whereas Candidates who at any Examination for the said Degree have passed in any subject are entitled to receive a Certificate thereof: and whereas the Candidate hereinafter named has passed in certain of the said subjects, although he (or she) has not succeeded in obtaining the Degree of Associate of Arts: Now these are to certify that at an Examination for the Degree of Associate of Arts under the Tasmanian Council of Education held in passed in the following subject (that is to say)

#### Hobart, Tasmania,

day of 18.

The examination will comprise the subjects mentioned in the following sections, in four of which, at least, including English, the Candidate must pass :---

1. English.

- 2. Latin. 3. Greek.
- 4. French.
- 4. French.
- 5. German.
- 6. Italian.
- 7. Fure Mathematics.

 8. The Elementary Principles of Hydrostatics and Mechanics.
 9. The Elements of Chemistry.

President.

Secretary.

- 10. Zoology and Botany.
- 11. Geology.
- 12. Drawing.
- 13. Music.

#### MINOR SCHOLARSHIPS FOR ASSOCIATES OF ARTS.

A Minor Scholarship of the value of  $\pm 40$  per annum, tenable for two years, will be awarded to each of the two Male Associates being under the age of nineteen years who stand highest on the Class List for the year, and who declare their intention of continuing their studies with a view of competing for the Tasmanian Scholarships.

Payments on account of each Minor Scholarship will be made quarterly upon the Council receiving such proof as it may require that the general conduct of the holder is satisfactory, and that he is diligently pursuing his studies for the Tasmanian Scholarship Examination; and in the event of the holder not procuring such proof, the Council may declare the Minor Scholarship to be vacant. In case any Minor Scholarship becomes vacant by the declaration of the Council or by the death or resig-

In case any Minor Scholarship becomes vacant by the declaration of the Council or by the death or resignation of the holder, the Associate whose name stands next highest on the Class List, and who is not the holder of a Minor Scholarship, shall be entitled, upon complying with the terms aforesaid, to such Minor Scholarship during the residue of its currency.

NOTE.—Candidates for the Degree of Associate of Arts are required to send in their applications for admission to the Examination to the Secretary to the Council of Education not later than the 31st July. Printed forms of application may be had on application to the Secretary.

1. ENGLISH.—Language.—The Candidate will be examined in English Grammar and in "Twenty of Bacon's Essays," (English School Classics,—Rivington), and will be required to write a short original composition, or an essay founded upon some abstract of facts furnished to him. History.—The outlines of English History, including theSuccession of Sovereigns. Geography.—General.

2. LATIN.—Grammar. Livy, Book XXI.; Virgil, Eclogues; Horace, Carmen Seculare and Epodes. Passages for translation from other Latin authors; and passages of English for translation into Latin Prose and Verse.

3. GREEK.—Grammar. Xenophon, Anabasis, Book VI.; Euripides, Andromache. Homer, Odyssey, Book VI. Passages for translation from other Greek authors, and a passage of English for translation into Greek prose.

4. FRENCH.-Grammar. Passages for translation from French into English, and from English into French prose.

5. GERMAN.-Grammar. Passages for translation from German into English, and from English into German prose.

6. ITALIAN.-Grammar. Passages for translation from Italian into English, and from English into Italian prose.

7. PURE MATHEMATICS.—(a) Arithmetic and Algebra, (b) Euclid, Books 1. 11 III. IV. VI. XI. to the end of Proposition 21, Plane Trigonometry, and the use of Logarithms. Candidates to pass in Mathematics need not present Euclid, Books VI. and XI., Plane Trigonometry, and the use of Logarithms, but must present them as well as the other subjects to obtain a First Class in Mathematics.

8. NATURAL PHILOSOPHY.-Elements of Statics, Dynamics, and Hydrostatics, treated mathematically.

9. CHEMISTRY.—The non-metallic elements and the laws of combination, with the use of symbolic notation.

10. ZOOLOGY AND BOTANY.—The description and classification of animals, their habits and geographical distribution; and 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.

11. GEOLOGY.-Elements of Physical Geography and Geology. Specimens of rocks and fossils will be given for identification.

12. DRAWING.—Drawing from the Flat, from Models, and in Perspective. A fair degree of skill in Freehand Drawing will be required in order that a Student may pass.

13. MUSIC.—The Elements of Harmony and Musical Composition, with some knowledge of the history and principles of the Art.

#### SCALE OF MARKS.

	Full Marks obtainable.
(Language	600
1. English { History	250
1. English { History	250
2. Latin	
3. Greek	800
4. French	
5. German	
6. Italian	550
T D M d M (a) Arithmetic and Algebra	500
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