

(No. 36.)



1877.

SESSION IV.

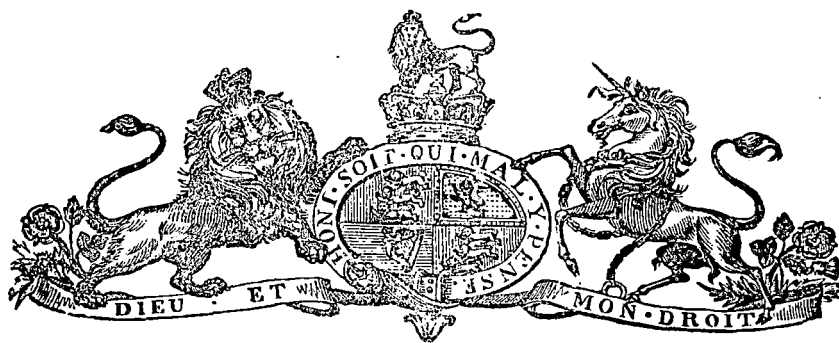
TASMANIA.

LEGISLATIVE COUNCIL.

A.A. DEGREE:

EXAMINERS' REPORT, 1877.

Laid upon the Table by Mr. Moore, and ordered by the Council to be printed,
November 20, 1877.



TASMANIAN COUNCIL OF EDUCATION.

DEGREE OF ASSOCIATE OF ARTS—SEPTEMBER, 1877.

IN 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 of the Degree of Associate of Arts to the satisfaction of the Examiners, and upon whom the Degree has been conferred accordingly:—

FIRST CLASS.

GEORGE ALEXANDER WEBSTER, Hutchins School, Hobart Town. Awarded the Council's Gold Medal as Senior Associate of the year, the Council's First Prize for Latin, the Council's First Prize for Mathematics, the Council's Second Prize for Greek, and the Council's Prize for Natural Philosophy.

STEPHEN HENRY HUGHES, High School, Hobart Town. Awarded the Council's Second Prize for English.

WILLIAM WALKER, Hutchins School, Hobart Town. Awarded the Council's First Prize for Italian, and the Council's Second Prize for Mathematics.

JOHN SINGLETON CLEMONS, Church Grammar School, Launceston.

ARTHUR FREDERICK DAVENPORT, High School, Hobart Town. Awarded the Council's First Prize for Greek, and the Council's Second Prize for Latin.

HUGH MURRAY PRIOR, High School, Hobart Town.

LEIGH TRAFFORD TARLETON, Hutchins School, Hobart Town. Awarded the Council's Second Prize for French.

ALFRED JOHN POPE, Hutchins School, Hobart Town.

ARTHUR GEORGE CLARENCE HAWTHORN, High School, Hobart Town.

CHARLES SYDNEY JONES, High School, Hobart Town. Awarded the Council's First Prize for English.

SECOND CLASS.

ALFRED HENRY CHESTERMAN, High School, Hobart Town. Awarded the Council's Prize for Drawing.

ISABEL MARY RIDDEL, Mrs. Reynolds' School, Hobart Town. Awarded a Prize for French.

ERNEST VALENTINE STACKHOUSE, Horton College, Ross.

SAMUEL KIRKLAND JOHNSTON, Hutchins School, Hobart Town.

ONSLow GORDON DOUGLAS, Horton College, Ross.

The Council has further directed the publication of the names of the under-mentioned Candidates over the age of nineteen years 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:—

THIRD CLASS.

MARY ELIZABETH SMITH, Mrs. Reynolds School, Hobart Town.

HANNAH MARY SWAN, Ladies' College, Hobart Town.

By Order of the Council,

GEO. RICHARDSON, *Secretary.*

Hobart Town, 9th October, 1877.

TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS, 1877.

EXAMINERS' REPORT.

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

WE have the honor to submit to your inspection the result of our Examination of the Candidates for the A. A. Degree.

PRELIMINARY EXAMINATION.

The Examination opened on Friday, September 21, when twenty Candidates presented themselves, of whom three were females. Two failed to pass the Preliminary Examination; and of the remaining eighteen two were over the prescribed age, and therefore, according to the Regulations, no account is taken of them in the following reports.

(1.) ARITHMETIC.—No less than ten of the Candidates obtained full marks, which is a great improvement in accuracy upon last year. Of the remainder there were three or four who misread the questions—a phenomenon exceedingly common at every examination.

(2.) ENGLISH.—Dictation unusually accurate; reading deficient throughout in style; analysis and parsing on the whole good, three Candidates obtaining full marks and five others nearly full.

(3.) HISTORY AND GEOGRAPHY.—These subjects were very satisfactorily done, four Candidates making only immaterial mistakes, and the rest maintaining a good average.

The Examiners would venture to suggest the desirability in future of including the First Latin and the First Mathematical papers in the Preliminary Examination. It can hardly be said that Candidates, coming nervously fresh to their work, prove their incompetency to go forward by mistakes in so few subjects as are at present prescribed, especially since Arithmetic is one of them; and Reading aloud before a Board of Examiners, another.

ORDINARY EXAMINATION.

I. ENGLISH SUBJECTS.—All the Candidates presented themselves in these subjects. Failed, none. Passed, 16; with credit, 10. Full marks, 1100. Highest obtained, 867. Average of all who passed in these subjects, 728. This average may be regarded as satisfactory; but neither it, nor the maximum number obtained, reaches what was achieved last year. Webster was far the best in the English paper; but Jones secured the highest number of marks in the aggregate. Hughes and Chesterman are also entitled to honorable mention.

II. LATIN.—Presented by 15. Failed, 1. Passed, 14; with credit, 4. Full marks, 800. Highest obtained, 593. Average, 465. These numbers compare very favourably with those of last year. Webster takes the lead, but followed very closely by Davenport. The other credits were obtained in order by Jones and Walker. The whole average was very good.

III. GREEK.—Presented by 12. Failed, 1. Passed, 11; with credit, 4. Full marks, 800. Highest obtained, 622. Average, 510. In this subject Davenport stands very decidedly first. The others, who obtained credit, are Webster, Hughes, and Stackhouse. In this subject again the marks much exceed those of last year; notably, the highest number obtained.

IV. FRENCH.—Presented by all. Failed, 1. Passed, 15; with credit, 3. Full marks, 550. Highest obtained, 475. Average, 322½. Although neither the highest marks obtained nor the general average is equal to what it was last year, yet the grammar shows an advance: still there is room for considerable improvement. Candidates give token of insufficient attention being paid to translating from English into French. Those who passed with credit are Isabel Mary Riddell, Tarleton, and Prior.

V. GERMAN.—Presented by one only, who passed with 372 marks. There were two other Candidates above the regulation age, one of whom, Mary Elizabeth Smith, passed with credit, as she did also in French. The remarks made on the French examination apply very closely to this subject.

VI. ITALIAN.—Presented by 8. Failed, 1. Passed 7; with credit, 1. Full marks, 550. Highest obtained, 417. Average, 302. The examination showed one Candidate to be of more than ordinary goodness, Walker. The translation was well done in general; the parsing extremely well. The attempts at the unseen passage occasioned disappointment; for, although it could not be mastered without a little thought and some accurate scholarship, it contained no hard words.

VII. PURE MATHEMATICS.—Presented by 16. Failed, none. Passed, 16; with credit, 5. Full marks, 1000. Highest obtained, 831. Average, 435. Webster for the third time comes to the front; but followed within two marks by Walker. Both these Candidates manifested considerable power as mathematicians; yet both contrived to lose their heads over small difficulties. The former lost marks by looking out his logarithms in the wrong tables, and needs also to study the exact meaning of *ex equali*. The former obtained full marks for his arithmetic throughout—a rare occurrence. The other credits were gained by Jones, Hughes, and Johnston.

VIII. NATURAL PHILOSOPHY.—Presented by 3. Failed, 1. Passed, 2; with credit, 1. Full marks, 250. Highest obtained, 147. Average, 130½. Both Candidates who passed,—viz. Webster and Clemons—showed an intelligent appreciation of the subject.

IX. DRAWING.—Presented by 4. Failed, 1. Passed, 3; with credit, 1. Full marks, 200. Highest obtained, 165. Average, 115½. The Candidate with the highest number of marks is Chesterman; and the Examiner describes his Drawings as characterised by a boldness and firmness of outline, together with a neatness of finish that he has rarely met with in previous examinations. The Candidates appeared to be somewhat taken by surprise at the “Object” drawings given, but the Examiner is convinced that no better test of knowledge in practical perspective can be applied; and he trusts that this may lead to greater attention being devoted to such practice. The Examiner begs to express his gratification at learning that the Council has raised for the future the maximum of marks to 250.

On adding together the number of marks obtained by the Candidates in the several subjects presented by them, it appeared that of the sixteen the following fifteen had passed:—

FIRST CLASS.—	Webster, G. A.	3631
	Hughes, S. H.	2993
	Walker, W.	2937
	Clemons, J. S.	2689
	Davenport, A. F.	2669
	Prior, H. M.	2591
	Tarleton, L. T.	2550
	Pope, A. J.	2479
	Hawthorn, A. G. C.	2440
	Jones, C. S.	2370

SECOND CLASS.—	Chesterman, A. H.	2329
	Riddel, Isabel Mary	2178
	Stackhouse, E. J.	2156
	Johnston, S. K.	2009
	Douglas, O. G.	1952

THIRD CLASS.—None.

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	3631 in 1877.	2565 in 1875.
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		

* Average, 1860-1871.

The Examiner-in-Chief has much pleasure in bearing testimony to the large body of knowledge displayed by the Candidates. The English subjects were not so well done as last year; but the Classical and Mathematical ones were executed in a way decidedly superior. Great care is always taken not to lavish marks unless fully earned, and to keep to as exact a standard as possible; and the fact that the highest number ever gained by a Candidate has been scored this year, of itself testifies to the high merits of the Candidates who have presented themselves.

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

The Council's Gold Medal	G. A. Webster.
First Prize English.....	C. S. Jones.
First Prize Latin	G. A. Webster.
First Prize Greek	A. F. Davenport.
First Prize Italian	W. Walker.
First Prize Mathematics	G. A. Webster.

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	S. H. Hughes.
Second Prize for Latin	A. F. Davenport.
Second Prize for Greek	G. A. Webster.
Second Prize for French.....	L. T. Tarleton.
Second Prize for Mathematics	W. Walker.
Prize for Natural Philosophy.....	G. A. Webster.
Prize for Drawing.....	A. H. Chesterman.
Prize for French	Isabel Riddel.*

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

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 4th October, 1877.

* In justice to this Candidate it ought, perhaps, to be stated that this Prize would have been a First Prize had not the regulation been that no First Prize can be taken by any Candidate unless his name appears in the First Class of Associate of Arts.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

GENERAL CLASS LIST.

FIRST CLASS.

CANDIDATES UNDER 19 YEARS OF AGE.

No.	NAMES.	MARKS.	AGE.		SCHOOL.
			<i>grs. mths.</i>		
1	Webster, G. A.	3631	17 0	{ Council's Gold Medal. First Prize Latin £10 First Prize Mathematics .. £10 Prize Natural Philosophy £5 Second Prize Greek £5 Second Prize English £5	{ Hutchins.
2	Hughes, S. H.	2993	17 10	Second Prize English £5	High.
3	Walker, William,	2937	16 5	{ First Prize Italian £10 Second Prize Mathematics £5	{ Hutchins.
4	Clemons, J. S.	2689	15 6	—	{ Church Gram- mar, Launceston
5	Davenport, A. F.	2669	17 8	{ First Prize Greek £10 Second Prize Latin £5	{ High.
6	Prior, H. M.	2591	16 2	—	High.
7	Tarleton, L. T.	2550	18 0	Second Prize French £5	Hutchins.
8	Pope, A. J.	2479	18 3	—	Hutchins.
9	Hawthorn, A. G. C.	2440	17 11	—	High.
10	Jones, C. S.	2370	16 5	First Prize English £10	High.

SECOND CLASS.

11	Chesterman, A. H.	2329	16 9	Prize for Drawing £5	High.
12	Riddel, Isabel Mary,	2178	18 2	Prize for French £5	Private.
13	Stackhouse, E. V.	2156	17 11	—	{ Horton College, Ross.
14	Johnston, S. K.	2009	16 9	—	Hutchins.
15	Douglas, O. G.	1952	16 2	—	{ Horton College, Ross.

THIRD CLASS.

None.

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 4th October, 1877.

SPECIAL CLASS LIST.

CANDIDATES UNDER 19 YEARS OF AGE.

<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>Drawing.</i>
FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.
Jones Hughes Chesterman Webster Johnston Walker Clemons Davenport Hawthorn Riddel, Miss	Webster Davenport Jones Walker — — — — — —	Davenport Webster Hughes Stackhouse — — — — — —	Riddel, Miss Tarleton Prior — — — — — —	— — — — — — — — — —	Walker — — — — — — — — — —	Webster Walker Jones Hughes Johnston — — — — —	Webster — — — — — — — — — —	Chesterman — — — — — — — — — —
SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.
Douglas Pope Tarleton Stackhouse Prior — — — — —	Hughes Prior Clemons Hawthorn Stackhouse Tarleton Pope Johnston Chesterman Douglas — —	Clemons Chesterman Hawthorn Tarleton Douglas Prior Pope — — — — —	Pope Webster Walker Johnston Davenport Clemons Hawthorn Jones Stackhouse Douglas Chesterman Hughes	Riddel, Miss — — — — — — — — — —	Prior Riddel, Miss } Webster } Hughes Pope Tarleton — — — — —	Clemons Pope Tarleton Prior Davenport Hawthorn Stackhouse Chesterman Douglas Riddel, Miss — —	Clemons — — — — — — — — — — — —	Hawthorn Riddel, Miss — — — — — — — — — — —

For the Examiners,

J. E. BROMBY, D.D.

Hobart Town, 4th. October, 1877.

TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION for the Degree of ASSOCIATE OF ARTS.—September, 1877.

TABLE OF MARKS.

No.	NAME.	DATE OF BIRTH.	SCHOOL.	TEACHER.	English.	Latin.	Greek.	French.	German.	Italian.	Mathematics.	Natural Philosophy.	Drawing.	TOTAL.	CLASS.
[Maximum No. of Marks]					1100	800	800	550	550	550	1000	250	200		
1	Webster, George Alexander	29 Sept. 1860	Hutchins	Rev. J. V. Buckland, B.A.	814 c	593 c	585 c	364	—	297	831 c	147 c	—	3631	First.
2	Hughes, Stephen Henry	2 Dec. 1859	High	Rev. R. D. Poulett-Harris, M.A.	823 c	498	581 c	225	—	270	596 c	n.p.	—	2993	First.
3	Walker, William	23 Feb. 1861	Hutchins	Rev. J. V. Buckland, B.A.	802 c	541 c	—	348	—	417 c	829 c	—	n.p.	2937	First.
4	Clemons, John Singleton	24 Mar. 1862	Church Grammar, Launceston	Rev. W. H. Savigny, M.A.	784 c	485	516	323	—	—	467	114	—	2689	First.
5	Davenport, Arthur Frederick	7 Feb. 1860	High	Rev. R. D. Poulett-Harris, M.A.	782 c	584 c	622 c	325	—	—	356	—	—	2669	First.
6	Prior, Hugh Murray	25 July, 1861	High	Rev. R. D. Poulett-Harris, M.A.	559	489	449	375 c	—	533	386	—	—	2591	First.
7	Tarleton, Leigh Trafford	21 Sept. 1859	Hutchins	Rev. J. V. Buckland, B.A.	628	418	487	383 c	—	232	402	—	—	2550	First.
8	Pope, Alfred John	27 June, 1859	Hutchins	Rev. J. V. Buckland, B.A.	662	376	340	369	—	267	465	—	—	2479	First.
9	Hawthorn, Arthur George Clarence	31 Oct. 1859	High	Rev. R. D. Poulett-Harris, M.A.	765 c	477	505	291	—	—	300	—	102	2440	First.
10	Jones, Charles Sydney	16 May, 1861	High	Rev. R. D. Poulett-Harris, M.A.	867 c	562 c	—	283	—	—	658 c	—	—	2370	First.
11	Chesterman, Alfred Henry	7 Dec. 1860	High	Rev. R. D. Poulett-Harris, M.A.	818 c	356	508	234	—	—	248	—	165 c	2329	Second.
12	Riddel, Isabel Mary	29 July, 1859	Private	Mrs. Reynolds	734 c	—	—	475 c	372	297	200	—	100	2178	Second.
13	Stackhouse, Ernest Vernon	28 Oct. 1859	Horton College	W. W. Fox, Esq., B.A.	601	451	559 c	267	—	n.p.	278	—	—	2156	Second.
14	Johnston, Samuel Kirkland	16 Jan. 1861	Hutchins	Rev. J. V. Buckland, B.A.	805 c	363	—	332	—	—	509 c	—	—	2009	Second.
15	Douglas, Onslow Gordon	3 Aug. 1861	Horton College	W. W. Fox, Esq., B.A.	690	320	463	244	—	—	235	—	—	1952	Second.
Candidates over 19 Years of Age.															
1	Smith, Mary Elizabeth	—	Private	Mrs. Reynolds	724	n.p.	—	375 c	417 c	274	—	—	—	1790	Third.
2	Swan, Hannah Mary	—	Ladies' College	Miss Knott	631	—	—	284	279	n.p.	200	—	95	1489	Third.

NOTE.—c. credit. n.p. not passed.

For the Examiners,

Hobart Town, 4th October, 1877.

J. E. BROMBY, D.D.

TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.—SEPTEMBER, 1877.

Preliminary Examination.

ARITHMETIC.

DR. BROMBY, *Examiner.*

Two hours.

1. Multiply—

- (a) 97842852 by 6307, and express the result in words.
 (b) One hundred and three millions four hundred and ninety thousand seven hundred and eighty-five by eight thousand two hundred and seventy-seven.

2. Divide—

- (a) 100,073,188,271 by 9989, and express the result in words.
 (b) One hundred and one thousand and sixteen millions four hundred and nineteen thousand five hundred and eighty by four millions six thousand nine hundred and ninety-eight.

3. Multiply—

- (a) £5694 1s. 1½d. by 598.
 (b) 450 tons 1 cwt. 28 lbs. by 96.

4. Divide—

- (a) £1280 11s. 1½d. by 427.
 (b) 2621 miles 1061 yds. 1 foot by 752.

ENGLISH.

One hour and a half.

1. Analyse according to Dr. Abbott's analysis the subjoined passage :—

"It remains that all bodies were formed for the sake of intelligent minds. And, as the earth was principally designed for the service and contemplation of men, why may not all other planets be created for the like uses, each for its own inhabitants, which have life and understanding?"

2. Parse according to Abbott's scheme :—

"Scripture has not spoken with an articulate voice of the future locality of the blest."

3. Write from dictation.

HISTORY AND GEOGRAPHY.

Three hours.

1. Name the locality and indicate the general direction of these mountain ranges—Carpathian, Lupata, Himalaya, Caucasus, Andes, Sierra Morena.
2. Describe the general direction and outflow of these rivers—Irrawaddy, Ebro, Hudson, La Plata, Clarence, Tweed.
3. Where are the following capes :—Leeuwin, St. Roque, Verd, Gracios a Dios, Hatteras, Colonna?
4. Sketch a rough outline of Africa; and indicate thereon the positions of Mozambique, Senegambia, Natal, Fez, Khartoum, Bight of Benin.
5. Give the dates of accession of the sovereigns of England from Edward V. to the end of the Stuart dynasty, and mention the claim which each made to the crown.
6. In whose reign and in what cause were fought the battles of Fontenoy, Bothwell Bridge, Marston Moor, the Standard, Neville's Cross, Corunna?
7. In whose reigns, and in connexion with what events, are found the names of Coverdale, Strafford, Abercrombie, Blucher, Coke, Beckett?
8. In whose reigns did the following events take place :—The promulgation of Law's scheme, the flight of Maria Theresa to Hungary, the bombardment of Copenhagen, the execution of Sir Thomas More, the enactment of the Statute of Mortmain, the abolition of Episcopacy in Scotland?

English.

Three hours.

DR. BROMBY, *Examiner*.

SHAKESPEARE.—Macbeth. Grammar and Composition..

1. Frame short sentences to show how conjunctions may be formed (1) from adverbs, (2) from prepositions, (3) from participles, (4) from verbs, by the addition of *that*.
2. What (according to Dr. Abbott) are the three characteristics of poetry? Quote Denham's description of the Thames, as an example of the last.
3. Sketch the plot of "Macbeth," giving the date of its incidents.
4. Derive the following words:—Malkin, minion, harbinger, surcease, alarum, avouch, poison, taint, foison, afeer'd, limbec. Give the exact meaning of each word.
5. What is the origin of the term *pent-house*? Adduce two other examples of a termination converted into a distinct word.
6. What is the meaning of these Celtic words—*Colme-kill* and *inch*? Give also the primary meanings of coign, quell, chaudron, sag, flaws.
7. What is a rooky wood? Give the modern Scotch form of *rooky*?
8. Explain the following expressions:—God 'ild us—daggers breech'd with gore—to scarfe up—we rest your hermits—we'd jump the life to come—at a point—fee-grief—a fell of hair.
9. Define *onomatopœa*, *anachronism*, *paronomasia*, *apostrophe*, *hyperbole*; and adduce examples from the play of Macbeth.
10. Who are referred to under these titles:—Bellona's bridegroom—the fatal bellman—the Lord's anointed temple?
11. ——— "If much you note him,
You shall offend him and extend his passion."
What is the original difference between *shall* and *will*? What is the reason why we violate at times their proper signification?
12. Paraphrase the following passages:—This Duncan hath borne his faculties so meek.—I have filed my mind.—From whom this tyrant holds the due of birth.—Let us bestride our down-fall'n birthdom.—Violent sorrow seems a modern ecstasy.—Their dear causes would to the bleeding and the grim alarm excite the mortified man.—If thou could'st, doctor, cast the water of my land.
13. "Vaulting ambition which o'erleaps itself
And falls on other."
What ingenious emendation has been given of this passage?
14. "Like the poor cat i' th' adage." Quote the adage.
15. "The castle's gently render'd." What is the modern form of the last word? Why is Shakespeare's better?
16. Where did Shakespeare find the history of Macbeth? At what date was that history written?

History and Geography.

Three hours.

DR. BROMBY, *Examiner*.

Student's HUME.—Henry VII. to James I. CORNWELL.—School Geography.

1. Write down a genealogical table so as to show Henry the Seventh's descent from both Edward III. and Catherine of France.
2. Name the two pretenders to the crown at the commencement of Henry the Seventh's reign, and trace their subsequent history.
3. Who succeeded Louis XII. on the throne of France? State the terms of the league entered into to deprive him of his dominions, and name the parties. What circumstances interfered with its execution?
4. How old was Edward VI. when he came to the crown? Who was made Protector? Detail the personal history of this man, and the chief incidents of his protectorate.
5. Give a short history of Cranmer. Who succeeded him in the See of Canterbury? How many in all suffered at the stake in Mary's reign? Name the most distinguished.
6. Where was Zutphen? How came a battle to be fought there? Who commanded the English? What celebrated man lost his life there?

7. Make a rough map of Europe, and mark down on it The Hague, Trieste, Avignon, Granada, Cintra: and mention any circumstances historic or political which distinguish each. Also Innspruck; and derive the word. Trace the rivers Danube, Rhine, and Elbe. Mark down Capes—Finisterre, Passaro, the Naze, Clear, St. Vincent: and the Islands—Heligoland, Candia, Faroe, Ivica, Funen, Guernsey.
8. Name the highest mountains in Europe, Asia, Africa, and America; and give their respective altitude in feet.
9. In what portion of the world are earthquakes the most frequent and violent? Name the volcanos of Europe.
10. What is the meaning of the following terms:—Reichsrath, buddhism, mikado, daimio, fiord sierra, faro, brunnen, pagodas? What technical names are given to 'seas of ice,' to 'masses of snow falling from the mountains,' to 'native soldiers of India,' to 'the fire-worshippers of Persia,' to 'the neck-swellings of the Swiss,' to 'huge scattered blocks of stone?'
11. What and where are Marmora, Riga, Tiflis, Bolan, Comorin, Cattegat, Cayenne, Levant, Piræus, Yenikalé, Anatolia, Amboyna, Athos, Bidassoa?
12. Sketch out a map of Tasmania and mark down on it the courses of the Derwent, the Tamar, the N. and S. Esk: the towns of Perth, Campbell Town, Longford, Launceston, Evandale, and Hobart Town. Also Circular Head, Cape Pillar, Bruni Island, Furneaux Group, King's Island, Storm Bay, Cape Sorell, Banks's Straits, C. Grim.

Latin.—I.

Four hours.

DR. BROMBY, *Examiner.*

CICERO—De Amicitia. VIRGIL—Æneid VII.

1. Translate—

(a) *Fannius*.—Nos autem a te potius: quamquam etiam ab istis sæpe quæsi et audi, non invitatus equidem: sed aliud quoddam expetimus filium orationis tuæ. *Scævola*.—Tum magis id diceret, Fanni, si nuper in hortis Scipionis, cum est de republica disputatum, affuisses. Qualis tum patronus justitiæ fuit contra accuratam orationem Philii! *Fannius*.—Facile id quidem fuit, justitiam justissimo viro defendere. *Scævola*.—Quid amicitiam? Nonne facile ei, qui ob eam summa fide constantia justitiæ servatam maximam gloriam ceperit? *Lælius*.—Vim hoc quidem est afferre: quid enim refert qua me ratione cogatis? cogitis certe: studiis enim generorum, præsertim in re bona, cum difficile est, tum ne æquum quidem obsistere.

(b) Veterrima quæque (ut ea vina, quæ vetustatem ferunt) esse debent suavissima; verumque illud est, quod dicitur, multos modios salis simul edendos esse, ut amicitia munus expletum sit. Quin ipso equo, cujus modo mentionem feci, si nulla res impediatur, nemo est qui non eo, quo consuevit, libentius utatur quam intractato et novo. Nec modo in hoc quod est animal, sed in iis etiam quæ sunt inanimata, consuetudo valet: cum locis etiam ipsis montuosis delectemur et silvestribus, in quibus diutius commorati sumus.

2. Translate—

His ubi nequicquam dictis experta Latinum
Contra stare videt; penitusque in viscera lapsum
Serpentis furiale malum, totamque pererrat:
Tum vero infelix, ingentibus excita monstris,
Immensam sine more furit lymphata per urbem:
Ceu quondam torto volitans sub verbere turbo,
Quem pueri magno in gyro vacua atria circum
Intenti ludo exercent. Ille actus habena
Curvatis fertur spatiis: stupet inscia turba,
Impubesque manus, mirata volubile buxum:
Dant animos plagæ. Non cursu segnior illo
Per medias urbes agitur, populosque feroces.
Quin etiam in sylvas, simulato numine Bacchi,
Majus adorsa nefas, majoremque orsa furorem,
Evolat: et natam frondosis montibus abdit,
Quo thalamum eripiat Teucris, tædasque moretur.

3. In (a) state what kind of subjunctive respectively are *diceret*, *affuisses*, *ceperit*, *cogatis*; and in 2 *moretur*.
4. In (b) explain the force of the termination *osus*, and of the comparative *diutius*.

5. Derive, giving English both of the words and of their roots—*Prudentia*, *sapiens*, *facilis*, *opportunus*, *detestabilis*, *generosus*, *imbecillus*, *ambitiosus*, *existimo*, *allecto*, *ancile*, *recidivus*, *irrisus*, *secundus*, *certamen*, *salignus*, *exiliter*, *fibula*.
6. Give perfect, supine, and infinitive of *repello*, *pendo*, *cerno*, *video*, *coeo*, *gaudeo*, *sedeo*, *quæro*, *evertō*, *concedo*, *intelligo*, *affero*, *suadeo*, *colo*, *concludo*, *diligo*, *confido*.
7. Give nominative singular, dative plural, and gender of *aggeres*, *cedri*, *bigas*, *lampade*, *arcum*, *hyemem*, *vi*, *consuetudinis*, *pondera*, *cote*, *animæ*.
8. Give second person plural indicative mood and perfect tense of *paciscor*, *ordior*, *fio*.
9. Write down the whole of the future tense indicative and the imperative mood of *memini*.
10. What is the difference between *invenio* and *reperio*, *magister* and *pædagogus*, *verecundia* and *modestia*, *juvenis* and *junior*, *crinis* and *coma*, *concava* and *convexa*, *alia* and *cetera*. According to number *merces*; and according to quantity of any syllable *luteus*, *repetite*, *conditur*.
11. What is the English of *cicur*, *arvina*, *colus*, *calathus*, *vitreus*, *suber*, *veru*, *trabea*, *guttur*?
12. What marked circumstance distinguished the following individuals:—*Mezentius*, *Picus*, *Lælius*, *Tib. Gracchus*, *Coriolanus*?
13. Write brief notes to explain—(a) *Sumtâ virili togâ*. (b) *His proximis Nonis*. (c) *Quod Tarquinium dixisse ferunt exulantem se intellexisse*. (d) *Ab amicitia Q. Pompeii meo nomine se removerat Scipio*. (e) *Ea vox audita laborum prima tulit finem*. (f) *Nubigenæ Centauri*. (g) *Infaustum Allia nomen*.
14. Put into Latin—(a) It is the custom of the learned Greeks to have a subject given them to discuss however unprepared they may be. (b) We somehow become deaf, and do not hear the warnings which nature gives. (c) I don't see why I should not dare to tell you what I think about death. (d) To me Scipio still lives and always will live; because I loved the virtue of the man, which death has not extinguished.

Latin.—II.

Four hours.

DR. BROMBY, *Examiner*.

TRANSLATION AT SIGHT AND COMPOSITION.

Translate into English—

Causam per hos dies dixit Julius Bassus, homo laboriosus et adversis suis clarus. Egit contra eum Pomponius Rufus, vir paratus et vehemens. Rufo successit Theophanes, unus ex legatis, princeps et fax accusationis et origo. Respondi ego. Actionem meam, ut proelia solet, nox diremit. Egeram horis tribus et dimidia; supererat sesquihora. Nam cum ex lege accusator sex horas, novem reus accepisset, ita diviserat tempora reus inter me et eum qui dicturus post erat, ut ego quinque horis, ille reliquis uteretur. Mihi successus actionis silentium finemque suadebat. Temerarium est enim secundis non esse contentum. Ad hoc verebar ne mox corporis vires iterato labore deficerent, quem difficilior est repetere quam jungere. Erat etiam periculum, ne reliqua actio mea et frigus ut deposita et tædium ut resumta pateretur. Ut enim faces ignem assidua concussione custodiunt, dimissum ægerrime reparant, sic et dicentis calor et audientis intentio continuatione servatur, intercapedine et quasi remissione languescit. Sed Bassus multis precibus, pene etiam lacrymis, obsecrabat implerem meum tempus. Parui, utilitatemque ejus prætuli meæ. Bene cessit: inveni ita erectos animos Senatus, ita recentes, ut priore actione incitati magis quam satiati viderentur.

Translate into Latin prose—

Let us suppose two men, one of whom has learnt and believes that he owes fidelity to his country, but has no ardor of patriotism, and the other an enthusiastic patriot. Suppose a bribe offered to these two men to betray their country. Neither will take the bribe. But the former, if we suppose the bribe large enough, will feel his fingers itch as he handles the gold; his mind will run upon the advantages it will bring him, the things he might buy, the life he might lead, if he had the money; he will find it prudent to divert his mind from the subject, to plunge desperately into occupations which may absorb him until the time of temptation has passed. The other will have no such feelings; the gold will not make his feelings itch with desire, but perhaps rather seem to scorch them; he will not picture to himself happiness or pleasure as a consequence of taking it, but on the contrary unsupportable degradation and despair. Such a supposition images forth the difference between the virtue of the old Greeks and the spirit of Christianity.

Translate into Latin verse—

The winds are sleeping on the sea,
The oxen on the starlit lea,
Hushed is the endless song of streams—
It is the time of silent dreams.
It is the time when helplessly
In sleep's entwining arms we lie.
But ever, Lord, thou dost awake
And keep us for thy mercy's sake.
Thou keepest every fluttering bird
By whose swift wing the leaves are stirred;
Thou keepest every insect fair
That dances in the sultry air;
Thine are the flowers the summer dawn
Awakes in field or shadowy lawn;
And ever, Lord, thy sovran eye
Preserves us as in sleep we lie.

Latin.—III.

Three hours.

Dr. BROMBY, *Examiner*.

1. Translate—

Pastor quum traheret per freta navibus
Idæis Helenen perfidus hospitam,
Ingrato celeres obruit otio
Ventos, ut caneret fera
Nereus fata: "Mala dūcis avi domum,
Quam multo repetet Græcia milite,
Conjurata tuas rumpere nuptias
Et regnum Priami vetus.
Heu heu! quantus equis, quantus adest viris
Sudor! quanta moves funera Dardanæ
Genti! Jam galeam Pallas et ægida
Currusque et rabiem parat.
Nequicquam Veneris præsidio ferox
Pectus cæsariem, grataque feminis
Imbelli cithara carmina divides;
Nequicquam thalamo graves
Hastas et calami spicula Gnosii
Vitabis strepitumque et celerem sequi
Ajacem; tamen heu serus adulteros
Crines pulvere collines.

2. What object is Horace supposed to have had in view in the composition of this ode?
3. Define "zeugma," and point out an example of it in this ode.
4. What ambiguity is there in the word *avi*? Is there a similar ambiguity in the word *ducis*?
5. How did Pallas wear her ægis? What was it literally? What made it horrible?
6. Translate—

Non ebur neque aureum
Mea renidet in domo lacunar,
Non trabes Hymettiae
Premunt columnas ultima recisas
Africa, neque Attali
Ignotus heres regiam occupavi,
Nec Laconicas mihi
Trahunt honestæ purpuras clientæ.
At fides et ingenium
Benigna vena est, pauperemque dives
Me petit: nihil supra
Deos laccio, nec potentem amicum
Largiora flagito,
Satis beatus unicus Sabinis.
Truditur dies die,
Novæque pergunt interire Lunæ.

Tu secunda marmora
 Locas sub ipsum funus, et sepulchri
 Immemor struis domos
 Marisque Baiis obstrepentis urges
 Summovere litora,
 Parum locuples continente ripa.

7. Derive, giving the English of all the Latin words you use, summus, triplex, fragilis, Acroceraunia, egregius, iterare, auspex, callidus, sella, securus, cella, iners, cautus, exul, Postumus, amphora.
8. Discuss the metre of the Ode in question 6.
9. Indicate briefly who the following persons were:—Attalus, Polyhymnia, Gyges, Tecmessa, Cecrops, Circe, Thyestes.
10. Give the difference in meaning between questus and quæsitus; desiderium and cupido; thalamus and cubile; æstas and æstus; manare and manere; lacerta and lacertus; sanguis and cruor; ædes sing. and ædes plural; and according to quantity of any syllable—nitere, scriberis, solis, leporem, moreris.
11. Where are the following places:—Eryx, Acroceraunia, Cythera, Mitylene, Ephesus, Tempe, Hæmus, Pylos, Noricum, Lycæus, Hydaspes, Hymettus, Colchis? What was each, and for what were any of them celebrated?
12. Translate the following:—Cui dabit partes scelus expiandi Jupiter?—Atqui non ego te tigris tu aspera persequor.—Licebit injecto ter pulvere curras.—Frui paratis mihi, Latoë, dones.—Insanientis sapientiæ consultus erro.—Minaci murmure cornuum perstringis aures.

Greek.—I.

Three hours.

DR. BROMBY, *Examiner*.

XENOPHON—Anabasis VI.

1. Translate—

Καὶ ὁ Ξενοφῶν ἐπεὶ ἑώρα πλείονος ἐνδέον, παρελθὼν εἶπεν· “Ἄλλ’, ὦ ἄνδρες,” ἔφη, “ὥς πάνυ εἰδῆτε, ὁμνύω ὑμῖν θεοὺς πάντας καὶ πάσας, ἢ μὴν ἐγὼ, ἐπεὶ τὴν ὑμετέραν γνώμην ἡσθάνομην, ἰθύνομην, εἰ βέλτιον εἴη, ὑμῖν τε ἐμοὶ ἐπιτρέψαι ταύτην τὴν ἀρχὴν, καὶ ἐμοὶ ὑποστῆναι· καὶ μοι οἱ θεοὶ οὕτως ἐν τοῖς ἱεροῖς ἐσήμηναν, ὥστε καὶ ἰδιώτην ἂν γινῶναι, ὅτι τῆς μοναρχίας ἀπέχεσθαι με δεῖ.” Οὕτω δὲ Χειρίσοφον αἰροῦνται. Χειρίσοφος δ’ ἐπεὶ ἤρεθῃ, παρελθὼν εἶπεν· “Ἄλλ’, ὦ ἄνδρες, τοῦτο μὲν ἴστε, ὅτι οὐδ’ ἂν ἐγὼ γε ἐστασίαζον, εἰ ἄλλον εἴλεσθε· Ξενοφῶντα μέντοι,” ἔφη, “ὠνήσατε οὐκ ἐλόμενοι· ὥς καὶ νῦν Δέξιππος ἤδη διέβαλλεν αὐτὸν πρὸς Ἄναξιβιον, ὃ τι ἐδύνατο, καὶ μάλα ἐμοῦ αὐτὸν σιγάζοντος. Ὁ δ’ ἔφη νομίζειν αὐτὸν Τιμασίῳ μᾶλλον συνάρχειν ἰθελῆσαι Δαρδανεῖ ὄντι τοῦ Κλεάρχου στρατεύματος, ἢ ἐαυτῷ Λάκωνι ὄντι. Ἐπεὶ μέντοι ἐμὲ εἴλεσθε,” ἔφη, “καὶ ἐγὼ πειράσομαι, ὅτι ἂν δύνωμαι, ὑμᾶς ἀγαθὸν ποιεῖν. Καὶ ὑμεῖς οὕτω παρασκευάζεσθε, ὥς αὖριον, ἔαν πλοῦς ᾖ, ἀναξόμενοι· ὁ δὲ πλοῦς ἔσται εἰς Ἡράκλειαν· ἅπαντας οὖν δεῖ ἐκέῖσε πειράσθαι κατασχεῖν· τὰ δ’ ἄλλα, ἐπειδὴν ἐκέῖσε ἔλθωμεν, βουλευσόμεθα.”

2. Translate—

Λιμὴν δ’ ὑπ’ αὐτῇ τῇ πέτρᾳ τὸ πρὸς ἐσπέραν αἰγιαλὸν ἔχων. Κρήνη δὲ ἡδέος ὕδατος καὶ ἄφθονος ρέουσα ἐπ’ αὐτῇ τῇ θαλάττῃ ὑπὸ τῇ ἐπικρατείᾳ τοῦ χωρίου. Ξύλα δὲ πολλὰ μὲν καὶ ἄλλα, πάνυ δὲ πολλὰ καὶ καλὰ ναυπηγήσιμα ἐπ’ αὐτῇ τῇ θαλάττῃ. Τὸ δὲ ὄρος [τὸ ἐν τῷ λιμένι] εἰς μεσόγαιαν μὲν ἀνῆκει ὅσον ἐπὶ εἴκοσι σταδίους, καὶ τοῦτο γεῶδες καὶ ἀλιθόν· τὸ δὲ παρὰ θάλατταν πλεόν ἢ ἐπὶ εἴκοσι σταδίοις δασὺ πολλοῖς καὶ παντοδαποῖς καὶ μεγάλοις ξύλοις.

3. Translate—

Ἐνταῦθα πονηρὸν τὸ πρᾶγμα ἐδόκει εἶναι τοῖς Ἕλλησι, καὶ ἐδέοντο μὴ ποιεῖν ταῦτα. Ὁ δ’ οὐκ ἂν ἄλλως ἔφη γενέσθαι, εἰ μὴ τις ἐκδώσει τὸν ἄρξαντα βάλλειν καὶ τὸν ἀφελόμενον. Ἦν δὲ, ὃν ἐξήτει, Ἀγασίας, διὰ τέλους φίλος τῷ Ξενοφῶντι· ἐξ οὗ καὶ διέβαλεν αὐτὸν ὁ Δέξιππος. Καὶ ἐντεῦθεν, ἐπειδὴ ἀπορία ἦν, συνήγαγον τὸ στρατεύμα οἱ ἄρχοντες· καὶ ἔνιοι μὲν αὐτῶν παρ’ ὀλίγον ἐποιοῦντο τὸν Κλέανδρον, τῷ δὲ Ξενοφῶντι οὐκ ἐδόκει φαῦλον εἶναι τὸ πρᾶγμα, ἀλλ’ ἀναστὰς ἔλεξεν·

“ὦ ἄνδρες στρατιῶται, ἐμοὶ δ’ οὐδὲν φαῦλον δοκεῖ εἶναι τὸ πρᾶγμα, εἰ ἡμῖν οὕτως ἔχων τὴν γνώμην Κλέανδρος ἄπεισιν, ὥσπερ λέγει.”

4. Write out the whole of the cases of ναῦς, γυνή, ὅστις, εἷς, and the accusative sing. and dative plural of λιμήν, ἀπορρώξ, μάντις, ἀνδράποδον, νάπος, ἀνήρ.

5. State the tense, mood, and voice of ἐπενόει, ὑπέσχετο, ἀπελθών, συλλεγέμεντες, ἀφικνούντο, εἴλοντο, αἰτιᾷ, διαβῆναι, ἰδόντι, ἀφίκοντο, διεσπάρη, ἀπέθανον. Also give of each the present, future, perfect, and aorist in use, and the perfect passive (if any).
6. Write down a conspectus of all the moods of the— 2 a. mid. πυνθάνομαι, 2 a. act. ἔχω, fut. οἶδα, 1 a. mid. ἐπιτάττω, perf. act. φέρω, perf. pass. παρασκευάζω, 1 a. act. ἀναλίσκω.
7. Write out all the persons of the—1 a. subj. pass. ἀνίστημι, 2 a. imperative pass. ἀπαλλάττω, fut. indic. mid. ἀπόλλυμι, perf. infin. pass. φαίνω, plup. opt. act. ἀριστέω, pres. sub. act. ἄξιω (contract form), 2 a. opt. pass. θάπτω.
8. Give the comparative and superlative of αἰσχρός, πολύς, ἀγαθός, ἱερός, μάλα, ῥαδίως.
9. Derive, giving the English of every word and of its roots—στασιάζω, λῶν, πολιορκεῖν, ἀπορρώξ, γεώδης, κενοτάφιον, μηρύομαι.
10. Translate—ἤδη γὰρ ἦσαν πεμπταῖοι, καὶ οὐχ οἴοντε ἀναιρεῖν ἔτι ἦν. Εξέρχονται σὺν δορατίοις καὶ ἄσκοις καὶ θυλάκοις καὶ ἄλλοις ἀγγείοις. Τὴν οὐρὰν τοῦ κέρατος ποιησάμενοι κατὰ τοὺς πρώτους φανέντας νεκροὺς, ἔθαπτον πάντας, ὁπόσους ἐπελάμβανε τὸ κέρα. Ἐκ τούτου ἔδωκεν ἡ στρατιὰ, οὗσιν αὖς βούλοιο, προσελόμενον ἰέναι.
11. What is the difference between πειστέον ἐστὶ τούτοις and πειστέον ἐστὶ τούτους? Form verbal adjectives from βοηθεῖν, ὠφελεῖν, and ἐπιθυμεῖν, and frame short sentences to show the construction of each.
12. Put into Greek—(a) They danced under arms to the sound of a flute. (b) They send 3000 bushels of barley meal, 2000 jars of wine, 20 oxen, and 100 sheep. (c) Having erected a trophy, where the first engagement took place, they departed about sunset towards the sea. (d) Many of our men were wounded, but of the enemy not a single one; so that we dared not stir from the camp; and at last they cut us off from water.

Greek.—II.

Three hours.

DR. BROMBY, Examiner.

EURIPIDES—Medea. HOMER—Iliad VI.

1. Translate—

Μήδεια δ' ἡ δύστηνος ἡτιμασμένη
βοῇ μὲν ὄρκους, ἀνακαλεῖ δὲ δεξιᾶς
πίστιν μεγίστην, καὶ θεοὺς μαρτύρεται
οἷας ἀμοιβῆς ἐξ Ἰάσονος κυρεῖ.
κεῖται δ' ἄσιτος, σῶμ' ὑφείσ' ἀλγηδόσι,
τὸν πάντα συντήκουσα δακρύοις χρόνον,
ἐπεὶ πρὸς ἀνδρὸς ἦσθετ' ἡδικημένη,
οὗτ' ὅμμ' ἐπαίρουσ' οὗτ' ἀπαλλάσσουσα γῆς
πρόσωπον· ὥς δὲ πέτρος ἢ θαλάσσιος
κλύδων ἀκούει νοουθετουμένη φίλων.

2. Account for all the genitive cases in the above passage. Give also an example from the Medea of a genitive of apposition.

3. Translate—

καὶ ταῦτ' Ἰάσων παῖδας ἐξανέξεται
πάσχοντας, εἰ καὶ μητρὶ διαφορὰν ἔχει;
and explain the difference between εἰ καὶ and καὶ εἰ.

4. Translate—

δίκη γὰρ οὐκ ἔνεστ' ἐν ὀφθαλμοῖς βροτῶν
ᾧστις, πρὶν ἀνδρὸς σπλάγχχον ἐκμαθεῖν σαφῶς,
στρυγεῖ δεδορκῶς, οὐδὲν ἡδικημένος.

Suggest an improved reading of the first of these lines. What is the antecedent to ᾧστις?

5. Translate—

ἐχθροὶ γὰρ ἐξίασι πάντα δὴ κάλων,
κούκ ἐστιν ἄτης εὐπρόσοιστος ἔκβασις.

Parse ἐξίασι and derive εὐπρόσοιστος.

6. Translate—

δέξεται νύμφα χρυσέων ἀναδесμῶν
 δέξεται δύστανος ἄταν·
 ξανθῇ δ' ἀμφὶ κόμα
 σήσει τὸν Αἴδα κόσμον αὐ-
 τὰ γ' ἐν χερσὶν λαβοῦσα.
 πείσει χάρις, ἀμβρόσιός τ' αὐγὰ πέπλων,
 χρυσεότευκτον στέφανον περιθέσθαι·
 νερτέροις δ' ἤδη πάρα νυμφοκομήσει.

Account for the accent of πάρα.

7. Translate the following :—

πῆμα οὐδέπω μεσοῖ — ἐξέδου κόρην — οὔτι ταύτη ταῦτα — οὐκ ἀπειρηκῶς φίλοις ἦκω —
 κάτει τοι καὶ σὺ πρὸς τέκνων ἔτι — χήτει τοιοῦδ' ἀνδρὸς ἀμύνειν δούλιον ἡμάρ.

8. Translate—

- (a) "Αδρηστον δ' ἄρ' ἔπειτα βοῆν ἀγαθὸς Μενέλαος
 Ζῶν ἔλ'. ἴππων γάρ οἱ ἀτυζομένω πεδίῳ,
 "Οζῳ ἐνὶ βλαφθέντε μυρικίνῳ, ἀγκύλον ἄρμα
 "Αξαντ' ἐν πρώτῳ ῥυμῷ αὐτῷ μὲν ἐβήτην
 Πρὸς πόλιν, ἣ περ οἱ ἄλλοι ἀτυζόμενοι φοβέοντο,
 Αὐτὸς δ' ἐκ δίφροιο παρὰ τροχὸν ἐξεκλίσθη
 Πρηνὴς ἐν κούρησιν ἐπὶ στόμα· παρ δέ οἱ ἔστη
 "Ατρείδης Μενέλαος ἔχων δολιχόσκιον ἔγχος.
 "Αδρηστος δ' ἄρ' ἔπειτα λαβὼν ἐλλίσσετο γούνων.
 "Ζώγρει, "Ατρεὺς υἱέ, σὺ δ' ἄξια δέξαι ἄποινα.
 Πολλὰ δ' ἐν ἀφνειοῦ πατρὸς κειμήλια κείται,
 Χαλκός τε χρυσός τε πολύκμητός τε σίδηρος,
 Τῶν κέν τοι χαρίσαιο πατὴρ ἀπερείσι' ἄποινα,
 Εἴ κεν ἐμὲ Ζῶν πεπύθοιτ' ἐπὶ νηυσὶν Ἀχαιῶν."
- (b) "Ἦτοι ὁ μὲν μέδισεν ἰδὼν ἐς παῖδα σιωπῇ·
 "Ανδρομάχη δέ οἱ ἄγχι παρίστατο δακρυχέουσα,
 "Εν τ' ἄρα οἱ φῦ χειρὶ, ἔπος τ' ἔφατ', ἐκ τ' ὀνόμαζεν.
 "Δαιμόνιε, φθίσει σε τὸ σὺν μένος, οὐδ' ἐλεάρεις
 Παῖδά τε νηπίαχον καὶ ἐμ' ἄμμορον, ἣ τάχα χήρη
 Σεῦ ἔσομαι· τάχα γάρ σε κατακτανέουσιν Ἀχαιοὶ
 Πάντες ἐφορμηθέντες· ἐμοὶ δέ κε κέρδιον εἴη
 Σεῦ ἀφαρτοῦση χθόνα δύνειν· οὐ γὰρ ἔτ' ἄλλη
 "Εσται θαλπωρὴ, ἐπεὶ ἂν σύ γε πότμον ἐπίσπης,
 "Αλλ' ἄχ'. Οὐδέ μοι ἔστι πατὴρ καὶ πότνια μήτηρ.
 "Ἦτοι γὰρ πατέρ' ἄμὸν ἀπέκτανε δῖος Ἀχιλλεύς,
 "Εκ δὲ πόλιν πέρσεν Κιλικῶν εὐναιετάωσαν,
 Θήβην ὑψίπυλον· κἀτὰ δ' ἔκτανεν Ἡετίωνα,
 Οὐδέ μιν ἐξενάριξε, σεβάσσατο γὰρ τό γε θυμῷ,
 "Αλλ' ἄρα μιν κατέκχε σὺν ἔντεσι δαιδαλέοισιν
 "Ἦδ' ἐπὶ σῆμ' ἔχεεν· περὶ δὲ πτελέας ἐφύτευσαν
 Νύμφαι ὀρεστιάδες, κοῦραι Διὸς αἰγιόχοιο.
 Οἱ δέ μοι ἐπτά κασίγνητοὶ ἔσαν ἐν μεγάροισιν,
 Οἱ μὲν πάντες ἰὼ κίον ἡματι "Δίδος εἴσω·
 Πάντας γὰρ κατέπεφνε ποδάρκης δῖος Ἀχιλλεύς
 Βουσὶν ἐπ' εἰλιπόδεσσι καὶ ἀργεννῇς ὀτέσσιν.

9. Give four examples of the Greek digamma becoming a *v* in Latin; and four of the Greek aspirate becoming an *s*.

10. Parse ὑφέισα, μολοῦσα, ἐκλελαθέσθαι, ἐπιπλώς, ἀπόερσε, ἀπούρας, σύνθεο.

11. Derive (giving English to every Greek word)—φροῦδος, ἀρτίφρων, πλημμελής, δυσίατος, στόμαργος, κηώεις.

12. Restore to original Iambics—

Medea.—Thou hast told what thou hast told : I blame thee not.

Pæd.—Why then dost thou droop the eye, and shed tears ?

Medea.—There is much necessity, old man : for these things the gods
 And I, evilly cogitating, have contrived.

And to original Hexameters—

Thus having spoken he placed in the hands of his dear wife
 His child : and she then received him in her fragrant bosom,
 Tearfully laughing : and her husband observing pitied her,
 And stroked her with his hand, and spoke a word and called her by name.

French.

Three hours.

Dr. DOBSON, *Examiner.*

1. Give a short sketch of the life of Charles XII.
2. Translate—

Le roi quitta alors sa frégate pour s'aller mettre dans la première chaloupe, à la tête de ses gardes. L'ambassadeur de France était alors auprès de lui : "Monsieur l'ambassadeur," lui dit-il en latin (car il ne voulait jamais parler français), "vous n'avez rien à démêler avec les Danois : vous n'irez plus loin s'il vous plaît. "Sire," lui répondit le comte de Guiscard en français, "le roi mon maître m'a ordonné de résider auprès de votre majesté ; je me flatte que vous ne me chasserez pas aujourd'hui de votre cour, qui n'a jamais été si brillante." En disant ces paroles, il donna la main au roi, qui sauta dans la chaloupe, où le comte de Piper et l'ambassadeur entrèrent. On s'avancait sous les coups de canon des vaisseaux qui favorisaient la descente. Les bateaux de débarquement n'étaient encore qu'à trois cents pas du rivage.

3. Write out the present subjunctive of *aller* ; the principal parts of the verb *mettre* ; distinguish between *auprès* and *près* ; distinguish between *mêler avec* and *mêler à* ; distinguish between *vaisseau* and *navire* ; mention the cases in which *cent* takes the plural termination.
4. Give the rules for the use of the present participle and the verbal adjective ending in *ant*.
5. Give three instances of verbs which—
 - (a) require no preposition before the infinitive which they govern.
 - (b) require the preposition *à*.
 - (c) require the preposition *de*.
6. Give the rules for the agreement of the past participle of reflexive verbs.
7. Translate—Hatred has taken possession (*s'emparer*) of my soul.
8. What is the rule as to the agreement of the participle *fait* followed by an infinitive?
9. Translate—

There are a great many people in the streets.
 It cannot be helped.
 I was told they would come to-morrow.
 I wonder why George is keeping us waiting.
 I don't know why we should wait for him.
 Il fallait qu'il vînt à l'heure indiquée.
 Rien ne devrait le retenir quand il sait que nous l'attendons.

10. Translate—

M. Jourdain à Dorante.—Voilà deux cents louis bien comptés.

Dorante.—Je vous assure, Monsieur Jourdain, que je suis tout à vous, et que je brûle de vous rendre un service à la cour.

M. Jourdain.—Je vous suis trop obligé.

Dorante.—Si Mme. Jourdain veut voir le divertissement royal, je lui ferai donner les meilleures places de la salle.

Mme. Jourdain.—Mme. Jourdain vous baise les mains.

Dorante, bas, à M. Jourdain.—Notre belle marquise, comme je vous ai mandé par mon billet, viendra tantôt ici pour le ballet et le repas ; et je lui ai fait consentir enfin au cadeau, que vous lui voulez donner.

M. Jourdain.—Tirons-nous un peu plus loin pour cause.

Dorante.—Il y a huit jours que je ne vous ai vu, et je ne vous ai point mandé de nouvelles du diamant que vous me mîtes entre les mains, pour lui en faire présent de votre part ; mais c'est que j'ai eu toutes les peines du monde à vaincre son scrupule ; et ce n'est qu'aujourd'hui qu'elle s'est résolue à l'accepter.

11. Translate *céans* ; *trompette marine* ; je n'y saurais que faire ; tout mon soûl ; deux mailles de rompues ; ne m'en donnes-tu point à garder ?

12. Explain the insertion of the apostrophe in such words as *grand'mère*, and show why its insertion is wrong etymologically.

13. *Feu monsieur votre père*. Give the rule for the concord of *feu*.

14. Translate—

Imagine the conflict in a mind like *Deronda's*, given not only to feel strongly, but to question actively, on the evening after that interview with *Mordecai*. To a young man of much duller susceptibilities the adventure might have seemed enough out of the way to divide his thoughts; but it had stirred *Deronda* so deeply, that with the usual reaction of his intellect he began to examine the grounds of his emotion, and consider how far he must resist its guidance. The consciousness that he was half dominated by *Mordecai's* energetic certitude, and still more by his fervent trust, roused his alarm. It was his characteristic bias to shrink from the moral stupidity of valuing lightly what had come close to him, and of missing blindly in his own life of to-day the crises which he recognised as momentous and sacred in the historic life of men.

15. Distinguish between *imposer* and *en imposer*; *imaginer* and *s'imaginer*; *ne faire que* and *ne faire que de*; *comparer à* and *comparer avec*; *changer en* and *changer contre* or *pour*; *ennuyant* and *ennuyeux*.

16. Translate—

Rappelle-toi quand l'aurore craintive
Ouvre au ciel son palais enchanté;
Rappelle-toi quand la nuit pensive
Passe en rêvant sous son voile argenté:
A l'appel du plaisir, lorsque ton sein palpite,
Aux doux songes du soir, lorsque l'ombre l'invite;
Ecoute au fond des bois,
Murmurer une voix
Rappelle-toi!

Rappelle-toi lorsque les destinées,
M'auront de toi pour jamais séparé;
Quand le chagrin, l'exil, et les années,
Auront flétri ce cœur désespéré;
Songe à mon triste amour, songe à l'adieu suprême;
L'absence, ni le temps, ne sont rien quand on aime.
Tant que mon cœur battra,
Toujours il te dira
Rappelle-toi!

Rappelle-toi lorsque sous la froide terre,
Mon cœur brisé pour toujours dormira;
Rappelle-toi quand la fleur solitaire,
Sur mon tombeau, doucement, s'ouvrira.
Je ne te verrai plus, mais mon âme immortelle
Reviendra près de toi, comme une sœur fidèle.
Ecoute dans la nuit
Une voix qui gémit
Rappelle-toi!

Alfred de Musset.

German.

Three hours.

DR. DOBSON, *Examiner*.

1. Give a slight sketch of the life of *Wallenstein*.

2. Translate—

Max. Piccolomini.

Krieg! Ist das der Name?

Der Krieg ist schrecklich, wie des Himmels Plagen;
Doch ist er gut, ist ein Geschick, wie sie.
Ist das ein guter Krieg, den du dem Kaiser
Bereitest mit des Kaisers eigenen Heer?
O Gott des Himmels, was ist das für eine
Veränderung! Ziemt solche Sprache mir

Mit dir, der wie der feste Stern des Pols
 Mir als die Lebensregel vorgeschienen!
 O! welchen Riss erregst du mir im Herzen!
 Der alten Ehrfurcht eingewachsenen Trieb
 Und des Gehorsams heilige Gewohnheit
 Soll ich versagen lernen deinem Namen?
 Nein! wende nicht dein Angesicht von mir!
 Es war mir immer eines Gottes Antlitz,
 Kann über mich nicht gleich die Macht verlieren;
 Die Sinne sind in deinen Banden noch
 Hat gleich die Seele blutend sich befreit!

3. Decline ein guter Krieg; parse all the words in the line Der alten Ehrfurcht eingewachsenen Trieb; decline die heilige Gewohnheit; give the principal parts of verlieren.
4. Give the rules for the formation of the plural of neuter nouns; mention some of the principal exceptions.
5. Decline mein guter Name; ihr schönes Angesicht; das Hemd; das Schiff; die harte Nuss.
6. What is the rule for the formation of the comparative degree of monosyllabic adjectives? Give two examples and two exceptions.
7. Translate—

WALLENSTEIN (im Harnisch).

Du hast erreicht, Octavio! Fast bin ich
 Jetzt so verlassen wieder, als ich einst
 Vom Regensburger Fürstentage ging.
 Da hatt' ich nicht mehr als mich selbst—doch was
 Ein mann kann werth sein, habt ihr schon erfahren;
 Den Schmuck der Zweige habt ihr abgehauen
 Da steh' ich, ein entlaubter Stamm! Doch innen
 Im Marke lebt der schaffende Gewalt,
 Die sprossend eine Welt aus sich geboren.
 Schon einmal galt ich euch statt eines Heers,
 Ich Einzelner. Dahingeschmolzen vor
 Der schwed'schen Stärke waren eure Heere,
 Am Lech sank Tilly, euer letzter Hort,
 Ins Baierland, wie ein geschwollner Strom,
 Ergoss sich dieser Gustav, und zu Wien
 In seiner Hofburg zitterte der Kaiser.
 Soldaten waren theuer, denn die Menge
 Geht nach dem Glück.

8. Explain the historical allusion to Regensburg, and to Gustav; and why was the Kaiser represented as zitternd in seiner Hofburg? Who was the Kaiser?
9. Translate into German—
 Writing exercises is necessary in order to learn a language.
 We noticed his looking at the picture.
 The poor are in want of bread.
 Admiral Byng was suspected of cowardice.
 It is not worth the trouble.
 It is my turn to play.
 I have no money about me.
 The stag was wounded by an arrow.
 I have cut my finger. (Compare the French equivalent.)
10. Give the principal parts of the following irregular verbs:—befehlen, betrügen, bieten, bitten, empfangen, fallen, genesen, geniessen, schlafen, trinken, verzeihen, wissen.
11. Translate into German and decline—Good cloth, severe distress, pure thought.
12. What are the conjunctions which require the verb of the subordinate proposition to be in the subjunctive mood? Translate "If I were not poor I would go with you" without using a conjunction.
13. Translate—

"Wenn ein Gott dort oben im Himmel lebt, wie die heiligen Männer sagen, und wir Alle seine Wesen sind, O! beim Heiland, zu dem wir beten sollen, warum duldet er, dass meine schwartze Haut verachtet wird von meinen Brüdern? Warum, du Gott der weissen Herren, verlangst du unsere Liebe, wenn du uns nicht schützen kannst? Bin ich nicht auch dein Geschöpf; sind meine Glieder nicht stark; ist mein Auge nicht das der wilden Katze; ist mein Haar nicht glänzend, meine Zähne weiss, meine Hand stark und kühn? Warum bin ich ein Hund, verflucht und geschlagen, zur Arbeit verdammt, von der Sonne gebraten mit verdorrten Lungen, und dort im kühlen Hause sitzen sie, und lachen wenn ich weine. Lache nicht weisser Massa, lache nicht; Moses und seine Brüder sind stark, ihr Athem wird dich verzehren." Der diese Worte sprach war ein junger Neger.—Mügge's "Toussaint."

14. Translate into German—

After a moment's silence he began to speak again: "During the short time that I have had the good fortune to be in your company, I have, excuse me for mentioning it to you, been able several times to observe with unspeakable admiration the beautiful shadow which you throw in the sunlight without being conscious of it yourself,—the beautiful shadow there at your feet. Pardon me the question, which is certainly a bold one, would you feel disinclined to make over this shadow of yours to me?"

He was silent; and it seemed to me as if a mill-wheel were turning round in my head. What was I to make of the strange proposal to purchase my shadow? He must be mad, I thought, and with an alteration of voice, which suited better the humility of his, I answered thus:

"Why (Ei, Ei!), my good friend, is not your own shadow sufficient for you? I call this a trade of a very peculiar kind." He broke in immediately, "I have in my pocket much which might appear to you (dem Herrn) not wholly valueless, and for this inestimable shadow I consider the highest price too small."—*Chamisso's "Peter Schlemihl."*

15. Translate—

HOFFER.

Hoher Herr!

Der Brief wird mir den Glauben doch nicht geben.

(Der Vicekönig wendet sich unwillig.)

Vergieb mir meine Kühnheit, lieber Herr!

Der arme Hofer kann einmal nicht anders;

Und da du Gnade üben willst, so übe

Die Gnade jetzt, mich huldreich anzuhören.

Wir Leute von Tyrol sind, oder waren,

Ein fröhlich Völklein; aber einen Zug

Den wollen unsre Nachbar'n just nicht loben;

Sie nennen uns misstrauisch. Ob wir's sind,

Kann ich nicht sagen; wenn wir's sind, so haben

Wir ein'gen Grund dazu; denn Vorsicht lehrt

Uns jeder Schritt von unsern Kindesbeinen.

Auf schmalen Pfaden wandern wir, da reisst

Sich haarbreit neben uns ein Abgrund auf,

Es hängt der Fels, die Klippe über uns—

Geschwind vorbei, eh' sich die Quadern lösen;

Heut sehen wir ein Bächlein, morgen ist

Vom kurzem Regenguss das Thal beströmt;

Die Nebel und die Wolken spiegeln uns

Die Ebne oder eine Brücke vor,

Vertrauen wir dem Dunst, so stürzen wir

Zerschmettert in das Bodenlose.

Immermann.

Italian.

Three hours.

CHARLES H. PEARSON, Esq., M.A., Examiner.

SILVIO PELLICO—Le Mie Prigioni.

1. M' affacciai prima a quella, e vidi che *metteva* verso il palazzo del patriarca. Altre *prigion* erano presso la mia, in un' ala di poca estensione a destra, ed in uno sporgimento di fabbricato, che mi stava dirimpetto. In quello sporgimento stavano due carceri, una sull' altra. La inferiore aveva un *finestrone* enorme, pel quale io vedevo dentro passeggiare un uomo signorilmente vestito. Questi mi *vide*, mi fece qualche segno e ci *dicemmo* i nostri nomi. *Volli* quindi esaminare dove guardasse l' altra mia finestra. Posi il tavolino sul letto e sul tavolino una sedia, m' arrampicai sopra, e vidi essere a livello d' una parte del tetto del palazzo. Al di là del palazzo *appariva* un bel tratto della città e della laguna.
2. Parse the words in Italics.
3. Give the rules for the formation of the plural in nouns ending in *co*, *ajo*, *cia*, and *gia*. Give the plurals of *pajo* (a pair), *uovo* (an egg), and *braccio* (an arm).
4. Give the present, past, and future tenses of *crescere* and *fare*.
5. What prepositions are required after the verbs *pensare* (to think of), *badare* (to mind, care, watch), *entrare* (to enter), and after the adverbs "in mezzo, adesso, dentro, presso?" Give examples.

6. When must *di lui*, *di lei* be used instead of *suo*, *sua*, and *vice versá* ?
 7. Give the different ways of rendering in Italian the English word "then," with examples.
 8. What are the principal uses of the grave accent in Italian ?
 9. Translate—

La procellosa e trepida
 Gioia d'un gran disegno,
 L'ansia d'un cor che indocile
 Serve pensando al regno,
 E'l giunge, e tiene un premio
 Ch' era follia sperar.
 Tutto ei provò; la gloria
 Maggior dopo il periglio,
 La fuga, e la vittoria,
 La reggia, e il triste esiglio,
 Due volte nella polvere
 Due volte su gli altar.

E' si nomò: due secoli,
 L'un contro l'altro armato,
 Sommessi a lui si volsero
 Come aspettando il fato:
 Ei fe silenzio, ed arbitro
 S'assise in mezzo a lor.

10. Translate into Italian—

The posts crash down in a heap; the imperial standard totters and falls in the dust. Immediately afterwards people of different kinds were seen to pour out furiously and to scatter through the plain in disorder and panic. Vainly does a knight, rooted to the spot and scorning danger, call them back with words and signs. Fear stops their ears; these cowards have no life except in their legs. "And yet I could have sworn one of them was left," murmurs Ferruccio to himself.

Pure Mathematics.—I.

Three hours.

Dr. BROMBY, Examiner.

ALGEBRA.

- Two persons set out to walk round the same field, the periphery of which is $3n + a + b$ yards. One goes $2a$ yards and then walks back $3b$ yards, then advances again $4b$ yards and retires a yards: meanwhile the other starting from the same point in an opposite direction goes $4m$ yards and then retires n yards, then advances $3n$ yards and retires $4m$ yards. How far are they now apart?
- Divide $2x^4 - 2ax^3 - 5a^2x^2 + 19a^3x - 4a^4$ by $2x^2 + 4ax - a^2$.
- Find the highest common factor of $x^4y - 5ax^3y + a^2yx^2 + 5xya^3 - 2a^4y$ and $x^4y - 7ayx^3 - 11a^2x^2y + 19xya^3 - 23a^4y$.
- Subtract $\frac{3}{(x+1)(x-2)(x+2)}$ from $\frac{2x}{(x^2-1)(x^2-4)}$, and reduce the result to its simplest form.
- Simplify $\frac{\frac{1}{a} - \frac{1}{b+c}}{\frac{1}{a} + \frac{1}{b+c}} \left\{ 1 + \frac{b^2 + c^2 - a^2}{2bc} \right\}$.
- Solve the equations—
 (a) $\frac{x}{8} - \frac{x-1}{2\frac{1}{2}} = \frac{3x-4}{15} + \frac{x}{12} + \frac{13}{120}$.
 (b) $2x - \frac{y+3}{4} = 7 + \frac{3y-2x}{5}$.
 (c) $\frac{7}{x^2+4x} + \frac{21}{3x^2-8x} = \frac{22}{x}$.
 (b) $4y - \frac{8-x}{3} = 24\frac{1}{2} - \frac{2y+1}{2}$.
- The number of cubical feet in two cubical blocks of stone is 152. If the number of square feet on one face of each stone be multiplied by the number of feet in the edge of the other and the results added together the sum is 120. Find the cubical feet in each block.

8. Find the first four terms in their simplest form of $\sqrt{1-x}$.
9. Prove the sum of an arithmetic progression to be $\left(2a + \overline{n-1} \cdot d\right) \frac{n}{2}$, where a is the first term, n the number of terms, and d the common difference.
10. Insert three geometric means between 3 and 243.
11. If $a : b :: c : d :: e : f$, prove that $a : b :: ma + nc - pe : mb + nd - pf$.
12. Prove the rule for pointing in Division of Decimals.

Pure Mathematics.—II.

Four hours.

DR. BROMBY, *Examiner*.

EUCLID—Books I.—IV. inclusive. ARITHMETIC.

1. The greater side of every triangle is opposite to the greater angle.
2. Describe a parallelogram that shall be equal to a given triangle, and have one of its angles equal to a given rectilineal angle.
3. If a straight line be divided into any two parts, the rectangle contained by the whole and one of the parts is equal to the rectangle contained by the two parts, together with the square on the aforesaid part.
4. Divide a given straight line into two parts, so that the rectangle contained by the whole and one of the parts, shall be equal to the square on the other part.
5. If any point be taken in the diameter of a circle which is not the center, of all the straight lines which can be drawn from it to the circumference, the greatest is that in which the center is, and the other part of that diameter is the least; and, of the rest, that which is nearer to the line which passes through the center is always greater than one more remote: and from the same point there can be drawn only two equal straight lines to the circumference one upon each side of the diameter.
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. In a given circle to inscribe a triangle equiangular to a given triangle.
8. To describe an equilateral and equiangular pentagon about a given circle.
9. If a triangle be inscribed in a circle, prove that the angle between the base and the diameter drawn through one extremity of it is equal to the difference between the vertical angle and a right angle.
10. If from any point within an equilateral triangle perpendiculars be drawn to the sides, prove that the sum of these perpendiculars is equal to the perpendicular drawn from either of the angles to the opposite side.

N.B.—The full working of the following questions must be sent up.

1. Reduce to its simplest form—

$$\frac{54}{57} \left(\frac{5}{6} + \frac{8}{9} - 5\frac{1}{3} \right) \div \left(\frac{1}{6} - \frac{4\frac{1}{2}}{59\frac{1}{3}} \right)$$
2. Divide .0625 by .00005.
3. Find the value of .475 of a yard + .04535 of a mile. Present the answer in yards, feet, and inches.
4. What is the dividend on £1710 14s. 6d. at 13s. 4½d. in the £? Work this by Practice.
5. A trader owned $\frac{4}{7}$ of a vessel and sold $\frac{1}{11}$ of $\frac{2}{9}$ of his share for £12 12; what was the value of $\frac{1\frac{1}{2}}{4\frac{1}{2}}$ of $\frac{2}{3}$ of the vessel?
6. A room 18 feet long, 15 broad, and 10 high, has to be hung with paper $\frac{3}{4}$ yard wide and which costs 9 pence a yard. Find cost of papering the room.
7. If I lay out £1110 in the 4 per cents at 92½, at what price should they be sold to gain 9½ per cent.?
8. The superficial areas of two cubes are 106134 and 4957686 square feet respectively. Find the difference in length of their edges.

Mathematics.—III.

Four hours.

DR. BROMBY, *Examiner*.

EUCLID, VI. & XI. TRIGONOMETRY. LOGARITHMS.

1. The sides about the equal angles of equiangular triangles are proportionals; and those which are opposite to the equal angles are homologous sides, that is, are the antecedents or consequents of the ratios.
2. Similar polygons may be divided into the same number of similar triangles, having the same ratio to one another that the polygons have; and the polygons have to one another the duplicate ratio of that which their homologous sides have.
3. If from any angle of a triangle, a straight line be drawn perpendicular to the base; the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.
4. If two straight lines be at right angles to the same plane, they shall be parallel to one another.
5. If two parallel planes be cut by another plane, their common sections with it are parallels.
6. Define a cylinder, a parallelepiped, and the inclination of a plane to a plane.
7. Show geometrically how to cut off the fifth part of a straight line.
8. In a given circle place a straight line parallel to a given straight line and having a given ratio to it. What is the limit of possibility to this problem?
9. Define sine of an angle and also cosecant. Prove that cosecant of any angle is equal to the reciprocal of the sine.
10. Express the sine of the difference of two angles in terms of sines and cosines of the angles themselves.
11. Prove the truth of the following expressions:—
 - (a) $\frac{\sec 2\theta - 1}{\tan 2\theta} = \tan \theta.$
 - (b) $\sqrt{\frac{2 \sin a - \sin 2a}{2 \sin a + \sin 2a}} = \tan \frac{a}{2}.$
12. If $\sin(\theta - \phi) = \cos(\theta + \phi) = \frac{1}{2}$, prove that $\theta = 45^\circ$ and $\phi = 15^\circ$.
13. From the top of a lighthouse, which was 296·35 feet above the sea, the angle of depression of a ship was $42^\circ 35'$. Required the horizontal distance of the ship.
14. Observers at two forts which are known to be 926·7 yards apart find that the angles subtended by the other fort and a ship are respectively $31^\circ 13'$ and $48^\circ 24' 15''$. Find the distance of the ship from each fort.

Natural Philosophy.

Three hours.

DR. BROMBY, *Examiner*.

1. Define *Force*; and state what name is sometimes given to it when it is transmitted by means of a cord.
2. P , Q , and S are parallel forces acting at distances 5 in., 7 in., and 11 in. respectively from a point lying without them; P and S are concurrent, Q non-concurrent: what is the distance of the resultant from the same point when $P = 9$, $Q = 4$, and $S = 15$?
3. $ABCD$ is a uniform square board suspended at A . Each side is $4\sqrt{2}$ inches long. From D is suspended a weight equal to the weight of the square. Find the point in the diagonal BD through which a vertical line drawn from A will pass.

4. Two uniform cylinders of the same material are joined together end to end so that their axes are in the same straight line. One cylinder is 20 in. long and 2 in. in diameter; the other is 3 in. long and 4 in. in diameter. Find the centre of gravity of the combination.
5. A scale beam is 12 in. long, but its fulcrum is placed 5 in. from one end. Find the apparent weight of 3 lbs. of sugar (1) when weighed at one end, (2) when weighed at the other: then show that the true weight is a mean proportion between the two.
6. A wheel and axle is used to raise a bucket from a well. The circumference of the wheel is 50 inches, and while the wheel makes three revolutions the bucket, which weighs 25 lbs., rises one foot. What force will be necessary to turn the wheel?
7. In the third system of pulleys, if there be 4 pulleys and the weight be 90 lbs.; find the power.

N.B.—In the following problems use the integral value of g .

8. The force of gravity at the surface of Jupiter is about 2.6 times as great as at the surface of the earth. Find the time it would take there for a stone to fall 260 feet.
9. On a plane of ice rising 7 in 25, find how far a body would slide in 5".
10. A gun pointed horizontally 4 feet above a level plane discharged its ball so as to strike the ground 325 yards off. Find the initial velocity of the ball.
11. A boy placed his ship in a bucket of water which was quite full, and 36 cubic inches of water run over; what was the weight of the ship?
12. Describe the common hydrometer; and investigate the formula for graduating the table which accompanies it.
13. Describe a Forcing Pump.
14. If water be forced to rise to the height of 288 feet above the level of the street, what pressure upon the square inch must the bottom of the pipe be prepared to sustain?

Drawing.

H. HUNTER, Esq., Examiner.

FROM THE FLAT.

One hour and a half.

Make a copy of the symmetrical ornament given on the black board, as large as your paper will admit.

PERSPECTIVE DRAWING.

Two hours and a half.

Make perspective sketches of the several objects placed before you, and mark by letters or dotted lines, with corresponding references, the "horizontal line," "perspective centre," and "vanishing points."

The Examiner will indicate the desired size of each drawing.

DRAWING FROM MODEL.

Three hours.

Sketch in outline the plaster cast given to the size of the original, and complete by shading the portion that will be pointed out to you.

TASMANIAN COUNCIL OF EDUCATION.

Hobart Town, 13th April, 1876.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS, 1877.

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 1877.

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. | |

SCHEME of Examination for the Year 1877.

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*, with Questions on the Etymology and Grammatical construction of the Language; 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 accession of Henry VII. to accession of James I. 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, *Aeneid*, Book VII., Horace, *Odes*, Books I. and II.; Cicero, *De Amicitia*. Questions will also be given on the Language, and the historical and geographical allusions. 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 VI.; Euripides, *Medea*. Homer's *Iliad*, Book VI. Questions on the Language, and the historical and geographical allusions. 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 1, 2, and 3; Molière, *Le Bourgeois Gentilhomme*. Questions on the Language, and the historical and geographical allusions; a passage from some other French author for translation into English, and from some English author into French.

5. GERMAN.—Schiller, *Wallenstein*. Questions on the Language, and the historical and geographical allusions; a passage from some other German author for translation into English, and from an English author into German.

6. ITALIAN.—Silvio Pellico, *Le Mie Prigioni*, with questions on the Language, a passage from some other Italian author for translation into English, and from an English author into Italian.

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's Zoology, (Renshaw), 8s. 6d., and Lindley's Elements of Botany, (Bradbury), 9s.

11. GEOLOGY.—Book recommended—Page's Advanced Text Book of Geology, (Blackwood), 5s.

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		200
13. Music		200
		Marks.
Standard for First Class		2350
Standard for Second Class		1900
Standard for Third Class		1350