

Examinations for matriculation in the year 1842 / University of London.

Contributors

University of London.
Royal College of Physicians of London

Publication/Creation

London : R. & J.E. Taylor, 1842.

Persistent URL

<https://wellcomecollection.org/works/yp4wqv3c>

Provider

Royal College of Physicians

License and attribution

This material has been provided by This material has been provided by Royal College of Physicians, London. The original may be consulted at Royal College of Physicians, London. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

UNIVERSITY OF LONDON.

EXAMINATION

FOR

MATRICULATION

IN THE YEAR 1842.



LONDON:

SOLD BY RICHARD AND JOHN E. TAYLOR,

PRINTERS TO THE UNIVERSITY OF LONDON,

RED LION COURT, FLEET STREET.

1842.

Digitized by the Internet Archive
in 2016

	Page
Exhibitioners	4
Pass Examination	5
Examination for Honours in Mathematics, &c.	21
————— Chemistry	31
————— Natural History	32
————— Classics	34
Candidates who passed the respective Examinations	51-53

EXHIBITIONERS.

MATHEMATICS AND NATURAL PHILOSOPHY.

1838. { CHARLES JAMES HARGREAVE University College.
 { C. SARGENT King's College.
1839. ISAAC TODHUNTER University College.
1840. WILLIAM DAVISON University College.
1841. JOSEPH ANTHONY SPENCER..... University College.
1842. HENRY RICHARDS LUARD King's College.

CLASSICS.

1838. { FREDERICK JAMES MANNING King's College.
 { CHARLES PETER MASON University College.
1839. { BARROW HELBERT ELLIS University College.
 { GEORGE DAVID JONES King's College.
 { JOHN PHILIP MARTINEAU University College.
1840. TIMOTHY SMITH OSLER Bristol College.
1841. BUNNELL LEWIS University College.

PASS EXAMINATION.

MONDAY, July 4.—MORNING, 10 to 1.

ARITHMETIC AND ALGEBRA.

Examiner, Mr. JERRARD.

1. GIVE an account of our method of numeration. Wherein consists the great advantage it possesses over the methods of the ancients?

2. Upon what principles does the rule for the division of one whole number by another depend? What is meant by dividing one fraction by another?

3. Reduce

$$(1.) \quad \frac{2}{3} + \frac{4}{5} + \frac{6}{7} - \frac{8}{9}, \qquad (2.) \quad \frac{1}{2 + \frac{3}{4 + \frac{5}{6}}}$$

to their most simple forms; and divide

·0079968 by 2·24.

4. Investigate the rule for the extraction of the square root of a number. Take as an example the number 3392964. What is the square root of $3\frac{3}{4}$ to five places of decimals?

5. Define Discount; and find the present value of £793 due six months hence, interest being at $3\frac{1}{2}$ per cent.

6. State the rule for the signs in the multiplication of algebraic quantities. Expand

(1.) $(x + a)(x + b)(x + c)$, (2.) $(x + a)^3(x - a)^3$; and show that

$$x^5 = \frac{(x + 1)^5 + (x - 1)^5}{2} - (10x^3 + 5x).$$

7. Divide $(x^3 - 6x^2 + 11x - 6)(x - 4)$ by $x - 1$. Also investigate the expression $\frac{a^m}{a^n} = a^{m-n}$. What is the meaning of the result when m is equal to n ?

8. Show that if

$$\frac{a}{b} = \frac{c}{d} = \frac{e}{f} = \dots$$

then will

$$\frac{a}{b} = \frac{a + c + e + \dots}{b + d + f + \dots}.$$

9. Solve the equations

$$(1.) \quad 5x - 7 = 9(x - 1) - 42,$$

$$(2.) \quad \frac{x}{3} - \frac{x - 5}{7} = 11,$$

$$(3.) \quad (2a - x)(a + b) = 5a(b + x) - 7bx.$$

$$(4.) \quad \left. \begin{aligned} \frac{5x}{3} - 16 + \frac{2y}{5} &= 18 - y \\ \frac{x}{4} - \frac{7y}{2} - 1 &= 3(1 - x) \end{aligned} \right\},$$

$$(5.) \quad \left. \begin{aligned} x + y + 2z &= 28 \\ 3x - 2y &= 33 \\ 2x + 5y - 7z &= 72 \end{aligned} \right\}.$$

MONDAY, July 4.—AFTERNOON, 3 to 6.

ENGLISH HISTORY.

Examiner, Rev. Dr. JERRARD.

1. Give a short account of the manners, government, and religion of the ancient Britons. How does it appear that Christianity prevailed very generally amongst them before the conclusion of the second Century? Was it entirely extinguished in this Island at any subsequent period?

2. Enumerate the most remarkable kings that reigned in England from the Heptarchy to the Norman Conquest; mentioning the title which each of them had to the Crown, and the events that marked their respective reigns.

3. What were the chief safeguards of the liberty of the subject under the Saxon Government? Were these entirely swept away at the Conquest?

4. Mention the successive steps by which, from the Conquest to the Revolution in 1688, the civil liberty of Englishmen was secured—giving the date of each measure to which you refer, and pointing out the events which chiefly led to it.

5. Give some account of the struggle for power between Henry II. and Thomas à Becket; with the particulars of the assassination of the latter, and its immediate consequences.

6. At what period was the Papal authority at its greatest height in this Country? What effect had the Crusades upon it? What circumstances led, remotely or immediately, to its downfall in England?

7. What evidence have we of the bad state of Agriculture in the time of Henry VIII.? What was its condition during the reign of James I.?

8. By what acts of Elizabeth was the progress of Com-

merce much impeded? What was the period of the most rapid increase of Commerce and of Manufacture previously to the Revolution?

9. What part did Cromwell take in respect of (1) the trial, and (2) the execution, of King Charles I.? When was he appointed lord-lieutenant of Ireland? Give a short account of his proceedings in that Country; and also in Scotland.

TUESDAY, July 5.—MORNING, 10 to 1.

GREEK CLASSIC AND HISTORY.

Examiner, Mr. BURCHAM.

HOMER*, ODYSSEY, Book XI.

- I. Αὐτὰρ ἐπὶ ἦν μνηστήρας ἐνὶ μεγάροισι τεοῖσιν
κτείνης, ἥ ἐ δόλῳ, ἥ ἀμφιδὸν ὀξέϊ χαλκῷ,
ἔρχεσθαι δὴ ἔπειτα, λαχὼν εὐήρες ἐρετμόν,
εἰσόκε τοὺς ἀφίκηαι, οἳ οὐκ ἴσασι θάλασσαν
ἀνέρες, οὐδέ θ' ἄλεσσι μεμιγμένον εἶδαρ ἔδουσιν·
οὐδ' ἄρα τοίγ' ἴσασι νέας φοινικοπαρήους,
οὐδ' εὐήρε' ἐρετμά, τά τε πτερὰ νηυσὶ πέλονται.
σῆμα δέ τοι ἐρέω μάλ' ἀριφραδές, οὐδέ σε λήσει·
ὁππότε κεν δὴ τοι ξυμβλήμενος ἄλλος ὁδίτης
φήῃ, ἀθηρηλουγὸν ἔχειν ἀνὰ φαιδίμῳ ὦμφ,
καὶ τότε δὴ γαίῃ πῆξας εὐήρες ἐρετμόν,
ῥέξας ἱερὰ καλὰ Ποσειδάωνι ἄνακτι,
ἀρνεῖόν, ταῦρόν τε, συῶν τ' ἐπιβήτορα κάπρον,

* Edit. Loewe.

οἴκαδ' ἀποστείχειν, ἔρδειν θ' ἱεράς ἐκατόμβας
 ἀθανάτοισι θεοῖσι, τοὶ οὐρανὸν εὐρὺν ἔχουσιν,
 πᾶσι μάλ' ἐξείης· θάνατος δέ τοι ἐξ ἀλὸς αὐτῷ
 ἀβληχρὸς μάλα τοῖος ἐλεύσεται, ὅς κέ σε πέφνη
 γήρα' ὑπὸ λιπαρῷ ἀρημένον· ἀμφὶ δὲ λαοὶ
 ὄλβιοι ἔσσονται· τάδε τοι νημερτέα εἶρω.

II. Ἀλλά κε κεῖνα μάλιστα ἰδὼν ὀλοφύραο θυμῷ,
 ὥς ἀμφὶ κρητῆρα, τραπέζας τε πληθούσας,
 κείμεθ' ἐνὶ μεγάρῳ, δάπεδον δ' ἅπαν αἵματι θῦεν.
 οἰκτροτάτην δ' ἤκουσα ὅπα Πριάμοιο θυγατρός,
 Κασσάνδρης, τὴν κτεῖνε Κλυταιμνήστρη δολόμητις
 ἀμφ' ἐμοί· αὐτὰρ ἐγὼ ποτὶ γαίῃ χεῖρας ἀείρων
 βάλλον ἀποθνήσκων περὶ φασγάνῳ· ἡ δὲ κυνώπις
 νοσφίσατ', οὐδέ μοι ἔτλη, ἰόντι περ εἰς Ἀἶδαο,
 χερσὶ κατ' ὀφθαλμοὺς ἐλέειν, σὺν τε στόμ' ἐρεῖσαι.
 ὥς οὐκ αἰνότερον καὶ κύντερον ἄλλο γυναικός,
 ἥτις δὴ τοιοῦτο μετὰ φρεσὶν ἔργα βάλλεται·
 οἶον δὴ καὶ κείνη ἐμήσατο ἔργον ἀεικές,
 κουριδίῳ τεύξασα πόσει φόνον· ἦτοι ἔφην γε
 ἀσπάσιος παῖδεςσιν ἰδὲ δμῶεσσιν ἐμοῖσιν
 οἴκαδ' ἐλεύσεσθαι· ἡ δ' ἔξοχα λύγρ' εἰδυῖα
 οἷ τε κατ' αἰσχος ἔχευε καὶ ἐσσομένησιν ὀπίσσω
 θηλυτέρησι γυναιξὶ, καὶ ἥ κ' εὐεργὸς ἔησιν.

III. Πάντας δ' οὐκ ἂν ἐγὼ μυθήσομαι, οὐδ' ὀνομήνω,
 ὅσσον λαὸν ἔπεφνε, ἀμύνων Ἀργείοισιν·
 ἀλλ' οἶον τὸν Τηλεφίδην κατενήρατο χαλκῷ,
 ἦρ' Εὐρύπυλον· πολλοὶ δ' ἀμφ' αὐτὸν ἐταῖροι
 Κήτειοι κτείνοντο, γυναιῶν εἵνεκα δώρων.
 κεῖνον δὴ κάλλιστον ἶδον μετὰ Μέμνονα δῖον.
 αὐτὰρ ὅτ' εἰς ἵππον κατεβαίνομεν, ὃν κάμ' Ἐπειός,
 Ἀργείων οἱ ἄριστοι, ἐμοὶ δ' ἐπὶ πάντ' ἐτέταλτο·
 [ἡμὲν ἀνακλῖναι πυκινὸν λόχον, ἡδ' ἐπιθεῖναι]
 ἔνθ' ἄλλοι Δαναῶν ἡγήτορες ἡδὲ μέδοντες
 δάκρυά τ' ὠμόργυνντο, τρέμεν θ' ὑπὸ γυῖα ἑκάστου·
 κεῖνον δ' οὐποτε πάμπαν ἐγὼν ἶδον ὀφθαλμοῖσιν
 οὔτ' ὠχρήσαντα χροῖα κάλλιμον, οὔτε παρειῶν

δάκρυ' ὁμορξάμενον· ὁ δέ με μάλα πόλλ' ἰκέτευεν
 ἱππόθεν ἐξίμεναι, ξίφεος δ' ἐπεμαίετο κώπην,
 καὶ δόρυ χαλκοβαρές, κακὰ δὲ Τρώεσσι μενοίνα.
 ἀλλ' ὅτε δὴ Πριάμοιο πόλιν διεπέρασμεν αἰπήν,
 μοῖραν καὶ γέρας ἐσθλὸν ἔχων ἐπὶ νηὸς ἔβαινεν
 ἀσκηθῆς, οὗτ' ἄρ βεβλημένος ὄξεϊ χαλκῶ,
 οὗτ' αὐτοσχεδίην οὐτασμένος· οἶά τε πολλὰ
 γίγνεται ἐν πολέμῳ· ἐπιμῖξ δέ τε μαίνεται Ἄρης.

IV. Καὶ μὴν Τάνταλον εἰσεῖδον, χαλέπ' ἄλγ' ἔχοντα,
 ἔσταότ' ἐν λίμνῃ· ἡ δὲ προσέπλαζε γενεῖω·
 στεῦτ' δὲ διψάων, πῖεειν δ' οὐκ εἶχεν ἐλέσθαι.
 ὅσσάκι γὰρ κύψει' ὁ γέρων, πῖεειν μενεαίνων,
 τοσσάχ' ὕδωρ ἀπολέσκειτ' ἀναβροχέν· ἀμφὶ δὲ ποσσὶν
 γαῖα μέλαινα φάνεσκε, καταζήνασκε δὲ δαίμων.
 δένδρεα δ' ὑψιπέτηλα κατάκρηθεν χέε καρπόν,
 ὄγχαι καὶ ῥοιαί καὶ μηλέαι ἀγλαόκαρποι,
 συκαὶ τε γλυκεραί καὶ ἐλαῖαι τηλεθόωσαι.
 τῶν ὁπότ' ἰθύσει' ὁ γέρων ἐπὶ χερσὶ μάσασθαι,
 τὰς δ' ἄνεμος ῥίπτασκε ποτὶ νέφεα σκιδόντα.

Καὶ μὴν Σίσυφον εἰσεῖδον, κρατέρ' ἄλγ' ἔχοντα,
 λᾶαν βαστάζοντα πελώριον ἀμφοτέρησιν.
 ἦτοι ὁ μὲν, σκληριπτόμενος χερσὶν τε ποσσὶν τε,
 λᾶαν ἄνω ὤθεσκε ποτὶ λόφον· ἀλλ' ὅτε μέλλοι
 ἄκρον ὑπερβαλέειν, τότε ἀποστρέψασκε κραταῖς
 αὐτῖς· ἔπειτα πέδονδε κυλίνδετο λᾶας ἀναιδής.
 αὐτὰρ ὅγ' ἄψ ὥσασκε τιταινόμενος· κατὰ δ' ἰδρῶς
 ἔρρεεν ἐκ μελέων, κονίη δ' ἐκ κρατὸς ὀρώρει.

1. What are the chief arguments adduced to show that the Iliad and the Odyssey are the productions of two different persons? Give a short summary of the latter poem. Upon what grounds is the passage from v. 568 to v. 626 in this book considered an interpolation?

2. What is the original meaning of *τύραννος*? During what period did the *τύραννοι* prevail in Greece? How do you account for the circumstance that they were chiefly to be found in the Dorian states?

3. Show that the liberation of Athens from the tyranny of the Pisistratidæ is falsely ascribed to Harmodius and Aristogeiton. To what family did Cleisthenes belong? Who was his chief political opponent? What changes did Cleisthenes effect in the constitution of Solon?

4. From what country is it probable that Sicily was originally peopled? What were the general names of the inhabitants of the interior, and of the Grecian colonists upon the coast? About what time was Syracuse founded, and by whom?

5. Between whom was the battle of Cunaxa fought? What ultimate results as regarded Persia were produced by the retreat of the ten thousand? Who was the competitor of Agesilaus for the throne of Sparta? To whose influence was the latter chiefly indebted for his success?

6. From whom did the Macedonian kings claim descent? What is the earliest mention we have of Macedonia? What was the form of government established there? What ancient form did it resemble?

7. About what time did the confederate war break out? Mention the names of the principal states united in the confederacy? How long did that war last, and what was its result? Give a short account of the circumstances which led to the placing of Philip at the head of the Thessalian confederacy.

TUESDAY, July 5.—AFTERNOON, 3 to 6.

CHEMISTRY. NATURAL HISTORY.

CHEMISTRY.

Examiner, Professor DANIELL.

1. How would you prove atmospheric air to have the properties of weight and elasticity? and what is the constitution of the atmosphere as dependent upon these properties?
2. What is the chemical constitution of the atmosphere? Refer to experimental evidence.
3. Explain the process by which a wet cloth becomes dry in the atmosphere, and the circumstances upon which the rapidity of the operation depends.
4. Describe a process for obtaining and collecting oxygen gas.
5. Illustrate the meaning of the term *Chemical Equivalent* by an example.

BOTANY.

Examiner, Rev. Professor HENSLOW.

CHARACTERS OF THE PRINCIPAL NATURAL FAMILIES OF
EUROPEAN PLANTS.

State the principal characters of the following Orders :

1. Cistaceæ.
2. Malvaceæ.
3. Rosaceæ.

Compare the following Orders; showing by what characters they principally agree and disagree:

4. Boraginaceæ with Labiatae.
5. Iridaceæ with Amaryllidaceæ.

Refer to their Natural Orders, the plants possessing the following characters:

6. *Flores* hermaphroditi regulares.
Calyx 4-sepalus.
Corolla 4-petala, hypogyna, sepalis alterna.
Stamina 6, hypogyna, tetradynama.
7. *Flores* hermaphroditi.
Calyx tubulosus, gamosepalus.
Corolla hypogyna, gamopetala, petalis sepalis alternis.
Stamina loborum corollæ numero, iisque opposita.
Fructus capsularis, unilocularis, placenta centrali, seminibus plurimis.
Embryo in axi albuminis, umbilico parallelus, dicotyledoneus.

ZOOLOGY.

Examiner, Professor T. RYMER JONES.

1. Name the PRIMARY DIVISIONS of the Animal Kingdom according to the Cuvierian system of arrangement, and state the leading characters whereby they are respectively distinguished.

2. Describe the animals that form the class ACALEPHÆ.

3. State the essential differences between a FISH, a REPTILE, a BIRD, and a MAMMAL.

4. What peculiarities distinguish the BATRACHIA from other Reptiles?

5. Name, and briefly describe the *classes* of animals which constitute the great group Mollusca.

6. What are the *orders* into which the class MAMMALIA is divided, and the characters peculiar to each?

WEDNESDAY, July 6.—MORNING, 10 to 1.

GEOMETRY AND SIMPLE EQUATIONS.

Examiner, Rev. R. MURPHY.

1. Define a straight line, a circle, and a plane, and show that two straight lines cannot have a common segment.

2. Show how a perpendicular may be drawn on a given straight line from a given point without it.

3. Prove that in any triangle, the greater angle is subtended by the greater side.

4. If two straight lines are parallel to the same straight line, prove that they are parallel to each other. If they are on opposite sides of the straight line to which they are parallel, prove this proposition without the assistance of the twelfth axiom.

5. Show that the diagonals of a parallelogram bisect each other. What is the length of the diagonal of a square of which the side is a unit? Prove that it is incommensurable.

6. Prove that the sum of the angles of any plane rectilineal figure is either two right angles or a multiple of two right angles.

7. Parallelograms on the same base and between the same parallels are equal to each other.

8. *Problem.*—It is required to draw a straight line from a given point, which shall make equal angles with two given straight lines.

9. Simple equations :

$$(1.) \quad \frac{5x+7}{4} + 719 = 722x.$$

$$(2.) \quad \begin{cases} x + 2y + 3z = 14. \\ 3y - 7z = 15. \\ \frac{50z - 47x}{11y - 3} = \frac{103}{25}. \end{cases}$$

$$(3.) \quad \begin{cases} 17x - 20y = 30x + 18y - 7. \\ 119x - 139y = 210x + 125y + 1. \end{cases}$$

10. *Problem.*—What is the value of x , when £ x and 18 shillings are twice the amount of £18 and x shillings precisely?

WEDNESDAY, July 6.—AFTERNOON, 3 to 6.

NATURAL PHILOSOPHY.

Examiners, Mr. JERRARD and Rev. R. MURPHY.

1. Prove that the resultant of two forces acting upon a point will be represented both in magnitude and direction by the diagonal of the parallelogram, the sides of which represent the component forces in magnitude and direction.

Example. Two forces equivalent each to twelve pounds act conjointly on a point at an angle of 60° with each other; find what single force is equivalent to these two forces.

2. State the condition of equilibrium in the lever, both when the forces are on the same, and when on opposite sides of the fulcrum. To what kind of lever does an oar propelling a boat belong? Give instances of levers of the third kind, and explain the object of employing them.

3. Describe the chief experiments for illustrating the General Laws of Motion.

4. How far will a body fall *in vacuo* in $3\frac{1}{2}$ ", and what will be the velocity acquired?

5. The pressure of fluids is equally diffused, and varies as the depth when uniform.

6. Define Specific Gravity. How may the specific gravity of a body be ascertained?

7. Describe the construction of the Barometer, and mention its principal uses.

8. Explain the nature of Sound. How are echoes produced?

9. Give some account of the formation of Images by Lenses.

THURSDAY, July 7.—MORNING, 10 to 1.

ROMAN CLASSIC AND HISTORY.

Examiner, Rev. Dr. JERRARD.

CÆSAR*, DE BELLO GALLICO.

Translate :

Book V. chap. 12, 42, 43.

(A.) Britanniae pars interior ab iis incolitur, quos natos in insula ipsa memoria proditum dicunt : maritima pars ab iis, qui prædæ ac belli inferendi caussa ex Belgis transierant ; qui omnes fere iis nominibus civitatum adpellantur, quibus orti ex civitatibus eo pervenerunt et bello inlato ibi remanserunt atque agros colere cœperunt. Hominum est infinita multitudo creberrimæque ædificia, fere Gallicis consimilia : pecorum magnus numerus. Utuntur aut ære, aut annulis ferreis, ad certum pondus examinatis, pro nummo. Nascitur ibi plumbum album in mediterraneis regionibus, in maritimis ferrum ; sed ejus exigua est copia : ære utuntur importato. Materia cujusque generis, ut in Gallia, est, præter fagum atque abietem. Leporem et gallinam et anserem gustare,

* Edit. Oberlin.

fas non putant; hæc tamen alunt animi voluptatisque caussa. Loca sunt temperatoria, quam in Gallia, remissioribus frigoribus.

Translate, explaining the military terms :

(B.) Ab hac spe repulsi Nervii, vallo pedum xi et fossa pedum xv hiberna cingunt. Hæc et superiorum annorum consuetudine a nostris cognoverant et, quosdam de exercitu nacti captivos, ab his docebantur: sed, nulla ferramentorum copia, quæ sunt ad hunc usum idonea, gladiis cespitem circumcidere, manibus sagulisque terram exhaurire cogeabantur. Qua quidem ex re hominum multitudo cognosci potuit: nam minus horis tribus milium decem in circuitu munitionem perfecerunt: reliquisque diebus turres ad altitudinem valli, falces testudinesque, quas iidem captivi docuerant, parare ac facere cœperunt.

Septimo obpugnationis die, maximo coorto vento, ferventes fusili ex argilla glandes fundis et fervefacta jacula in casas, quæ more Gallico stramentis erant tectæ, jacere cœperunt. Hæc celeriter ignem comprehenderunt et venti magnitudine in omnem castrorum locum distulerunt. Hostes, maximo clamore insecuti, quasi parta jam atque explorata victoria, turres testudinesque agere et scalis vallum adscendere cœperunt. At tanta militum virtus atque ea præsentia animi fuit, ut, quum undique flamma torrerentur maximaque telorum multitudine premerentur suaque omnia impedimenta atque omnes fortunas conflagrare intellegerent, non modo demigrandi caussa de vallo decederet nemo, sed pæne ne respiceret quidem quisquam; ac tum omnes acerrime fortissimeque pugnarent. Hic dies nostris longe gravissimus fuit; sed tamen hunc habuit eventum, ut eo die maximus hostium numerus vulneraretur atque interficeretur, ut se sub ipso vallo constipaverant recessumque primis ultimi non dabant.

Book VI. chap. 19, 20.

(C.) Viri, quantas pecunias ab uxoribus dotis nomine acceperunt, tantas ex suis bonis, æstimatione facta, cum dotibus communicant. Hujus omnis pecuniæ conjunctim ratio ha-

betur, fructusque servantur: uter eorum vita superarit, ad eum pars utriusque cum fructibus superiorum temporum pervenit. Viri in uxores, sicut in liberos, vitæ necisque habent potestatem: et, quum pater familiæ, inlustriore loco natus, decessit, ejus propinqui conveniunt et, de morte si res in suspicionem venit, de uxoribus in servilem modum quæstionem habent, et, si compertum est, igni atque omnibus tormentis excruciatas interficiunt. Funera sunt pro cultu Gallorum magnifica et sumtuosa; omniaque, quæ vivis cordi fuisse arbitrantur, in ignem inferunt, etiam animalia: ac paullo supra hanc memoriam servi et clientes, quos ab iis dilectos esse constabat, justis funeribus confectis, una cremabantur.

Quæ civitates commodius suam rem publicam administrare existimantur, habent legibus sanctum, si quis quid de re publica a finitumis rumore ac fama acceperit, uti ad magistratum deferat, neve cum quo alio communicet: quod sæpe homines temerarios atque inperitos falsis rumoribus terreri et ad facinus impelli et de summis rebus consilium capere cognitum est. Magistratus, quæ visa sunt, occultant; quæque esse ex usu judicaverint, multitudini produnt. De re publica nisi per concilium loqui non conceditur.

1. What is the character of Cæsar's style as an Historian? What as an Orator? Are his descriptions of the Britons, Gauls, and Germans, accurate?

2. What is the most probable account of the origin of the Druids? Was the treatment which they received from the Romans in accordance with the usual policy of the latter? How was that policy consistent with their national creed? "In primis hoc volunt (Druides) persuadere, non interire animas,"—what appears to have been Cæsar's opinion on this subject?

3. Draw a map of that part of Ancient Britain which lay south of the Tamesis, giving the modern as well as the ancient names. What is the probable derivation of the word 'Britain'?

4. When did the decline of the Roman Republic commence, and what events most signally marked the progress

of that decline? On what pretext did Cæsar take up arms against the Senate? Give a sketch of his proceedings throughout the Civil War. Contrast his clemency with the cruelty of other Roman conquerors. On what ostensible grounds was the plot formed against his life? Not to speak of the *guilt* of the act of assassination, was the conduct of the conspirators *politic*?

5. (C.) “*si res in suspicionem venit*”. Why not ‘*veniat*’? Give instances of similar constructions. Explain the origin and use of the Latin Supines, supporting your theory by examples.

THURSDAY, July 7.—AFTERNOON, 3 to 6.

GRAMMATICAL STRUCTURE OF THE ENGLISH LANGUAGE.

Examiner, Mr. BURCHAM.

1. In what relation does the Modern English stand to the Anglo-Saxon? Mention the languages which bear a similar relation to the Latin and Greek. What stages of a language are denoted by a greater or less amount of inflectional forms?

2. Mention the different modes of expressing Gender in the English language, and also the corresponding ones in the Latin and Greek. Is the distinction of Gender necessary to a language? Upon what grounds is it contended that there is no Gender where the declension is not affected? Upon this hypothesis, what words are the only specimens of true Gender in the English language?

3. What is the *matter*, and what the *form* of a language? How do the English and Latin differ in respect of the latter?

What are in general criteria of the greater or less antiquity of languages of the same stock? Compare in this respect the Anglo-Saxon and the English, the Latin and the Greek.

4. What properly constitutes a Case? What would be the consequence if it were constituted merely by the use of a preposition? Of what case are the old words '*whilom*,' '*seldom*,' remnants? From what, according to the common notion, is the genitive form '*father's*' contracted? Give a more probable explanation.

5. What gender did the termination in *ster* originally denote? What word in our language with that termination retains the same force? What termination in German is equivalent to the English one in *-ess*? Has the English language any words with the same termination and force? Of what word is '*vixen*' a derivative?

6. Define *Composition*. How does it differ from what is called *geminatio* and *derivation*? What is the rule in the case of Compound words in English in respect of the word which is qualified by the addition? On which of the words does the accent generally fall? What difference, as regards the accent and the ideas conveyed, is there between a compound and two words?

7. Give instances of expressions where *never* and *ever* are interchanged wrongly? What is the rule with respect to the proper collocation of the adverb with adjectives and verbs? What is generally the proper position of the adverb '*only*'?

8. Have conjunctions any government in the English language? Has it any mood corresponding with the subjunctive in Latin and Greek? With what limitations is Mr. Harris to be understood when he says, that the chief difference between prepositions and conjunctions is, that the former couple *words* and the latter *sentences*?

9. Define '*Metre*.' What is the difference between the English Metres and the Metres of the Classical languages? In what does a full and perfect rhyme consist? Give instances from any of our poets, where the recurring sounds are merely Assonances.

EXAMINATION FOR HONOURS.

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

EXAMINATION FOR HONOURS.

MATHEMATICS

AND

NATURAL PHILOSOPHY.

TUESDAY, July 12.—MORNING, 10 to 1.

ARITHMETIC, ALGEBRA, GEOMETRY.

Examiner, Rev. R. MURPHY.

1. FIND the number of seconds in 365 days, 5 hours, 48 minutes, and 48 seconds (time), and the number of English degrees, &c., equivalent to $380^{\circ} 90'$ French.

2. Explain what is meant by the multiplication and division of fractions one by the other, or by integers, and take numerical examples to illustrate your explanation. Also find in a decimal form the difference between $\frac{7}{22}$ and $\frac{113}{355}$.

3. At what do you estimate the total wages of 123 labouring men and 41 children for five weeks, at $1s. 7\frac{1}{2}d.$ for each

of the former daily, and one half that allowance for each of the children?

4. In algebraic multiplication, prove the rule for the sign of the product, and also that in multiplying powers of like quantities the index of the product will be the sum of those of the two quantities multiplied.

5. Prove the rule for finding the greatest common measure of two numbers, or of two integer algebraic forms.

6. Find by the ordinary rules of progression in algebra the sum to 10 terms of the following series:—

$$(1.) \text{ Arithmetical: } \frac{11}{20}, -\frac{1}{10}, -\frac{3}{4}, -\frac{7}{5}, \&c.$$

$$(2.) \text{ Geometrical: } 1, -\frac{1}{2}, +\frac{1}{4}, -\frac{1}{8}, \&c.$$

7. Solve the following equations:

$$(1.) \quad x^2 + (a + b)x = -ab.$$

$$(2.) \quad \begin{cases} (x^3 + y^3) + (x + y) = 0. \\ x - y = \dots\dots\dots 2. \end{cases}$$

$$(3.) \quad (x+1)^2 + (x+2)^2 + (x+3)^2 + \dots\dots (x+n)^2 = nx^2 + a.$$

$$(4.) \quad \sqrt{\left(\frac{x+a}{x-a}\right)} - \sqrt{\left(\frac{x-a}{x+a}\right)} = x + \sqrt{(x^2 - a^2)}.$$

8. Prove that the angle formed at the centre of a circle is double that at the circumference, if they stand on the same arc.

9. Construct an isosceles triangle, of which the base angles are each double the vertical angle.

10. The areas of similar rectilineal figures are to each other as the squares of their homologous sides.

11. State and prove Ptolemy's Theorem relative to quadrilaterals inscribed in circles.

TUESDAY, July 12.—AFTERNOON, 3 to 6.

PLANE AND SPHERICAL TRIGONOMETRY— CONIC SECTIONS.

Examiner, Mr. JERRARD.

1. Investigate the expression

$$\sin(a \pm b) = \sin a \cos b \pm \sin b \cos a,$$

and apply it in obtaining

$$\frac{\sin a + \sin b}{\sin a - \sin b} = \frac{\tan \frac{1}{2}(a + b)}{\tan \frac{1}{2}(a - b)}.$$

2. Prove Legendre's *formula of verification*

$$\begin{aligned} \sin(54^\circ + x) + \sin(54^\circ - x) - \sin(18^\circ + x) - \sin(18^\circ - x) \\ = \sin(90^\circ - x). \end{aligned}$$

3. Express the tangent of half an angle of a plane triangle in terms of the sides.

4. In a spherical triangle, given two angles with the side opposite one of them, find the other two sides and the third angle.

5. Show that

$$\cos \theta = \frac{1 + aa'}{\sqrt{(1 + a^2)(1 + a'^2)}}$$

where θ is the angle contained between two straight lines of which the equations are

$$y = ax + b, \quad y = a'x + b'.$$

6. Investigate formulæ for the transformation of coordinates from a rectangular system to an oblique one having the same origin.

7. For the parabola find the locus of the intersections of tangents forming a given angle. What does it become when the angle is right?

8. Find the polar equation to the hyperbola, one of the foci being the pole.

9. Prove that in the ellipse

$$SP \times HP = CD^2,$$

S and H being the foci and C D the semi-diameter parallel to the tangent at P.

WEDNESDAY, July 13.—MORNING, 10 to 1.

HYDROSTATICS AND OPTICS.

Examiner, Rev. R. MURPHY.

1. Give explanations of the terms Fluidity, Elasticity and Dilatability as applied to liquids or gases, and explain the principle of Bramah's Press.

2. Find the pressure on a plane surface immersed in a fluid, and define the Centre of Pressure.

3. Required all the conditions necessary for the equilibrium of a floating body, and define the Metacentre of such a body.

4. Prove that the positions of stable and instable equilibrium in a floating body are alternate.

5. Describe the Air-pump and the Diving-bell.

6. Describe the experiments by which the laws of the reflexion and refraction of light may be verified.

7. Find the relation between the conjugate foci in the axis of a concave spherical speculum.

8. Describe the Eye, and state the appropriate lenses for defective vision.

9. Give a general account of the Undulatory theory of light, and of interferences.

WEDNESDAY, July 13.—AFTERNOON, 3 to 6.

STATICS AND DYNAMICS.

Examiner, Mr. JERRARD.

1. Prove that the moment of the resultant of two forces acting in one plane about any point is equal to the sum or difference of the moments of the components, according as the forces tend to turn the system the same or different ways.

2. Show that in any system of particles the sum of the products formed by multiplying each particle into the square of its distance from a certain point is least when the point is the centre of gravity.

3. Find the condition necessary in order that any number of forces acting upon a rigid body may have a single resultant.

4. A beam, considered as a straight line, rests upon a given point with its end against a vertical plane; what is the position of equilibrium?

5. State the general result of the experiments for determining the laws of *Friction*, and find the conditions of equilibrium when a force acting in any direction supports a weight upon an inclined plane, friction being taken into the account.

6. Investigate the equations

$$s = \frac{1}{2} f t^2, \quad v^2 = 2 f s,$$

and show that the spaces described in the 1st, 2nd, 3rd, 4th, .. seconds are as the odd numbers 1, 3, 5, 7, ..

7. Find the curve which a projectile would describe, if the resistance of the air were neglected. What would be the

range on a horizontal plane, and the time of flight of a body projected at an elevation of 9° with a velocity of 1600 feet a second?

8. Define moving force and accelerating force. Two heavy bodies hang over a fixed pulley, find the accelerating force. When the weights are as 7 to 5, what will be the space described from a state of rest in three seconds?

9. Show that the motion of the centre of gravity of two bodies is not affected by their direct impact.

THURSDAY, July 14.—MORNING, 10 to 1.

GENERAL QUESTIONS.

Examiner, Rev. R. MURPHY.

1. A can perform a piece of work in one hour for which B would require double the time and C only half the time; in what time could all three jointly perform it?

2. Extract the square root of $\cdot 0230957$, and the cube root of 2985984.

3. It is required to inscribe a square in a semicircle.

4. Draw a straight line which shall touch two given circles, on opposite sides of the line joining their centres.

5. Given the sum and product of two numbers, find the sum of their n th powers.

6. Investigate the common rules for simple and compound interest.

7. Find the value of $\left(1 + \frac{x}{n}\right)^n$ when n is infinite.
8. Give an explanation of the phenomena of the action of capillary tubes and inclined glass plates on water and mercury.
9. Describe the Camera Lucida and the simple Microscope.
10. Explain the Mirage and the Fata Morgana.

THURSDAY, July 14.—AFTERNOON, 3 to 6.

GENERAL QUESTIONS.

Examiner, Mr. JERRARD.

1. Show that the area of a quadrilateral figure inscribed in a circle will be equal to

$$\sqrt{(p-a)(p-b)(p-c)(p-d)},$$

where a, b, c, d are the sides, and $p = \frac{1}{2}(a + b + c + d)$.

2. Investigate the expressions

$$\cos \theta = \frac{e^{\theta \sqrt{-1}} + e^{-\theta \sqrt{-1}}}{2}, \quad \sin \theta = \frac{e^{\theta \sqrt{-1}} - e^{-\theta \sqrt{-1}}}{2 \sqrt{-1}},$$

and expand Nap. log $(1 - n \cos \theta)$ in a series of the form

$$A + B \cos \theta + C \cos 2 \theta + \dots$$

3. Show how to solve by trigonometry the equation

$$x^2 + ax + b = 0.$$

4. Investigate the relations which the sides and angles of a spherical triangle bear to those of its *polar* triangle, and thence deduce the expression for the cosine of a side in terms

of the angles from that for the cosine of an angle in terms of the sides.

5. Show how to determine the coordinates of the centre of curves represented by the equation

$$A y^2 + B x y + C x^2 + D y + E x + F = 0.$$

How does it appear from the investigation that the parabola has no centre?

6. Trace the curve of which the equation is

$$3 x^2 + 3 y^2 - 5 x + 7 y - 2 = 0,$$

and find the axes of the curve represented by

$$x^2 + 2 y^2 = 2 x.$$

7. Find the equation of a tangent to an hyperbola referred to the asymptotes as coordinate axes.

8. What is meant by a *statical couple*? Show that it may be transferred to any distance in its own plane or in any parallel plane, and turned through any angle without altering its effect.

9. State the principle of virtual velocities, and verify it in the case of the inclined plane, and in that of the lever.

CHEMISTRY.

Examiner, Professor DANIELL.

FRIDAY, July 15.—MORNING, 10 to 1.

1. Humboldt, in his "Personal Narrative," notes that from Corunna to the Canary Islands the centigrade thermometer, observed at noon and in the shade, rose gradually from 10° to 18° , and from Santa Cruz to Cumana from 18° to 25° ; and he also observes that the maximum heat during the voyage did not exceed $21^{\circ} \cdot 3$ of Reaumur: what are these temperatures respectively upon Fahrenheit's scale?

2. The same eminent traveller observed that upon the top of a high mountain near Santa-Fe di Bogota, water boiled at $89^{\circ} \cdot 9$ cent.: what is this temperature upon Fahrenheit's scale, and how do you account for the difference between it and that which is commonly called the boiling point of water?

3. The mean temperature of the coasts of Teneriffe is about 70° Fahr., while the Peak of Teneriffe probably reaches the limit of perpetual congelation; how is the difference of temperature to be accounted for?

4. Explain the general constitution of Salts, and illustrate it by examples.

5. Illustrate the law of definite, equivalent proportions by volume, by examples.

6. What is the general constitution of Organic Substances?

NATURAL HISTORY.

FRIDAY, July 15.—AFTERNOON, 3 to 6.

BOTANY.

Examiner, Rev. Professor HENSLOW.

State the principal characters of the following Orders:—

1. Rutaceæ.
2. Resedaceæ.
3. Compositæ.
4. Convolvulaceæ.
5. Araceæ.

Point out the chief resemblances and differences between the following Orders:—

6. Umbelliferæ and Araliaceæ.
7. Scrophulariaceæ and Acanthaceæ.
8. Orchidaceæ and Hydrocharaceæ.

Refer to their Natural Orders, the plants possessing the following characters:—

9. *Flores* regulares.

Calyx persistens, æstivatione imbricatus.

Corollæ petala hypogyna, calycis partibus alterna, æstivatione contorta.

Stamina (fertilis) petalis numero æqualia, iisque alterna.

Capsula multilocularis, loculis monospermis.

Semina pendula, endopleura carnosæ, albumen mentiente.

Embryo complanatus, dicotyledoneus, radícula supera.

10. *Flores* hermaphrodit.

Perigonium corollinum, hexaphyllum.

Stamina 6, perigonii foliolis opposita.

Pericarpium capsulare, triloculare, loculicido-trivalve.

Semina albumine carnosio, copioso.

Embryo monocotyledoneus.

ZOOLOGY.

Examiner, Professor T. RYMER JONES.

1. Describe the principal external and internal changes that are in progress during the metamorphosis of a BATRACHIAN REPTILE.

2. What are the leading anatomical characters wherein the *Sharks* and *Rays* differ from ordinary osseous Fishes?

3. Describe the structure of one of the PULMONIGRADE ACALEPHÆ.

4. What animals compose the class ECHINODERMATA, and what are the most remarkable features of their organization?

5. Describe the circulatory and respiratory apparatus of an Insect.

6. In what respects do the INSECTA differ from the ARACHNIDA?

7. Narrate the phenomena that accompany the metamorphosis of a *Lepidopterous Insect*, more especially as relates to the changes which take place in the nervous system and in the organs of the senses.

CLASSICS.

TUESDAY, July 19.—MORNING, 10 to 1.

ENGLISH PROSE COMPOSITION.

Examiner, Mr. BURCHAM.

Subject.

Velocius et citius nos
Corrumpunt vitiorum exempla ——— magnis
Quum subeunt animos auctoribus.—*Juvenal, Sat. XIV.*

TUESDAY, July 19.—AFTERNOON, 3 to 6.

LATIN PROSE COMPOSITION.

Examiner, Rev. Dr. JERRARD.

Translate into Latin Prose :

Hesiod, in his celebrated distribution of mankind, divides them into three orders of intellect. "The first place," says he, "belongs to him that can by his own powers discern what

is right and fit, and penetrate to the remoter motives of action. The second is claimed by him that is willing to hear instruction, and can perceive right and wrong when they are shown him by another: but he that has neither acuteness nor docility, who can neither find the way by himself, nor will be led by others, is a wretch without use or value."

If we survey the moral world, it will be found that the same division may be made of men, with regard to their virtue. There are some whose principles are so firmly fixed, whose conviction is so constantly present to their minds, and who have raised in themselves such ardent wishes for the approbation of God, and the happiness with which he has promised to reward obedience and perseverance, that they rise above all other cares and considerations, and uniformly examine every action and desire, by comparing it with the divine commands. There are others in a kind of equipoise between good and ill; who are moved on the one part by riches or pleasure, by the gratifications of passion and the delights of sense; and, on the other, by laws of which they own the obligation, and rewards of which they believe the reality, and whom a very small addition of weight turns either way. The third class consists of beings immersed in pleasure, or abandoned to passion, without any desire of higher good, or any effort to extend their thoughts beyond immediate and gross satisfactions.

The second class is so much the most numerous, that it may be considered as comprising the whole body of mankind. Those of the last are not very many, and those of the first are very few; and neither the one nor the other falls much under the consideration of the moralist, whose precepts are intended chiefly for those who are endeavouring to go forward up the steep of virtue, not for those who have already reached the summit, or those who are resolved to stay for ever in their present situation.—*Rambler*, No. 70.

WEDNESDAY, July 20.—MORNING, 10 to 1.

GREEK.

Examiner, Mr. BURCHAM.

(A.) HOMER*, ODYSSEY, Book IX. v. 177—192.

Translate :

ὦς εἰπὼν, ἀνὰ νηὸς ἔβην· ἐκέλευσα δ' ἑταίρους
αὐτοὺς τ' ἀμβαίνειν, ἀνά τε πρυμνήσια λῦσαι.
οἱ δ' αἰψ' εἴσβαινον, καὶ ἐπὶ κληῖσι κάθιζον·
ἑξῆς δ' ἐζόμενοι πολὴν ἄλα τύπτον ἑρετμοῖς.
ἀλλ' ὅτε δὴ τὸν χῶρον ἀφικόμεθ', ἐγγὺς ἑόντα,
ἔνθα δ' ἐπ' ἐσχατιῇ σπέος εἶδομεν, ἄγχι θαλάσσης,
ὑψηλὸν, δάφνησι κατηρεφές· ἔνθα δὲ πολλὰ
μῆλ', οἷές τε καὶ αἶγες ἰαύεσκον· περὶ δ' αὐλὴν
ὑψηλὴν δέδμητο κατωρυχέεσσι λίθοισιν,
μακρῆσιν τε πίτυσσιν ἰδὲ δρυσὶν ὑψικόμοισιν.
ἔνθα δ' ἀνὴρ ἐνίαυε πελώριος, ὅς ῥά τε μῆλα
οἷος ποιμαίνεσκεν ἀπόπροθεν· οὐδὲ μετ' ἄλλους
πωλείτ', ἀλλ' ἀπάνευθεν ἔων ἀθεμίστια ἦδη.
καὶ γὰρ θαῦμ' ἐτέτυκτο πελώριον· οὐδὲ ἑώκει
ἀνδρὶ γε σιτοφάγῳ, ἀλλὰ ῥίῳ ὑλήεντι
ὑψηλῶν ὀρέων, ὅ, τε φαίνεται οἶον ἀπ' ἄλλων.

(B.) EURIPIDES†, MEDEA, v. 635—660.

στέργοι δέ με σωφροσύνα, ἀντιστροφὴ α'·
δώρημα κάλλιστον θεῶν
μηδέ ποτ' ἀμφιλόγους ὀργὰς, ἀκόρεστα τε νείκη,
θυμὸν ἐκπλήξας ἐτέ-
ροις ἐπὶ λέκτροις,
προσβάλοι δεινὰ Κύπρις, ἀ-
πτολέμους δ' εὐνὰς σεβίζουσ',

* Edit. Loewe.

† Edit. Porson.

ὀξύφρων κρίνοι λέχη γυναικῶν.

ὦ πατὴρ, ὦ δῶμά τ' ἐμὸν,

στροφή β.

μὴ δῆτ' ἀπολις γενοίμαν,

τὸν ἀμηχανίας ἔχουσα

δυσπέρατον αἰῶν',

οἰκτρότατον ἀχέων

θανάτῳ, θανάτῳ πάρος δαμείην,

ἀμέραν τάνδ' ἐξανύσασα· μόχθων δ'

οὐκ ἄλλος ὑπερθεν,

ἢ γὰρ πατρίας στέρεσθαι.

εἶδομεν, οὐκ ἐξ ἐτέρων

ἀντιστροφή β.

μύθων ἔχομεν φράσασθαι·

σὲ γὰρ οὐ πόλις, οὐ φίλων τις

ᾧκτισεν παθοῦσαν

δεινότατα παθέων.

ἀχάριστος ὅλοιθ', ὅτῳ πάρεστι

μὴ φίλους τιμᾶν, καθαρὰν ἀνοίξαν-

τα κλῆδα φρενῶν· ἐ-

μοὶ μὲν φίλος οὐποτ' ἔσται.

(C.) THUCYDIDES*, Book I. chap. cxxi.

Ἡμεῖς δὲ νῦν καὶ ἀδικούμενοι τὸν πόλεμον ἐγείρομεν καὶ ἱκανὰ ἔχοντες ἐγκλήματα, καὶ ὅταν ἀμυνώμεθα Ἀθηναίους, καταθησόμεθα αὐτὸν ἐν καιρῷ. κατὰ πολλὰ δὲ ἡμᾶς εἰκὸς ἐπικρατῆσαι, πρῶτον μὲν πλήθει προὔχοντας καὶ ἐμπειρίᾳ πολεμικῇ, ἔπειτα ὁμοίως πάντας ἐς τὰ παραγγελλόμενα ἰόντας. ναυτικόν τε, ᾧ ἰσχύουσιν, ἀπὸ τῆς ὑπαρχούσης τε ἐκάστοις οὐσίας ἐξαρτυσόμεθα, καὶ ἀπὸ τῶν ἐν Δελφοῖς καὶ Ὀλυμπίᾳ χρημάτων δάνεισμα γὰρ ποιησάμενοι ὑπολαβεῖν οἰοί τ' ἐσμέν μισθῷ μείζονι τοὺς ξένους αὐτῶν ναυβάτας. ὠνητὴ γὰρ Ἀθηναίων ἡ δύναμις μᾶλλον ἢ οἰκεία· ἡ δὲ ἡμετέρα ἦσσαν ἂν τοῦτο πάθοι, τοῖς σώμασι τὸ πλεον ἰσχύουσα ἢ τοῖς χρήμασι. μᾶ τε νίκη ναυμαχίας κατὰ τὸ εἰκὸς ἀλίσκονται· εἰ δ' ἀντίσχοιεν, μελετήσομεν καὶ ἡμεῖς ἐν πλείονι χρόνῳ τὰ ναυτικά. καὶ ὅταν τὴν ἐπιστήμην ἐς τὸ ἴσον καταστήσωμεν, τῇ γε εὐψυχίᾳ δὴ πού περιεσόμεθα. ὁ γὰρ ἡμεῖς ἔχομεν φύσει ἀγαθὸν, ἐκείνοις οὐκ ἂν γένοιτο διδαχῇ; ὁ δ' ἐκείνοι ἐπιστήμη προὔ-

* Edit. Bekker.

χουσι, καθαιρετέον ἡμῖν ἐστὶ μελέτη. χρήματα δ' ὥστ' ἔχειν ἐς αὐτὰ, οἴσομεν· ἢ δεινὸν ἂν εἴη, εἰ οἱ μὲν ἐκείνων ξύμμαχοι ἐπὶ δουλείᾳ τῇ αὐτῶν φέροντες οὐκ ἀπεροῦσιν, ἡμεῖς δ' ἐπὶ τῷ τιμωρούμενοι τοὺς ἐχθροὺς καὶ αὐτοὶ ἅμα σώζεσθαι οὐκ ἄρα δαπανήσομεν, καὶ ἐπὶ τῷ μὴ ὑπ' ἐκείνων αὐτὰ ἀφαιρεθέντες αὐτοῖς τούτοις κακῶς πάσχειν.

(D.) DEMOSTHENES*, OLYNTHIAC III. p. 40.

Ἄλλ' ὦ τᾶν, εἰ ταῦτα φαύλως, τά γ' ἐν αὐτῇ τῇ πόλει νῦν ἄμεινον ἔχει. καὶ τί ἂν εἰπεῖν τις ἔχοι; τὰς ἐπάλξεις ἅς κοινῶμεν, καὶ τὰς ὁδοὺς ἅς ἐπισκευάζομεν, καὶ κρήνας, καὶ λήρους; ἀποβλέψατε δὴ πρὸς τοὺς ταῦτα πολιτευομένους, ὧν οἱ μὲν ἐκ πτωχῶν πλούσιοι γεγόνασιν, οἱ δ' ἐξ ἀδόξων ἔντιμοι, ἔνιοι δὲ τὰς ἰδίας οἰκίας τῶν δημοσίων οἰκοδομημάτων σεμνοτέρας εἰσὶ κατεσκευασμένοι, ὅσῳ δὲ τὰ τῆς πόλεως ἐλάττω γέγονε, τοσοῦτῳ τὰ τούτων ἠϋξῆται.

Τί δὴ τὸ πάντων αἷτιον τούτων, καὶ τί δήποτε ἅπαντ' εἶχε καλῶς τότε καὶ νῦν οὐκ ὀρθῶς; ὅτι τὸ μὲν πρῶτον καὶ στρατεύεσθαι τολμῶν αὐτὸς ὁ δῆμος δεσπότης τῶν πολιτευομένων ἦν καὶ κύριος αὐτὸς ἀπάντων τῶν ἀγαθῶν, καὶ ἀγαπητὸν ἦν παρὰ τοῦ δήμου τῶν ἄλλων ἐκάστῳ καὶ τιμῇ καὶ ἀρχῇ καὶ ἀγαθοῦ τινὸς μεταλαβεῖν· νῦν δὲ τοῦναντίον κύριοι μὲν οἱ πολιτευόμενοι τῶν ἀγαθῶν, καὶ διὰ τούτων ἅπαντα πράττεται, ὑμεῖς δ' ὁ δῆμος ἐκνεενυρισμένοι καὶ περιηρημένοι χρήματα καὶ συμμάχους ἐν ὑπηρέτου καὶ προσθήκης μέρει γεγέννησθε, ἀγαπῶντες ἐὰν μεταδιδῶσι θεωρικῶν ὑμῖν ἢ βοῖδια πέμψωσιν οὗτοι, καὶ τὸ πάντων ἀνανδρότατον, τῶν ὑμετέρων αὐτῶν χάριν προσοφείλετε. οἱ δ' ἐν αὐτῇ τῇ πόλει καθεύξαντες ὑμᾶς ἐπάγουσιν ἐπὶ ταῦτα καὶ τιθασεύουσι χειροήθεις αὐτοῖς ποιῶντες.

1. What are Homer's expressions for "the Greeks"? What is meant by Thucydides when he says of Homer, οὐ μὴν οὐδὲ βαρβάρους εἶρηκε? Are there any real or apparent exceptions to that assertion? Why is it probable that the Greeks were not called Pelasgi at the time of the Trojan war?

2. Enumerate the extant plays of Euripides. To what class of dramatic compositions do the Orestes and the Alcestis belong? Where and about what time did Euripides die?

* Edit. Bekker.

Mention some of the physical doctrines of Anaxagoras that are to be found in his dramas.

3. What is the rule with respect to the employment of a monosyllable as the second syllable of a tribrach or of a dactyl in Tragic Iambics? Give instances from Euripides or any other Greek Tragic writer in which it is violated. How do Æschylus, Sophocles and Euripides differ as regards the quantity of the last syllable in *ἡμιν*, *ύμιν*?

4. What is the difference between *γαμεῖν* and *γαμεῖσθαι*? Quote instances from the *Medea* in which that distinction is not made. For *ἀνοιξαντα*, in extract (B.), one MS. has *ἀνοίξαντι*; confirm the reading in the text.

5. What is the purpose of the *Memorabilia* of Xenophon? In what other works of Xenophon is Socrates introduced? What are the main points in which other representations of Socrates by his contemporaries differ from the account of Xenophon?

WEDNESDAY, July 20.—AFTERNOON, 3 to 6.

GREEK.

Examiner, Rev. Dr. JERRARD.

Translate :

(A.) SOPHOCLES*, *ANTIGONE*, line 904—928.

καίτοι σ' ἐγὼ τίμησα τοῖς φρονούσιν εὖ.
οὐ γάρ ποτ' οὐτ' ἂν εἰ τέκνων μήτηρ ἔφυν
οὐτ' εἰ πόσις μοι κατθανὼν ἐτήκετο,
βία πολιτῶν τόνδ' ἂν ἡρόμην πόνον.

* Edit. Dindorf.

τίνος νόμου δὴ ταῦτα πρὸς χάριν λέγω ;
 πόσις μὲν ἂν μοι κατθανόντος ἄλλος ἦν,
 καὶ παῖς ἀπ' ἄλλου φωτὸς, εἰ τοῦδ' ἡμπλακον,
 μητρὸς δ' ἐν "Αἰδου καὶ πατρὸς κεκευθότοι
 οὐκ' ἔστ' ἀδελφὸς ὅστις ἂν βλάστοι ποτέ.
 τοιῷδε μέντοι σ' ἐκπροτιμήσας ἐγὼ
 νόμῳ, Κρέοντι ταῦτ' ἔδοξ' ἁμαρτάνειν
 καὶ δεινὰ τολμᾶν, ὧ κασίγνητον κάρα.
 καὶ νῦν ἄγει με διὰ χερῶν οὔτω λαβὼν,
 ἄλεκτρον, ἀννυμέναιον, οὔτε του γάμου
 μέρος λαχοῦσαν οὔτε παιδείου τροφῆς,
 ἀλλ' ὧδ' ἔρημος πρὸς φίλων ἢ δύσμορος
 ζῶσ' εἰς θανόντων ἔρχομαι κατασκαφάς·
 ποῖαν παρεξελθούσα δαιμόνων δίκην ;
 τί χρή με τὴν δύστηνον εἰς θεοὺς ἔτι
 βλέπειν ; τίν' αὐδᾶν ξυμμάχων ; ἐπεὶ γε δὴ
 τὴν δυσσέβειαν εὖσεβοῦς' ἐκτησάμην.
 ἀλλ' εἰ μὲν οὖν τάδ' ἐστὶν ἐν θεοῖς καλὰ,
 παθόντες ἂν ξυγγνοῖμεν ἡμαρτηκότες·
 εἰ δ' οἷδ' ἁμαρτάνουσι, μὴ πλείω κακὰ
 πάθοιεν ἢ καὶ δρῶσιν ἐκδίκως ἐμέ.

(B.) HERODOTUS*, Book II. pp. 308—309.

Τοὺς δὲ βοῦς τοὺς ἔρσενας τοῦ Ἐπάφου εἶναι νομίζουσι, καὶ
 τούτου εἵνεκα δοκιμάζουσι αὐτοὺς ὧδε. τρίχα ἦν καὶ μῖην ἴδη-
 ται ἐπεοῦσαν μέλαιναν, οὐ καθαρὸν εἶναι νομίζει. δίζηται δὲ
 ταῦτα ἐπὶ τούτῳ τεταγμένος τῶν τις ἱρέων, καὶ ὀρθοῦ ἐστεῶτος
 τοῦ κτήνεος καὶ ὑπτίου, καὶ τὴν γλῶσσαν ἐξειρύσας, εἰ καθαρὴ
 τῶν προκειμένων σημηίων, τὰ ἐγὼ ἐν ἄλλῳ λόγῳ ἐρέω. κατορᾶ
 δὲ καὶ τὰς τρίχας τῆς οὐρῆς, εἰ κατὰ φύσιν ἔχει πεφυκυίας. ἦν
 δὲ τουτέων πάντων ἢ καθαρὸς, σημαίνεται βύβλῳ περὶ τὰ κέρεια
 εἰλίσσων· καὶ ἔπειτα γῆν σημαντρίδα ἐπιπλάσας, ἐπιβάλλει
 τὸν δακτύλιον· καὶ οὔτω ἀπάγουσι. ἀσήμαντον δὲ θύσαντι
 θάνατος ἢ ζημὴ ἐπικέεται. δοκιμάζεται μὲν νυν τὸ κτήνος
 τρόπῳ τοιῷδε. Θυσίῃ δέ σφι ἤδε κατέστηκε. ἀγαγόντες τὸ
 σεσημασμένον κτήνος πρὸς τὸν βωμὸν, ὅκου ἂν θύωσι, πυρὴν

* Edit. Schweighæuser.

καίουσι. ἔπειτα δὲ ἐπ' αὐτοῦ οἶνον κατὰ τοῦ ἱρήτου ἐπισπείσαντες, καὶ ἐπικαλέσαντες τὸν θεὸν, σφάζουσι· σφάξαντες δὲ, ἀποτάμνουσι τὴν κεφαλὴν. σῶμα μὲν δὴ τοῦ κτήνεος δείρουσι· κεφαλῇ δὲ κείνῃ πολλὰ καταρησάμενοι, φέρουσι, τοῖσι μὲν ἂν ἡ ἀγορὴ, καὶ Ἕλληνες σφισι ἔωσι ἐπιδήμιοι ἔμποροι, οἱ δὲ φέροντες ἐς τὴν ἀγορὴν, ἀπ' ὧν ἔδοντο· τοῖσι δὲ ἂν μὴ παρέωσι Ἕλληνες, οἱ δ' ἐκβάλλουσι ἐς τὸν ποταμόν. καταρέονται δὲ, τάδε λέγοντες, τῇσι κεφαλῇσι· “εἴ τι μέλλοι ἢ σφίσι τοῖσι θύουσι, ἢ Αἰγύπτῳ τῇ συναπάσῃ κακὸν γενέσθαι, ἐς κεφαλὴν ταύτην τραπέσθαι.”

(C.) PLATO*, CRITO, pp. 374—379.

ΣΩ. Ἄλλ', ὦ Κρίτων, τύχῃ ἀγαθῇ. εἰ ταύτῃ τοῖς θεοῖς φίλον, ταύτῃ ἔστω. οὐ μέντοι οἶμαι ἥξειν αὐτὸ τήμερον.

ΚΡ. Πόθεν τοῦτο τεκμαίρει;

ΣΩ. Ἐγὼ σοι ἔρῳ. τῇ γάρ που ὑστεραία δεῖ με ἀποθνήσκειν ἢ ἢ ἂν ἔλθῃ τὸ πλοῖον.

ΚΡ. Φασί γέ τοι δὴ οἱ τούτων κύριοι.

ΣΩ. Οὐ τοίνυν τῆς ἐπιούσης ἡμέρας οἶμαι αὐτὸ ἥξειν, ἀλλὰ τῆς ἐτέρας. τεκμαίρομαι δὲ ἔκ τινος ἐνυπνίου ὃ ἐώρακα ὀλίγον πρότερον ταύτης τῆς νυκτός· καὶ κινδυνεύεις ἐν καιρῷ τινὶ οὐκ ἐγείραί με.

ΚΡ. Ἦν δὲ δὴ τί τὸ ἐνύπνιον;

ΣΩ. Ἐδόκει τίς μοι γυνὴ προσελθοῦσα καλὴ καὶ εὐειδής, λευκὰ ἱμάτια ἔχουσα, καλέσαι με καὶ εἰπεῖν ὦ Σώκρατες, ἡματί κεν τριτάτῳ Φθίῃν ἐρίβωλον ἴκοιο.

ΚΡ. Ὡς ἄτοπον τὸ ἐνύπνιον, ὦ Σώκρατες.

ΣΩ. Ἐναργὲς μὲν οὖν, ὥς γ' ἐμοὶ δοκεῖ, ὦ Κρίτων.

ΚΡ. Λίαν γε, ὥς ἔοικεν. ἀλλ' ὦ δαιμόνιε Σώκρατες, ἔτι καὶ νῦν ἐμοὶ πείθου καὶ σώθητι, ὥς ἐμοί, ἐὰν σὺ ἀποθάνῃς, οὐ μία ξυμφορὰ ἐστίν, ἀλλὰ χωρὶς μὲν τοῦ ἐστερηῆσθαι τοιούτου ἐπιτηδείου οἶον ἐγὼ οὐδένα μὴ ποτε εὐρήσω, ἔτι δὲ καὶ πολλοῖς δόξω, οἱ ἐμὲ καὶ σὲ μὴ σαφῶς ἴσασιν, ὥς οἶος τ' ὧν σε σώζειν, εἰ ἡθέλον ἀναλίσκειν χρήματα, ἀμελῆσαι. καί τοι τίς ἂν αἰσχίων εἴη ταύτης δόξα, ἢ δοκεῖν χρήματα περὶ πλείονος ποιεῖσθαι ἢ φίλους; οὐ γὰρ πείσονται οἱ πολλοὶ ὥς σὺ αὐτὸς οὐκ ἡθέλησας ἀπιέναι ἐνθένδε ἡμῶν προθυμουμένων.

ΣΩ. Ἀλλὰ τί ἡμῖν, ὦ μακάριε Κρίτων, οὕτω τῆς τῶν πολλῶν δόξης μέλει; οἱ γὰρ ἐπιεικέστατοι, ὧν μᾶλλον ἄξιον φροντίζειν, ἡγήσονται αὐτὰ οὕτω πεπραχθαι ὥς περ ἂν πραχθῇ.

1. (A.) τοῖς φρονούσιν εὖ. Give other examples of this construction, and explain the full meaning and use of the Dative case in Greek. ἡ δύσμορος—τὴν δύστηνον—what is the force of the Article in each of these instances?

2. ἡμαρτηκότες—why is the participle employed here? ἁμαρτάνουσι—why is this word used in the indicative? ἔφυν—ετήκετο—ἡρόμην—why are these verbs in the Imperfect tense and not in the Aorist? οὐ γάρ ποτ' οὕτ' ἂν κ.τ.λ.—on what historical fact is this passage supposed to be founded?

3. (B.) What other peculiarities does Herodotus notice in the religious rites and ideas of the Ægyptians? Is the origin of any of them to be found in those of a more ancient people?

4. καθαρὴ τῶν προκειμένων. Explain and illustrate this use of the Genitive.

5. (C.) What distinction has been made by Grammarians between ὄνειρος, ὄραμα, χρηματισμός, ἐνύπνιον, and φάντασμα? ἤματί κεν τριτάτω, κ.τ.λ.—Whence is this quotation taken? and in what manner, precisely, does it appear to be applied by Socrates?

6. μὴ σαφῶς ἴσασιν—why not οὐ? Can the mood of ἀμελῆσαι be satisfactorily explained?

7. Describe the character of Prometheus as drawn by Æschylus, and refer to what you consider the most sublime passages of that Tragedy.

THURSDAY, July 21.—MORNING, 10 to 1.

LATIN.

Examiner, Mr. BURCHAM.

Translate :

(A.) LIVY*, Book XXXI. chap. 26.

Tentata et ab ipso rege obpugnatio ejus castelli est. sed naves Romanæ, a Piræeo venientes, intromissumque præsidium absistere incepto coëgerunt. Diviso deinde exercitu, rex cum parte Philoclem Athenas mittit, cum parte ipse Piræeum pergit: ut, quum Philocles subeundo muros, et comminanda obpugnatione contineret urbe Athenienses, ipsi Piræeum levi cum præsidio relictum expugnandi facultas esset. Ceterum nihilo ei Piræei, quam Eleusinis, facilius, iisdem fere defendentibus, obpugnatio fuit. A Piræeo Athenas repente duxit, inde eruptione subita peditum equitumque inter angustias semirutæ muri, qui brachiis duobus Piræeum Athenis jungit, repulsus: omissa obpugnatione urbis, diviso cum Philocle rursus exercitu, ad vastandos agros profectus, quum priorem populationem sepulcris circa urbem diruendis exercuisset, ne quid inviolatum relinqueret, templa Deum, quæ pagatim sacrata habebant, dirui atque incendi jussit. Exornata eo genere operum eximie terra Attica, et copia domestici marmoris, et ingeniis artificum, præbuit huic furori materiam. neque enim diruere modo ipsa templa, ac simulacra evertere satis habuit; sed lapides quoque, ne integri cumlarent ruinas, frangi jussit: et, postquam non tam ira satiata, quam iræ exercendæ materia hæc deerat, agro hostium in Bœotiam excessit, nec aliud quidquam dignum memoria in Græcia egit.

* Edit. Ernesti.

(B.) TACITUS*, DE MORIBUS GERMANIÆ, Chap. 24, 25.

Genus spectaculorum unum atque in omni cœtu idem. Nudi juvenes, quibus id ludicrum est, inter gladios se atque infestas frameas saltu jaciunt. Exercitatio artem paravit, ars decorem: non in quæstum tamen, aut mercedem: quamvis audacis lasciviæ pretium est, voluptas spectantium. Aleam (quod mirare) sobrii inter seria exercent, tanta lucrandi perdendive temeritate, ut, cum omnia defecerunt, extremo ac novissimo jactu de libertate et de corpore contendant. Victus voluntariam servitutem adit: quamvis juvenior, quamvis robustior, adligari se ac venire patitur: ea est in re prava per-
vicacia: ipsi fidem vocant. Servos conditionis hujus per commercia tradunt, ut se quoque pudore victoriæ exsolvant.

Ceteris servis, non in nostrum morem, descriptis per familiam ministeriis, utuntur. Suam quisque sedem, suos Penates regit. Frumenti modum dominus, aut pecoris, aut vestis, ut colono, injungit: et servus hactenus paret. Cetera domus officia uxor ac liberi exsequuntur. Verberare servum ac vinculis et opere coercere, rarum. Occidere solent, non disciplina et severitate, sed inpetu et ira, ut inimicum, nisi quod inpune. Libertini non multum supra servos sunt, raro aliquod momentum in domo, numquam in civitate; exceptis dumtaxat iis gentibus, quæ regnantur. Ibi enim et super ingenuos et super nobiles ascendunt; apud ceteros inpares libertini libertatis argumentum sunt.

(C.) HORACE†, ODES, Book III. 16.

Quanto quisque sibi plura negaverit,
Ab Dîs plura feret. Nil cupientium
Nudus castra peto, et transfuga divitum
Partes linquere gestio,
Contemtæ dominus splendidior rei,
Quam si, quidquid arat impiger Appulus,
Occultare meis dicerer horreis,
Magnas inter opes inops.

* Edit. Ernesti.

† Edit. Doering.

Puræ rivus aquæ, silvaque jugerum
 Paucorum, et segetis certa fides meæ,
 Fulgentem imperio fertilis Africæ
 Fallit. Sorte beatior,
 Quamquam nec Calabræ mella ferunt apes,
 Nec Læstrygonia Bacchus in amphora
 Languescit mihi, nec pingua Gallicis
 Crescunt vellera pascuis :
 Importuna tamen Pauperies abest ;
 Nec, si plura velim, tu dare deneges.
 Contracto melius parva cupidine
 Vectigalia porrigam,
 Quam si Mygdoniis regnum Alyattei
 Campis continuem. Multa petentibus
 Desunt multa. Bene est, cui Deus obtulit
 Parca, quod satis est, manu.

(D.) EPISTLES, Book II. 2.

Flore, bono claroque fidelis amice Neroni,
 Si quis forte velit puerum tibi vendere natum
 Tibure vel Gabiis, et tecum sic agat : " Hic et
 Candidus et talos a vertice pulcher ad imos,
 Fiet eritque tuus nummorum millibus octo,
 Verna ministeriis ad nutus aptus heriles,
 Litterulis Græcis imbutus, idoneus arti
 Cuilibet, argilla quidvis imitaberis uda :
 Quin etiam canet indoctum, sed dulce bibenti.
 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 lædit."
 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 veniret.
 Quid tum profeci, mecum facientia jura
 Si tamen attentas? Quereris super hoc etiam, quod
 Expectata tibi non mittam carmina mendax.
 Luculli miles collecta viatica multis
 Ærumnis, lassus dum noctu stertit, ad assem
 Perdiderat; post hoc vehemens lupo, et sibi et hosti
 Iratus pariter, jejunis dentibus acer,
 Præsidium regale loco dejecit, ut aiunt,
 Summe munito et multarum divite rerum.
 Clarus ob id factum donis ornatur honestis;
 Accipit et bis dena super sestertia nummum.
 Forte sub hoc tempus castellum evertere prætor
 Nescio quod cupiens, hortari cœpit eundem
 Verbis, quæ timido quoque possent addere mentem:
 "I, bone, quo virtus tua te vocat; i pede fausto,
 Grandia laturus meritorum præmia! Quid stas?"
 Post hæc ille catus, quantumvis rusticus, "Ibit,
 Ibit eo, quo vis, qui zonam perdidit," inquit.

1. In how many books was the history of Livy originally comprised, and how many are extant? To what period was his work carried down, and where does the last extant book terminate? To whom have the Epitomes been attributed?

2. What does a numeral adverb express when it is joined to Sestertium? Give the etymology of Sestertius. What part of a denarius was a sesterce? What are the sums mentioned in the following passages: "L. Cincio H-S \overline{XXCD} constitui me curaturum." "L. Cincio H-S \overline{CCIDDD} \overline{CCIDDD} \overline{CCCC} pro signis Megaricis, ut tu ad me scripseras, curavi." "Domum Rubirianam M. Fonteius emit H-S $\overline{CCCIDDDDD}$ \overline{XXX} ."

3. Arrange the works of Horace in the chronological order adopted by Bentley. State any objections to that arrangement. What is the date of the Carmen Sæculare? In what different significations is the term 'Epode' used? Under

which do the Epodes of Horace fall? What internal evidence do they contain as to the time at which they were written?

4. Where was the saltus Teutoborgiensis; and for what event is it remarkable? Where does Tacitus place the source of the Albis? Exhibit in a map the course of the Rhine from its source to the sea, with the countries through which it flows, and its chief tributary rivers.

5. What is the difference in respect of conjugation between transitive and intransitive Verbs derived from nouns? Mention the various ways in which the terminations *-lus*, *-la*, *-lum* of Diminutives are appended to the primitive nouns. What does the termination *-itas* in derivative substantives denote? Which of the two forms does Tacitus prefer,—*consensio*, *consensus*—*motus*, *motio*?

THURSDAY, July 21.—AFTERNOON, 3 to 6.

LATIN.

Examiner, Rev. Dr. JERRARD.

Translate :

(A.) VIRGIL*, ÆNEID, Book V. line 654—684.

At matres primo, ancipites, oculisque malignis
Ambiguae, spectare ratis, miserum inter amorem
Praesentis terrae, fatisque vocantia regna :
Quum dea se paribus per coelum sustulit alis,
Ingentemque fuga secuit sub nubibus arcum.
Tum vero adtonitæ monstris, actaeque furore,
Conclamant, rapiuntque focis penetralibus ignem ;

* Edit. Heyne.

Pars spoliant aras, frondem ac virgulta facesque
 Conjiciunt. Furit inmissis Volcanus habenis
 Transtra per et remos et pictas abiete puppis.
 Nuntius Anchisae ad tumulum cuneosque theatri
 Incensas perfert naus Eumelus; et ipsi
 Respiciunt atram in nimbo volitare fauillam.
 Primus et Ascanius, cursus vt laetus equestris
 Ducebat, sic acer equo turbata petiuit
 Castra; nec exanimes possunt retinere magistri.
 Quis furor iste nouus? quo nunc, quo tenditis, inquit,
 Heu miserae ciues? non hostem, inimicaque castra
 Argium; vestras spes vritis. En, ego vester
 Ascanius: galeam ante pedes proiecit inanem,
 Qua ludo indutus belli simulacra ciebat.
 Adcelerat simul Aeneas, simul agmina Teucrum.
 Ast illae diuersa metu per litora passim
 Diffugiunt; siluasque, et sicubi concaua furtim
 Saxa, petunt. Piget incepti, lucisque; suosque
 Mutatae adgnosunt, excussa pectore Iuno est.
 Sed non idcirco flammae atque incendia vires
 Indomitas posuere: vdo sub robore viuit
 Stuppa vomens tardum fumum, lentusque carinas
 Est vapor, et toto descendit corpore pestis;
 Nec vires heroum infusaque flumina prosunt.

(B.) SALLUST*, JUGURTHA, Chap. xlviii.

Jugurtha ubi Metelli dicta cum factis composuit, ac se suis
 artibus tentari animadvortit; quippe cui verbis pax nuncia-
 batur, ceterum re bellum asperrimum erat: urbs maxuma
 alienata, ager hostibus cognitus, animi popularium tentati,
 coactus rerum necessitudine, statuit armis certare. Igitur
 explorato hostium itinere, in spem victoriae adductus ex op-
 portunitate loci, quas maximas copias potest omnium generum
 parat, ac per tramites occultos exercitum Metelli antevenit.
 Erat in ea parte Numidia, quam Adherbal in divisione pos-
 sederat, flumen oriens a meridie, nomine Muthul; a quo

* Edit. Frotscher.

ab erat mons ferme millia passuum XX tractu pari, vastus ab natura et humano cultu: sed ex eo medio quasi collis oriebatur, in immensum pertinens, vestitus oleastro ac mirtetis, aliisque generibus arborum, quae humi arido atque arenoso gignuntur. Media autem planities deserta, penuria aquae: praeter flumini propinqua loca: ea consita arbustis pecore atque cultoribus frequentabantur.

(C.) CICERO*, ORATIO IN CATILINAM, Chap. 8.

Vnum genus est eorum, qui magno in aere alieno, maiores etiam possessiones habent, quarum amore adducti dissolvi nullo modo possunt. Horum hominum species est honestissima; sunt enim locupletes; voluntas vero et causa impudentissima. Tu agris, tu aedificiis, tu argento, tu familia, tu rebus omnibus ornatus et copiosus sis, et dubites de possessione detrahere, acquirere ad fidem? Quid enim exspectas? bellum? Quid? ergo in vastatione omnium tuas possessiones sacrosanctas futuras putas? An tabulas novas? errant, qui istas a Catilina exspectant. Meo beneficio tabulae novae proferentur, verum auctionariae. Neque enim isti, qui possessiones habent, alia ratione ulla salvi esse possunt. Quod si maturius facere voluissent, neque (id quod stultissimum est) certare cum usuris fructibus praediorum, et locupletioribus his et melioribus civibus uteremur. Sed hosce homines minime puto pertimescendos, quod aut deduci de sententia possunt; aut, si permanebunt, magis mihi videntur vota facturi contra rempublicam, quam arma laturi.

Alterum genus est eorum, qui quamquam premuntur aere alieno, dominationem tamen exspectant; rerum potiri volunt; honores, quos quieta república desperant, perturbata consequi se posse arbitrantur. Quibus hoc praecipendum videtur, unum scilicet et idem, quod ceteris omnibus, ut desperent, se id, quod conantur, consequi posse. * * * * * Quod si iam sint id, quod cum summo furore cupiunt, adepti, num illi in cinere urbis et sanguine civium, quae mente conscelerata ac nefaria concupierunt, consules se ac dictatores,

* Edit. Orellii.

aut etiam reges sperant futuros? Non vident id se cupere, quod si adepti fuerint, fugitivo alicui, aut gladiatori concedi sit necesse?

1. On what traditional stories relating to Æneas has Virgil founded the Æneid? How has he contrived to introduce into that Poem allusions to the most important events in the History of Rome? Is any similar artifice employed by Milton in the Paradise Lost? Quote the verses in which Virgil refers to Cæsar—to Pompey—to Hannibal—and the Scipios. How much time is occupied by the Action of the Æneid?

2. What is the oldest extant MS. of any portion of Virgil's works? To what century does it in all probability belong?

3. What important work of Sallust has been almost wholly lost? Produce testimony from ancient Authors to his great excellence as a Writer. By what other celebrated Roman Historian does his style appear to have been much imitated?

4. Before whom and on what occasion was the 2nd Oration against Catiline delivered? What was the ultimate consequence to Cicero of the part which he took against Catiline?

5. What is the origin of the phrase "*tabulæ novæ*"? *Uteremur*—why not *usi essemus*? *Pertimescendos*—could the word *pertimendos* be used? Distinguish between *timor*—*metus*—*formido*—*terror*.

6. Retranslate into Latin prose :

"*My cause the Senate had espoused openly; the Equestrian Order, most zealously; the whole of Italy, in a public manner; all good men, with interest and earnestness. I had been engaged in events of such a nature that my actions were not those of an individual merely, but of the representative and leader of the Will of the entire People; and not only redounded to my glory as Consul, but were the means of preserving all the citizens of Rome—nay, almost all the nations of the Earth—from one common ruin.*"

CANDIDATES WHO PASSED THE EXAMINATIONS.

PASS EXAMINATION.

First Division.

	Colleges, Schools, &c.
AYRTON, JAMES	University.
BARNES, ROBERT	M. Le François, Univ. of Ghent.
BLOUNT, HENRY JOSEPH	St. Gregory's, Downside.
BRIDGES, WILLIAM RICHARD	Private tuition.
COOKE, CHARLES	Stonyhurst.
DAVIES, THOMAS	Highbury.
EDGER, SAMUEL	Stepney.
ELLISON, THOMAS MICHAEL.....	St. Paul's, Prior Park.
ENGLISH, LOUIS BERNARD	St. Peter's, Prior Park.
FARRINGTON, BENJAMIN	Stepney.
FEARON, PAUL JOHN	Manchester.
FIELD, LEONARD.....	University.
FURNIVALL, FREDERICK JAMES....	University.
GILLOW, WILLIAM AUSTIN	St. Cuthbert's, Ushaw.
GRIMSTON, JOHN.....	Stonyhurst.
HERCY, THOMAS JOSEPH	St. Paul's, Prior Park.
HONIBORNE, THOMAS SAUNDERS ..	Homerton.
JEMMETT, BENJAMIN LANCASTER..	King's.
JESSEL, EDWARD.....	University.
KELLY, JOSEPH AUGUSTINE	St. Mary's, Oscott.
KÖENIG, LOUIS ANTOINE ALFRED..	St. Gregory's, Downside.
LOCKWOOD, JOHN	Rotherham.
LUARD, HENRY RICHARDS.....	King's.
MANSFIELD, ALEXANDER JOHN....	St. Mary's, Oscott.
MARTIN, JAMES	Stepney.
MATTHEW, CHARLES REEVE.....	University.
MULHALL, EDWARD	Carlow.
NOOTT, WILLIAM FRANCIS	Private tuition.
REYNOLDS, HENRY ROBERT	University.
SHEAHAN, DENIS	St. Edmund's, Ware.
SMITH, PHILIP ANSTIE	Bristol.
SMITH, SAMUEL JOSEPH.....	University.
SOMERTON, CHARLES.....	Bristol and University.
STANFORD, CHARLES.....	Highbury.
STONOR, HON. THOMAS EDWARD ..	St. Mary's, Oscott.

Colleges, Schools, &c.

SUTTON, STEPHEN BRAIN	University.
SWEENEY, JAMES.....	St. Gregory's, Downside.
TIDMAN, ARTHUR	University.
TODHUNTER, WILLIAM BOWER....	Private tuition.
WALLIS, JOSEPH.....	Baptist, Bristol.
WHEELER, THOMAS	Stepney.
WILLIAMS, EDWARD ALOYSIUS....	St. Mary's, Oscott.

Second Division.

ANDERSON, JOHN	University.
BARKER, THOMAS WITHAM	Spring Hill.
BROWN, JOHN	Baptist, Bristol.
DOLAN, LAWRENCE JOHN BAPTIST .	St. Edmund's, Ware.
ECCLES, JAMES	Stonyhurst.
GARVEY, MICHAEL ANGELO	Highbury.
GIFFORD, JOSEPH	Baptist, Bristol.
GREGSON, JOHN COMPTON.....	University.
HARRIS, FREDERICK HILLS	King's.
JAMES, CHARLES EDWIN	Homerton.
KELLY, JOHN CHRISTOPHER.....	St. Peter's, Prior Park.
KING, GEORGE HENRY	Private tuition.
O'CONNELL, DANIEL	St. Gregory's, Downside.
O'SULLIVAN, MICHAEL THOMAS ..	St. Mary's, Oscott.
RUSSELL, CHARLES JOSEPH STEWART	University.
SAINSBURY, THOMAS BYERLEY....	Highbury.
SHERLOCK, PETER	Stonyhurst.
STEVENS, JAMES	University.
TALBOT, GEORGE TERTIUS.....	Bristol.
TILLY, ALFRED	Stepney.
TRIGG, HENRY.....	Cheshunt.
WALLIS, JOHN EDWARD.....	University.
YOUNG, CUTHBERT GEORGE	Spring Hill.
YOUNG, HENRY JOHN GIRDLESTON .	University.

EXAMINATIONS FOR HONOURS.

The names are arranged in the order of proficiency.

MATHEMATICS AND NATURAL PHILOSOPHY.

Colleges, &c.

LUARD, HENRY RICHARDS...	(<i>Exhibition</i>)... King's.
JESSEL, EDWARD	University.
{ REYNOLDS, HENRY ROBERT	University.
{ TODHUNTER, WILLIAM BOWER	Private Tuition.

CHEMISTRY.

JEMMETT, BENJ. LANCASTER (<i>Prize of Books</i>)	King's.
WALLIS, JOSEPH	Baptist, Bristol.
SMITH, PHILIP ANSTIE	Bristol.
FURNIVALL, FREDERICK JAMES.....	University.

CLASSICS.

SOMERTON, CHARLES	Bristol and University.
TIDMAN, ARTHUR	University.

PRINTED BY R. AND J. E. TAYLOR,
PRINTERS TO THE UNIVERSITY OF LONDON,
RED LION COURT, FLEET STREET.