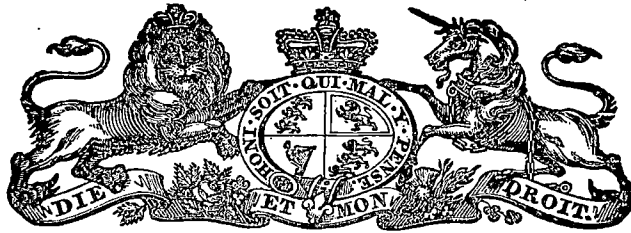


(No. 46.)



1877.
SESSION IV.

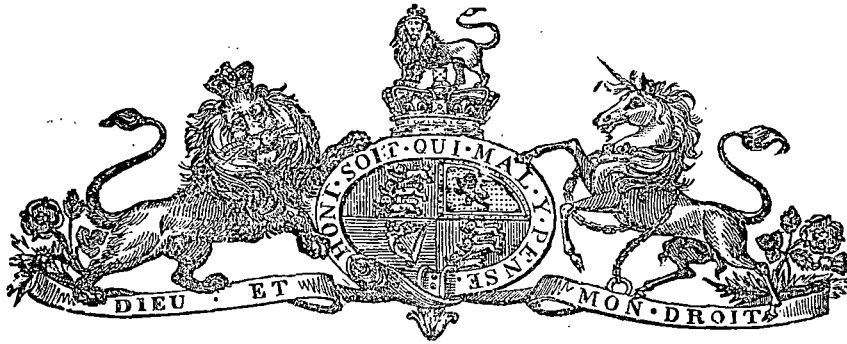
TASMANIA.

HOUSE OF ASSEMBLY.

TASMANIAN SCHOLARSHIPS.

EXAMINERS' REPORT, 1877.

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



TASMANIAN COUNCIL OF EDUCATION.

TASMANIAN SCHOLARSHIPS.

THE Council of Education has directed the publication of the names of the under-mentioned Candidates who have passed the Examination for the Tasmanian Scholarships to the satisfaction of the Examiner. A Scholarship has been awarded to each, tenable for four years from the 1st March next, subject to the conditions of the Council's Regulations.

GEORGE ARCHIBALD MACMILLAN, age 19 years and 7 months, Hobart Town, Tasmania, Associate of Arts, 1875, Pupil of the Rev. R. D. Poulett-Harris, M.A., High School, Hobart Town.

NEIL ELLIOT LEWIS, age 18 years and 11 months, Hobart Town, Tasmania, Associate of Arts, 1875, Pupil of the Rev. R. D. Poulett-Harris, M.A., High School, Hobart Town.

The Report of the Examiner is annexed.

By Order of the Council,

GEO. RICHARDSON, *Secretary.*

Hobart Town, 9th October, 1877.

EXAMINER'S REPORT.

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

I HAVE the honor to report that the Examination for the Tasmanian Scholarships commenced on Monday, the 1st of October, and occupied the whole week.

Three Candidates presented themselves; of whom "B" failed to satisfy either of the prescribed conditions. "A" proved himself to be decidedly the best Mathematician, beating "C," who was virtually his only competitor, in every paper. "C," however, amply indemnified himself in the Classical papers, distancing his competitor even more completely than he had himself been distanced in the Mathematical papers. Both of them showed at every stage of the Examination that they were able and well-taught men; and both of them scored considerably more marks in the aggregate than what the standard prescribed by the Council requires; fulfilling at the same time the other condition of gaining a minimum of either 900 in Classics or 750 in Mathematics.

"C" obtained in Classics, 1206; and a total of 2342.

"A" obtained in Mathematics, 1074; and a total of 2250.

On opening the sealed envelopes it was found that the Scholars for the year were—

GEORGE ARCHIBALD MACMILLAN, A.A., 1875; and
NEIL ELLIOT LEWIS, A.A., 1875.

A full schedule of the marks obtained by the three Candidates is appended to this Report.

J. E. BROMBY, *D.D., Examiner.*

Hobart Town, 6th October, 1877.

EXAMINATION for TASMANIAN SCHOLARSHIPS, October, 1877.

TABLE OF MARKS.

	Full Marks.	Motto.		
		A.	B.	C.
MATHEMATICS.				
I. Arithmetic and Algebra	350	236	109	142
II. Euclid, Geometrical Conics, and Trigonometry	375	288	92	234
III. Trigonometry and Analytical Conics	375	281	107	245
IV. Differential Calculus and Natural Philosophy	400	269	55	119
<i>Total</i>	1500	1074	363	740
CLASSICS.				
I. Greek Authors	260	173	48	205
II. Latin Authors	240	146	60	202
III. General Questions	300	119	64	185
IV. Greek Composition	250	77	50	232
V. Latin Composition	300	168	74	260
VI. Ancient History	150	121	41	122
<i>Total</i>	1500	804	337	1206
MODERN LANGUAGES AND HISTORY.				
I. English	250	141	23	155
II. French	250	106	47	112
III. Constitutional and European History	250	125	45	129
<i>Total</i>	750	372	115	396
GRAND TOTAL	3750	2250	815	2342

J. E. BROMBY, D.D., Examiner.

Hobart Town, 6th October, 1877.

Mathematics.—I.

Four hours.

DR. BROMBY, Examiner.

ARITHMETIC AND ALGEBRA.

- The surface of a cube contains 150 square inches: find the length of its diagonal to two places of decimals.
- If 236 yards are bought at 7s. 10½d. per yard, and one-fourth be sold at 10s. 3d., one-third at 8s. 6d., and the remainder at 7s. per yard; what was the gain or loss per cent. upon the whole outlay?
- If the same sum be invested in the 3 per cents at 82½ and in the 3½ per cents at 93½, what is the ratio which the two incomes bear to each other?
- If 2 boys and 1 man do a piece of work in 4 hours, and 2 men and 1 boy can do the same in 3 hours: find in what time a man can do the work by himself.
- If the interest upon £153 amount in 5 years to £36 6s. 9d., what is the rate per cent. per annum?
- Reduce the difference between $\frac{2}{7}$ of £2 7s. 8½d. and $\frac{3}{10}$ of £1 6s. 8d. to the decimal of £20.
- Extract the square root of $1 - x + \frac{2}{3}(x^{\frac{1}{2}} + \frac{2}{3}x^{\frac{3}{2}}) + \sqrt{x}(2\sqrt{x} - 2 - \frac{2}{3}x^{\frac{1}{2}})$.
- Find the value of $\frac{\sqrt{ac+x} + \sqrt{ac-x}}{\sqrt{ac+x} + \sqrt{ac-x}}$ when $x = \frac{2ab^2c}{1+b^4}$.

9. If the equation $ax^2 + bx + c = 0$ have two roots equal, which is the relation between the constants?
10. Solve the equations—
- (a) $ax - \frac{a^2 - 3bx}{a} - ab^2 = bx + \frac{6bx - 5a^2}{2a} - \frac{bx + 4a}{4}$.
- (b) $3x + 5y = \frac{(8a - 2b)ab}{a^2 - b^2}$
 $a^2x - \frac{ab^2c}{a + b} + (a + b + c)by = b^2x + (a + 2b)ab$ }
- (c) $x^2 + 4\sqrt{x^2 + 3y + 5} = 55 - 3y$ }
 $6x - 7y = 16$ }
- (d) $x = \frac{a^2}{y} - \frac{b^2}{z}$ }
 $yz = c^2$ }
- (e) $\overline{x - 2}^2 - 6\sqrt{x(x - 2)} = 24 - 14x + 15\sqrt{x}$.
11. Extract the square root of $2 + 2(1 - x)\sqrt{1 + 2x - x^2}$.
12. In the Binomial Theorem prove that $C_r = B_{r-1} + B_r$; and write down Pascal's Triangle for six values of the index.
13. The sum of £325 was divided among four persons whose shares were in geometrical progression; and the difference between the greatest and least was to the difference between the means as 95 to 30. What were their respective shares? If you obtain two answers, explain them.
14. Five persons undertake to reap a field of 87 acres. The five terms of an arithmetic progression whose sum is 20 will express the times in which they can severally reap an acre; and they altogether can finish the undertaking in 60 days. In how many days can each separately reap an acre?
15. How many words of two consonants and one vowel can be formed from 8 consonants and 4 vowels, the vowel being the middle letter in each word?
16. Prove generally that every number is divisible by 9 if the sum of its digits is divisible by 9.

Mathematics.—II.

Four Hours.

DR. BROMBY, *Examiner*.

EUCLID. GEOMETRICAL CONICS. LOGARITHMS.

- 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 angle.
- If a straight line be divided into any two parts, the squares on the whole line and on one of the parts are equal to twice the rectangle contained by the whole and that part, together with the square on the other part.
- From a given circle show how to cut off a segment which shall contain an angle equal to a given angle.
- If two similar parallelograms have a common angle, and be similarly situated, they are about the same diameter.
- If two straight lines which meet one another be parallel to two other straight lines which meet one another but are not in the same plane with the first two, the plane which passes through one pair of lines shall be parallel to the plane passing through the other pair.
- Two circles which touch each other have a common tangent (not at the point of contact) which cuts the diameters of both (produced) in A: prove that twice the distance of A from the nearest circle multiplied by the sum of the radii equals the difference between the squares of the distances of A from the two touching points of the tangent.
- Define the inclination of a straight line to a plane: and prove that if two straight lines are parallel to each other, they shall have the same inclination to the same plane.
- Define a logarithm; and investigate the method for finding the quotient of two numbers by the aid of logarithmic tables.
- Expand a^x in a series of ascending powers of x .

10. Assuming the expansion for $\log_e(1+x)$, prove that $\log_e \frac{m}{n} = 2 \left\{ \frac{m-n}{m+n} + \frac{1}{3} \left(\frac{m-n}{m+n} \right)^3 + \frac{1}{5} \left(\frac{m-n}{m+n} \right)^5 + \&c. \right\}$
11. State the relationship between the ordinate and abscissa in a parabola: and prove that if circles whose radii are in arithmetical progression touch a given straight line at a given point, and if to such circles tangents be drawn parallel to the given line, they will successively cut the circles next larger in points lying on a parabola.
12. The locus of the middle points of any system of parallel chords in the ellipse is a straight line passing through the centre.
13. In the rectangular hyperbola prove that $CN^2 - PN^2 = CA^2$; and from this property prove that the curve has asymptotes.
14. If a right circular cone be cut by a plane, determine the condition for the section being a parabola.

Mathematics.—III.

Four hours.

DR. BROMBY, *Examiner.*

TRIGONOMETRY AND ANALYTICAL GEOMETRY.

- What is the difference between the trigonometrical function of an angle and one of an arc? Prove that the tangent multiplied by the cotangent of the same arc is equal to the square of the radius.
- If $m \sin \theta + n \cos \theta = p$, prove that $\sin \theta = \frac{mp \pm n\sqrt{m^2 + n^2 - p^2}}{m^2 + n^2}$.
- Prove that $\cos(A+B) = \cos A \cdot \cos B - \sin A \cdot \sin B$.
- Prove that $\tan \frac{a}{2} \tan \left(45 + \frac{a}{2} \right) = \frac{\tan a + \sec a}{\cot a + \operatorname{cosec} a}$.
- Let a be the side of a regular polygon of n sides and r the radius of the circumscribing circle; prove that $r = \frac{a}{2 \sin \frac{180^\circ}{n}}$.
- Two stations are known to be exactly 326 yards apart; an observer at each station finds the angle subtended by a ship and the other station to be respectively 13° and $127^\circ 45'$: what was the distance of the ship from either of the two stations?
- A ship at sea observes a light-house which bears N.N.E., and after sailing 7 miles E. by S. finds that the light-house now bears N.W. by N.; calculate the distance of the light from the last point of observation.
- Given $\tan^{-1} \frac{1}{a-1} = \tan^{-1} \frac{1}{x} + \tan^{-1} \frac{1}{a^2 - x + 1}$: find the values of x .
- Assuming De Moivre's theorem expand $\sin a$ according to powers of a .
- The equation $2y^2 - 5xy + 2x^2 - 2y + 13x - 24 = 0$ represents two straight lines. Find the angle between them; their point of intersection; and the distance of that point from the point $(\frac{1}{3}, 3\frac{1}{3})$.
- Circles whose radii are respectively $r, 2r, 3r, \&c.$ all touch a common tangent at a common point; and tangents drawn at the other extremities of their diameters cut the succeeding circles: find the equation to the curve upon which all these points of intersection lie.
- In any ellipse of which S and H are the foci and P any point in the curve, show that $\tan \frac{PSH}{2} \times \tan \frac{PHS}{2} = \frac{1-e}{1+e}$.
- The condition that the line $y = mx + c$ may touch the conic section $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ is $c^2 = m^2 a^2 + b^2$. Prove this.
- Prove that in the hyperbola the difference of the squares of any two semi-conjugate diameters is equal to the difference of the squares of the semi-axes. What property in the rectangular hyperbola deducible from the above has occasioned it to be called the equilateral hyperbola?
- $2x^2 + y^2 = 2$ is the equation to an ellipse. Find the equation to a line which shall touch the ellipse and be inclined to the axis of x at an angle of 45° .

Mathematics.—IV.

DR. BROMBY, *Examiner.*

Four hours.

DIFFERENTIAL CALCULUS AND NATURAL PHILOSOPHY.

1. Define a differential coefficient; and from the definition investigate those of x^n , e^x , and $\cos x$.
2. Differentiate $e^{ax} \sec bx$, $\tan^{-1} \frac{\sqrt{x} - \sqrt{a}}{1 + \sqrt{ax}}$, $\frac{x \sin^{-1} x}{\sqrt{1-x^2}} + \log \sqrt{1-x^2}$,
 $\log \frac{1+x\sqrt{2}+x^2}{1-x\sqrt{2}+x^2} + 2 \tan^{-1} \frac{x\sqrt{2}}{1-x^2}$.
3. If $u = \log \frac{x^2 + ax + \sqrt{(x^2 + ax)^2 - bx}}{x^2 + ax - \sqrt{(x^2 + ax)^2 - bx}}$ find value of $\frac{du}{dx}$.
4. If $u = x^2 e^x$, prove that $\frac{d^nu}{dx^n} = e^x (x^2 + 2nx + n(n-1))$
5. A railway engine accidentally got loose, and passed the next station at 3.55' with a velocity of 12 miles an hour. At 4.3' it had acquired a speed of 18 miles an hour; and at 4.7' it ran into the down train. Calculate the rate at which it was going when the collision took place. Find also the ratio which the accelerating force of the steam bore to gravity (= 32).
6. Two weights 93 lbs. and 81 lbs. are placed at the extremities of the base of a triangle, and 29 lbs. at its vertex. The altitude of the triangle is 16 feet. Find the distance of the centre of gravity of the three weights from the base.
7. Two weights 12 lbs. and 9 lbs. are fastened to the two ends of a rigid rod without weight; and the rod is suspended by a string fastened at its extremities and passing freely over a fixed point. Given 5 feet as the length of the rod and 7 feet as the length of the string; find the inclination of the rod to the horizon during equilibrium.
8. The radius of the axle of a capstan is a foot and a quarter; if 4 men push each with a force of 80 lbs. on handspikes 5 feet long, find the tension upon the rope.
9. In the third system of pulleys, if there are 4 pulleys weighing one lb. each, and the Weight is 71 lbs., find the Power.
10. A clock whose pendulum is $4\frac{1}{2}$ feet long loses 6 hours a day, by how much must the pendulum be altered to make it keep true time?
11. A piece of glass, whose specific gravity is 3.33, is fastened to a piece of cork of three times its volume. The specific gravity of cork is .24. Will the united mass sink or swim?
12. Give a full description of the fire engine.
13. Assuming that the volume of a cone is one-third of that of a cylinder upon the same base, and that the barometer is standing at 30 inches, find the depth to which an inverted conical wine-glass must be plunged in mercury that the fluid may bisect its vertical axis. Measure the depth by the distance between the surfaces within and without the glass.
14. A barometer tube has an internal section of $\frac{1}{2}$ of a square inch; there are 30 inches of mercury standing in it and 6 inches of vacuum above; a bubble of air containing $\frac{1}{27}$ of a cubic inch of external air is introduced: show how far will the mercury fall?

Classics.—I.

Three hours.

DR. BROMBY, *Examiner.*

GREEK AUTHORS.

1. Translate—

ΦΙ. ὦ πτανὰ θῆραι χαροπῶν τ'
 ἔθνη θηρῶν, οὐς ὄδ' ἔχει
 χῶρος οὐρεσιβώτας,
 φυγᾶ μ' οὐκ ἔτ' ἀπ' αὐλίων
 πελάτ'· οὐ γὰρ ἔχω χεροῖν
 τὰν πρόσθεν βελίων ἀλκᾶν,
 ὦ δύστανος ἐγὼ τανῦν,
 ἀλλ' ἀνέδην ὄδε χῶρος ἐρύκεται,
 οὐκ ἔτι φοβητὸς ὑμῖν.
 ἔρπετε, νῦν καλὸν
 ἀντίφονον κορέσαι στόμα πρὸς χάριν
 ἐμᾶς σαρκὸς αἰόλας.
 ἀπὸ γὰρ βίον αὐτίκα λείψω.
 πόθεν γὰρ ἔσται βιοτά; τίς ὄδ' ἐν αὔραις τρέφεται,
 μηκέτι μηδενὸς κρατύνων ὅσα πέμπει βιόδωρος αἴα;

ΧΟ. πρὸς θεῶν, εἴ τι σέβει ξένον, πέλασσον,
 εὐνοία πάσῃ πελάταν·
 ἀλλὰ γνῶθ', εὐ γνῶθ' ὅτι σὸν
 κῆρα τάνδ' ἀποφένγειν.
 οἰκτρὰ γὰρ βόσκειν, ἀδαῆς δ'
 ἔχειν μύριον ἄχθος, ᾧ ξυνοικεῖ.

2. Translate—

(A) Ὁ γὰρ σύμβουλος καὶ ὁ συκοφάντης, οὐδὲ τῶν ἄλλων οὐδὲν ἐοικότες, ἐν τούτῳ πλεῖστον ἀλλήλων διαφέρουσιν· ὁ μὲν γὰρ πρὸ τῶν πραγμάτων γνώμην ἀποφαίνεται, καὶ δίδωσιν ἑαυτὸν ὑπεύθυνον τοῖς πεισθεῖσι, τῇ τύχῃ, τοῖς καιροῖς, τῷ βουλομένῳ· ὁ δὲ σιγήσας ἠνίκ' ἔδει λέγειν, ἂν τι δύσκολον συμβῇ, τοῦτο βασκαίνει. ἦν μὲν οὖν, ὅπερ εἶπον, ἐκεῖνός ὁ καιρὸς τοῦ γε φροντίζοντος ἀνδρὸς τῆς πόλεως καὶ τῶν δικαίων λόγων· ἐγὼ δὲ τοσαύτην ὑπερβολὴν ποιούμεαι ὥστε, ἂν νῦν ἔχῃ τις δεῖξαι τι βέλτιον, ἢ ὅλως εἴ τι ἄλλο ἐνῆν πλὴν ὧν ἐγὼ προειλόμην, ἀδικεῖν ὁμολογῶ. εἰ γὰρ ἔσθ' ὅ τι τις νῦν ἐώρακεν, ὃ συνήνεγκεν ἂν τότε πραχθῆν, τοῦτ' ἐγὼ φημι δεῖν ἐμὲ μὴ λαθεῖν. εἰ δὲ μήτ' ἔστι μήτε ἦν μήτ' ἂν εἰπεῖν ἔχοι μηδεὶς μηδέπω καὶ τήμερον; τί τὸν σύμβουλον ἐχρῆν ποιεῖν; οὐ τῶν φαινομένων καὶ ἐνότων τὰ κράτιστα ἐλέσθαι; τοῦτο τοίνυν ἐποίησα ἐγὼ.

(B) Καίτοι ὅτῳ τὰ τῶν Ἑλλήνων ἀτυχήματα ἐνευδοκιμεῖν ἀπέκειτο, ἀπολωλέναι μᾶλλον οὐτός ἐστι δίκαιος ἢ κατηγορεῖν ἑτέρου· καὶ ὅτῳ συνευνηόχασιν οἱ αὐτοὶ καιροὶ καὶ τοῖς τῆς πόλεως ἐχθροῖς, οὐκ ἐνὶ τούτῳ ἐννοῦν εἶναι τῇ πατρίδι. δηλοῖς δὲ καὶ ἐξ ὧν ζῆς καὶ ποιεῖς καὶ πολιτεύει καὶ πάλιν οὐ πολιτεύει. πράττεται τι τῶν ὑμῖν δοκούτων συμφέρειν, ἄφωνος Αἰσχίνης· ἀντέκρουσέ τι καὶ γέγονεν οἷον οὐκ ἔδει, ἀρεστὴν Αἰσχίνης· ὥσπερ τὰ ῥήγματα καὶ τὰ σπᾶσματα, ὅταν τι κακὸν τὸ σῶμα λάβῃ, τότε κινεῖται.

3. Translate—

“αὐτὸς νῦν ἴδε πῶμα, θεῶς δ' ἐπὶ δεσμὸν ἦλθον,
 μή τις τοι καθ' ὁδὸν δηλήσεται, ὅππότε ἂν αὔτε
 εὐδησοῦσα γλυκὴν ὕπνον ἰὼν ἐν νηὶ μελαίνῃ.”
 ἀντάρ ἐπεὶ τὸ γ' ἄκουσε πολὺτλας δῖος Ὀδυσσεύς,
 ἀντίκ' ἐπήρτυε πῶμα, θεῶς δ' ἐπὶ δεσμὸν ἦλθεν
 ποικίλου, ὃν ποτέ μιν δέδαε φρεσὶ πότνια Κίρκη.
 αὐτόδιον δ' ἄρα μιν ταμίη λούσασθαι ἀνώγει
 ἔς ῥ' ἀσάμινθον βάνθ'. ὁ δ' ἄρ' ἀσπασίως ἴδε θυμῷ
 θερμὰ λότηρ', ἐπεὶ οὐ τι κομιζόμενός γε θάμιζεν,
 ἐπεὶ δὴ λίπε δῶμα Καλυψοῦς ἠγκόμοιο·
 τόφρα δὲ οἱ κομιδὴ γε θεῶ ὡς ἔμπεδος ἦεν.
 τὸν δ' ἐπεὶ οὖν δμῶαί λούσαν καὶ χρίσαν ἐλαίῳ,
 ἀμφὶ δὲ μιν χλαῖναν καλὴν βάλον ἠδὲ χιτῶνα,
 ἔκ ῥ' ἀσαμίνθου βὰς ἄνδρας μέγα οἰνοποτήρας
 ἦιε. Ναυσικάα δὲ θεῶν ἄπο καλλος ἔχουσα
 στή ῥα παρὰ σταδμὸν τέγεος πύκα ποιητοῖο,
 θαύμαζεν δ' Ὀδυσῆα ἐν ὀφθαλμοῖσιν ὀρώσα,
 καὶ μιν φωνήσασ' ἔπεα πτερόεντα προσηύδα.
 “χαῖρε, ξεῖν', ἵνα καὶ ποτ' ἐὼν ἐν πατρίδι γαίῃ
 μνήσῃ ἐμεῦ, ὅτι μοι πρώτη ζωάγρι' ὀφέλλεις.”

4. Translate—

Οἱ δὲ Πελοποννήσιοι αἰσθόμενοι ἐν ταρσοῖς καλάμου πηλὸν ἐνεῖλλοντες ἐσέβαλλον ἐς τὸ διηρημένον, ὅπως μὴ διαχεόμενον ὥσπερ ἡ γῆ φοροῖτο. οἱ δὲ ταύτῃ ἀποκληρόμενοι τοῦτο μὲν ἐπέσχον, ὑπόνομον δ' ἐκ τῆς πόλεως ὀρύξαντες καὶ ξυντεκμηράμενοι ὑπὸ τὸ χῶμα ὑφείλκον αὐθις παρὰ σφᾶς τὸν χοῦν· καὶ ἐλάνθανον ἐπὶ πολὺ τοὺς ἔξω, ὥστ' ἐπιβάλλοντας ἤσσαν ἀνύτεν ὑπαγομένον αὐτοῖς κάτωθεν τοῦ χῶματος καὶ ἰζάνοντος αἰεὶ ἐπὶ τὸ κενούμενον. δεδιότες δὲ μὴ οὐδ' οὕτω δύνωνται ὀλίγοι πρὸς πολλοὺς ἀντέχειν, προσεπέξευρον τόδε· τὸ μὲν μέγα οἰκοδόμημα ἐπαύσαντο ἐργαζόμενοι τὸ κατὰ τὸ χῶμα, ἐνθεν δὲ καὶ ἐνθεν αὐτοῦ ἀρξάμενοι ἀπὸ τοῦ βραχέος τείχους ἐκ τοῦ ἐντὸς μνηοειδὲς ἐς τὴν πόλιν προσωκοδόμουν, ὅπως εἰ τὸ μέγα τείχος ἀλίσκοιτο, τοῦτ' ἀντέχοι, καὶ δέοι τοὺς ἐναντίους αὐθις πρὸς αὐτὸ χοῦν, καὶ προχωροῦντας εἰς διπλάσιόν τε πόνον ἔχειν καὶ ἐν ἀμφιβόλῳ μᾶλλον γίνεσθαι. ἅμα δὲ τῇ χώσῃ καὶ μηχανὰς προσήγον τῇ πόλει οἱ Πελοποννήσιοι, μίαν μὲν, ἢ τοῦ μεγάλου οἰκοδομήματος κατὰ τὸ χῶμα προσαχθεῖσα ἐπὶ μέγα τε κατέσεισε καὶ τοὺς Πλαταιᾶς ἐφόβησεν, ἄλλας δὲ ἄλλη τοῦ τείχους, ἄς βρόχους τε περιβάλλοντες ἀνέκλων οἱ Πλαταιῆς, καὶ δοκοὺς μεγάλας ἀρτήσαντες ἀλύσει μακραῖς σιδηραῖς

ἀπὸ τῆς τομῆς ἐκατέρωθεν ἀπὸ κεραιῶν δύο ἐπικεκλιμένων καὶ ὑπερτεινουσῶν ὑπὲρ τοῦ τείχους ἀνελεύσαντες ἐγκαρσίας, ὅποτε προσπεσεῖσθαι μέλλοι ἢ μηχανῇ, ἀφίεσαν τὴν δοκὸν χαλαραῖς ταῖς ἀλύσει καὶ οὐ διὰ χειρὸς ἔχοντες· ἢ δὲ ῥύμη ἐμπίπτουσα ἀπεκαύλιζε τὸ προέχον τῆς ἐμβολῆς.

5. Translate—

Αἱ πόλεις, πάλιν τοῦ Δημοσθένους ἀναρριπίζοντος αὐτὰς, συνίσταντο. Καὶ Θηβαῖοι μὲν ἐπέθεντο τῇ φρουρᾷ, καὶ πολλοὺς ἀνείλον, ὅπλα τοῦ Δημοσθένους αὐτοῖς παρασκευάσαντος· Ἀθηναῖοι δ' ὡς πολεμήσουσιν μετ' αὐτῶν παρεσκευάζοντο· καὶ τὸ βῆμα κατέειχεν ὁ Δημοσθένης, καὶ πρὸς τοὺς ἐν Ἀσίᾳ στρατηγοὺς τοῦ βασιλέως ἔγραφε, τὸν ἐκεῖθεν ἐπεγείρων πόλεμον Ἀλεξάνδρῳ, παῖδα καὶ μαργίτην ἀποκαλῶν αὐτόν. Ἐπεὶ μέντοι τὰ περὶ τὴν χώραν θέμενος παρῆν αὐτὸς μετὰ τῆς δυνάμεως εἰς τὴν Βοιωτίαν, ἐξεκέκοπτο μὲν ἢ θρασύτης τῶν Ἀθηναίων· καὶ ὁ Δημοσθένης ἀπεσβήκει· Θηβαῖοι δὲ προδοθέντες ὑπ' ἐκείνων ἠγωνίσαντο καθ' αὐτοὺς, καὶ τὴν πόλιν ἀπέβαλον. Θορύβον δὲ μεγάλον τοὺς Ἀθηναίους περιεστῶτος, ἀπεστάλη μὲν ὁ Δημοσθένης αἰρεθεὶς μεθ' ἑτέρων πρεσβευτῆς πρὸς Ἀλέξανδρον· δείσας δὲ τὴν ὄργην, ἐκ τοῦ Κιθαιρῶνος ἐχώρησεν ὀπίσω, καὶ τὴν πρεσβείαν ἀφήκεν. Εὐθὺς δ' ὁ Ἀλέξανδρος ἐξήτει τῶν δημαγωγῶν, δέκα μὲν ὡς τινες εἰρήκασιν, ὀκτὼ δ' ὡς οἱ πλείστοι καὶ δοκιμώτατοι τῶν συγγραφέων.

Classics.—II.

Four hours.

Dr. BROMBY, Examiner.

GENERAL QUESTIONS ON THE CLASSICAL AUTHORS.

1. Indicate the position of the following :—Eretria, Scyros, Lemnos, Cœnoe, Chryse, Ambracia, Sicyon, Naupactus, Rhodope, Potidæa, Strymon, Marpesius, Eridanus, regia. What was each?
2. Give an account of the following persons which shall be sufficient for their identification :—Lycomedes, Pœan, Phocion, Theseus, Laodamia, Deiphobus, Threicius sacerdos, Berecynthia mater, Serranus, Caieta, Mezentius, Cocytia virgo, Pentheus, the Sosii, Empedocles, M. Horatius, Ahala.
3. Of whom did the Chorus consist in the Philoctetes? What was the usual number in a tragic chorus? How did they take part in the dialogue? Give the technical name of their position in the theatre, and of the altar round which they danced. In what drama is it on record that they greatly exceeded their usual number?
4. Furnish a scheme for anapæstic dimeters. What is the meaning of synapheia? Why were the feet dactyl, spondee, and anapæst so named? What is the name of the foot consisting of four short syllables?
5. Translate the following :—τὸ Πελασγικὸν ἀργὸν ἄμεινον—ἐρρῶσθαι φράσας πολλά—ἀνοχὰς ποιεῖσθαι—συμπαρτίθεται τοῖς παρακαλουμένοις—ὅπερ οὐ σμικρὰν ὑμῖν οἴσειν ἐλπίζω ῥοπήν—τὰ γέγραφα ἐνεπίμπρασαν—ὁ συμβὰς σκηπτὸς—ἐνδεχομένως—πρότριπα—ἐπενήνοθεν—ιδνωθεὶς ὀπίσω—βηγάρμονες.
6. Make explanatory comments on the following :—αὐτοτραγικὸς πίθηκος—ἀρουραῖος Οἰνόμαος—λαμβειοφάγος—ἡ βακτηρία καὶ τὸ σύμβολον—ἐν τᾷ ἀλία—λαβῶν ῥήτρην. What would the Attic Greek be for the two last expressions?
7. Describe from Thucydides the manner in which the bones of the slain were treated in the earlier part of the Peloponnesian war. Detail also the symptoms of one attacked with the plague.
8. Quote the oracle which foretold the plague. What observations does Thucydides make upon the various readings of it?
9. Translate—ὡς χ' ὁ ξείνος ἐνίσπη οἷσι φίλοισιν. How would the Attics express χ'? and how would they deal with the particle in prose before a subjunctive of purpose?
10. Derive, taking care to give the English of the word itself and its roots—σχεδόν, αὐτόματος, γραμματοκόφω, συσκευωρεῖσθαι, κρατηρίζειν, ἀνέδη, πρύμνη, νῆϊς, νύδωνος, ἐριοῦνης, νύσση.
11. What is the difference between ἀποστολεύς and ἀπόστολος—φιλάργυρος and φιλόδωρος—δοκιμασία and εἰθῆναι—μάρτυς and συνίστωρ—δέρρεις and διφθέραι—λαός and λαός—ἐξήτασαι, ἐξέτασαι, and ἐξετάσαι—καθαίρειν and καθαίρειν—θέων and θεῶν?

Also between janua and porta—janitor and portitor—arvum and ager—lūteus and lūteus—sōlo and sōlo—fornix and fornax—orator and rhetor—thyrus and thiasus—liberet and liberet?

12. Derive (as in 10)—*passim*, *Sibylla*, *sublimis*, *limen*, *semen*, *examen*, *omen*, *ancile*, *fibula*, *ampullor*, *mancipium*, *exilis*, *litura*, *flamen* (m.), *flamen* (n.), *medius-fidius*.
13. Give the technical names of the 12 parts into which the Roman *as* was divided.
14. Narrate the circumstances which led to Milo's trial. Where did it take place? under what peculiar circumstances? and with what result?
15. What classes of words in Latin are negatived by the prefix *in*? What classes are not so negatived? What class is made ambiguous by it? Give three examples of such ambiguity. What is the English for *incanus*?
16. When are the genitive cases of *ego* and *tu* employed? When the forms *nostrum* and *nostrum* as genitives plural? Give examples of these usages.
17. Mars perdere gentem
Immanum Lapithum valuit: concessit in iras
Ipse Deum antiquam genitor Calydonæ Dianæ:
Quod scelus, aut Lapithis tantum, aut Calydone merente?
- Translate and explain the allusions.
18. Altera candenti perfecta nitens elephanto. What fancy of the ancients is here alluded to? Name the figure of speech in *elephanto*. Define the figure *asyndeton*.
19. What reply does the shade of Dido make to Æneas?
20. Translate—*Manicipat usus—pretium chartis quotus arrogat annus?—abrotonum ægro non audet, nisi qui didicit, dare—in concordia ordinum nullos se usquam esse vident—conciones intermortuæ—divisa sententia est—cui bono fuit?*
21. What does Cicero mean by *litera salutaris* and *litera tristis*?

Classics.—III.

Three hours.

DR. BROMBY, *Examiner*.

LATIN AUTHORS.

1. Translate—

Quanta per Idæos sævis effusa Mycenis
Tempestas ierit campos; quibus actus uterque
Europæ atque Asiæ fatis concurrerit orbis:
Audiit, et si quem tellus extrema refuso
Submovet Oceano, et si quem extenta plagarum
Quatuor in medio dirimit plaga Solis iniqui.
Diluvio ex illo tot vasta per æquora vecti
Dis sedem exiguam patriis litusque rogamus
Innocuum, et cunctis undamque auramque patentem.
Non erimus regno indecores: nec vestra feretur
Fama levis, tantive abolescet gratia facti;
Nec Trojam Ausonios gremio excepisse pigebit.
Fata per Æneæ juro, dextramque potentem,
Sive fide, seu quis bello est expertus et armis;
Multi nos populi, multæ—ne temne, quod ultro
Præferimus manibus vittas ac verba precantia—
Et petiere sibi et voluere adjungere gentes.
Sed nos fata deum vestras exquirere terras
Imperiis egere suis. Hinc Dardanus ortus:
Huc repetit, jussisque ingentibus urget Apollo
Tyrrhenum ad Thybrim et fontis vada sacra Numici.

2. Translate—

“ Multa fidem promissa levant, ubi plenius æquo
Laudat venales, qui vult extrudere, merces.
Res urget me nulla; meo sum pauper in ære.
Nemo hoc mangonum faceret tibi; non temere a me
Quivis ferret idem. Semel hic cessavit, et, ut fit,
In scalis latuit metuens pendentis habenæ:—
Des nummos, excepta nihil te si fuga lædat;”
Ille ferat pretium pœnæ securus, opinor.
Prudens emisti vitiosum, dicta tibi est lex:
Insequeris tamen hunc et lite moraris iniqua?
Dixi me pigrum proficiscenti tibi, dixi

Talibus officiis prope mancum, ne mea sævus
 Jurgares ad te quod epistola nulla rediret.
 Quid tum profeci, mecum facientia jura
 Si tamen attentas? Quereris super hoc etiam, quod
 Exspectata tibi non mittam carmina mendax.

3. Translate—

Postquam vero comitia Decemviris creandis in trinum nundinum indicta sunt, tanta exarsit ambitio, ut primores quoque civitatis (metu, credo, ne tanti possessio imperii, vacuo ab se relicto loco, haud satis dignis pateret) prensarent homines, honorem summa ope ab se impugnatum, ab ea plebe, cum qua contenderant, suppliciter petentes. Demissa jam in discrimen dignitas, ea ætate, eisque honoribus actis, stimulabat Ap. Claudium. nescires utrum inter Decemviros, an inter candidatos numerares. Propior interdum petendo, quam gerendo magistratui erat. criminari optimates, extollere candidatorum levissimum quemque humillimumque. ipse medius inter tribunitios Duilios Iciliosque in foro volitare; per illos se plebi venditare: donec collegæ quoque, qui unice illi dediti fuerant ad id tempus, conjecere in eum oculos, mirantes quid sibi vellet. Apparere nihil sinceri esse; Profecto haud gratuitam, in tanta superbia, comitatem fore. nimium in ordinem se ipsum cogere, et vulgari cum privatis, non tam properantis abire magistratu, quam viam ad continuandum magistratum quærentis esse. Propalam obviam ire cupiditati parum ausi, obsecundando mollire impetum aggrediuntur. comitorum illi habendorum, quando minimus natu sit, munus consensu injungunt.

4. Translate—

An ille prætor, ille vero consul, si modo hæc templa atque ipsa mœnia stare eo vivo tamdiu et consulatum ejus exspectare potuissent, ille denique vivus mali nihil fecisset, qui mortuus, uno ex suis satellitibus [Sex. Clodio] duce, curiam incenderit? Quo quid miserius, quid acerbius, quid luctuosius vidimus? Templum sanctitatis, amplitudinis, mentis, consilii publici, caput urbis, aram sociorum, portum omnium gentium, sedem ab universo populo concessam uni ordini, inflammari, excindi, funestari? neque id fieri a multitudine imperita, quamquam esset miserum id ipsum, sed ab uno? Qui quum tantum ausus sit ustor pro mortuo, quid signifer pro vivo non esset ausus? In curiam potissimum abjecit, ut eam mortuus incenderet, quam vivus everterat.

5. Translate—

Restat ut super ortu lapidis hujus pauca succinctius explicentur. Apud Indos et Persas margaritæ reperiuntur in testis marinis robustis et candidis, permistione roris anni tempore præstituto conceptæ. Idque indicium est ætheria potius derivatione quam saginis pelagi hos oriri fetus et vesci, quod guttæ matutini roris iisdem infusæ claros efficiunt lapillos et teretes, vespertini vero flexuosos contra et rutilos et maculosos interdum. Minima autem vel magna pro qualitate haustum figurantur casibus variatis. Concussæ sæpissime metu fulgurum inanescunt, aut debilia pariunt, aut certe vitis diffuunt abortivis. Capturas autem difficiles et periculosas, et amplitudines pretiorum illa efficit ratio, quod frequentare sueta littora propter piscantium insidias declinant, ut quidam conjiciunt, circa devios scopulos et marinorum canum receptacula delitescent. Quod genus gemmæ etiam in Britannici secessibus maris gigni legique, licet dignitate dispari, non ignoramus.

Classics.—IV.

Three hours.

DR. BROMBY, *Examiner*.

GREEK COMPOSITION.

1. The battle of Pharsalia being now over, and Pompey having taken to flight, Cato, who held a large force at Dyrrachium and a considerable fleet, offered the command to Cicero on the ground of his being his superior in the law and of his consular dignity. But Cicero, declining the command and refusing to have anything whatever to do with the war, was within an ace of losing his life; for young Pompey and his friends began to call him traitor, and drew their swords. But Cato, by rigorously opposing them, with difficulty rescued him, and drew him out of the camp. Having departed to Brundisium, he remained there awaiting the arrival of Cæsar, who was detained by businesses in Asia and Egypt. But when it was reported that he had landed at Tarentum, and was coming thence by land to Brundisium, he set out to meet him, fearing to make trial in the presence of many of a man who was both hostile and victorious. There was no need, however, for him to do or say anything derogatory to his dignity. For Cæsar, as soon as he saw him coming to him considerably in advance of the rest, dismounted and embraced him; and proceeded several stadia along the road, conversing with him alone.

2. Restore to the original iambics the following literal translation from the *Philoctetes* :—

- Neopt.* O Zeus! what must I do? must I a second time be detected vile?
Both concealing what I ought not, and speaking the basest of words.
- Philoct.* This man, unless I am wrong in opinion,
Seems, after having betrayed me and deserted me, to be about to sail on his voyage.
- Neopt.* I will conceal nothing from thee: for thou must sail to Troy,
To the Achæans and the fleet of the Atreidæ.
- Ph.* Alas! what didst thou say of me?
- Neopt.* Do not groan before thou hast learnt
- Ph.* What lesson? what in the world dost thou intend to do to me?
- Neopt.* First indeed to save thee from this evil, and in the next place
Along with thee to go and ravage the plains of Troy.
- Ph.* And dost thou intend to do these things truly?
- Neopt.* There prevails much
Necessity for these things: and thou, do not anger thyself on hearing them.

3. Translate into Greek iambics :—

Lo, as the bark, that hath discharged her freight,
Returns with precious lading to the bay,
From whence at first she weigh'd her anchorage,
Com' th Andronicus, bound with laurel boughs,
To re-salute his country with his tears;
Tears of true joy for his return to Rome.
Thou great defender of this capitol,
Stand gracious to the rites that we intend.
Why suff'rest thou thy sons, unburied yet,
To hover on the dreadful shore of Styx?

Classics.—V.

Three hours.

DR. BROMBY, *Examiner.*

1. Translate into Latin Prose—

When a new official arrives, he exchanges visits with all the notables, and for a few days he produces quite a sensation in the little community. If he appears at social gatherings he is much talked to, and if he does not appear he is much talked about. His former history is repeatedly narrated, and his various merits and defects assiduously discussed. If he is married and has brought his wife with him, the field of comment and discussion is very much enlarged. The first time that madame appears in society she is the "cynosure of neighbouring eyes." Her features, her complexion, her hair, her dress, and her jewellery are carefully noted and criticised. Perhaps she has brought with her from the capital or from abroad some dresses of the newest fashion. As soon as this is discovered, she at once becomes an object of special curiosity to all the ladies, and of envious jealousy to those who regard as a personal grievance the presence of a toilette finer or more fashionable than their own. Her demeanour too is very carefully observed.

2. Translate into Latin verse—

1.

What saith the sea
Winding around green shores and cliffs austere?
Have not those waters beautiful and clear
Some meaning in their music free?

2.

On summer days
You scarce can hear its ripple soft
As surging and receding oft
It gleams in quiet bays.

3.

In winter time,
Or when autumnal leaves are waxing old,
White crests upon its waves you may behold,
Like heroes of Homeric rhyme.

4.

Tired, weary, worn,
Vexed with the careful world and Mammon's shrine:
How fresh the kisses of thy emerald brine,
What time it blushes to the morn!

5.

No song can tell
What in thy wealth of power thou utterest,
Though oft the singer floats upon thy breast,
And hears thy wildering music swell.

Classics.—VI.

HISTORY OF GREECE TO B.C. 404.

One hour.

DR. BROMBY, *Examiner.*

1. Name the four great festivals of Greece. Give the dates at which they were founded; the places at which they were celebrated; the deities, to whom dedicated; the peoples, by whom superintended. To what candidates were the contests open? How often did each recur? What was the Altis? Who were Theori?
2. Give a full account of the Ionic Revolt.
3. Narrate the circumstances which originated the Third Messenian War. How were the Athenians concerned in it?
4. How did *Cleruchies* differ from Colonies? Which was the earliest *Cleruchy* recorded? Give date and particulars. Who carried out the system to a much greater extent?
5. Mention the most characteristic incidents with proximate dates (beginning, middle, or close of a century) in order to identify—Cleon, Epimenides, Gorgias, Miltiades, Simonides, Aspasia.
6. Where were Ithome, Mytilene, Amphipolis, Sardis, Thurii, Sinope? Make a sketch of Syracuse, with especial reference to the Athenian assault upon the city.

HISTORY OF ROME TO B.C. 202.

One hour.

1. What was the name given to the two chief magistrates of Rome prior to the Decemvirate? Who were really the first two Consuls? Give the date of their election, and the substance of the two laws they then brought forward.
2. What was the *fenus unciarium*? Derive both words. How was 5 per cent. expressed in Latin? What laws were enacted at Rome affecting rates of interest? With what result?
3. What was the difference between the *clipeus* and the *scutum*? between the *hasta* and the *pilum*? Who were the *rorarii* and the *accensi*? and why so named? What other soldiers beside these in the Roman army constituted the *antesignani*? Explain the phrase *in quincuncem dispositi*.
4. Who were *Mamertines*? Why so named? Whom did they resemble of the middle ages? Of what important event in history were they instrumental in originating? Date.
5. How long did the Second Punic War last? Divide it into four periods, mentioning the characteristic events of each. Give date of its commencement.
6. Narrate the legend of the Alban *emissarium*. State its dimensions. Into what waters was its outlet?

French.

Three hours.

DR. BROMBY, *Examiner.*

MOLIÈRE—L'Avare. GUIZOT—Edouard III. COMPOSITION.

1. Translate into English—

Cléante.—Que la peste l'étouffe avec sa discrétion, le traître, le bourreau qu'il est! A-t-on jamais parlé d'une usure semblable? Et n'est-il pas content du furieux intérêt qu'il exige, sans vouloir encore m'obliger à prendre pour trois mille livres les vieux rogatons qu'il ramasse? Je n'aurais pas deux cents écus de tout cela; et cependant il faut bien me résoudre à consentir à ce qu'il veut; car il est en état de me faire tout accepter, et il me tient, le scélérat, le poignard sur la gorge.

La Flèche.—Je vous vois, monsieur, ne vous en déplaît, dans le grand chemin justement que tenoit Panurge pour se ruiner, prenant argent d'avance, achetant cher, vendant à bon marché, et mangeant son blé en herbe.

2. Enunciate the rule for *cent* taking the terminal *s* and for *mille* dropping the terminal *le*.

3. Translate into English—

(a) Le roi porta bientôt à la trêve une grave atteinte. (b) Les Anglais les prirent à l'abordage. (c) Passer au fil de l'épée. (d) Il essayait d'attirer Edouard en rase campagne. (e) Fors à son seigneur. (f) La journée était pour elle et pour ses gens. (g) Les rangs de l'armée écossaise s'éclaircirent.

4. Translate into English—

"Ce Jean de Copeland, si très-tôt qu'il tint le roi d'Ecosse, sagement en agit, car il se boucha au plus tôt qu'il pût hors de la presse, lui vingtième de compagnons, et chevaucha tant que de ce jour il quitta la place où la besogne avait été environ quinze lieues, et vint chez soi en un châtel qui s'appelle *Châtel orgueilleux*."

5. What is the meaning of the phrase "en dépit que j'en ait?" Supply the ellipsis.

6. Derive the following words, taking care to give the English both of the words and their roots:—Lorsque, selon, dont, hors, ainsi, encore; métier, étrennes, brebis, épuisement, appuis, gué; effroyable; songer, serrer, pousser, avaler, mêler, fâcher.

7. What English words come from the same non-Latin root as—guiser, gratter, briser, tomber, bouter, dunes, trêve, garnison?

8. Translate into French—

You two fellows I have appointed to rinse out the glasses and to hand the drink; but only when any one shall be thirsty, and not after the practice of certain officious lackeys, who go to provoke people to it, and to remind them of drinking when nobody was thinking anything about it. Wait till you are asked more than once, and mind you carry always plenty of water.

9. Translate into French—

Between the tropics, as we know, the twilight lasts only a short time. We soon found ourselves therefore in complete darkness, which the black branches of the trees made still deeper. So long as there was any remnant of daylight, I had retained hope and courage; but when the last pale ray of light had disappeared, a feeling which I can't describe, but which was very like despair, came over my heart. Two silent tears ran down my cheeks; and Robert, who at that moment seized me by the arm, felt one of them fall upon his hand. Then there came back to my mind all the sad stories which I had read at different times in which wolves and wild boars played their frightful parts. I thought every moment that I recognised their distant howls in those dull vague sounds which run along under the tops of great trees.

10. Who was Jacques d'Arteveldt? What advice did he give to Edward III. to quiet the scruples of his countrymen? What was his end?

English.

Three hours.

DR. BROMBY, *Examiner.*

MARSH—Student's Manual. EARLE—Philology of the English Tongue.

1. What are the two main branches of the Teutonic languages? How is each subdivided?
2. What language did the Picts speak? What living language did it most resemble? Detail the facts which seem to establish the probability.

3. Give two examples of words of Spanish origin and four of Portuguese now incorporated into the English language.

4. "And small fowls make melody
That sleep all the night with open eye."

How did Chaucer write these lines? And how pronounce them metrically?

Deal in the same way with the following couplet:—

"But truly my own master dear,
This was a piteous tale for to hear."

5. Translate the following sentences into modern English:—

"It is a ryght shamefull dede to any nobleman to do that that theuys and brybours done." "Havyng sothli the spice of pite, forsothe denyng the vertu of it."

"Of shoone and bootes, new and faire,
Looke at the least you have a paire,
And that they sit so fetously,
That these rude may utterly
Marvaile, sith that they sit so plaine,
How they come on or off againe."

Give four examples of modern English plurals formed after the type of "shoone."

6. In the will of K. Alfred occur the terms "spear-side" and "spindle-side." What do they designate?

How is the Salic law popularly expressed in France?

7. What was the original meaning of *gentleman*, *sky*, *flesh*, *meat*, *soldier*?

What is the meaning and origin of the Scandinavian word *Pebersvend*?

8. Derive the words—*cattle*, *alone*, *bantling*, *firkin*, *minx*, *bumpkin*, *orchard*, *bed-ridden*.

9. What is the meaning of these obsolete words?—*dawnstere* (Wycliffe), *lakin* (Shakespeare), *janglere* (Wycliffe), *ynou* (Robert of Gloucester), *grain of Sarra* (Milton), *wastel* (Chaucer), *limb-meal* (Shakespeare).

10. Translate into modern English—

"Engelond ys a wel god lond, ich wene of eche lond best ;
Yset in the ende of the world, as al in the West.
The see goth hym al aboute, he stont as an yle.
Here fon heo durre the lasse doute, but hit be thorw gyle
Of folc of the selue lond, as me hath yseye wyle."

Mention the authorship and date of the composition.

11. What distinction does Mr. Earle draw between *presentive* and *symbolic* words?

What does Chaucer mean by the line—

"He wolde the see were kept for any thyng."

Is "thyng" here presentive or symbolic?

12. Sir Hugh Luttrell in 1420 writes—"I schalle come home, and that rather than som men wolde." What does he mean? Is *rather* presentive here? Quote a line from Milton in which the word occurs in its positive form.

13. "Woe worth the day." What is the literal meaning of this sentence? Except in this particular exclamation what other word has replaced "worth" in the English language? By what word is it represented in Greek, Latin, French, and German?

14. How does Mr. Earle divide English compounds into three orders? Give an example of each. In a compound of the first order what principle governs the precedence of the words? What is the reason that hyphens are more used in poetry than in prose?

15. Translate in modern English—

When dede is doun hit ys to lat ;
Be ware of hady-wyst.

What is the derivation of *hady-wyst*? also of *handywork*?

Modern History.

Two hours.

DR. BROMBY, *Examiner.*

HALLAM—Constitutional History, Chapters I., II., and III.; and FREEMAN'S General Sketch of European History.

1. Explain the meaning of the following, and say why each was so called:—Copyhold property; Palatine jurisdiction; an Escheat; the Hanaper Office; a Seminary Priest; the Vatican; the Escorial.
 2. "An estate in tail can be barred by a common recovery." What is the meaning of this?
 3. What evils was the Court of Star Chamber instituted to meet?
 4. State the four principal theories respecting the Eucharist which divided Europe at the accession of Edward VI.; and give the names of those who originated them.
 5. What was the substance of the famous bull of Pius V.? Who succeeded Pius on the papal throne? What modification did he introduce into the bull?
 6. Hallam speaks of the title to the crown of England "which the descendants of Mary Brandon derived from a parliamentary settlement." Who was this Mary Brandon? How was her title obtained? What is the history of her descendants? What other title was there?
 7. Give some account of the following persons sufficient fully to identify them:—Scipio Æmilianus; Julian; Harold Hardrada; Saint Bernard; Sultan Suleiman; Van Tromp. At what era did each live?
 8. Who were the first and last emperors of the Roman Empire, latterly called the Holy Roman Empire? Give first and last dates of its existence.
 9. When did the Ottoman Turks arise? Why so named? Which was their first capital in Europe? What name is given to the earliest Turks of history?
 10. Furnish a general sketch of the Thirty Years' War. By what peace was it concluded? State the gains of the different belligerents.
 11. What sovereigns effected the first partition of Poland? How did they share it?
 12. What was the effect on Buonaparte's fortunes of the battles of Austerlitz, Jena, Wagram, Trafalgar, and Leipsig?
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TASMANIAN COUNCIL OF EDUCATION.

Hobart Town, 13th April, 1876.

EXAMINATION FOR TASMANIAN SCHOLARSHIPS, 1877.

THE Council of Education have directed the publication of the following Regulations and Scheme of Examination for the Tasmanian Scholarships for the year 1877.

By Order of the Council,

GEORGE RICHARDSON, *Secretary.*

REGULATIONS FOR THE TASMANIAN SCHOLARSHIPS.

Every Candidate for a Scholarship must, by the provisions of the Act, be above the age of sixteen and under the age of twenty years. He must also have been resident in the Colony for the period of five years next before the time of his examination, and have taken the Degree of Associate of Arts.

By the 14th Section of the Act, the examination for Tasmanian Scholarships must comprise the following subjects:—

1. Classics—Translations from Greek and Latin authors into English, Greek and Latin composition, Ancient History, Philology.
2. Mathematics—Arithmetic, Algebra, Euclid, Plane Trigonometry.
3. Natural Philosophy—Elementary Statics, Dynamics, and Hydrostatics.
4. Modern History—The History of England.
5. The grammatical structure of the English Language, and French or German, at the option of the Candidate.

Every Scholar shall forward to the Secretary of the Council a certificate from the proper authority, testifying to his having become a Member of some University of the United Kingdom; and until such certificate be received by the Secretary to the Council, or by their accredited Agent in Great Britain, the Council will not authorise the payment of any portion of the annual value of the Scholarship: provided always, that this condition shall not apply in any case where it has been proved to the satisfaction of the Council that the Scholar has been prevented by sickness or other sufficient cause from entering himself on the books of a University.

The Council will order to be paid by the Secretary, or an accredited agent in Great Britain, quarterly, to the said Scholar, the amount of his Scholarship for the quarter, upon the receipt by their Secretary, or by such accredited agent, of a testimonial from the authorities of the University or College to which he may belong, stating that he is conducting himself diligently and steadily.

In the event of any Tasmanian Scholar not being able to produce such a testimonial for any three months, he shall forfeit the amount to which he would be otherwise entitled for the said three months; and should he fail to do so for twelve months, his Scholarship shall be declared vacant, and he shall have no claim for moneys accruing therefrom: provided always, that this Rule shall not apply to Scholars when they have been incapacitated by illness from attending to their University or College duties.

For the further encouragement of Tasmanian Scholars to prosecute their studies diligently in the University or College to which they belong, the Council of Education will cause to be published in their Annual Reports the names of those who have obtained Prizes, Scholarships, or Exhibitions, or who have appeared in the "Honour List," together with the description or class of Honour which may have been awarded to them.

SCHEME of Examination for the TASMANIAN SCHOLARSHIPS for the Year 1877.

I.—CLASSICS.

GREEK.—Thucydides, *Book II.*; Demosthenes, *De Corona*; Homer's *Odyssey*, *Book VIII.*; Sophocles, *Philoctetes*.

LATIN.—Virgil, *Aeneid*, *Books VI. & VII.*; Horace, *Epistles*, *Book II.*, 1 & 2, and *Ars Poetica*; Livy, *Book III.*; Cicero, *Pro Milone*.

Papers will be set for translation from some other Greek and Latin author, and from English into Greek and Latin Prose, and from English Verse into Greek and Latin Verse.

ANCIENT HISTORY.—Questions will be given upon the historical and geographical allusions contained in the above-named Greek and Latin Books, and in the philology of the Greek and Latin languages. Candidates will also be examined in the first four Books of Smith's *History of Greece* and Liddell's *History of Rome* respectively.

II.—MATHEMATICS.

Arithmetic; Algebra, except Theory of Equations; Euclid, *Books I. to VI. inclusive, and XI. to the 21st Proposition inclusive*; Plane Trigonometry, including Logarithms; Conic Sections, treated both geometrically and analytically; and Simple Differentiations.

III.—NATURAL PHILOSOPHY.

Elementary Statics, Dynamics, and Hydrostatics.

IV.—MODERN HISTORY.

Hallam's Constitutional History of England, *Chapters I. II. and III.*, and Freeman's General Sketch of European History.

V.—MODERN LANGUAGES.

The grammatical structure of the English Language, and French or German. Candidates may submit themselves for examination in either French or German, at their option.

FRENCH.—Passages will be given from Molière, *L'Avare*, and Guizot, *Edouard III.*, for translation into English; also a passage from some other French author for translation into English, and from some English author into French.

GERMAN.—Passages will be given from Schiller's *William Tell*. Questions on the historical and geographical allusions; also a passage from some other German author for translation into English, and from an English author into German.

NOTE.—The following values have been affixed to the several subjects of examination:—

1. Classics - - - - -	1500 Marks.
2. Mathematics and Natural Philosophy - - - - -	1500 „
3. Modern History - - - - -	250 „
4. Modern Languages—	
(a.) English - - - - -	250 }
(b.) French or German - - - - -	250 }
	500 „
TOTAL - - - - -	<u>3750 Marks.</u>

It shall be essential to success that a Candidate gain at least 1650 Marks; of which either 900 shall have been gained in Classics or 750 in Mathematics.

BOOKS RECOMMENDED.

- History of Greece, Student's, Smith, W., (Murray), 7s. 6d.
 ———— Rome, Student's, Smith, W., (Murray), 7s. 6d.
 Arithmetic, Colenso, J. W., (Longman), 4s. 6d.
 Algebra, Colenso, J. W., Parts I. and II., (Longman) p. I, 4s. 6d., p. II., 6s.
 Trigonometry, Todhunter, J., (Macmillan), 5s.
 Conic Sections, Puckle, (Macmillan), 7s. 6d.
 Geometry of Conics, Taylor, (Deighton & Bell), 3s. 6d.
 Differential Calculus, Williamson, (Longman), 10s.
 Elementary Statics, Goodwin, (Deighton & Bell), 3s. 6d.
 Dynamics, Goodwin, (Deighton & Bell), 3s. 6d.
 Hydrostatics, W. H. Besant, *to the end of Chapter 8*, (Bell & Daldy), 4s.
 Mathematical Tables, (Chambers), 3s.
 History of England, Hallam's Constitutional History, (Murray), 18s.
 General Sketch of European History, Freeman, (Macmillan), 3s. 6d.
 Student's History of the English Language, Marsh, G. P., (Murray), 7s. 6d.
 Philology of the English Tongue, Earle, (Macmillan), 7s. 6d.
 Historical Grammar of the French Language, Brachets, (Clarendon Press Series), 3s. 6d.