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1881.

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T A S M A N I A.

H O U S E O F A S S E M B L Y.

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DEGREE OF ASSOCIATE OF ARTS :

REPORT FOR 1880.

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Laid upon the Table by the Colonial Treasurer, and ordered by the House to be  
printed, July 19, 1881.



## TASMANIAN COUNCIL OF EDUCATION.

### DEGREE OF ASSOCIATE OF ARTS, DECEMBER, 1880.

**I**N conformity with the Rules and Regulations of the Tasmanian Council of Education the Council has 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 the Degree has been conferred accordingly :—

#### FIRST CLASS.

**EVETT GORDON ALLPORT**, Horton College, Ross. Awarded the Council's Gold Medal as Senior Associate of the Year, the Council's First Prize for Latin, for Greek, and for Mathematics, the Council's Second Prize for English and for Italian, and the Council's Prize for Geology.

**FRANCIS SYDNEY KNIGHT**, Hutchins School, Hobart Town. Awarded the Council's First Prize for French, and the Council's Second Prize for Latin and for Mathematics.

**FREDERICK MILLER JOHNSON**, Hutchins School, Hobart Town. Awarded the Council's Prize for Zoology and Botany.

**MARY CAROLINE DICKSON**, Miss Garrett's Ladies' School, Hobart Town. Awarded the Council's First Prize for English, for German, and for Italian, and the Council's Second Prize for French.

**HERBERT NEIL GRANT**, Horton College, Ross.

**WILLIAM CROSBY WALCH**, Horton College, Ross.

**JAMES DUNCAN ALBERT RIDDEL**, High School, Hobart Town.

**PERCY GOWER OLDMEADOW**, Church Grammar School, Launceston. Awarded the Council's Prize for Natural Philosophy.

**JOHN BENJAMIN TRAVERS SOLLY**, Hutchins School, Hobart Town.

**VINCENT JAMES ELLIS**, City School, (Mr. Pike's), Hobart Town.

#### SECOND CLASS.

**JAMES AUGUSTUS GORRINGE**, Horton College, Ross.

**IDA ROBERTS**, Ladies' College, Hobart Town.

**ALBERT FREDERICK STRUTT**, High School, Hobart Town.

**EMMA CONSTANCE GATEHOUSE**, High School, Hobart Town. Awarded the Council's Prize for Drawing.

**ROBERT GILLESPIE SCOTT**, High School, Hobart Town. Awarded the Council's Second Prize for Greek.

#### THIRD CLASS.

**FRANK ADOLPHUS DAVENPORT**, High School, Hobart Town.

**ETHEL JANE HUXTABLE**, Ladies' College, Hobart Town. Awarded the Council's Prize for Music.

**AGNES MARION HARRIS**, Ladies' College, Hobart Town.

By Order of the Council,

GEO. RICHARDSON, *Secretary.*

*Hobart Town, 16th December, 1880.*

## TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS, DECEMBER, 1880.

### EXAMINERS' REPORT.

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

WE have the honor to present our Report of the Examination of Candidates for the A.A. Degree.

A list of 23 Candidates was placed in our hands; but only 21 presented themselves when the examination opened on the morning of Friday, December the 3rd. We may perhaps be allowed to make a suggestion (although not strictly within our province) that some check, by fine or otherwise, is desirable upon the practice of Candidates sending in their names, either for the whole examination or the special subjects, lightly and unadvisedly. It has happened more than once that a paper has been drawn up and printed for the benefit of a single Candidate, and when the time came he did not present himself. But loss of time and trouble is not always the whole of the mischief; for when the Candidates are numerous, and each professes to bring up a great variety of subjects, it is sometimes a task of considerable difficulty to adjust the time table for such aberrant subjects as Geology, Chemistry, Music, and Drawing, without protracting the Examination unduly. Or again, unnecessary trouble and expense may have been incurred to procure a larger examination room, whereas all the time a smaller one would have sufficed. Of the 21 Candidates exactly one-third were females.

#### PRELIMINARY EXAMINATION.

There were two very serious failures in Arithmetic, but of these two Candidates one recovered himself greatly in his subsequent subjects, obtaining indeed the very highest marks in Preliminary History and Geography; the other exhibited no token of similar buoyancy, and, in accordance with prescribed practice, was not allowed to proceed.

The Examiner-in-Chief would here repeat what he wrote some three or four years ago; viz., that it is hardly possible for an Examiner to judge from the meagre list of subjects given at the Preliminary what the ultimate chances are of any Candidate's passing. Some nervous temperaments do not get over the confusing effects of the first start on the opening day. An elementary Latin paper and an elementary Algebra paper would do much to confirm his judgment.

Eight Candidates obtained full marks in Arithmetic, and four in Reading. In the last subject the female Candidates maintained, as usual, their superiority.

#### ORDINARY EXAMINATION.

I. ENGLISH SUBJECTS.—Presented by all the Candidates. Failed none. Passed, 20; with credit, 13. Full marks, 1100. Highest obtained, 940. Average, 761. The result is highly satisfactory; but a failure is noticeable on the part of several to understand the interdependence of clauses of a compound sentence. One Candidate is deserving of especial notice as having passed with credit in this subject, but who failed subsequently to pass the final test.

II. LATIN.—Presented by 16. Failed, 1. Passed, 15; with credit, 12. Full marks, 800. Highest obtained, 701. Average, 574. The average in this subject is very high. Two Candidates, viz. Allport and Knight, contributed largely to swell it. Grant also stands very high.

III. GREEK.—Presented by 9. Failed, 1. Passed, 8; with credit, 2. Full marks, 800. Highest obtained, 549. Average, 456. The work in this subject was not so well executed as in the Latin. The Geography was particularly defective in the collateral questions. Allport and Scott distinguished themselves most upon the whole.

IV. FRENCH.—Presented by 20. Failed, 4. Passed, 16; with credit, 5. Full marks, 550. Highest obtained, 486. Average, 350. The average of merit in this subject is not particularly high; but is in great measure redeemed by the exercises of Knight and Mary Dickson.

V. GERMAN.—Presented by 7. Failed, 2. Passed, 5; with credit, 1. Full marks, 550. Highest obtained, 404. Average, 266. The knowledge of the language displayed by Mary Dickson is very praiseworthy; the low average being owing to the slight acquaintance of the other Candidates with the primary rules of construction.

VI. ITALIAN.—Presented by 9. Failed, 1. Passed, 8; with credit, 2. Full marks, 550. Highest obtained, 397. Average, 327. Mary Dickson made the best attempts in translating at sight from English into Italian, and *vice versa*; she is followed in the general total very closely by Allport, whose papers are also very good.

VII. PURE MATHEMATICS.—Presented by 20. Failed, 4. Passed, 16; with credit, 6. Full marks, 1000. Highest obtained, 805. Average, 493. In this subject Allport distinguished himself most; but Knight and Johnson are deserving of honorable mention.

VIII. NATURAL PHILOSOPHY.—Presented by 5. Failed, 1. Passed, 4; with credit, 1. Full marks, 250. Highest obtained, 204. Average, 132. In this subject Oldmeadow is not only decidedly in advance of the other Candidates, but will compare favourably with any that have passed in previous years.

IX. GEOLOGY.—Presented by 3. Failed, none. Passed, 3; with credit, 2. Full marks, 250. Highest obtained, 185. Average, 101. Allport very good; Knight by no means amiss.

X. ZOOLOGY & BOTANY.—Presented by 2. Failed, none. Passed, 2; with credit, 2. Full marks, 250. Johnson obtained 147, and Allport, 127.

XI. DRAWING.—Presented by 5. Failed, 1. Passed, 4; with credit, 2. Full marks, 250. Highest obtained, 175. Average, 150. The Examiner observes a marked improvement upon previous years; but excellence in the different departments of "model drawing," "perspective," and "from the flat," was very variously distributed among the several Candidates.

XII. MUSIC.—Presented by 2. Failed, none. Passed, 2; with credit, 2. Full marks, 400. Highest obtained, 332, by Ethel Huxtable. Ida Roberts, of whom also the Examiner speaks in terms of high commendation, obtained 318.

On adding together the number of Marks obtained by the Candidates in the several subjects presented by them, it appeared that of the twenty the following eighteen had passed:—

	Marks.
FIRST CLASS.—Allport, E. G.....	4069
Knight, F. S.....	3291
Johnson, F. M.....	3258
Dickson, Mary C.....	3200
Grant, H. N.....	2989
Walch, W. C.....	2805
Riddel, J. D. A.....	2590
Oldmeadow, P. G.....	2553
Solly, J. B. T.....	2533
Ellis, V. J.....	2378
SECOND CLASS.—Gorringe, J. A.....	2225
Roberts, Ida.....	2199
Strutt, A. F.....	2168
Gatehouse, Emma C.....	2135
Scott, R. G.....	2065
THIRD CLASS.—Davenport, F. A.....	1877
Huxtable, Ethel J.....	1665
Harris, Agnes M.....	1643

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

	No. of Candidates.	Rejected at Preliminary.	Admitted to A.A. Examination.	Passed.	First Classes.	Second Classes.	Third Classes.	Highest Marks obtained.	Average of all who passed.	Highest Marks yet gained.	Highest Average yet reached.
1860-1871	114	13	91	84	40	19	25	2637*	2095		
1872	11	0	11	9	3	1	5	2821	2075		
1873	14	2	12	10	4	1	5	3295	2228		
1874	17	1	16	13	5	7	1	3082	2357		
1875	12	0	12	9	4	5	0	3442	2565		
1876	18	0	18	14	8	3	3	3308	2511		
1877	18	2	16	15	10	5	0	3631	2532		
1878	18	0	18	16	8	7	1	3611	2495		
1879	25	0	25	22	14	2	6	3573	2532		
1880	21	1	20	18	10	5	3	4069	2536		

\* Average, 1860-1871.

The Examiner-in-Chief has now only to observe, in conclusion, that the standard of proficiency has been well maintained by the several Candidates this year. His own observations, fully corroborated by the reports of his co-examiners, have produced the most satisfactory conviction that the Candidates have been well instructed, and have laboured assiduously. Even in the case of those whose marks did not reach the regulation number to entitle them to a class, some papers were most creditably done; but when the number of subjects brought up are few a single failure will often prove fatal.

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

The Council's Gold Medal .....	E. G. Allport.
First Prize for English .....	Mary C. Dickson.
First Prize for Latin .....	E. G. Allport.
First Prize for Greek .....	E. G. Allport.
First Prize for French .....	F. S. Knight.
First Prize for German .....	Mary C. Dickson.
First Prize for Italian .....	Mary C. Dickson.
First Prize for Mathematics .....	E. G. Allport.

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

Second Prize for English .....	E. G. Allport.
Second Prize for Latin .....	F. S. Knight.
Second Prize for Greek .....	R. G. Scott.
Second Prize for French .....	Mary C. Dickson.
Second Prize for Italian .....	E. G. Allport.
Second Prize for Mathematics .....	F. S. Knight.
Prize for Natural Philosophy .....	P. G. Oldmeadow.
Prize for Zoology and Botany .....	F. M. Johnson.
Prize for Geology .....	E. G. Allport.
Prize for Drawing .....	Emma C. Gatehouse.
Prize for Music .....	Ethel J. Huxtable.

Full Tables of the results will be found attached to this report.

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 14th December, 1880.

# EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

## GENERAL CLASS LIST.

### CANDIDATES UNDER 19 YEARS OF AGE.

#### FIRST CLASS.

No.	NAME.	MARKS.	AGE.	AWARDS.
			1 Sept. 1880.	
			<i>yrs. mths.</i>	
1	Allport, E. G. ....	4069	16 9	{ Council's Gold Medal. First Prize for Latin. First Prize for Greek. First Prize for Mathematics. Second Prize for English. Second Prize for Italian. Prize for Geology.
2	Knight, F. S. ....	3291	17 4	{ First Prize for French. Second Prize for Latin.
3	Johnson, F. M. ....	3258	17 4	{ Second Prize for Mathematics. Prize for Zoology and Botany.
4	Dickson, Mary C. ....	3200	17 10	{ First Prize for English. First Prize for German. First Prize for Italian. Second Prize for French.
5	Grant, H. N. ....	2989	16 7	—
6	Walch, W. C. ....	2805	16 7	—
7	Riddel, J. D. A. ....	2590	17 7	—
8	Oldmeadow, P. G. ....	2553	16 7	Prize for Natural Philosophy.
9	Solly, J. B. T. ....	2533	17 2	—
10	Ellis, V. J. ....	2378	17 4	—

#### SECOND CLASS.

11	Gorringe, J. A. ....	2225	18 10	—
12	Roberts, Ida ....	2199	18 1	—
13	Strutt, A. F. ....	2168	17 5	—
14	Gatehouse, Emma C. ...	2135	18 3	Prize for Drawing.
15	Scott, R. G. ....	2065	17 4	Second Prize for Greek.

#### THIRD CLASS.

16	Davenport, F. A. ....	1877	17 7	—
17	Huxtable, Ethel J. ....	1665	17 11	Prize for Music.
18	Harris, Agnes M. ....	1643	18 10	—

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 14th December, 1880.

# SPECIAL CLASS LIST.

<i>English.</i>	<i>Latin.</i>	<i>Greek.</i>	<i>French.</i>	<i>German.</i>	<i>Italian.</i>	<i>Mathematics.</i>	<i>Natural Philosophy.</i>	<i>Zoology and Botany.</i>	<i>Geology.</i>	<i>Drawing.</i>	<i>Music.</i>
FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.
Dickson, Mary Allport Riddel Johnson Gatehouse, Emma C. Grant Roberts, Ida Gorrings Knight Harris, Agnes Scott Walch	Allport Knight Grant Gorrings Johnson Riddel Oldmeadow Gatehouse, Emma C. Walch Solly Scott Strutt	Allport Scott	Knight Dickson, Mary Ellis Johnson Harris, Agnes	Dickson, Mary	Dickson, Mary Allport	Allport Knight Johnson Solly Oldmeadow Dickson, Mary	Oldmeadow.	Johnson Allport	Allport Knight	Gatehouse, Emma C. Solly	Huxtable, Ethel Roberts, Ida
SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.
Ellis Solly Davenport Strutt Oldmeadow Huxtable, Ethel	Davenport Ellis Dickson, Mary	Johnson Riddel Strutt Grant Davenport Walch	Roberts, Ida Walch Grant Gorrings Strutt Gatehouse, Emma Allport Oldmeadow Solly Huxtable, Ethel Riddel	Roberts, Ida Gatehouse, Emma C. Harris, Agnes Huxtable, Ethel	Knight Ellis Walch Grant Harris, Agnes	Gorrings Roberts, Ida Walch Grant Ellis Riddel Davenport Strutt Huxtable, Ethel Scott	Allport Solly Knight	None.	Grant	Oldmeadow	None.

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 14th December, 1880.

# TASMANIAN COUNCIL OF EDUCATION.

*EXAMINATION for the Degree of ASSOCIATE OF ARTS.—December, 1880.*

TABLE OF MARKS.

No.	NAME.	DATE OF BIRTH.	SCHOOL.	TEACHER.	English.	Latin.	Greek.	French.	German.	Italian.	Pure Mathematics.	Natural Philosophy.	Zoology and Botany.	Geology.	Drawing.	Music.	TOTAL.	CLASS.
[Maximum No. of Marks..]					1100	800	800	550	550	550	1000	250	250	250	250	400		
1	Allport, Evett Gordon	27 Nov. 1863	Horton College	W. W. Fox, Esq., B.A.	885 c	701 c	549 c	316	—	387 c	805 c	114	127 c	185 c	—	—	4069	First.
2	Knight, Francis Sydney	28 Apr. 1863	Hutchins School	Rev. J. V. Buckland, B.A.	783 c	691 c	—	486 c	—	337	758 c	98	—	138 c	—	—	3291	First.
3	Johnson, Frederick Miller	2 Apr. 1863	Hutchins School	Rev. J. V. Buckland, B.A.	854 c	616 c	500	397 c	—	—	744 c	n.p.	147 c	—	—	—	3258	First.
4	Dickson, Mary Caroline	5 Oct. 1862	Private	Miss Garrett	940 c	352	—	440 c	404 c	397 c	607 c	—	—	—	—	—	3200	First.
5	Grant, Herbert Neil	24 Jan. 1864	Horton College	W. W. Fox, Esq., B.A.	805 c	637 c	400	344	—	300	423	—	—	80	—	—	2989	First.
6	Walch, William Crosby	30 Jan. 1864	Horton College	W. W. Fox, Esq., B.A.	740 c	571 c	387	351	—	323	433	—	—	—	—	—	2805	First.
7	Riddel, James Duncan Albert	4 Jan. 1863	High School	Rev. R. D. Poulett-Harris, M.A.	878 c	593 c	487	247	—	—	385	—	—	—	—	—	2590	First.
8	Oldmeadow, Percy Gower	8 Jan. 1864	Church Grammar School, Launceston	Rev. W. H. Savigny, M.A.	654	586 c	—	306	—	—	673 c	204 c	—	—	130	—	2553	First.
9	Solly, John Benjamin Travers	26 June, 1863	Hutchins School	Rev. J. V. Buckland, B.A.	700	557 c	—	304	—	—	689 c	113	—	—	170 c	—	2533	First.
10	Ellis, Vincent James	2 Apr. 1863	City School	H. M. Pike, Esq.	719	514	—	411 c	n.p.	326	408	—	—	—	—	—	2378	First.
11	Gorringr, James Augustus	13 Sept. 1861	Horton College	W. W. Fox, Esq., B.A.	789 c	619 c	n.p.	332	—	—	485	—	—	—	—	—	2225	Second.
12	Roberts, Ida	2 July, 1862	Ladies' College	Miss Knott	791 c	n.p.	—	359	251	—	480	—	—	—	—	318 c	2199	Second.
13	Strutt, Albert Frederick	11 Mar. 1863	High School	Rev. R. D. Poulett-Harris, M.A.	662	535 c	401	324	—	—	246	—	—	—	—	—	2168	Second.
14	Gatehouse, Emma Constance	2 May, 1862	High School	Rev. R. D. Poulett-Harris, M.A.	840 c	575 c	—	317	228	—	n.p.	—	—	—	175 c	—	2135	Second.
15	Scott, Robert Gillespie	23 Apr. 1863	High School	Rev. R. D. Poulett-Harris, M.A.	779 c	538 c	535 c	n.p.	n.p.	—	213	—	—	—	—	—	2065	Second.
16	Davenport, Frank Adolphus	2 Jan. 1863	High School	Rev. R. D. Poulett-Harris, M.A.	686	532	392	n.p.	—	—	267	—	—	—	—	—	1877	Third.
17	Huxtable, Ethel Jane	16 Sept. 1862	Ladies' College	Miss Knott	611	—	—	284	224	—	214	—	—	—	—	332 c	1665	Third.
18	Harris, Agnes Marion	9 Oct. 1861	Ladies' College	Miss Knott	779 c	—	—	387 c	224	253	n.p.	—	—	—	—	—	1643	Third.

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 14th December, 1880.



## EXAMINATION PAPERS.

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### Preliminary Examination.

#### ARITHMETIC.

Two hours.

1. Multiply 5789634 by 40086, and express result in words.
  2. Multiply seventy-four millions eight hundred and two thousand and sixty-five by three thousand and ninety-seven.
  3. Divide 3005893378 by 6563.
  4. Divide twelve millions eighty-four thousand nine hundred and nine by seven thousand and nineteen.
  5. Multiply £654 12s. 6½d. by 631.
  6. Multiply 13 cwt. 2 qrs. 15 lbs. by 57.
  7. Divide £308079 6s. 6d. by 841.
  8. Divide 918094 acres 17 poles by 963.
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#### ENGLISH.

One hour and a half.

1. Analyse—

In the time which he employs on a square foot of canvas a master of a different order covers the walls of a palace with gods burying giants under mountains, or makes the cupola of a church alive with seraphim and martyrs.

All experience is an arch where thro' gleams that untravell'd world, whose margin fades for ever and for ever when I move.

2. Parse the last clause, beginning with *whose*.
  3. Dictation.—
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#### GEOGRAPHY AND HISTORY.

Three hours.

1. Name in order of height the six chief mountain ranges of Europe, noting briefly the position of each.
  2. Where and what are Benares, Sierra Morena, Halifax, Windermere, Florida, Vosges, Congo, Bosporus, Corea, Carpentaria?
  3. What are the capitals of Austria, Sweden, Switzerland, China, Chili, Newfoundland?
  4. Sketch an outline map of N. America, showing the three chief mountain ranges; also the boundaries and three chief towns of British America, the United States, and Mexico.
  5. Make a list of the Kings of the houses Lancaster and York, with dates of accession.
  6. What do you know of the Non-jurors, Lollards, Ironsides, Magna Charta?
  7. What events are connected with the names of Calais, Bannockburn, Cade, Corunna, Utrecht, Macdonald, Acre? In whose reigns did they occur?
  8. What Kings conquered Ireland and Wales?
-

**English.**

Three hours.

DR. BROMBY, *Examiner.*

SHAKESPEARE.—Macbeth. Grammar and Composition.

1. Tears such *as* angels weep. This scamp *of* a coachman. *A many* of our bodies. You are *no* soldier. Explain the use of the words italicized.
2. What are the various kinds of subordinate sentences? Construct complex sentences to show an example of each.
3. Give the meaning and derivation of thane, weird, coign, purveyor, wassail, sleeve, benison, seel, shard-borne, thrall, antic, gin, foison, doff, homage, villain, cloister, measure.
4. Describe the characters of Macbeth and Lady Macbeth.
5. Write notes on—There's *husbandry* in heaven. We'd *jump* the life to come. Liars and swearers *enow*. Where violent sorrow seems a *modern* ecstasy. *Protest* me the *baby* of a girl. *All-thing* unbecoming. The *rooky* wood. Thy *wholesome* days.
6. "Augures and understood relations have  
By maggot-pies and choughs and rooks brought forth  
The secret'st man of blood."  
"Canst thou not minister to a mind diseased,  
Pluck from the memory a rooted sorrow,  
Raze out the written troubles of the brain,  
And with some sweet oblivious antidote  
Cleanse the stuff'd bosom of that perilous stuff  
Which weighs upon the heart?"

Paraphrase these passages.

7. Where are Scone, Colme-kill, Birnam, Forres, Saint Colme's Inch? In what connection do they occur in Macbeth?
8. What king reigned in England in the time of Macbeth? What is he called in this play? What superstition concerning him is mentioned?
9. "Like the poor cat i' the adage." What is the adage?
10. What is a metaphor? Explain the metaphors in the following—  
Macbeth is ripe for shaking  
And put a barren sceptre in my gripe.  
What all my pretty chickens and their dam.
11. What is an Alexandrine?
12. Write an account of the plot of Macbeth.

**History and Geography.**

Three hours.

DR. BROMBY, *Examiner.*

Student's HUME.—Accession of Anne to Peace of Versailles. CORNWELL.—School Geography.

1. Make a table showing the connection of George I. with the house of Stuart. What took place in Scotland with regard to the Succession previous to the Union?
2. Describe the character of Marlborough.
3. Sketch the Rebellion of 1745.
4. What were the causes of the American Revolution? Give dates of Declaration and Recognition of Independence.
5. What were the chief actions of the Seven Years' War? What did England gain by it?
6. Describe the battle of Blenheim.
7. Draw a map of Ireland, and mark the position of Dublin, Belfast, Cork, Londonderry, Armagh, Valentia; the rivers Shannon, Blackwater, Liffey, Boyne, Bann, Foyle, with such lakes as are connected with them; Malin Head, Cape Clear; Donegal, Dundalk, Galway and Dingle Bays.
8. Name the chief ports of France and New Zealand.
9. What does Malaysia consist of? What parts are possessed by European states?
10. Give the name and length of the longest river in the world, in North America, in Europe, in Australasia, in Tasmania.
11. Explain the terms longitude, meridian, zone, tropic, watershed, estuary.
12. For what are the following places famous—Milan, Geneva, Trent, Navarino, Delhi, Boston, Cuzco, Sheffield, Rouen?

## Latin.—I.

Four hours.

DR. BROMBY, *Examiner*.VIRGIL.—*Æneid*, VIII. CICERO.—*De Amicitia*.

## 1. Translate—

- (a) Hæc nemora indigenæ Fauni Nymphæque tenebant,  
 Gensque *virum* truncis et duro robore nata :  
*Queis* neque mos neque cultus erat ; nec jungere tauros,  
 Aut componere opes *norant*, aut parcere parto :  
 Sed rami atque asper victu venatus alebat.  
 Primus ab ætherio venit Saturnus Olympo,  
 Arma Jovis fugiens et regnis exsul ademtis.  
 Is genus indocile ac dispersum montibus altis  
 Composuit, legesque dedit, Latiumque vocari  
 Maluit, his quoniam latuisset in oris.  
 Aurea quæ perhibent, illo sub rege fuerunt  
 Sæcula : sic placida populos in pace regebat ;  
 Deterior donec paulatim ac decolor ætas  
 Et belli rabies et amor successit habendi.
- (b) Jamque adeo exierat portis equitatus apertis ;  
 Æneas inter primos et fidus Achates ;  
 Inde alii Trojæ procures ; ipse agmine Pallas  
 In medio, *chlamyde* et pictis conspectus in armis :  
 Qualis ubi oceani perfusus Lucifer unda,  
 Quem Venus ante alios astrorum diligit ignes,  
 Extulit os sacrum *cælo*, tenebrasque resolvit.  
 Stant pavidæ in muris matres, oculisque sequuntur  
 Pulveream nubem et fulgentes ære catervas.  
*Olli* per dumos, qua proxima meta viarum,  
 Armati tendunt. It clamor, et agmine facto  
 Quadrupedante putrem sonitu quatit ungula campum.

2. What is remarkable about the last line ?  
 3. What is remarkable, in form or construction, in the italicised words ?  
 4. What case are parto, montibus, Latium, quæ, portis, agmine, ignes, qua ? Why ?  
 5. Translate—

(a) *Quid enim Africanus indigens mei ?* Minime herele : ac ne ego quidem illius : sed ego admiratione quadam virtutis ejus, ille vicissim opinione fortasse nonnulla, quam de meis moribus habebat, me dilexit : auxit benevolentiam consuetudo. Sed quamquam utilitates multæ et magnæ consecutæ sunt, non sunt tamen ab earum spe causæ *diligendi* profectæ. Ut enim benefici liberalesque sumus, non ut *exigamus* gratiam, neque enim beneficium fœneramur, sed natura propensi ad liberalitatem sumus : sic amicitiam non spe mercedis adducti, sed quod omnis *ejus* fructus in ipso amore inest, expetendam putamus.

(b) Sed cum tot signis eadem natura *declaret*, quid *velit*, anquirat, desideret ; obsurdescimus tamen nescio quomodo ; nec ea quæ ab ea monemur, audimus ; est enim varius et multiplex usus amicitia, multæque causæ suspicionum offensionumque dantur : quas tum *evitare*, tum elevare, tum ferre, *sapientis* est ; una illa sublevanda offensio est, ut et veritas in amicitia, et fides retineatur ; nam et monendi amici sæpe sunt, et objurgandi : et hæc accipienda amice, cum benevole fiunt. Sed nescio quomodo verum est, *quod* in Andria familiaris meus dicit :

Obsequium amicos, veritas odium parit.

6. Parse the words italicised in Question 5, explaining the construction.  
 7. Who is “familiaris meus ?” What did he write, and when ?  
 8. What kind of verb is obsurdescimus ? How do such verbs form their perfects ?  
 9. Give the principal parts of parit, abstulit, censemus, novit, vivet, senserim, contrivimus, fugio, perstrinxit, juvo, perspicere, queo, loquar, quærunt, cogo, petentem, fallo, porgite, finge, rumpant.  
 10. Give genitive singular, nominative and genitive plural, gender, and English of palus, fœdus, vallis, caligo, comes, mons, specus, vis, merces, fides, ætas, dolor.  
 11. Derive, giving the English of the roots, as well as of the derivatives, concordia, extemplo, princeps, impedio, nutrix, lautus, gloriosus, amplexus, culmen, niveus, bicornis, jurgium.  
 12. How are diminutives formed from Latin nouns ? Give examples.

## 13. Explain the allusions in—

Ti. Gracchum rempublicam vexantem.  
 Ferre contra patriam arma cum Coriolano.  
 Cum Pylades Orestem se esse diceret.  
 Te potuit lacrimis Tithonia flectere conjux.  
 Ægida horriferam.  
 Lapsa ancilia cælo.

## 14. Who or what were Araxes, Eurys, Orcus, Lipare, Cloelia, Anubis, Pyrrhus, Alcides, Neoptolemus, Nonæ?

## 15. Put into Latin—Who is there who does not hate Tarquinius Superbus? This should be done by all. He can say how many sheep every one has. If any evil happened, it happened to me.

## Latin.—II.

Four hours.

DR. BROMBY, *Examiner.*

## TRANSLATION AT SIGHT AND COMPOSITION.

## 1. Translate—

His rebus gestis, Curio se in castra ad Bagradam recepit, atque universi exercitus conclamatione imperator appellatur; posteroque die Uticam exercitum ducit, et prope oppidum castra ponit. Nondum opere castrorum perfecto, equites ex statione nunciant, magna auxilia equitum peditumque ab rege missa Uticam venire; eodemque tempore vis magna pulveris cernebatur, et e vestigio temporis primum agmen erat in conspectu. Novitate rei Curio permotus præmittit equites, qui primum impetum sustineant, ac morentur; ipse, celeriter ab opere deductis legionibus, aciem instruit. Equites committunt prælium; et prius quam plane legiones explicari et consistere possent, tota auxilia regis impedita ac perturbata, quod nullo ordine et sine timore iter fecerant, in fugam se conjiciunt: equitatuque omni fere incolumi, quod se per litora celeriter in oppidum recepit, magnum peditum numerum interficiunt.

## 2. Translate into Latin—

Castor and Pollux, it was said, had fought, armed and mounted, at the head of the legions of the commonwealth, and had afterwards carried the news of the victory with incredible speed to the city. The well in the Forum at which they had alighted was pointed out. Near the well rose their ancient temple. A great festival was kept to their honour on the Ides of Quintilis, supposed to be the anniversary of the battle; and on that day sumptuous sacrifices were offered to them at the public charge. One spot on the margin of Lake Regillus was regarded during many ages with superstitious awe. A mark, resembling in shape a horse's hoof, was discernible in the rock; and this mark was believed to have been made by one of the celestial chargers.

## 3. Translate into Latin verse—

Who is he that cometh, like an honoured guest,  
 With banner and with music, with soldier and with priest,  
 With a nation weeping, and breaking on my rest?  
 Mighty Seaman, this is he,  
 Was great by land as thou by sea.  
 Thine island loves thee well, thou famous man,  
 The greatest sailor since our world began.  
 Now to the roll of muffled drums,  
 To thee the greatest soldier comes;  
 For this is he,  
 Was great by land as thou by sea;  
 His foes were thine; he kept us free;  
 O give him welcome, this is he  
 Worthy of our gorgeous rites,  
 And worthy to be laid by thee.

## Latin.—III.

Three hours.

DR. BROMBY, *Examiner*.

HORACE—Odes I. and II.

## 1. Translate—

O navis, referent in mare te novi  
 Fluctus! O quid agis? Fortiter occupa  
 Portum. Nonne vides ut  
 Nudum remigio latus  
 Et malus celeri saucius Africo  
 Antennæque gemant, ac sine funibus  
 Vix durare carinæ  
 Possint imperiosius  
 Æquor? Non tibi sunt integra lintea.  
 Non di, quos iterum pressa voces malo.  
 Quamvis Pontica pinus,  
 Silvæ filia nobilis,  
 Jactes et genus et nomen inutile;  
 Nil pictis timidus navita puppibus  
 Fidit. Tu, nisi ventis  
 Debes ludibrium, cave.  
 Nuper sollicitum quæ mihi tædium,  
 Nunc desiderium, curaque non levis,  
 Interfusa nitentes  
 Vites æquora Cycladas.

2. What is the meaning of the above ode?
3. Scan the first four lines. Give the metrical name of each line, and the name of each foot employed.
4. What would be the meanings of novi, latus, malus, voces, fidit, levis, if the quantities were changed?
5. Account for the case of remigio, pinus, puppibus, tædium, Cycladas.
6. Translate—
 

O sæpe mecum tempus in ultimum  
 Deducte, Bruto militiæ duce,  
 Quis te redonavit Quiritem  
 Dis patriis Italoque cælo,  
 Pompei meorum prime sodalium,  
 Cum quo morantem sæpe diem mero  
 Fregi coronatus nitentes  
 Malobathro Syrio capillos?  
 Tecum Philippos et celerem fugam  
 Sensi, relictæ non bene parmula,  
 Cum fracta virtus, et minaces  
 Turpe solum tetigere mento.  
 Sed me per hostes Mercurius celer  
 Denso paventem sustulit aëre;  
 Te rursus in bellum resorbens  
 Unda fretis tulit æstuosis.
7. What war is referred to in this ode? What was the result of it? How was it that Horace was engaged in it? Give date of the Battle of Philippi.
8. Give the Latin for the south, west, and south-west winds; also the names of three Italian wines.
9. Derive, giving meanings,—bruma, dimidium, auritus, prelum, officina, compesco, populeus, puertia, quercetum. What is the meaning of the suffix in the three last? Give two other examples of each.
10. Give the principal parts of scindo, veto, tergeo, sterno, fallo, aduro.
11. Translate, with brief explanation, if necessary, venena Colchica: bis Afro murice tinctæ lanæ; cohors Gigantum impia; nec Babylonios tentaris numeros; Centaurea rixa; licebit injecto ter pulvere curras; memor mutatæ simul togæ.
12. Obligasti. Give the other persons of this tense which elide the v. What other tenses do the same? Give three examples.
13. What kind of a numeral is trecenti? Give the English, and the first ten of the series.
14. Who were Icarus, Melpomene, Orpheus, Bassareus, Mæcenas, Cynthius?
15. What were Chimæra, Syrtes, Tempe, Cnidus, Calabria, Hæmonia?
16. Give six Greek words employed by Horace, with their meanings.

## Greek.—I.

Three hours.

DR. BROMBY, Examiner.

XENOPHON—Anabasis I.

## 1. Translate—

Ἐπεὶ δὲ ὑμεῖς οὐ βούλεσθε συμπορεύεσθαι, ἀνάγκη δὴ μοι ἢ ὑμᾶς προδόντα τῇ Κύρον φιλίᾳ χρῆσθαι ἢ πρὸς ἐκείνον ψευδόμενον μεθ' ὑμῶν εἶναι. Εἰ μὲν δὴ δίκαια ποιήσω οὐκ οἶδα· αἰρήσομαι δ' οὖν ὑμᾶς, καὶ σὺν ὑμῖν ὃ τι ἂν δέῃ πείσομαι. Καὶ οὐποτε ἐρεῖ οὐδείς ὡς ἐγώ, Ἕλληνας ἀγαγὼν εἰς τοὺς βαρβάρους, προδοὺς τοὺς Ἕλληνας τὴν τῶν βαρβάρων φιλίαν εἰλόμην. Ἀλλὰ ἐπεὶ ὑμεῖς ἐμοὶ οὐκ ἐθέλετε πείθεσθαι [οὐδὲ ἔπεισθαι,] ἐγὼ σὺν ὑμῖν ἔψομαι καὶ ὃ τι ἂν δέῃ πείσομαι. Νομίζω γὰρ ὑμᾶς ἐμοὶ εἶναι καὶ πατρίδα καὶ φίλους καὶ συμμάχους· καὶ σὺν ὑμῖν μὲν ἂν οἶμαι εἶναι τίμιος ὅπου ἂν ᾖ, ὑμῶν δ' ἔρημος· ὦν οὐκ ἂν ἱκανὸς εἶναι οὐτ' ἂν φίλον ὠφελῆσαι οὐτ' ἂν ἐχθρὸν ἀλέξασθαι. Ὡς ἐμοῦ οὖν ἰόντος ὅπῃ ἂν καὶ ὑμεῖς, οὕτω τὴν γνῶμην ἔχετε.

2. Write out all the cases sing. of οὐδείς, πατήρ, ὅστις. Also dative sing. and plural of μῆν, τευχός, πούς, ἀλέτης, δρέπανον, ἀσπίς, βασιλεύς.
3. State the tense, mood, and voice of—ἦσθη, ἐδαπάνων, μενούμεν, ἀποκρινούνται, ἀπαγορεύω, συνέσπον, ἐπύθετο, ὤετο, προέσθαι, συνεσπειραμένην, διειχέτην, ἐλώντα, ἐπίασι. Also give of each the present, future, and aorist tenses in use.
4. Write out a conspectus of moods for—p. act. of πέμπω, 1 a. pass. λαμβάνω, 1 a. mid. μάχομαι, p. pass. σκευάζω, fut. mid. πίπτω, plup. ind. οἶδα.
5. Write out all the persons of—2 a. ind. mid. ἀνέχω, fut. ind. mid. θνήσκω, 1 a. opt. pass. δείκνυμι, perf. subj. δέομαι, 2 a. act. ἐνδύνω, perf. opt. pass. μμνήσκω, pres. subj. pass. ἀξιόω (contract.)

## 6. Translate the following sentences—

Οὐ γὰρ ἦν τοῦ Κύρου τρόπου ἔχοντα μὴ ἀποδιδόναι — ὀκνοῖν ἂν ἐμβαίνειν, μὴ ἡμᾶς αὐταῖς ταῖς τρήρεσι καταδύσῃ — Παρυσάτιδος ἦσαν εἰς ζώονη δεδομένοι — Τὰς ὀπίδας, ἂν τις ταχὺ ἀνιστῇ ἔστι λαμβάνειν — ὡς εἶδε Κλέαρχον διελαύνοντα ἴησι τῇ ἀξίῃ, καὶ οὗτος μὲν αὐτοῦ ἡμαρτε — ἔφη δὲ Κύρον ἄρχειν τοῦ λόγου ὧδε — ἐκ πλέονος ἢ τὸ πρόσθεν ἔφενγον.

7. Derive, giving the English both of each word and of its roots—πρόφασις, γέφυρα, ἡττηθείς, ὀργυιά, εὐώνυμος, αὐτόματος, προσποιεῖσθαι, εὐηθεία, μετέωρος, καταλευσθῆναι, ἀφθονία.
8. To what language does the word παράδεισος properly belong? What exactly does it express? In what two connections do we meet with it in Scripture?
9. What is the difference between κατ' ἴλας and κατὰ τάξεις, between μετὰ governing a gen. and governing an accus. case, between διὰ governing a gen. and governing an accus. case, between βασιλεία and βασιλεία, between ἀμπέλων and ἀμπελών, between εἰδῆτε and ἰδῆτε, between αὐτή and αὐτὴ, between ἀναβάσι and ἀνάβασι, between ἀποφῆναι and ἀπόφηναι?
10. When an adverb in Greek is employed as a preposition, what case does it govern? Give an example from the Anabasis.
11. What was the position of the following places:—Stymphalus, Sardis, Megara, Olynthus, Thapsacus, Amphipolis, the Maeander?
12. Put into Greek—Those in the market having left their commodities behind them took to flight. To one who paid attention, it was clear that the king's empire was strong in the amount of territory and the number of men, but weak through the length of the roads and by the forces being scattered, if any one should wage war against it suddenly.
13. Translate into English—

Οἱ Θηβαῖοι ἡξίουσαν ὑπὲρ πάντων Βοιωτῶν ὁμνύναι. ὁ δὲ Ἀγεσίλαος οὐκ ἔφη δέξασθαι τοὺς ὅρκους, ἐὰν μὴ ὁμνύωσι, ὥσπερ τὰ βασιλέως γράμματα ἔλεγεν, αὐτονόμους εἶναι καὶ μικρὰν καὶ μεγάλην πόλιν. Οἱ δὲ τῶν Θηβαίων πρέσβεις ἔλεγον, ὅτι οὐκ ἐπεσταλμένα σφίσι ταῦτα εἶη. Ἰτε νῦν ἔφη ὁ Ἀγεσίλαος καὶ ἐρωτᾷτε· ἀπαγγέλλετε δ' αὐτοῖς καὶ ταῦτα, ὅτι, εἰ μὴ ταῦτα ποιήσουσιν ἔκσπονδοὶ ἔσονται. Οἱ μὲν δὴ ὥχοντο. Ὁ δὲ Ἀγεσίλαος διὰ τὴν πρὸς Θηβαίους ἔχθραν οὐκ ἔμελλεν, ἀλλὰ πείσας τοὺς ἐφόρους εὐθὺς ἐθύετο· ἐπεὶ δὲ ἐγένετο τὰ διαβατήρια, ἀφικόμενος εἰς τὴν Τεγέαν, διέπεμπε τῶν ἱππέων κατὰ τοὺς περιοίκους ἐπισπεύσοντας.

## Greek.—II.

EURIPIDES—Hecuba. HOMER—Iliad, VII.

## 1. Translate—

Ἑκάβη, διδάσκου, μηδὲ τῷ θυμουμένῳ  
τὸν εὖ λέγοντα δυσμενῇ ποιῶ φρενί.  
ἐγὼ τὸ μὲν σὸν σῶμ', ὑφ' οὐπὲρ ἡντύχουν,  
σώζειν ἔτοιμός εἰμι, οὐκ ἄλλως λέγω.  
ἂ δ' εἶπον εἰς ἅπαντας, οὐκ ἀρνήσομαι,  
Τροίας ἀλούσης, ἀνδρὶ τῷ πρώτῳ στρατοῦ  
σὴν παῖδα δοῦναι σφάγιον ἐξαιτουμένῳ.  
ἐν τῷδε γὰρ κάμνουσιν αἱ πολλαὶ πόλεις,  
ὅταν τις ἐσθλὸς καὶ πρόθυμος ὦν ἀνὴρ  
μηδὲν φέρεται τῶν κακίωνων πλέον.  
ἡμῖν δ' Ἀχιλλεὺς ἄξιος τιμῆς, γύναι,  
θανὼν ὑπὲρ γῆς Ἑλλάδος κάλλιστ' ἀνὴρ.  
οὐκ οὖν τόδ' αἰσχρὸν, εἰ βλέποντι μὲν φίλῳ  
χρώμεσθ', ἐπεὶ δ' ὄλωλε, μὴ χρώμεσθ' ἔτι;  
εἰεν· τί δῆτ' ἐρεῖ τις, ἦν τις αὖ φανῇ  
στρατοῦ τ' ἄθροισις, πολεμίων τ' ἀγωνία;  
πότερα μαχούμεθ' ἢ φιλοψυχήσομεν,  
τὸν κατθανόνθ' ὀρώντες οὐ τιμῶμενον.

2. Parse the words—*δυσμενῇ, ποιῶ, ἡντύχουν, ἂ, ἀλούσης, κακίωνων, κάλλιστ', φίλῳ, ἐρεῖ, φανῇ*;  
giving the principal parts of the verbs and the reason for the case, &c. of the other words.

## 3. Translate—

ὦ μοι ἐγὼ,  
πᾶ βῶ; πᾶ στῶ; πᾶ κέλσω,  
τετράποδος βάσιν θηρὸς ὀρεστέρου  
τιθέμενος ἐπὶ χεῖρα, κατ' ἵχνος;  
ποῖαν, ἢ ταύταν, ἢ τάνδ' ἐξαλλάξω,  
τὰς ἀνδροφόνους μάρψαι χρῆζων  
Ἰλιάδας, αἱ με διώλεσαν;  
τάλαιναι, τάλαιναι κόραι Φυργῶν·  
ὦ κατάρatoi, ποῖ καὶ με φυγᾶ  
πτώσσουνσι μυχῶν;  
εἴθε μοι ὀμμάτων αἱματόεν βλέφαρον  
ἀκέσαι, ἀκέσαιο, τυφλὸν, Ἀλιε,  
φέγγος ἀπαλλάξας.

4. Parse—*βῶ, μάρψαι, τιθέμενος, ἀκέσαιο*, giving principal parts.  
5. Give the dative plural of—*τετράποδος, βάσιν, χεῖρα, αἱματόεν*.  
6. Who are the speakers of the above passage? What is the latter complaining of?  
7. Who were *Διόσκουροι, Λατώ, Κρονίδας, Κάσανδρα*? What were *Sirius, Eurotas, Lemnos, Simoïs*? To what dialects do the first three names belong? Give the Attic forms.  
8. Translate—

Ἔκτωρ, νῦν μὲν δὴ σάφα εἴσεται οἰόθεν οἶος,  
οἶοι καὶ Δαναοῖσιν ἀριστῆες μετέασιν,  
καὶ μετ' Ἀχιλλῆα ῥηξήνορα, θυμολέοντα.  
Ἄλλ' ὁ μὲν ἐν νήεσσι κορωνίσιν ποντοπόροισιν  
κέῖτ' ἀπομνήσας Ἀγαμέμνονι, ποιμένι λαῶν·  
ἡμεῖς δ' εἰμὲν τοῖοι, οἳ ἂν σέθεν ἀντιάσαιμεν,  
καὶ πολέες· ἀλλ' ἄρχε μάχης ἡδὲ πτολέμοιο.  
Τὸν δ' αὖτε προσέειπε μέγας κορυθαίολος Ἔκτωρ·  
Αἴαν Διογενές, Τελαμώνιε, κοίρανε λαῶν,  
μήτι μεν, ἢ ὅτε παιδὸς ἀφαιρού, πειρήτιζε,  
ἢ ἐ γυναικός ἢ οὐκ οἶδεν πολεμήϊα ἔργα.  
Αὐτὰρ ἐγὼν εὖ οἶδα μάχας τ' ἀνδροκτασίας τε·  
οἶδ' ἐπὶ δεξιᾷ, οἶδ' ἐπ' ἀριστερὰ νωμῆσαι βῶν  
ἄζαλέην, τό μοι ἔστι ταλαύρινον πολεμίζειν·  
οἶδα δ' ἐπαίξαι μόθον ἱππων ὠκείων·  
οἶδα δ' ἐνὶ σταδίῳ δῆτ' ἔμπεσθαι Ἀρηϊ.  
Ἄλλ', οὐ γάρ σ' ἐθέλω βαλέειν, τοιοῦτον ἔοντα,  
λάβρη ὀπιπτεύσας, ἀλλ' ἀμφαδόν, αἶ κε τύχωμι.

9. What is the meaning of the epithets—*γλαυκῶπις*, *αἰγιγενέτης*, *εὐσσελμος*, *δολιχόσκιος*, *νεφεληγερέτα*, *δυσηχής*, *ἀκαλαρρείτης*, *ἡύκομος*? To whom or what does Homer apply them?
10. Give the Attic forms and meanings of—*δουρός*, *αἰγιόχοιο*, *σεῦ*, *ἀγέμεν*, *ῥα*, *προκαλέσσατο*, *ἴδμεν*, *δόμεναι*.
11. Parse—*ἔπεφνε*, *πύθωνται*, *ἐνίψει*, *ἀνέσχεθε*, *διακρινθέντε*, *εἶπεσκεν*, *δῶκε*, *ἔσσατο*.
12. What cases are governed by—*ἄπτω*, *ἄπτομαι*, *παύω*, *παύομαι*, *πείθω*, *πείθομαι*, *τιμωρέω*, *τιμωρέομαι*, *ἐνεκα*?
13. Derive—*χιονώδης*, *φροῦδος*, *ἀνθόκροκος*, *ζατρεφής*, *μυλοειδής*, *ἐρίγδουπος*, *ἐπηπλασίη*, *καρηκομόωντες*, *ἐπαρωγός*, *προσοιστέος*; giving the meanings of roots and derivatives.
14. What meanings has *ὥς* as a conjunction? What mood does it take in each case? What is the meaning of *ὥς* as a preposition and of *ὥς*?
15. *Κἄν*, *κᾶφερον*, *κᾶτα*, *αὐτός*, *τοῦμπαλιν*; give these in uncontracted form. What is the third word in—*εἰπὲ ποῦ 'σθ'*, *ἵνα*?
16. Scan the first line of one, the last of eight, and the following line—*ἄγετ', ὦ παῖδες, τὴν γραῦν πρὸ δόμων*. What feet may be used in an Iambic Trimeter instead of an iambus, and where?

### French.

Three hours.

DR. BROMBY, *Examiner*.

#### 1. Translate—

Ne rougisiez-vous point de déshonorer votre condition par les commerces que vous faites; de sacrifier gloire et réputation au désir insatiable d'entasser écu sur écu, et de renchérir, en fait d'intérêts, sur les plus infâmes subtilités qu'aient jamais inventées les plus célèbres usuriers?

Il est tout autre que vos yeux ne le jugent; et vous trouverez moins étrange que je me sois donnée à lui, lorsque vous saurez que, sans lui, vous ne m'auriez plus il y a longtemps. Oui, mon père, c'est lui qui me sauva de ce grand péril que vous savez que je courus dans l'eau, et à qui vous devez la vie de cette même fille dont.....—Tout cela n'est rien; et il valoit bien mieux pour moi qu'il te laissât noyer, que de faire ce qu'il a fait.

2. Parse the words *faites*, *inventées*, *je me sois donnée*, *saurez*, *courus*, *laissât*, in the above passage.
3. Give a short sketch of the plot of *L'Avare*. When was it written? From what writer is the idea derived?
4. Explain—*Fesse-mathieux*, *denier quatre*, *folle fieffée*, *faire bonne chère*, *il file doux*, *leur épée de chevet*.
5. Translate—

Le pape releva ses peuples du serment de fidélité qu'ils avaient fait à Stanislas. Cette démarche du saint-père faite à propos, et appuyée des forces d'Auguste, fut d'un assez grand poids; elle affermit le crédit de la cour de Rome en Pologne, où l'on n'avait nulle envie de contester alors aux premiers pontifes le droit chinérique de se mêler du temporel des rois: chacun retournait volontiers sous la domination d'Auguste, et recevait sans répugnance une absolution inutile, que le nonce ne manqua pas de faire valoir comme nécessaire.

6. What is the meaning of *fantassins*, *écuyer*, *enclouer*, *solaks*, *chute*, *éperon*, *opiniâtreté*, *chrétienté*, *cognée*, *cloche*, *nage*, *avoine*?
7. What is the history of the empress Catherine?
8. Give the feminine of *empereur*, *flatteur*, *inquiet*, *meilleur*, *doux*, *frais*, *épais*; and the comparative of *bon*, *bien*, *peu*.
9. Write out the present indicative of *faire*, *vouloir*, *vêtir*; and the present subjunctive of *acquérir*, *recevoir*, *aller*.
10. Make a table showing the participles, and the present and past definite indicative (1 sing.) of *offrir*, *paraître*, *valoir*, *mourir*, *conduire*, *vivre*.
11. Distinguish between the use of *qui*, *que*, and *quoi*, as relative pronouns, not interrogative.
12. Put into French—

He will give them to me.  
 He alone will do it.  
 I shall see her, and her brother.  
 What do you know about it?  
 We do not always like what is right.  
 We have more than 280 horses.  
 He is the first person that has spoken to me.  
 She has come in, but I have not seen her.



## 13. Translate—

Pompéi n'est pas une galerie de tableaux, c'est plutôt un journal illustré du premier siècle. On y voit des paysages singuliers; une petite île au bord de l'eau,—un rivage du Nil, où un âne qui veut boire se penche vers la gueule d'un crocodile, qu'il n'aperçoit pas, tandis que son maître s'efforce en vain de le tirer par la queue. Ce sont presque toujours des rochers au bord de l'eau, tantôt parsemés d'arbres, tantôt couverts de temples échelonnés, tantôt se dressant en âpres solitudes où se perd quelque pâtre avec son troupeau, quelquefois animés par une scène historique.

## 14. Put into French—

At that time I was seldom in bed after six in the morning, summer and winter. I awoke refreshed, and seldom without some merry thoughts in my head, or some piece of a song to welcome the new-born day. Now the first feeling which besets me, after stretching out the hours of recumbance to their last possible extent, is a forecast of the wearisome day that lies before me, with a secret wish that I could have lain on still, or never awaked.

**German.**

Three hours.

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

## 1. Translate—

*Tell.*

So führen wir dahin  
Der Vogt, Rudolph der Harras und die Knechte.  
Mein Köcher aber mit der Armbrust lag  
Am hintern Gransen bei dem Steuerruder.  
Und als wir an die Ecke jetzt gelangt  
Beim kleinen Oxen, da verhängt es Gott,  
Dass solch' ein grausam mörderisch Ungewitter  
Gählings herfürbrach aus des Gotthardts Schlünden,  
Dass allen Ruderern das Herz entsank,  
Und meinten Alle elend zu ertrinken.  
Da hört' ichs wie der Diener einer sich  
Zum Landovgt wendet' und die Worte sprach;  
Ihr sehet eure Noth und unsere Herr  
Und dass wir all' am Rand des Todes schweben  
Die Steuerleute aber wissen sich  
Vor grosser Furcht nicht Rath und sind des Fahrens  
Nicht wohl berichtet. Nun aber ist der Tell  
Ein starker mann und weiss ein Schiff zu steuern.  
Wie wenn wir sein jetzt brauchten in der Noth?  
Da sprach der Vogt zu mir: Tell, wenn du dir's  
Getrautest, uns zu helfen aus dem Sturm  
So möchte ich dich der Bande wohl entled'gen.  
Ich aber sprach; Ja, Herr mit Gottes Hülfe  
Getrau ich mir's und hülff' uns wohl hiedannen.  
So war ich meiner Bande los und stand  
Am Steuerruder und fuhr redlich ihn;  
Doch schielte ich seitwärts wo mein Schiesszeug lag  
Und an dem Ufer merkt' ich scharf umher  
Wo sich ein Vortheil aufthät zum Entspringen.

SCHILLER—*Wilhelm Tell.*

2. Parse "Ruderern" in the 9th line; "elend" in the 10th line; "des Fahrens" in the 16th line; "sein" in the 19th line; "hiedannen" in the 24th line; "aufthät" in the 29th line—of the above speech of Tell.

## 3. Translate—

Durch diese hohle Gasse muss er kommen  
Es führt kein andrer Weg nach Küssnacht.

Where is Küssnacht? Give a short outline of the drama up to the time when Tell is represented to have spoken as above.

## 4. Translate—

Endlich war der Prinz angekommen; die Generalität die Stabsofficiere und das übrige Gefolge das zu gleicher Zeit eintraf, die vielen Menschen, die theils zum Besuche, theils geschäftswegen einsprachen machten das Schloss einem Bienenstock ähnlich der eben

schwärmen will. Jedermann drängte sich herbei den vortrefflichen Fürsten zu sehen; und jedermann bewunderte seine Leutseligkeit und Herablassung; jederman erstaunte, in dem Helden und Heerführer zugleich den gefälligsten Hofmann zu erblicken.

Alle Hausgenossen mussten nach Ordre des Grafen bei der Ankunft des Fürsten auf ihrem Posten sein; kein Schauspieler durfte sich blicken lassen, weil der Prinz mit den vorbereiteten Feierlichkeiten überrascht werden sollte, und so schien er auch des Abends als man ihn in den grossen wohlerleuchteten und mit gewirkten Tapeten des vorigen Jahrhunderts ausgezierten Saal führte.

GOETHE—*Wilhelm Meisters Lehrjahre.*

5. Translate into German—

"The Emperor is deceived," Wallenstein replied to the Ambassadors. "I pity, but I forgive him. It is clear that the imperious mind of the Bavarian rules him. I am sorry, it is true, that he has given me up with so little resistance, but I will obey." He dismissed the deputies with princely gifts, and besought the Emperor in an humble letter not to deprive him of his favour, and to protect him in the dignities which he had gained. The murmuring in the army was universal when the deposition of their general became known, and the best part of his officers immediately left the Imperial service. Many followed him on to his estates in Bohemia and Moravia; he engaged others by means of considerable pensions in order to be able to avail himself immediately of them when the opportunity presented itself.

6. Decline der Poet; der Bär; die Wurst; die Mutter; das Element; das Rad; das Haar; Karl der grosse.
7. Write out six nouns which have in German a double gender on account of their different meanings.
8. Give the 1st person sing. pres. subjunctive, the 1st person singular imperfect indicative, and the past participle of the following verbs:—Beissen; genesen; fressen; erküren; sitzen; meiden; zeihen; stechen; triefen; thun; zwingen.
9. When are the prefixes durch, über, unter, and um, when compounded with verbs, treated as separable, and when as inseparable from their verbs? and give the proper auxiliary verbs for each class.
10. Give the different meanings in which the auxiliary verb lassen is used in German.
11. Write out some verbs which in German sometimes require the subjunctive and sometimes the indicative after them, and give the rule which determines when the indicative and when the subjunctive is to be used.
12. Translate into German—

Where do you get your shoes mended?

I have cut my finger.

Take another cup of tea.

He told me his father was in Paris.

Send me the hat to be dyed.

What is the news? There is no news.

There are people who are always discontented.

There are people in Mr. B.'s house.

He was hanged for killing a man.

We noticed his looking at her.

He is as old again as I.

### Italian.

Three hours.

Rev. T. KELSH, *Examiner.*

TASSO—*Gerusalemme Liberata.* PELLICO—*Le mie Prigioni.*

1. Translate—

All' onesta baldanza, all' improvviso  
Folgorar di bellezze altere e sante,  
Quasi confuso il re, quasi confiso,  
Frenò lo sdegno, e placò il fier sembiante.  
S' egli era d' alma, o se costei di viso

Severa' manco, ei diveniane amante ;  
 Ma ritrosa beltà ritroso core  
 Non prende, e sono i vezzi esca d' amore.  
 \* \* \* \* \*

Indi il suo manto per lo lembo prese,  
 Curvollo, e fenne un seno, e, il seno sporto,  
 Così pur anco a ragionar riprese,  
 Via più che prima dispettoso e torto :  
 O sprezzator delle più dubbie imprese,  
 E guerra e pace in questo sen t' apporto :  
 Tua sia l' elezione : or ti consiglia  
 Senz' altro indugio, e qual più vuoi ti piglia.

2. Parse the fifth and sixth lines.

3. What four individuals are referred to in these extracts ?

4. Give the meaning and gender of the following :—Aere — arbore — fine — fonte — fune —  
 ordine — oste — tema — carcere — dimane — margine — metodo — eclissi — parentesi —  
 elce — nocé — tordo — lepre — pantera — anguilla.

5. Explain the uses of costui — cotesto — desso — altrui — veruno — qualsivoglia — alquanto.

6. Conjugate the preterite indicative of dare — stare — temere — salire — fare — giacere — porre —  
 morire — dolore — bere — conoscere — gire.

7. Translate—

Fui colpito di trovare queste parole, ed arrossii che quel ragazzo si fosse accorto, della polvere ch' ei sopra vedeavi, ch' io più non leggeva la Bibbia, e ch' ei presumesse ch' io fossi divenuto più amabile divenendo incurante di Dio. Scapestratello! (gli dissi con amorevole rimprovero e dolendomi d' averlo scandalizzato.) Questo non è un *libraccio*, e da alcuni giorni che nol leggo sto assai peggio.

\* \* \* \* \*  
 E proruppe in lagrime. Gli porsi la mano, ma egli non me la potè stringere. Le mie guardie, non per malignità, ma per le istruzioni che aveano, lo respinsero. Non doveano lasciarmi avvicinare da chichesifosse. Le parole che quei condannati mi dirigevano, fingeano per lo più di dirsele tra loro, e se i miei due soldati s' accorgeano che fossero a me rivolte, intimavano silenzio.

8. Parse—

Vedeavi — presumesse — proruppe — porsi — me la potè — chichesifosse — dirsele.

9. Translate into Italian—

I heard your brother say that he had lent them an odd volume of Walter Scott, as they boasted so much about their English ; but when visiting them that day fortnight, and expressing a hope that they would not take offence if he asked it back, they replied, "It is not customary with us to trifle away our time in such reading, and it is therefore a pity you took the trouble to lend it to us at all." Tears came to his eyes at the slight offered his favourite poet, but as there was no occasion for further remarks he left abruptly, and after ten minutes' walk reached home.

I am fond of flowers, I have gathered some.

I replied, "May God's will be done!"

Would that I had only thought of my parents and relations!

At 9 o'clock A.M. Maroncelli and myself were made enter a gondola.

10. Translate the following sentences, and explain the concordance of the participles :—

Poichè alquanto di tempo ebbe posto in dover lei piagnente racconsolare, deliberò co' suoi compagni, non essere da tornare in Cipri.

Donna chente v' è paruta questa vivanda? La donna rispose: Monsignore, in buona fe ella m' è piacuta molto.

Le mani dalla cassa sviluppatogli, e quella posta in capo ad una sua figliuola, lui come un picciol fanciullo ne portò nella terra.

11. State what you know of the origin of the language, and of the progress of Italian literature in the 14th, 15th, and 16th centuries.

**Pure Mathematics.—I.**

Three hours.

DR. BROMBY, *Examiner.***ALGEBRA.**

1. If  $a = 0$ ,  $b = 2$ ,  $c = 4$ , and  $d = 6$ , find the numerical value of  $\{a + (b + c)^2 - d\} \{ (a + b)^2 + (d - c)^2 \} \{ (a + b + c)^2 - d \}$ .
2. If 1 be divided into any two parts, prove that the sums formed by adding each part to the square of the other are equal.
3. Reduce  $(a - x^2 + \frac{a^2 + x^2}{a + x})^2$  to its simplest form; and  $\frac{(ab - 1)^2 + (a + b - 2)(a + b - 2ab)}{ab + 1)^2 - (a + b)^2}$  to a factorial form.
4. Extract the square root of  $\frac{4x^2}{49y^2} - \frac{20x}{7y} + \frac{178}{7} + \frac{9y^2}{16x^2} - \frac{15y}{2x}$ .
5. Find the value of  $\sqrt{ax + x^2} + x$  when  $x = \frac{(n - 1)^2 a}{2n - 1}$ .
6. Solve the equations—
 

$$(a) \frac{ax}{b(x + c)} + \frac{bx}{a(x + c)} = 1.$$

$$(d) \left(\frac{x}{y}\right)^{\frac{1}{2}} + \left(\frac{y}{x}\right)^{\frac{1}{2}} = \frac{61}{\sqrt{xy}} + 1 \left\{ \begin{array}{l} \sqrt[4]{x^3y} + \sqrt[4]{xy^3} = 78 \end{array} \right.$$

$$(b) \begin{cases} x + 2y = 7 \\ y + 2z = 2 \\ 3x + 2y = z - 1 \end{cases}$$

$$(c) 2\sqrt{x} + \frac{2}{\sqrt{x}} = 5.$$
7. Two pieces of cloth of equal quality, but of different lengths, were bought, the one for £5, the other for £6 10s. Now, if the lengths of both pieces were increased by 10, the numbers resulting would be in the proportion of 5 to 6. How long was each piece? What the cost per yard?
8. Required the fourth term of  $(2x + 3y)^5$ .
9. Find the sum of 12 terms of the series  $\frac{1}{3}, \frac{5}{6}, \frac{4}{3}, \&c.$
10. Find the 12th term of  $\frac{1}{\sqrt{2}}, \frac{1}{2}, \frac{1}{2\sqrt{2}}, \&c. \dots$  And the sum of 12 terms.
11. If three magnitudes,  $a, b, c$ , be in continued proportion, prove that  $a : c :: a^2 : b^2$ . What name is given to this ratio?
12. If  $x^2 = a^2 + b^2$  and  $y^2 = c^2 + d^2$  prove that  $xy$  is greater than  $ac + bd$ .

**Pure Mathematics.—II.**

Four hours.

DR. BROMBY, *Examiner.***EUCLID, BOOKS I.—IV. ARITHMETIC.**

1. At a given point in a given straight line, to make a rectilinear angle equal to a given rectilinear angle.
2. In any right-angled triangle, the square which is described upon the side subtending the right angle, is equal to the squares described upon the sides which contain the right angle.
3. 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 of the line between the points of section, is equal to the square of half the line.
4. If a straight line be divided into two equal, and also into two unequal parts; the squares of the two unequal parts are together double of the square of half the line, and of the square of the line between the points of section.
5. To draw a straight line from a given point, either without or in the circumference, which shall touch a given circle.
6. In a circle, the angle in a semicircle is a right angle; but the angle in a segment greater than a semicircle is less than a right angle; and the angle in a segment less than a semicircle is greater than a right angle.

7. To inscribe a circle in a given triangle.
8. To describe a circle about a given equilateral and equiangular pentagon.
9. In a given straight line find a point equally distant from two given straight lines. State the case when this is impossible.
10. If from two fixed points in the circumference of a circle straight lines be drawn intercepting an arc of given length and meeting without the circle, prove that the locus of their intersection is a circle.
11. What sum of money increased by  $\frac{2}{3}$  of  $\frac{4}{5}$  of  $\frac{1}{4}$  of itself amounts to 3s. 4d.
12. Reduce to its simplest form  $\frac{2\frac{1}{2}}{4\frac{1}{2}}$  of  $\frac{363.37}{8.4}$ .
13. How much ore must I raise that on losing .425 in roasting and  $\frac{8}{100}$  of the residue in smelting, there may result 506 tons of pure metal.
14. What is the value of 2.145 of 5s. 8 $\frac{1}{2}$ d.?
15. If A starts from M at the rate of 2 $\frac{1}{4}$  miles an hour towards N, to meet B, who starts from N at the same time, how far will he have walked before he meets him? B is driving at the rate of 9 miles an hour, and the distance between the two places is 16 miles.
16. If a square field contains 4400 yards l foot, how many yards and feet will there be in the side of the field?
17. What sum of money improved by simple interest at 3 $\frac{1}{2}$  per cent. per annum for half a year will amount to £14 16s.?
18. The sum of 7 $\frac{1}{2}$ d. was divided among A, B, C in such proportion that A received 1 $\frac{1}{2}$ d. more than C, and B 2 $\frac{1}{4}$ d. less than C. Afterwards a sovereign had to be divided among them in the same proportion: what did they severally receive each time?

### Mathematics—III.

Four hours.

DR. BROMBY, *Examiner*.

#### EUCLID VI. AND XI.—TRIGONOMETRY, LOGARITHMS.

1. Equal parallelograms, which have one angle of the one equal to one angle of the other, have their sides about the equal angles reciprocally proportional: and parallelograms that have one angle of the one equal to one angle of the other, and their sides about the equal angles reciprocally proportional, are equal to one another.
2. Parallelograms about the diameter of any parallelogram, are similar to the whole, and to one another.
3. If an angle of a triangle be bisected by a straight line, which likewise cuts the base; the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base, together with the square of the straight line which bisects the angle.
4. If two straight lines meeting one another be parallel to two others that meet one another, and are not in the same plane with the first two; the first two and the other two shall contain equal angles.
5. If two planes which cut one another be each of them perpendicular to a third plane; their common section shall be perpendicular to the same plane.
6. Every solid angle is contained by plane angles, which together are less than four right angles.
7. Describe a parallelogram which shall be equal in area and perimeter to a given triangle.
8. Describe a circle which shall have its centre in a given straight line, touch another given line, and pass through a fixed point in the first given line.
9. Define the sine, cosine, and tangent of an arc, and prove that a side of a right-angled triangle divided by the hypotenuse is equal to the sine of the arc of that angle divided by the radius.
10. Taking for granted the formulæ for the sines and cosines of the sum and difference of two angles in terms of the sines and cosines of the simple angles, prove that

$$\cos A + \cos B = 2 \cos \frac{A+B}{2} \cos \frac{A-B}{2}.$$

11. Prove that  $\frac{\sqrt{1 - \cos 2a}}{\sin 2a} = \frac{\sec a}{\sqrt{2}}$  and that  $\sec(a + \beta) = \frac{\sec a \sec \beta \operatorname{cosec} a \operatorname{cosec} \beta}{\operatorname{cosec} a \operatorname{cosec} \beta - \sec a \sec \beta}$ .

12. Using the tables of Logarithms find value of  $\sqrt{\frac{3 \times (138)^{\frac{2}{3}}}{(.01)^{\frac{1}{5}}}}$ .
13. If  $A, B, C$  be the three angles of a triangle, and  $a, b, c$  their opposite sides, prove that  $\cos A = \frac{b^2 + c^2 - a^2}{2bc}$ ; and write out the values of  $\cos B$  and  $\cos C$ .
14. A person, whose eye is 5 feet 6 inches above the ground, having receded 125 feet from the base of a tower, finds that its angular elevation is  $52^\circ 34'$ ; calculate its height.

### Natural Philosophy.

DR. BROMBY, *Examiner*.

Three hours.

- Five equal forces, each  $\sqrt{5} \cdot P$ , act upon a point in such a way that the first is at right angles with the second; the third is at right angles with the resultant of the first two; the fourth is at right angles with the preceding resultant....: required the magnitude of the resultant of the five forces.
- A smooth ring, sustaining a weight of 8 lbs., runs along a cord, which is fastened at two points  $A$  and  $B$  in the same horizontal line: the length of the cord is 10 feet, the distance between  $A$  and  $B$  6 feet. Find the tension of the cord.
- Resolve a given force  $P$  into two parallel forces, acting at the distances  $a$  and  $b$  on each side of it.
- If the magnitudes of four parallel forces be 6, 7, 8, 9 respectively, the first three of which are concurrent, but the fourth non-concurrent, and the distances of their points of application from a given plane be 5, 10, 15, 20; what is the distance of the point of application of their resultant from the same plane?
- If  $2a$  be one side of an isosceles triangle and  $2b$  the base; prove that the centre of gravity of the perimeter of the triangle is distant from the base  $\frac{a(4a^2 - b^2)^{\frac{1}{2}}}{2a + b}$ .
- In the first system of pulleys where there are 5 movable pulleys each weighing 1 lb., what power would be necessary to sustain a weight of 113 lbs.?
- The diameter of a windlass is 1 ft. 4 in., but after a certain number of turns the rope, which is 2 in. thick, begins to double over itself: how much per cent. is the power of the instrument increased or diminished?
- If the interval between the threads of a screw be  $\frac{1}{8}$  of an inch, and the diameter of the circle described by the power be 2 feet; find what weight would be sustained by a power of 17 lbs.?
- Find the space described between the 4th and 7th seconds by a falling body.
- A body is projected vertically upwards with an unknown velocity; and having reached the height of 85 feet it takes  $3''$  before in falling it reaches that point again. Find the velocity of projection and the total height to which it ascends.
- Show how the specific gravity of a fluid is ascertained by means of the common hydrometer.
- The volume of the receiver of an air-pump is four times that of the barrel; determine the ratio of the elastic force of the air after 10 strokes of the piston to what it was after 8 strokes.
- The specific gravity of good coal gas is 0.5; and its ascensional force is  $8\frac{1}{2}$  lbs. for every cubic fathom. Calculate the ascensional force of a balloon containing 446 cubic fathoms, and weighing 1000 lbs., when filled with an inferior gas whose sp. gr. was .45.
- The resistance to a steamer of the water through which it moves increases in the cubic ratio of the velocity. If an engine of a 100 horse power can impel a steamer 8 miles an hour, how many horse power would be needed to propel it 16 miles an hour?

**Zoology and Botany.**

Three hours.

DR. BROMBY, *Examiner.***ZOOLOGY.**

1. Distinguish between a natural and an artificial system of classification. To whom is the credit due of instituting the former method? To what department of nature did he apply it?
2. Distinguish between the structure of the horns of the rhinoceros, of the deer, the ox, the antelope, the giraffe. In which species of deer is it that the females have antlers as well as the males?
3. What is the original habitat of the buffalo, the musk ox, the aurochs, and the bison? State also in what part of the world we must look for the giraffe, the pangolin, the camel, the lemur, the hippopotamus, the yack, the chamois.
4. How does the skull of a bird differ from the skull of a mammal? With what bone of a mammal does the skipjack of a bird correspond?
5. Whence is eider-down (*edredon*) obtained?
6. Name the flying reptile of geological times; and mention the recent animal which approaches it the nearest.
7. How does the circulation of the blood in reptiles differ from that in mammals?
8. Into what two great sub-classes is the class of fishes divided? Give three examples of each.
9. What number of wings has a common butterfly? Describe them: also its mouth: also the various phases of its existence. To what order of insects does it belong?
10. Describe an octopus, and a medusa. (Or an argonaut and a lerneæ.) And mention the class to which each belongs.

**BOTANY.**

11. What are spiral vessels? Why so called? In what way do they communicate with each other? What do they contain? In what parts of a plant are they chiefly found?
12. Describe all the essential parts of a flower.
13. When a small branch grows up from the middle of a rose, what is it an extension of?
14. From what is a carpel primarily formed? What part does it occupy in the flower? and what in the fruit?
15. Define the following terms:—Plumule, alburnum, laticiferous, endosmose, spadix, bract, stipule, reniform, papilla, acrogen.
16. What is the name of the reproductive organ of a fern? On what part of the plant does it grow? How does it differ in its germination from the seed of exogens? Refer the plant to its proper order.
17. If a plant were described as of the class enneandria and the order trigynia, what would be meant?
18. In what forms are nitrogen, hydrogen, and carbon severally supplied to plants for their nutriment?

**Geology.**

Three hours.

DR. BROMBY, *Examiner.*

1. At what rate does the heat of the earth's crust increase as we descend? At this rate, what would happen at the depth of 25 miles, and what at the depth of 150?
2. Of what plants do (a) the peat-bogs of Ireland consist? (b) the rafts, which yearly come floating down the Mississippi? (c) the vegetable growth which covers the Great Dismal Swamp?
3. What technical names are given to earthy compounds which consist principally of (a) sand, (b) clay, (c) lime, (d) coal, (e) flint?

4. Enumerate the twelve systems into which the earth's crust has been divided. Bracket them into periods; and subdivide the highest and lowest systems into groups. Why was each system so named?
5. What is the difference between "bedded slates" and "cleaved slates"? What do you understand by "foliation"? What agencies are supposed to have been in operation in producing the various phenomena of stratification?
6. To what order do the lowest forms of animal life belong? What is the peculiarity of their structure? What name has been given to the very earliest specimen?
7. Make a sketch of a graptolite. Why is it so named?
8. What is expressed by each of the following geological terms:—Anthracite, moraine, berg-mahl, moffeti, debris, geode, vesicular, amygdaloidal, phonolite, shale, gault, steatite, galena, zechstein?
9. What is the difference between sinter and tufa? between rubble and shingle? between fibrous and acicular? between a nautilus and an ammonite?
10. What do you understand by a crustacean animal? Sketch a figure of one of those recently found in great numbers in the Old Red of Scotland. To what size did these Scotch crustacea grow?
11. To what industrial uses have the following been applied:—Limestone, baryta, caen-stone, lias, flint, graphite, coprolite?
12. Describe and sketch a nummulite, a trilobite, a spirifer, a turbo, a plesiosaurus, a glyptodon, an encrinurus, a cycas.
13. What is the characteristic difference between the tooth of the fossil mammoth and the Asiatic elephant?
14. What is a sunderbund? What is bladder-wrack?
15. With what other sciences does Geology inosculate?

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### Drawing.

H. HUNTER, Esq., Examiner.

#### No. 1.—FROM THE FLAT.

One hour and a half.

Make an enlarged copy of the example given. The height to be equal to the distance between the lines A. B. on the margin. Increase the width in the same proportion.

#### No. 2.—IN PERSPECTIVE.

Two hours and a half.

Sketch the table top, with the arrangement of cubes and other objects upon it, as you see them. Show on your drawing the "horizontal line," and the direction of the principal "vanishing points."

The Examiner will indicate the desired size of the drawing.

#### No. 3.—FROM A PLASTER CAST.

Three hours.

Draw the model given, and shade as much of it as time will permit.

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# Degree of Associate of Arts.

## Music

### Three Hours.

1. Sumner Bsq

Examiner:

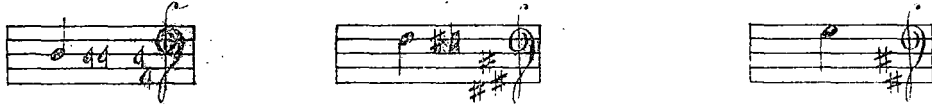
- Write down the letter names of the notes which form a major diatonic scale, commencing on B; also these which form the relative minor diatonic scale of A major.

- Name the two keys with four sharps at the Signature; and those with four flats at the Signature.

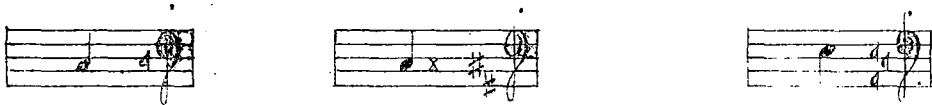
- Name these intervals, and say what they become when inverted:
 

C to A $\flat$	B to C	A to B $\flat$
A $\flat$ to C	C $\sharp$ to A $\flat$	B to C
C to B $\flat$	B to C	

- Raise these notes a semitone without changing their letter-names.



Lower these notes a semitone:



- Name and explain the following kinds of time Signature:
 

$\frac{9}{8}$	$\frac{3}{2}$	$\frac{9}{4}$	$\frac{8}{4}$	$\frac{6}{4}$	$\frac{3}{4}$
---------------	---------------	---------------	---------------	---------------	---------------

- Write down the chord of the second inversion of the third inversion of the chord of the dominant of the key of C minor.

VII. *Modulate (in four-part harmony, compressed score)*

from G to E minor

$C$  to  $B^b$

*G to B*

A to C

*C to G*

VIII. Name, give the root-sounds, and resolve the following chords ;

The first system of the musical score consists of two staves. The upper staff is in treble clef with a key signature of one flat (B-flat). It contains three measures: the first measure has a B-flat note on the second line and a B-flat note on the first space; the second measure has a B-flat note on the second line and a B-flat note on the first space; the third measure has a B-flat note on the second line and a B-flat note on the first space. The lower staff is in bass clef and contains three measures: the first measure has a B-flat note on the second line and a B-flat note on the first space; the second measure has a B-flat note on the second line and a B-flat note on the first space; the third measure has a B-flat note on the second line and a B-flat note on the first space.

IX. Harmonize the following bass in four parts (compressed score) adding Tenor, Alto, and Treble;

Handwritten musical score for the song "The Rose Tree". The score is written on two staves. The top staff is a treble clef with a key signature of one sharp (F#) and a time signature of 3/4. The bottom staff is a bass clef with a key signature of one sharp (F#) and a time signature of 3/4. The melody is written in the bass staff, and the accompaniment is written in the treble staff. The melody consists of a series of eighth and quarter notes, with some rests. The accompaniment consists of a series of chords and single notes, with some rests. The score is written in ink on a piece of paper with horizontal lines.

X. Transpose this passage to the key of  $B^b$ , and employ the Tenor Clef.

[illegible]

## TASMANIAN COUNCIL OF EDUCATION.

*Hobart Town, 7th May, 1879.*

## EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS, 1880.

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 1880.

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.

In determining the Classes, account will be taken of every part of the Examination, including the Preliminary 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.

The examination of those Students who have satisfactorily passed the preliminary examination will comprise the subjects mentioned in the following sections, in four of which, at least, the Candidate must pass:—

- |                      |   |
|----------------------|---|
| 1. English.          | 8. The Elementary Principles of Hydrostatics and Mechanics. |
| 2. Latin.            | 9. The Elements of Chemistry.                               |
| 3. Greek.            | 10. Zoology and Botany.                                     |
| 4. French.           | 11. Geology.  |
| 5. German.           | 12. Drawing.  |
| 6. Italian.          | 13. Music.  |
| 7. Pure Mathematics. |   |

*MINOR SCHOLARSHIPS for Associates of Arts, out of Funds to be provided by Parliament.*

A Minor Scholarship of the value of £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 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.

*SCHEME of Examination for the Year 1880.*

## PRELIMINARY EXAMINATION.

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 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.

## ORDINARY EXAMINATION.

1. **ENGLISH.**—*Language.*—The Candidate will be examined in *Shakespeare's Macbeth*, and will be required to write a short original Composition, or a Report founded upon some abstract of facts furnished to him. Books recommended: *Macbeth*, (Clarendon Press Series); Abbott's *How to Parse*, (Seeley & Co.) *History.*—History of England, from the Accession of Queen Anne to the Peace of Versailles; chaps. XXVIII.—XXXI., inclusive. Book recommended: Smith's *Student's Hume*, (Murray), 7s. 6d. *Geography.*—Physical, Commercial, and Political Geography. Book recommended: Cornwell's *School Geography*, (Simpkin & Co.), 3s. 6d.

2. **LATIN.**—Virgil, *Æneid*, *Book VIII.*, Horace, *Odes*, *Books I. and II.*; Cicero, *De Amicitia*. A passage for translation from some other Latin author; and passages of English for translation into Latin Prose and Verse. Candidates to pass in Latin need not present Horace, but must present it as well as the other books to obtain a *First Class in Latin*.

3. **GREEK.**—Xenophon, *Anabasis*, *Book I.*; Euripides, *Hecuba*. Homer's *Iliad*, *Book VII.* A passage for translation from some other Greek author. Candidates to pass in Greek need not present Euripides, but must present it as well as the other books to obtain a *First Class in Greek*.

4. **FRENCH.**—Voltaire, *Charles XII.*, *Books 4, 5, and 6*; Molière, *L'Avare*. A passage from some other French author for translation into English, and from some English author into French.

5. **GERMAN.**—Schiller, *Wilhelm Tell*. A passage from some other German author for translation into English, and from an English author into German.

6. **ITALIAN.**—Tasso, *Gerusalemme Liberata*, *Canto II.*—*Silvio Pellico*. A passage from some other Italian author for translation into English, and from an English author into Italian.

*In all the foregoing subjects Candidates will be required to answer questions on the respective Languages, and also on the historical and geographical allusions contained in the Books prescribed.*

7. **PURE MATHEMATICS.**—(a) Arithmetic and Algebra, (b) Euclid, *Books I. II. III. IV. VI. XI.*, to the end of Proposition 21, Plane Trigonometry, and the use of Logarithms. Books recommended: Colenso's *Trigonometry*, 1st Part, (Longman), 3s. 6d., or J. Hamblin Smith's *Elementary Trigonometry*, (Rivingtons), 4s. 6d. 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.**—Newth's *First Book of Natural Philosophy*,—not including the Eighth and Ninth Chapters.

9. **CHEMISTRY.**—Inorganic Chemistry. Book recommended—Wilson's *Chemistry*, by Madan, (Chambers), 4s.

10. **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. Books recommended:—Milne Edwards' *Zoology*, (Renshaw), 8s. 6d., and Lindley's *Elements of Botany*, (Bradbury), 9s.

11. **GEOLOGY.**—Book recommended—Page's *Advanced Text Book of Geology*, (Blackwood), 7s. 6d.

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 in this section. Books recommended: J. R. Dicksee's *Linear Perspective for use of Schools*, 8vo., (Virtue), 5s., and R. S. Burn's *Illustrated Drawing Book*, 8vo., (Ward & Lock), 2s.

13. **MUSIC.**—A knowledge of the Elements of Harmony and Musical Composition will be required; questions will also be set upon the history and principles of the Art. Books recommended: Currie's *Elements of Musical Analysis*, (Simpkin & Co.), Parts I. and II., 2s. each, and Sir F. A. G. Ouseley's *Treatise on Harmony*, (Macmillan), 10s.

## SCALE OF MARKS.

		Full Marks obtainable.
1. English	{ Language .....	600
	{ History .....	250
	{ Geography .....	250
2. Latin .....		800
3. Greek .....		800
4. French .....		550
5. German .....		550
6. Italian .....		550
7. Pure Mathematics	{ (a) Arithmetic and Algebra .....	500
	{ (b) Euclid and Trigonometry .....	500
8. Elementary Principles of Hydrostatics and Mechanics .....		250
9. Chemistry .....		250
10. Zoology and Botany .....		250
11. Geology .....		250
12. Drawing .....		250
13. Music .....		400
		Marks.
Standard for First Class .....		2350
Standard for Second Class .....		1900
Standard for Third Class .....		1350