

Civil Service

EAST-INDIA COMPANY'S

Civil Service

EXAMINATION PAPERS.

JULY, 1856.

PRINTED BY WILLIAM M. WATTS,
CROWN COURT, TEMPLE BAR.

AND SOLD BY
EDWARD STANFORD, 6, CHARING CROSS.

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INDIA CIVIL SERVICE EXAMINATIONS,
JULY 1856.

GREEK.

I.

MISCELLANEOUS QUESTIONS.

MR. BUTLER and MR. HOLDEN.

1. To what family of languages does the Greek belong? To what causes do you ascribe its distinction into dialects? and what are the respective characteristics of each?

2. Shew the radical connexion subsisting between the Greek and Latin languages by instances of words referring (1) to parts of the body, (2) to sights and sounds of nature.

3. Name the chief Greek historians of Hellenic affairs from the Persian war to the Achæan league, specifying the age, country, and limits of the history of each.

4. Determine, from internal evidence, the order in which the comedies of Aristophanes were exhibited. Quote any of his criticisms on the opinions and poetry of Euripides.

5. The nature and object of the reforms introduced by Cleisthenes into the constitution of Athens.

6. A sketch of the political and social state of Athens in the age of Pericles and Demosthenes.

7. Trace the history of the Sicilian Greeks from the defeat of the Athenians before Syracuse to the capture of that town by Marcellus.

8. A brief survey of the principal Greek Colonies, with the dates and circumstances of the foundation of each.

9. Notices of the most conspicuous military and political characters of Greece from B.C. 404 to B.C. 360.

10. Give an account of the Indian conquests of Alexander, with their political and social results.

11. Compare the course of procedure in a public suit in the time of Demosthenes at Athens with that at Rome in the age of Cicero.

12. Describe the position of the Dionysiac theatre at Athens, and quote any passages from the Greek dramatists, which you may imagine would borrow effect from the surrounding scenery.

INDIA CIVIL SERVICE EXAMINATIONS,
JULY 1856.

GREEK.

II.

MR. BUTLER and MR. HOLDEN.

Translate into Greek prose:

HE was one of those extraordinary men who give a character to the period and country in which they live. He was trained in the best of schools, a state of danger, of suffering, and activity. He could not be said to have any master in the art of war; he was a heaven-born general; and it was by the boldness and novelty of his measures, the impetuosity of his onset, and the imperturbable obstinacy of his defence, that he confounded his enemies, and changed the hesitating troops under his command into a band of heroes. He left nothing to chance: he foresaw and provided for every thing. Victory seemed to attend him wherever he turned, and no enterprise was too arduous where he was the leader.

Translate into Greek Iambics:

SPIRIT. What voice is that? my young Lord? speak again.
2d BROTHER. O Brother, 'tis my father's shepherd, sure.
1st BROTHER. Thyrsis? whose artful strains have oft delay'd
The huddling brook to hear his madrigal,
And sweeten'd every musk-rose of the dale?
How cam'st thou here, good swain? hath any ram
Slipt from the fold, or young kid lost his dam,
Or struggling wether the pent flock forsook?
How could'st thou find this dark sequester'd nook?
SPIRIT. O my lov'd master's heir, and his next joy,
I came not here on such a trivial toy
As a stray'd ewe, or to pursue the stealth
Of pilfering wolf; not all the fleecy wealth
That doth enrich these downs, is worth a thought
To this my errand, and the care it brought.

GREEK.
III.

MR. BUTLER and MR. HOLDEN.

Translate into good and close English, adding a short note wherever a word, a construction, or an allusion require it:

Καὶ αἱ πόλεις πυνθανόμεναι αἱ τῶν Ἀθηναίων ὑπήκοοι τῆς τε Ἀμφιπόλεως τὴν ἄλωσιν καὶ ἃ παρέχεται, τὴν τε ἐκείνου πρᾶξιν, μάλιστα δὲ ἐπήρθησαν ἐς τὸ νεωτερίζειν, καὶ ἐπεκηρυκούντο πρὸς αὐτὸν κρύφα, ἐπιπαριέναι τε κελεύοντες καὶ βουλόμενοι αὐτοὶ ἕκαστοι πρῶτοι ἀποστήναι. καὶ γὰρ καὶ ἄδεια ἐφαίνετο αὐτοῖς, ἐψευσμένοις μὲν τῆς Ἀθηναίων δυνάμεως ἐπὶ τοσοῦτον ὅση ὕστερον διεφάνη, τὸ δὲ πλέον βουλῇσι κρίνοντες ἀσφαλεῖ ἢ προνοίᾳ ἀσφαλεῖ, εἰωθότες οἱ ἄνθρωποι οὐ μὲν ἐπιθυμοῦσιν ἐλπίδι ἀπερισκέπτῳ διδόναι, ὃ δὲ μὴ προσίενται λογισμῷ αὐτοκράτορι διωθεῖσθαι. ἅμα δὲ τῶν Ἀθηναίων ἐν τοῖς Βοιωτοῖς νεωστὶ πεπληγμένων καὶ τοῦ Βρασίδου ἐφορκὰ καὶ οὐ τὰ ὄντα λέγοντος, ὥς αὐτῷ ἐπὶ Νίσαιαν τῇ ἐαυτοῦ μόνῃ στρατιᾷ οὐκ ἠθέλησαν οἱ Ἀθηναῖοι ξυμβαλεῖν, ἐθάρσουν καὶ ἐπίστευον μηδένα ἂν ἐπὶ σφᾶς βοηθῆσαι. τὸ δὲ μέγιστον, διὰ τὸ ἡδονὴν ἔχον ἐν τῷ αὐτίκα καὶ ὅτι τὸ πρῶτον Λακεδαιμονίων ὀργῶντων ἐμελλον πειράσσεσθαι, κινδυνεύειν παντὶ τρόπῳ ἐτοιμοὶ ᾔσαν.

Προσιτέον οὖν ἐγγυτέρω, ὥς ὁ ὑπὲρ Πρωταγόρου λόγος ἐπέταττε, καὶ σκεπτέον τὴν φερομένην ταύτην οὐσίαν διακρούοντα, εἴτε ὑγιὲς εἴτε σαθρὸν φθέγγεται. μάχη δ' οὖν περὶ αὐτῆς οὐ φαύλη οὐδ' ὀλίγοις γέγονε. ΘΕΟ. Πολλοὺ καὶ δεῖ φαύλη εἶναι, ἀλλὰ περὶ μὲν τὴν Ἰωνίαν καὶ ἐπιδίδωσι πάμπολυ. οἱ γὰρ τοῦ Ἡρακλείτου ἑταῖροι χορηγοῦσι τούτου τοῦ λόγον μάλα ἐβρώμενος. ΣΩ. Τῷ τοι, ὦ φίλε Θεόδωρε, μᾶλλον σκεπτέον καὶ ἐξ ἀρχῆς, ὥσπερ αὐτοὶ ὑποτείνονται. ΘΕΟ. Παντάπασιν μὲν οὖν. καὶ γάρ, ὦ Σώκρατες, περὶ τούτων τῶν Ἡρακλείτειων ἢ ὥσπερ σὺ λέγεις Ὀμηρείων καὶ ἔτι παλαιότερων, αὐτοῖς μὲν τοῖς περὶ τὴν Ἐφεσον, ὅσοι προσποιοῦνται ἔμπειροι εἶναι, οὐδὲν μᾶλλον οἶόν τε διαλεχθῆναι ἢ τοῖς οἰστρώσιν. ἀτεχνῶς γὰρ κατὰ τὰ ξυγγράμματα φέρονται· τὸ δ' ἐπιμεῖναι ἐπὶ λόγῳ καὶ ἐρωτήματι, καὶ ἡσυχίῳ ἐν μέρει ἀποκρίνασθαι καὶ ἐρέσθαι, ἥττον αὐτοῖς ἐν ἢ τὸ μηδὲν. μᾶλλον δὲ ὑπερβάλλει τὸ οὐδ' οὐδὲν πρὸς τὸ μηδὲ σμικρὸν ἐνεῖναι τοῖς ἀνδράσιν ἡσυχίας· ἀλλ' ἂν τινὰ τι ἔρη, ὥσπερ ἐκ φαρέτρας ῥηματίσκια αἰνιγματώδη ἀνασπῶντες ἀποτοξεύουσιν· κἂν τούτου ζητῆς λόγον λαβεῖν, τί εἴρηκεν, ἐτέρῳ πεπληγῇ καὶ καινῶς μετωνομασμένῳ, περαινὲς δὲ οὐδέποτε οὐδὲν πρὸς οὐδένα αὐτῶν.

ΜΗΔΑΜΩΣ, ὧς ἄνδρες Ἀθηναῖοι, μὴ προδῶτε μήτ' ἐμὲ μήθ' ἑμᾶς αὐτοὺς μήτε τοὺς νόμους. καὶ γὰρ αὐτὸ τοῦτο εἰ θέλοιτε σκοπεῖν καὶ ζητεῖν, τῷ ποτ' εἰσὶν ἑμῶν οἱ αἰεὶ δικάζοντες ἰσχυροὶ καὶ κύριοι τῶν ἐν τῇ πόλει πάντων, ἂν τε διακοσίους ἂν τε χιλίους ἂν θ' ὁπόσους ἂν ἡ πόλις καθίσῃ, οὔτε τῷ μεθ' ὅπλων εἶναι συντεταγμένοι μόνοι τῶν ἄλλων πολιτῶν εὐροῖτ' ἂν οὔτε τῷ τὰ σώματ' ἄριστα ἔχειν καὶ μάλιστα ἰσχύειν οὔτε τῷ τὴν ἡλικίαν εἶναι νεώτατοι οὔτε τῶν τοιούτων οὐδενί, ἀλλὰ τῷ τοῖς νόμους ἰσχύειν. ἢ δὲ τῶν νόμων ἰσχὺς τίς ἐστίν; ἄρ' ἐάν τις ἑμῶν ἀδικούμενος ἀνακράγῃ προσδραμῶνται βοηθοῦντες; οὔ· γράμματα γὰρ γεγραμμένα ἐστί, καὶ οὐχὶ δύναιντ' ἂν τοῦτο ποιῆσαι. τίς οὖν ἡ δύναμις αὐτῶν ἐστίν; ἡμεῖς ἐὰν βεβαιώτε αὐτοὺς καὶ παρέχῃτε κυρίους αἰεὶ τῷ δεομένῳ. οὐκοῦν οἱ νόμοι τε ἑμῖν εἰσὶν ἰσχυροὶ καὶ ἡμεῖς τοῖς νόμοις· δεῖ τοίνυν τούτοις βοηθεῖν ὁμοίως ὥσπερ ἂν αὐτῷ τις ἀδικουμένῳ, καὶ τὰ τῶν νόμων ἀδικήματα κοινὰ νομίζειν ἐφ' ὅτου περ ἂν λαμβάνηται, καὶ μήτε λειτουργίας μήτ' ἔλεον μήτ' ἄνδρα μηδένα μήτε τέχνην μηδεμίαν εὐρῆσθαι μήτ' ἄλλο μηδὲν, δι' ὅτου παραβάς τις τοὺς νόμους οὐ δώσει δίκην.

Ἡέλιος μὲν ἔπειτα νέον προσέβαλλεν ἀρούρας ἐξ ἀκαλαρρείταιο βαθυρρόου Ὠκεανοῖο, οἱ δ' ἐς βῆσσαν ἵκανον ἐπακτῆρες· πρὸ δ' ἄρ' αὐτῶν ἔχνη ἔρευνῶντες κίνες ἦσαν, αὐτὰρ ὀπισθεν υἱέες Ἀντολύκου· μετὰ τοῖσι δὲ διὸς Ὀδυσσεὺς ἦιεν ἄγχι κυνῶν, κραδάων δολιχόσκιον ἔγχος· ἐνθα δ' ἄρ' ἐν λόχμῃ πυκνῇ κατέκειτο μέγας σὺς· τὴν μὲν ἄρ' οὐτ' ἀνέμων διάει μένος ὑγρὸν ἀέντων, οὔτε μιν Ἡέλιος φαέθων ἀκτίσιν ἔβαλλεν, οὐτ' ὄμβρος περάσσκε διαμπερές· ὥς ἄρα πυκνὴ ἦεν, αὐτὰρ φύλλων ἐνέην χύσις ἤλιθα πολλή· τὸν δ' ἀνδρῶν τε κυνῶν τε περὶ κτύπος ἦλθε ποδοῖν, ὥς ἐπάγοντες ἐπῆσαν· ὁ δ' ἀντίος ἐκ ξυλόχοιο, φρίξας εὖ λοφιῇν, πῦρ δ' ὀφθαλμοῖσι δεδορκῶς, στήρ' αὐτῶν σχεδύθεν· ὁ δ' ἄρα πρῶτιστος Ὀδυσσεὺς ἔσσυτ' ἀνασχόμενος δολιχὸν δόρυ χειρὶ παχείῃ, οὐτάμεναι μεμαῶς· ὁ δὲ μιν φθάμενος ἔλασεν σὺς γονὸς ὕπερ, πολλὸν δὲ διήφυσε σαρκὸς ὁδόντι λικριφῖς αἶξας, οὐδ' ὁστέον ἔκετο φωτός· τὸν δ' Ὀδυσσεὺς οὐτῆσε τυχῶν κατὰ δεξιὸν ὦμον, ἀντικρὺ δὲ διήλθε φαεινοῦ δουρὸς ἀκωκῇ· καὶ δ' ἔπειτα ἐν κοίῃσι μακῶν, ἀπὸ δ' ἔπτατο θυμός.

φεύ· τοῦ θανόντος ὡς ταχεῖά τις βροτοῖς
 χάρις διαρρεῖ καὶ προδοῦσ' ἀλίσκεται,
 εἰ σοῦ γ' ὄδ' ἀνὴρ οὐδ' ἐπὶ σμικρῶν λόγων,
 Αἴας, ἔτ' ἴσχει μνήστιν, οὐ σὺ πολλάκις
 τὴν σὴν προτείνων προῦκαμες ψυχὴν δόρει·
 ἀλλ' οἴχεται δὴ πάντα ταῦτ' ἐρριμμένα.
 ὦ πολλὰ λέξας ἄρτι κἀνόνητ' ἔπη,
 οὐ μνημονεύεις οὐκέτ' οὐδὲν, ἦνίκα
 ἐρκέων ποθ' ἱμᾶς οὗτος ἐγκεκλημένους,
 ἦδη τὸ μῆδεν ὄντας, ἐν τροπῇ δορὸς
 ἐρρύσατ' ἐλθὼν μόνος, ἀμφὶ μὲν νεῶν
 ἄκροισιν ἦδη ναυτικοῖς ἐδωλίοις
 πυρὸς φλέγοντος, ἐς δὲ ναυτικὰ σκάφη
 πηδῶντος ἄρδην Ἑκτορος τάφρων ὑπερ;
 τίς ταῦτ' ἀπεῖρξεν; οὐχ ὅδ' ἦν ὁ δρῶν τάδε,
 ὃν οὐδαμοῦ φῆς οὐδὲ συμβῆναι ποδί;
 ἄρ' ἱμῖν οὗτος ταῦτ' ἔδρασεν ἐνδίκῃ;
 χῶτ' αὐθις αὐτὸς Ἑκτορος μόνος μόνου,
 λαχὼν τε κἀκέλευστος, ἦλθ' ἐναντίος,
 οὐ δραπέτην τὸν κλῆρον ἐς μέσον καθεῖς,
 ὑγρᾶς ἀρούρας βῶλον, ἀλλ' ὃς εὐλόφου
 κυνῆς ἐμελλε πρῶτος ἄλμα κουφιεῖν;

Κατα δ' ὡς ἐκ τῶν ἀγρῶν ξυηλθεν οἰργάτης λεῶς,
 τὸν τρόπον πωλούμενος τὸν αὐτὸν οὐκ ἐμάνθανεν,
 ἀλλ' αὐτ' ὦν ἀνευ γιγάρτων καὶ φίλων τὰς ἰσχάδας
 ἐβλεπεν πρὸς τοὺς λέγοντας· οἱ δὲ γινώσκοντες εὖ
 τοὺς πένητας ἀσθενούντας κἀποροῦντας ἀλφίτων,
 τήνδε μὲν δικροῖς ἐώθουν τὴν θεὸν κεκράγμασιν,
 πολλάκις φανείσαν αὐτὴν τῇσδε τῆς χώρας πόθῳ,
 τῶν δὲ συμμάχων ἔσειον τοὺς παχεῖς καὶ πλουσίους,
 αἰτίας ἂν προστιθέντες ὡς φρουροὶ τὰ Βρασίδου.
 εἴτ' ἂν ἡμεῖς τοῦτοι, ὥσπερ κυνίδι, ἐσπαράττετε·
 ἢ πόλις γὰρ ὠχρίῳσα κἀν φόβῳ καθημένη,
 αὐτὰ διαβάλοι τις αὐτῇ, ταῦτ' ἂν ἦδιστ' ἦσθιεν.
 οἱ δὲ τὰς πληγὰς ὀρώντες, ἅς ἐτύπονθ', οἱ ξένοι
 χρυσίῳ τῶν ταῦτα ποιοῦντων ἐβρίνουν τὸ στόμα,
 ὥστ' ἐκείνους μὲν ποιῆσαι πλουσίους, ἢ δ' Ἑλλὰς ἂν
 ἐξερημωθείσ' ἂν ἱμᾶς ἔλαθε. ταῦτα δ' ἦν ὁ δρῶν
 βυρσοπώλης.

INDIAN CIVIL SERVICE EXAMINATIONS,
 JULY 1856.

LATIN.

I.

MISCELLANEOUS QUESTIONS.

MR. BUTLER and MR. HOLDEN.

1. WHAT results has Comparative Philology established with regard to the origin of the Latin language?

2. Draw a map of Italy, marking the bounds of the different dialects spoken in early times, and specifying the most important races inhabiting the peninsula.

3. What is the historical value of the Roman legends?

4. What proofs have the Romans of the Republic left of their skill as civil and military engineers?

5. Trace the progress of Constitutional Law at Rome from the foundation of the Consulate to the full development of the Republic

6. The colonial system and provincial administration of Rome.

7. Give a brief account of Pompey's Asiatic campaigns.

8. Trace the progress of Roman conquests in Britain to the death of Trajan.

9. Notices of eminent members of the following houses: Valerian: Decian: Cornelian: Publilian: Fabian: Julian: Claudian.

10. What were the chief causes of the decay of the Roman Empire?

11. Give a sketch of the dramatic literature of Rome.

12. State the argument of any of Cicero's great speeches, adding a short criticism on the soundness of the reasoning and the style.

LATIN.

II.

MR. BUTLER and MR. HOLDEN.

Translate into Latin Prose:

If there be any suffering which more than another claims compassion but receives it least, it is that mental misery occasioned by the consciousness of possessing powers, which, not meeting with proportionate external excitements to action, oppress, instead of invigorating, the mind, and render it the prey of wretchedness, apparently of its own creation. Beings thus organized, uninterested in the passing trifles of the hour, move gloomily through life; alternately the victims of apathy or irritation; regarded as visionaries or misanthropes, beheld with wonder and dislike,—that species of dislike which the pride of human nature always induces it to feel towards whatever it cannot comprehend. But present before them objects of pursuit adequate to their desires,—awaken their bosom hopes,—rouse the master-spring of their passions,—touched with the spear of Ithuriel, their giant forms spring from the earth, new life is poured through their frames, new energies displayed in their actions; while the world beholds and confesses, with surprise, a metamorphosis which defies its comprehension.

Translate into Elegiacs:

TIME wears all his locks before;
Take thou hold upon his forehead:
When he flies he turns no more,
And behind his scalp is naked.
Works deferr'd have many stays;
Long demurs breed new delays.

Seek thy salve while sore is green;
Fester'd wounds ask deeper lancing
After-cures are seldom seen,
Often sought, scarce ever chancing.
Time and place give best advice:
Out of season, out of price.

Translate into Lyrics:

See how the orient dew,
Shed from the bosom of the morn
Into the blowing roses,
Yet careless of the mansion new,
For the clear region where 'twas born,
Round in itself encloses:
And in its little globe's extent,
Frames, as it can, its native element.
How it the purple flow'r does slight,
Scarce touching where it lies;
But gazing back upon the skies,
Shines with a mournful light:
Like its own tear,
Because so long divided from the sphere.
Restless it rolls and unsecure,
Trembling, lest it grow impure;
Till the warm sun pities its pain,
And to the skies exhales it back again.

LATIN.
III.

MR. BUTLER and MR. HOLDEN.

TRANSLATE into good and close English, adding a brief note wherever a peculiar word or construction, or an allusion require it:

"Sæpe me querentem de feminarum sæpe de virorum, nec de privatorum modo sed etiam magistratuum sumptibus audistis; diversisque duobus vitiis, avaritia et luxuria, civitatem laborare, quæ pestes omnia magna imperia everterunt. hæc ego, quo melior lætiorque in dies fortuna rei publicæ est, imperiumque crescit, — et jam in Græciam Asiamque transcendimus omnibus libidinum illecebris repletas, et regias etiam attractamus gazas, — eo plus horreo, ne illæ magis res nos ceperint quam nos illas. infesta, mihi credite, signa ab Syracusis illata sunt huic urbi. jam nimis multos audio Corinthi et Athenarum ornamenta laudantis mirantisque, et antefixa fictilia deorum Romanorum ridentis. ego hos malo propitios deos, et ita spero futuros, si in suis manere sedibus patiemur. patrum nostrorum memoria per legatum Cineam Pyrrhus non virorum modo sed etiam mulierum animos donis temptavit. nondum lex Oppia ad coercendam luxuriam muliebrem lata erat: tamen nulla accepit. quam causam fuisse censetis? eadem fuit quæ majoribus nostris nihil de hac re lege sancienti. nulla erat luxuria, quæ coerceretur.

Pulso Tarquinio, adversum patrum factiones multa populus paravit tuendæ libertatis et firmandæ concordie; creatique decemviri, et accitis quæ usquam egregia, compositæ duodecim tabulæ, finis æqui juris. Nam secutæ leges etsi aliquando in maleficos ex delicto, sæpius tamen dissensione ordinum et apiscendi illicitos honores aut pellendi claros viros aliaque ob prava per vim latæ sunt. Hinc Gracchi et Saturnini turbatores plebis, nec minor largitor nomine senatus Drusus; corrupti spe aut inlusi per intercessionem socii. Ac ne bello quidem Italico, mox civili omisum quin multa et diversa sciscerentur, donec Lucius Sulla dictator abolitis vel conversis prioribus, cum plura addisset, otium ejus rei haud in longum paravit, statim turbidis Lepidi rogationibus, neque multo post tribunis reddita licentia, quoquo vellent, populum agitandi. Jamque non modo in commune sed in singulos homines latæ quæstiones; et corruptissima re publica plurimæ leges.

Nec tuæ naturæ est tralatitia hæc et quasi publica officia a familiaribus amicis contra ipsorum commodum exigere: et ego te constantius amo quam ut verear ne aliter ac velim accipias, nisi te Calendis statim consulem videro: præsertim cum me necessitas locandorum prædiorum plures annos ordinatura detineat: in qua mihi nova consilia sumenda sunt. Nam priore lustro, quanquam post magnas remissiones, reliqua creverunt. Inde plerique nulla jam cura minuendi æris alieni, quod desperant posse persolvere, rapiunt etiam consumuntque quod natum est, ut qui jam putent se non sibi parcere. Occurrendum ergo augescentibus vitiis et medendum est: medendi una ratio, si non nummo sed partibus locum ac deinde ex meis aliquos operis exactores custodes fructibus ponam: et alioqui nullum justius genus redditus quam quod terra cælum annus refert. Ad hoc magnam fidem, acres oculos, numerosas manus poscit: experiendum tamen et quasi in veteri morbo quælibet mutationis auxilia temptanda sunt. Vides quam non delicata me causa obire primum consulatus tui diem non sinat: quem tamen hic quoque ut præsens votis gaudio gratulatione celebrabo. Vale.

HA. Hi loci sunt atque hæc regiones quæ mihi ab ero sunt demonstratæ,
Ut ego oculis rationem capio: nam mihi ita dixit
erus meus miles,
Septumās esse ædis à porta, ubi ille habitat leno
quod jussit
Me sūmbulum ferre et hoc argentum. nimis
[quā] velim certum qui id faciat
Mihi Ballio leno ubi hic habitat.
PS. St, tace tace: meus hic est homo, ni omnes
deserunt di [me] atque homines.
Novo consilio nunc mihi opus est: nova res subito mihi hæc objectast.
Hoc prævortat: illa omnia missa habeo quæ
ante agere occēpi.
Jam pōl ego advenientem hūc stratioticum
nūntium probe percūtiam.
HA. Ostium pultābo atque intus évocabo aliquem
foras.
PS. Quisquis es, compēdium ego te facere pultandī volo:
Nam ego precator et patronus foribus processī
foras.
HA. Tūc es Ballio? PS. Immo vero ego
ejus sum Subballio.
HA. Quid istuc verbist? PS. Cōndus promus
sūm procuratōr peni.
HA. Quāsi te dicas ātriensem. PS. Immo ātrien-
ensi ego inpero.

Cetera per terras omnes animalia somno
 Laxabant curas et corda oblita laborum;
 Ductores Teucrûm primi, delecta juvenus,
 Consilium summis regni de rebus habebant,
 Quid facerent, quisve Æneæ jam nuntius esset:
 Stant longis adnixa hastis et scuta tenentes
 Castrorum et campi medio. Tum Nisus et una
 Euryalus confestim alacres admittier orant:
 Rem magnam, pretiumque moræ fore. Primus
 Iulus

Accepit trepidos, ac Nisum dicere jussit.
 Tum sic Hyrtacides: "Audite o mentibus æquis,
 " Æneadæ, neve hæc nostris spectentur ab annis,
 " Quæ ferimus. Rutuli somno vinoque soluti
 " Conticuere; locum insidiis conspeximus ipsi,
 " Qui patet in bivio portæ, quæ proxima ponto;
 " Interrupti ignes, aterque ad sidera fumus
 " Erigitur: si fortuna permittitis uti,
 " Quæsitum Ænean et mœnia Pallantea;
 " Mox hic cum spoliis, ingenti cæde peracta,
 " Affore cernetis. Nec nos via fallit euntes:
 " Vidimus obscuris primam sub vallibus urbem
 " Venatu assiduo et totum cognovimus amnem."

Mane domi nisi te volui meruique videre,
 Sint mihi, Paulle, tuæ longius Esquilæ.
 Sed Tiburtinæ sum proximus accola pilæ,
 Qua videt antiquum rustica Flora Jovem.
 Alta Suburrani vincenda est semita olivi,
 Et nunquam sicco sordida saxa gradu.
 Vixque datur longas mulorum rumpere mandras,
 Quæque trahi multo marmora fune vides.
 Illud adhuc gravius quod te post mille labores,
 Paulle, negat lasso janitor esse domi.
 Exitus hic operis vani togulæque madentis;
 Vix tanti Paulum mane videre fuit.
 Semper inhumanos habet officiosus amicos
 Rex, nisi dormieris, non potes esse meus.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE EAST-INDIA COMPANY'S SERVICE,

JULY 1856.

ENGLISH LANGUAGE AND LITERATURE.

1. THE various races which have inhabited the British Isles have left their mark behind them in the language, and especially in surnames and the names of places. Illustrate this by examples.

2. Shew in a tabular form the precise place of the English language in the Indo-European family of tongues. The English is a "composite language:" state its principal elements, and the proportion of each.

3. England has stood towards France in the position both of a conquered and a conquering country. What influence did the Norman Conquest of England and the Conquests of Edward the Third in France respectively exercise on the formation and development of the English Language?

4. Spell the following words, so as to shew more accurately the root of each:—*treacle, syren, pigmy, gossip, bran-new, nostril, wassail, whole, island*: and state what is etymologically remarkable in the following:—*did, seamstress, shepherdess, bridegroom, streamlet, utmost, vixen, children, whilom*.

5. Sir Philip Sydney says, "I never heard the old song of Percy and Douglas, that I found not my heart moved more than with a trumpet: and yet it is sung but by some blind crowder, with no rougher voice than rude style; which being so evil apparelled in the dust and cobweb of that uncivil age, what would it work trimmed in the gorgeous eloquence of Pindar."

What are the characteristics of popular as distinguished from more refined and artificial poetry? Is the conclusion of Sir Philip Sydney just? Why do the rugged verses of Chevy Chase still "move our hearts," while Cowley's Pindarics are forgotten?

6. Take any poem of Milton's, Pope's, Gray's, Cowper's, Wordsworth's, Campbell's, or Tennyson's. Give an outline of the argument, and note any lines or phrases which have passed into the current literature of the language.

7. Explain the following passages:—

"And Frenche she spake ful fayre and fetisly
 After the scole of Stratford-atte-Bowe,
 For Frenche of Paris was to hire unknowe."

"I saw his sleeves purfiled at the hond
 With gris, and that the finest of the lond."

"When we have matched our rackets to these balls,
We will in France, by God's grace, play a set,
Shall strike his father's crown into the hazard :
Tell him he hath made a match with such a wrangler
That all the courts of France will be disturbed
With chaces."

"Say Warwick was our anchor ; what of that ?
And Montague our topmast ; what of him ?
Our slaughtered friends the tackles ; what of these ?
Why is not Oxford here another anchor ?
And Somerset another goodly mast ?
The friends of France our shrouds and tacklings ?
And though unskilful, why not Ned and I
For once allowed the skilful pilot's charge ?"

"Dap. And will I tell then ? By this hand of flesh,
Would it might never write good court-hand more,
If I discover ! What do you think of me ?
That I am a chiaus ?
Fac. What's that ? Dap. The Turk was here,
As one would say, do you think I am a Turk ?"

"Or call up him that left half told
The story of Cambuscan bold,
Of Camball and of Algarsife,
And who had Canace to wife
That owned the virtuous ring and glass,
And of the wondrous horse of brass,
On which the Tartar king did ride."

"He knew what's what, and that as high
As Metaphysic wit can fly :
In school-divinity as able
As he that might Irrefragable ;
A second Thomas, or at once
To name them all, another Dunce,
Profound in all the Nominal
And Real ways beyond them all :
For he a rope of sand could twist
As tough as learned Sorbonist."

"The city to reward his pious hate
Against his master, chose him magistrate ;
His hand a vare of justice did uphold,
His neck was loaded with a chain of gold."

"A man so various, that he seemed to be
Not one, but all mankind's epitome ;
Stiff in opinions, always in the wrong,
Was every thing by starts, and nothing long ;
But in the course of one revolving moon
Was chemist, fidler, statesman, and buffoon ———
In squandering wealth was his peculiar art :
Nothing went unrewarded but desert."

"Not Whigs nor Tories they, nor this nor that,
Not birds nor beasts ; but just a kind of bat :
A twilight animal, true to neither cause ;
With tory wings, but whiggish teeth and claws."

"Where London's column pointing to the skies,
Like a tall bully, lifts the head, and lies."

"They hoy't out Will, wi' sair advice ;
They hecht him some fine braw ane ;
It chanced the stack he faddom'd thrice
Was timmer-propt for thrawin' :
He taks a swirlie auld moss-oak,
For some black grouse carlin ;
An' loot a winze, an' drew a stroke
Till skin in blypes came haurlin'
Aff's nieves that night."

Name the authors of the following lines, and the poems in which they occur.
Give in each case as much of the context as you may remember.

"There is a tide in the affairs of men."

"To gild refined gold and paint the lily."

"Damn with faint praise, assent with civil leer."

"Odious in woollen ! 'twould a Saint provoke."

"For fools rush in where angels fear to tread."

"A saint in crape is twice a saint in lawn."

"Assume a virtue if you have it not."

"A little learning is a dangerous thing."

"And mistress of herself though china fall."

"The feast of reason and the flow of soul."

"In wit a man, simplicity a child."

8. Enumerate in order the principal English authors—poets, historians, theologians, philosophers, and writers of wit and humour. Mark with (I) those who have exercised great influence on our language, and indicate by a single term the qualities for which each is in other respects remarkable.

JOSEPH ANGUS.

GEORGE WEBBE DASENT.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE,
JULY 1856.

HISTORY.

I.

1. WHAT do we owe, in our Literature and Constitution to Alfred the Great?

2. "There is nothing so impracticable in History as the theory of Legitimacy. In England at least in earlier times, force, in later, public opinion or popular election, have never ceased to modify hereditary right: and posterity, for the most part, has accepted the judgment of contemporaries, and excused the shock given to existing institutions for the sake of some good that has arisen to the State. We take our kings as they come. We count them all as sovereigns. We do not except one because he overcame the actual and lawful ruler by a foreign invasion; another because he undermined the rightful heir by bribery; another because he murdered his infant nephew in prison; three or four others because they rose against their liege lords and slew them in the field or by the hands of assassins; one because he waded to the throne through the blood of all his kindred; another because out of a rough fanatical soldier he became a mere spontaneous deliverer and protector; another because called to defend our religion he claimed the kingdom for his reward."

Illustrate this passage by applying it to the case of each sovereign to whom allusion is made.

3. Niebuhr affirms that British liberty depends at least as much on local self-government (in matters of local concern) as on Parliament. State the provisions made at different times in England for such government, and what provisions are now in force.

4. *Subsidy, benevolence, monopoly, purveyance, præmunire, prerogative, privilege, ship-money*: each of these terms has had a special application and force in English History. Explain them, and specify those which have any force and application left.

5. State the circumstances under which the Great Charter, the Petition of Right, and the Bill of Rights, were adopted. Enumerate the principles of the English Constitution, as set forth in these documents, distinguishing those principles that are found in all, and those that are found only in one or two.

6. Give a sketch of the condition of the poor in England before the Statute of Elizabeth provided for their relief.

7. Swift, writing in the year 1710, says, "Among us there seems to have been a barrenness of invention in this point of party names, the words Whig and Tory, although they are not much above thirty years old, having been pressed to the service of many successions of parties with very different ideas fastened to them."

Explain the origin of the words *Whig* and *Tory*, and examine the truth of Swift's statement by considering the principles of Whig and Tory parties from the period fixed by him down to the year 1775.

8. State the origin, and mention the Charters of the East-India Company. What are the principal provisions of the Acts of 1784 and 1833?

GEORGE WEBBE DASENT.

JOSEPH ANGUS.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.
JULY 1856.

HISTORY.

II.

1. At what period in English History did Trial by Jury, as we now understand it, arise? State any popular errors connected with its origin which may occur to you; and shew, from some remarkable instances, the value of this form of trial as the safeguard of the liberties of the subject.

2. Why is the age of Elizabeth regarded as an era in English History?

3. When did the Colonies of England begin to be regarded as of political importance? State any principles (as to the formation and government of colonies) which have been illustrated in English History.

4. "A Church Papist is one that parts his religion betwixt his conscience and his purse, and comes to church not to serve God, but the King. The face of the Law makes him wear the mask of the Gospel, which he uses not as a means to save his soul, but charges. He loves Popery well, but is loth to lose by it; and though he be something scared with the Bulls of Rome, yet they are far off, and he is struck with more terror at the Apparitor. Once a month he presents himself at the Church to keep off the Churchwarden, and brings in his body to save his bail. He kneels with the congregation, but prays by himself, and asks God forgiveness for coming thither. If he be forced to stay out a sermon, he pulls his hat over his eyes and frowns out the hour, and when he comes home thinks to make amends for this fault by abusing the preacher. His main policy is to shift off the Communion, for which he is never unfurnished of a quarrel, and he will be sure to be out of charity at Easter; and indeed he lies not, for he hath a quarrel to the Sacrament. He would make a bad martyr and good traveller, for his conscience is so large he could never wander out of it, and in Constantinople would be circumcised with a reservation. His wife is more zealous, and therefore more costly, and he bates her in tyres what she stands him in religion. But we leave him hatching plots against the State, and expecting Spinola."

In what reign was this character written? Give a sketch of the Penal Laws to which it refers, and mention any facts in British History which shew the influence of such laws on the national character.

5. Give the more important provisions of the Act of Settlement of 1701, and mention any facts in the history of the previous twelve years that probably suggested some of its provisions.

6. State the causes which led to the revolt of the United States from the mother country, and enumerate the chief events of the war which ended with the acknowledgment of their independence.

JOSEPH ANGUS.

GEORGE WEBBE DASENT.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE,

JULY 1856.

COMPOSITION.

I.

1. Give rules for determining what words in modern English are of Saxon origin ; based (1) on the forms of the *words* themselves (nouns, verbs, adjectives) ; and (2) on the *things* to which they are applied.
2. Take any great river, and, descending its stream, describe the countries through which it flows, and the chief points of interest on its banks.
3. A friend has written to ask you how he may best learn to write pure and vigorous English prose. Answer his letter, and illustrate your advice by quotations from or imitations of the best authors.
4. Take any two English historians with whose writings you are best acquainted, and compare them.

JOSEPH ANGUS.

GEORGE WEBBE DASENT.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE,

JULY 1856.

COMPOSITION.

II.

1. DESCRIBE the education which best prepares men for active life.
2. State, and briefly illustrate, the difference of meaning between the following:— If he *is* ; If he *be*. Definition, Description, Explanation. Sincerity, Honesty, Uprightness. Reason, Cause, Origin, Source. Fancy, Imagination. Genius, Ingenuity, Talent, Abilities, Capacity.
3. Write a letter to a friend supposed to be ignorant of the recent war, and give a brief and vivid account of the defence and fall of Kars.
4. Choose one of Shakespeare's Historical Plays, and consider it in the light of a guide to the Historical Student.
5. Describe in precise language the grounds on which Falkland, Hampden, Somers, Mansfield, Burke, and Curran, are entitled to statues in the New Palace at Westminster ?

GEORGE WEBBE DASENT.

JOSEPH ANGUS.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

JULY 26, 1856.—3 P.M. to 6 P.M.

MATHEMATICS.

REV. DR. GRAVES and REV. M. COWIE.

[The Candidates are invited to state, and prove, any remarkable extensions of the propositions contained in this Paper. Not only will such proofs of more general theorems be accepted as solutions of the Questions proposed, but additional credit will be given for Answers of this kind.]

- A 1 Calculate the interest for three years and a-half at 3 per cent. on £2314 17s. 10 $\frac{3}{4}$ d. Convert the same principal sum into Pounds, Florins, Cents, and Mils; and compute the same interest in the decimal currency.
- A 2 Find the condition that $x^3 + ax^2 + bx + c(b-b')$ and $x^2 + ax + b'$ may have a common measure.
- A 3 Transform $\sqrt{17}$ into a continued fraction, and find the first four converging fractions.
Solve the equation $x^3 + 6x + 2 = 0$.
- A 4 If (p) be the greatest co-efficient of an equation, without regard to sign, and (q) the last term; show that all the real roots lie between $(p+1)$ and $-(p+1)$ and that no roots lie between $\frac{q}{p+q}$ and $-\frac{q}{p+q}$.
- B 1 Find the focus and directrix of a given parabola, and the centre and axes of a given ellipse or hyperbola, by geometrical constructions.
- B 2 If a straight line meets BC, CA, AB , the sides of a triangle ABC , in the points a, b, c , respectively, prove that
 $Ab.Bc.Ca. = Ac.Ba.Cb$.
- B 3 Two tangents drawn to an ellipse or hyperbola from a point without it make equal angles with the right lines drawn from the same point to the foci.
If the three sides of a triangle are tangents to a parabola, its circumscribing circle will pass through the focus.
- B 4 The anharmonic ratio of the points in which four fixed tangents to a conic section cut any fifth variable tangent is constant.
- B 5 Eliminate a, b, c , from the three equations
 $b \cos C + c \cos B = a$
 $c \cos A + a \cos C = b$
 $a \cos B + b \cos A = c$
which subsist between the sides a, b, c , and the angles A, B, C , of a plane triangle.
Show the geometrical meaning of the resulting equation.

- B 6 Prove the following formulæ in Plane Trigonometry

$$\sin \frac{1}{2} (A - B) = \cos \frac{1}{2} C \cdot \frac{a-b}{c}$$

$$\cos \frac{1}{2} (A - B) = \sin \frac{1}{2} C \cdot \frac{a+b}{c}$$

by means of geometrical constructions.

- B 7 From one angle of a spherical triangle draw to the opposite side an arc of a great circle which will divide the triangle into parts which have a given ratio.
- B 8 In treatises on mensuration the following rule is given for the computation of the length of a small arc of a circle :—
From eight times the chord of half the arc subtract the chord of the arc itself; one third of the remainder will nearly give the value of the arc.
Investigate the principle on which this rule is founded.
- B 9 Prove the following theorem :—
$$\log \left\{ (1+N)^{\frac{1+N}{2}} \cdot (1-N)^{\frac{1-N}{2}} \right\} = \frac{N^2}{1 \cdot 2} + \frac{N^4}{3 \cdot 4} + \frac{N^6}{5 \cdot 6} + \dots$$
- A 5 If $u = f(x, y) = 0$ where y is considered a function of x , the first derived equation is $\left(\frac{du}{dx}\right) + \left(\frac{du}{dy}\right) \frac{dy}{dx} = 0$. Form the second derived equation from this, and show that the hypothesis of partial differentiation is rigidly observed in the process.
- A 6 In the elimination of arbitrary functions by differentiation, to what order of differentiation must we proceed, to eliminate (m) arbitrary functions from a given equation containing three variables?
- A 7 Having given $x = \phi(r, \theta)$, $y = \psi(r, \theta)$ transform $\iint V dx dy$ where V is a function of x, y , to a double integral where r, θ are the independent variables.
- A 8 If (ϕ) be the angle between the normal to a curve and the axis of (x) , the radius of curvature $= -\frac{ds}{d\phi}$.
- A 9 Integrate $\frac{\sqrt{1-x^2}}{x^5} dx$; $\frac{(\sin x)^3}{(\cos x)^2} dx$; $e^x \cdot x (\cos 2x) dx$.
- A 10 What proposition did Lagrange make the basis of his system of Analytical Mechanics? Give a succinct account of his method of proving it. What objections have been made to this proof?
- A 11 A T square rests on a rough ledge with its T end, and the other extremity against a rough vertical wall; find the limiting angle of equilibrium.
- B 10 A beam has its two extremities resting within a smooth circular hoop whose plane is vertical; find the position of equilibrium by applying the principle of virtual velocities.
- B 11 Find the direction in which a given force P must act so that the weight which it can just move along a rough horizontal plane may be the greatest possible.
- B 12 Find the straight line of shortest descent from a given point without a given sphere to the surface of the sphere.
- A 12 If a pendulum be supposed to vibrate in a small cycloidal arc, show that a resistance of the air which depends on the velocity does not alter the time of vibration.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

JULY 28, 1856.—10 A.M. to 2 P.M.

MATHEMATICS.

REV. DR. GRAVES and REV. M. COWIE

- B 1 A very large number (m) of balls, being placed in a bag, a person, drawing at random, endeavours to take from it a particular ball; but as often as he draws a wrong one he returns it to the bag previous to the next trial. What is the chance that he will draw the desired ball in m trials?
- B 2 Express the area of a triangle in terms of the rectangular coordinates of its angular points.
- B 3 What is the equation of the conic section circumscribing the quadrilateral the equations of whose sides are $\alpha = 0$, $\beta = 0$, $\gamma = 0$, $\delta = 0$?
From this form of the equation of a conic deduce a proof of Pascal's theorem.
- B 4 If three conics have each double contact with a fourth, their six chords of intersection will pass, three by three, through the same points, thus forming the sides and diagonals of a quadrilateral.
From this proposition deduce Brianchon's theorem (the polar reciprocal of Pascal's).
- B 5 Prove that the line represented by the equation $\mu^2 L - 2\mu R + M = 0$ always touches the curve $LM = R^2$, whatever lines be represented by L , M , R .
- A 1 What is meant by singular solution of a Differential Equation? What criterion can be applied to ascertain whether a given solution is a singular solution or a particular integral? What is the geometrical meaning of the singular solution of a differential equation between two variables?
- A 2 Show that $\int_0^\infty \frac{x^{m-1} dx}{1+x^n} \quad (m < n) = \frac{\pi}{x \cdot \sin \frac{m}{n} \pi}$, and apply the result to show that the area of the curve $y^4 (a^4 - x^4) = b^8$, between the limits $x = 0$, $x = a$, is $\frac{\pi b^2}{2\sqrt{2}}$.
- A 3 Integrate the differential equation
$$z - x \frac{dz}{dx} - y \frac{dz}{dy} + xy \frac{d^2 z}{dx dy} = 0.$$
- B 6 Prove that the principal focus of a sphere of glass is distant from it by half the radius.
- B 7 Prove that a caustic curve is always rectifiable, if the refracting curve be algebraic.
- B 8 Describe the astronomical telescope, and determine its magnifying power and field of view.
- A 4 Define solar and mean solar time, sidereal time, mean equinoctial time. What is the "equation of time"?
Given the mean sun's increment of right ascension in 24 mean solar hours $= 59' 8'' \cdot 33$, and the mean sun's right ascension when on the meridian $= 2^h 3' 14''$; what is the sidereal time corresponding to the mean time $6^h 34' 20''$?

- A 5 Show how to find the true distance of the moon from the sun, or a fixed star, from the observed distance and the corresponding zenith distances, by Borda's method.
- A 6 What is meant by aberration of light? Find the aberration of a star in right ascension. Project your figure on the plane of the solstitial colure.
- A 7 Show that the apparent motions of all the planets must be direct in apogean syzygy, and retrograde in perigean syzygy; and find the magnitude of the arc of its orbit (supposed circular) described by the planet while its motion appears retrograde.
- A 8 State clearly D'Alembert's principle. Deduce from it the principle of the conservation of areas, stating what limitations must be introduced into the enunciation; and show that when the particles of a system are acted on by no forces but their mutual attractions,
$$\sum \{m(Xdx + Ydy + Zdz)\}$$
will be an exact differential.
- A 9 Form the equations of equilibrium of an elastic string placed on a smooth surface, and acted on by any forces.
Given the extreme tension that an elastic band can resist without breaking, what will be its unstretched length when a sphere of given radius can just be forced through it?
- B 9 A body revolves in an ellipse; determine, by Newton's method, the law of the centripetal force tending towards the focus of the ellipse.—(NEWTON, Book I. Prop. xi.)
- B 10 DEFINITION.—If from any point lines be drawn representing in direction and magnitude the velocity of a particle describing an orbit under the action of a force tending to a fixed centre, the locus of the extremities of these lines is the *Hodograph*.
Determine the nature of the hodograph in the following cases:—
1. When a conic section is described under the action of a force tending to the focus.
2. When a parabola is described under the action of a constant force parallel to the axis.
- A 10 Give the conditions of equilibrium of a body floating in a fluid.
Define the *metacentre*, and show how to determine whether equilibrium is stable, unstable, or neutral.
A hemispherical bowl floats in water, with a given weight of water inside it; when slightly disturbed, determine the motion.
- A 11 Investigate a formula for finding the difference of altitude of two places from the observed heights of the barometer at those places.
Let your formula include all the necessary corrections for temperature of mercury, variation of gravity, and the elastic force of the vapour in the atmosphere.
- B 11 A heavy sphere descends vertically in a fluid; required its velocity.
- B 12 The centre of gravity of the entire *surface* of a tetrahedron coincides with the centre of the sphere inscribed in the tetrahedron formed by joining the centres of gravity of the *faces* of the first tetrahedron.
- A 12 An indefinite hollow cylinder composed of homogeneous shells exercises no attraction upon a point within the interior of its internal surface.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

JULY 28, 1856.—3 P.M. to 6 P.M.

MATHEMATICS.

REV. DR. GRAVES and REV. M. COWIE.

- B 1 Show how to determine the points of inflexion of an algebraic curve.
- B 2 Investigate formulæ for the cosines of the angles which the osculating plane of a curve of double curvature makes with the three rectangular co-ordinate planes; and deduce from them the value of the radius of torsion.
- B 3 If a very narrow straight strip of paper be applied to any surface, it will trace a geodetic line upon it.
- B 4 Prove that if the form of a curved surface, supposed to be perfectly flexible and inextensible, is altered in any way, the measure of curvature at each point in it remains constant.
- B 5 Let $U = \int_{x_0}^{x_1} V dx$ where $V = f(x, y, \frac{dy}{dx}, \frac{d^2y}{dx^2}, \dots, \frac{d^ny}{dx^n})$, determine the form of the function y , and the values of the limits x_0 and x_1 , which will render U a maximum or a minimum.
- By what criterion do you distinguish whether the solution answers to a maximum or a minimum?
- B 6 Deduce the ordinary expressions for $\Delta^n u_x$ and u_{x+n} by the method of separation of symbols; and explain the principles on which the validity of this process depends.
- B 7 Prove Herschel's theorem $f(e^t) = f(1) + \frac{t}{1} f'(1) + \frac{t^2}{1 \cdot 2} f''(1) + \dots$ and apply it to developpe $(e^t - 1)^n$ in powers of t .

- B 8 Prove the following theorems in the calculus of operations:—

$$f(xD) x^m u = x^m f(xD + m) u,$$

$$f(xD) x^m = f(m) x^m,$$

$$xD(xD-1)(xD-2) \dots (xD-n+1) u = x^n D^n u.$$

- B 9 Prove the theorem of Leibnitz, viz.

$$D^n \{\psi x \cdot u\} = \psi x \cdot D^n u + n \psi' x \cdot D^{n-1} u + \frac{n(n-1)}{1 \cdot 2} \psi'' x \cdot D^{n-2} u + \dots$$

and deduce from it the more general one,

$$\phi(D) \{\psi x \cdot u\} = \psi x \cdot \phi(D) u + \psi' x \cdot \phi'(D) u + \frac{1}{2} \psi'' x \cdot \phi''(D) u + \dots$$

- A 1 Show, generally, that $\int_{x_0}^x \int_{y_0}^y f(xy) dx dy = \int_{y_0}^y \int_{x_0}^x f(xy) dy dx$.

What exception is there to this? and in the exceptional case show how to find the difference of the two expressions.

Ex.—Find the difference between

$$\int_{-1}^{+1} \int_{-1}^{+1} \frac{y^2 - x^2}{(x^2 + y^2)^2} dx dy \text{ and } \int_{-1}^{+1} \int_{-1}^{+1} \frac{y^2 - x^2}{(x^2 + y^2)} dy dx.$$

- A 2 Show that $\int_0^\infty \int_0^\infty \int_0^\infty \dots \frac{x^{l-1} y^{m-1} z^{n-1} \dots e^{-ax} e^{-by} e^{-cz} \dots}{(1 + \alpha x + \beta y + \gamma z + \dots)^\mu} dx dy dz \dots$
 $= \frac{\Gamma(l) \Gamma(m) \Gamma(n) \dots}{\Gamma(\mu)} \int_0^\infty \frac{t^{\mu-1} e^{-t}}{(a + \alpha t)^l (b + \beta t)^m (c + \gamma t)^n \dots} dt,$
 $l, m, n \dots$ being integers; $a, b, c \dots \alpha, \beta, \gamma \dots$ positive constants.

- A 3 If Y_m, Z_n be two of Laplace's coefficients, m being different from n , show that
 $\int_0^{2\pi} \int_{-1}^1 Y_m Z_n d\mu d\phi = 0.$

- A 4 Find, by the method of the Third Book of Newton, the ablatitious and addititious forces on the moon, and hence the central and tangential disturbing forces; and compare the moon's velocities at syzygies and quadratures.

- A 5 Describe succinctly the different motions of the moon and of its orbit. What is its probable shape? How does this shape influence its motions?

- A 6 An error in the solar tables was found to depend on the near commensurability of the mean motions of Venus on the Earth.

Explain how this arises. What other inequalities of historical interest have been found out in the same manner?

- A 7 The difference of the squares of the velocities of the two waves in a double-refracting crystal is proportional to the product of the sines of the angles between the normal to the front and the optic axes.

- A 8 Assuming the properties of the wave surface, show how geometrical constructions serve to explain the separation of a ray of light falling on a biaxial crystal into two waves and two rays, and explain the cases of interior and exterior conical refraction.

- A 9 In the vibrations of a cylindrical column of air, show from theory that a tube open at both ends ought to give the same note as one of half the length, closed at one end.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

DEPARTMENT OF THE NATURAL SCIENCES.
DR. LANKESTER.

(Wednesday, July 30, 2 to 4 P.M.)

CHEMISTRY.

1. WHAT are the properties of oxygen gas, and the methods of obtaining it?
2. State the exact composition of atmospheric air, and the methods of analyzing it.
3. Enumerate the non-metallic elements, and their distinguishing properties.
4. What are the elements which enter into the composition of animals and plants, and the principal compounds they form?
5. What is the composition of carbonic acid, and under what circumstances is it found in nature?
6. What is the composition of the following compounds :—Nitric acid—sulphuric acid—plaster of Paris—alum—potassa—bicarbonate of soda?
7. How would you test for sulphuric acid and its compounds?
8. What are the properties of chlorine, and how can its compounds be detected in solution?

MINERALOGY.

9. What is the meaning of the terms primary and secondary forms of minerals? and name the principal primary forms.
10. What is the nature of "double refraction," and in what minerals does it occur?
11. In what rocks does gold occur, and how is it separated from them?
12. What is the composition of silica or silicic acid? and name some of the forms in which it occurs in the mineral kingdom.
13. In what forms does carbonate of lime occur, and what is the form of its crystals?
14. Name the specimens marked 1—6.

(2)

GEOLOGY.

15. Name the principal rocks which are characteristic of the "secondary epoch."
16. To what epoch do the silurian rocks belong, and what are its principal characteristic forms?
17. In what parts of the world is coal found, and what fossils characterize the coal measures?
18. Enumerate the principal forms of fossil Saurians, and the formations in which they are found.
19. What is the composition of the magnesian limestone, and where is this formation found in Great Britain?
20. What is the nature of glaciers, and the effects they have produced on the surface of the earth?
21. Name the specimens marked 1—6.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

DEPARTMENT OF THE NATURAL SCIENCES.

DR. LANKESTER.

(10 A.M. to 1 P.M., July 30, 1856.)

ZOOLOGY AND COMPARATIVE PHYSIOLOGY.

[In this examination answers to half the number of questions given under each head will secure the highest number of marks, but answers to all the questions will tell till the highest number of marks is gained; and in all cases the specimens must be named to obtain the highest number of marks.]

1. WHAT are the principal distinctions between vertebrate and invertebrate animals?
2. Into what classes are the Vertebrate Animals divided, and what are their distinguishing features?
3. What are the forms assumed by the common frog in its passage from the ovum to the adult stage of its existence?
4. What are the principal forms of animals that enter into the group Radiaria or Radiata?
5. Describe the transformations which distinguish the class of Insects in passing from the egg to the adult stage.
6. What are the characters that distinguish the families of Crustacea, to which the crab, the lobster, and the shrimp respectively belong?
7. What is the nature of the organs called cilia, and where are they found in the animal kingdom?
8. What are the bone-cells, and how do they differ in fishes, birds, reptiles, and mammalia?
9. What is the composition of the blood and the functions it performs?
10. Describe the structure of the heart in fishes, reptiles, and mammalia, and the nature of the circulation in those animals?
11. Refer the specimens numbered 1—6 to their families and classes.

(2)

BOTANY.

12. On what principles did Linnæus construct the artificial or sexual system of the classification of plants?
13. What is meant by the natural system in Botany, and what are the principal classes and sub-classes recognised by botanical writers?
14. What is the structure of the leaf, and the functions it performs in plants?
15. What is the general plan on which the parts of the flowers of plants are formed?
16. What is the difference between the structure of the stems of Exogenous and Endogenous Plants?
17. What are the differences observed in the number of the parts of the flower in Endogenous and Exogenous Plants?
18. What are the principal characters of the following natural orders:—*Ranunculaceæ*—*Cruciferae*—*Leguminosæ*—*Coniferae*—*Liliaceæ*—*Cupuliferae*?
19. What are the plants and the orders they belong to, that yield tannin, cotton, hemp, flax, gallic acid, opium, and indigo?
20. What is the effect of light on the functions of the Vegetable Kingdom?
21. Refer the specimens marked 1—6 to their natural orders.

ELECTRICITY AND MAGNETISM.

22. What is the difference between static or free electricity, and dynamic or voltaic electricity?
23. Describe the structure of "the electrical machine," and give the theory of its action.
24. What is the nature of lightning and thunder? and state what you know of the history of the discovery of their true nature.
25. Describe the nature and effects of a simple voltaic circle.
26. How does magnetism differ from static and dynamic electricity, and what reasons are there for believing in the identity of these forces?
27. What is the principle of the electric telegraph? and describe as much as you know of its structure.
28. By what methods can magnets be formed?
29. What is meant by the term "dip" as applied to the magnetic needle, and how is the phenomenon accounted for?

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE,

JULY 1856.

POLITICAL PHILOSOPHY.

MR. BARNES.

[The Candidates are requested not to spend more than an hour and a-half upon this Paper.]

1. DEFINE Political Economy, so as most accurately to mark the boundary line between it and other sciences.
2. It is sometimes said that value depends upon demand and supply; sometimes, that it depends upon cost of production. Do these averments involve essentially different theories of value, or are they merely different modes of stating the same theory?
3. State the different meanings of the phrase, "value of money," and the causes which determine the value of money in each sense. How has the ambiguity of this phrase given colour to a serious misconception respecting the rate of interest?
4. How is the paradox contained in the two following propositions to be cleared up? Value depends upon demand: Demand depends upon value.
5. Is rent an element in cost of production?
6. How far do wages and profits respectively enter into cost of production, and how far do they not?
7. State the connexion, if any, between the price of provisions and the rate of wages.
8. State the connexion, if any, between the rate of wages and the increase or diminution of population.
9. State the connexion, if any, between the rate of profit and the rate of wages.
10. State the distinction, if any, between the amount of wages and the cost of labour. Are there any, and if any, what circumstances, under which a large amount of wages may coexist with a small cost of labour, or a great cost of labour with a small amount of wages?
11. Adam Smith says that high profits tend much more to raise the price of work than high wages. Point out the fallacy involved in the argument by which he endeavours to support this position; and state whether, independently of his reasoning, there are any grounds for the alleged distinction.

12. Mr. Senior says :—"The prolongation of the period of advance of the capital employed in the production of the commodities which the labourer does not consume is utterly indifferent to him." Is this proposition true? and, if true, how may it be proved? if not true, how is it to be disproved?

13. *A* employs 1000*l.* in purchasing commodities for his own use; *B* employs 1000*l.* in the purchase of services for his own use, *e. g.* in the hire and maintenance of a retinue of servants. Would the aggregate wages-fund of the country be increased, if *A* were to adopt *B*'s mode of expenditure? Would the aggregate demand for commodities be increased, if *B* were to adopt *A*'s?

14. Show that the Ricardo theory of rent and the Malthusian theory of population rest substantially on the same foundation.

15. Professor Rickards observes that the apparent strength of the Malthusian argument is owing to an incongruous comparison—the comparison, namely, of the *potential* increase of population with the *actual* increase of subsistence. Is it true that Malthus made any such comparison? Supposing it to be true, it may be shown, in opposition to Professor Rickards, that by so doing he gratuitously weakened his own case, and that his argument would have been much stronger, if he had compared the *potential* increase of the one with the *potential* increase of the other.

16. Compare the advantages and disadvantages of Direct and Indirect Taxation.

17. Is it advisable, under any circumstances, to defray Government-expenditure by means of loans obtained from capitalists within the country? Is it advisable, under any circumstances, to defray it by means of foreign loans?

18. Is the importation of an article, which can be produced with a smaller amount of labour and capital in the importing, than in the exporting country, necessarily a losing trade to the former?

19. Adam Smith was of opinion that a given amount of capital employed in the home-trade gave greater encouragement to native industry than an equal amount employed in foreign trade. Is this doctrine correct? and, if correct, how may it be proved? if incorrect, how is it to be disproved?

20. State and illustrate the distinction between fixed and circulating capital. Is seed-corn fixed or circulating capital? Is gold and silver coin fixed or circulating capital?

21. Describe the different methods of Funding, specifying the characteristic advantages or disadvantages of each.

22. Explain the principles upon which the Bank Charter Act of 1844 is founded; give a concise account of the provisions by which those principles are sought to be carried out; and state your own opinion as to the general policy or impolicy of the measure.

23. Give a succinct statement of the weightiest reasons you can assign either for, or against, the policy of limiting the functions of Government to the single operation of protecting the community against violence and fraud.

24. Is the law of Primogeniture justifiable on purely economical grounds? Is it justifiable on political grounds?

25. Discuss the comparative merits of voluntary and compulsory relief of destitution, (*A*) on economical grounds, and (*B*) on political grounds.

26. Give a philosophical, as distinguished from a historical, account of the nature and origin of the right of private property; and enumerate the various derivative rights which flow therefrom.

27. State and examine the validity of Paley's objection to the maxim, that it is better that ten guilty men should escape, than that one innocent man should suffer.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE,

JULY 1856.

MENTAL PHILOSOPHY.

MR. BARNES.

[The Candidates are requested not to spend more than an hour upon this Paper.]

1. Is there any, and, if any, what distinction between Psychology and Logic? Is there any between Psychology and Metaphysics?
2. State the distinction, as laid down by Kant, between the *matter* and the *form* of knowledge; and show how, if admitted, it is fatal to all Empirical theories of knowledge.
3. How far does Kant admit, and how far does he disallow, the claim of Experience to be received as the foundation of all knowledge?
4. Distinguish between the Psychological and Ontological consideration of ideas. Which, according to Cousin, is entitled to precedence in the order of investigation?
5. Distinguish between Positive and Negative Thinking. State the two conditions of Positive Thought, and the different forms or laws according to which they operate.
6. Contrast the Philosophy of the Unconditioned with that of the Conditioned; and state which, if either, is, in your judgment, the true theory of knowledge.
7. Explain and criticise Schelling's theory of Intellectual Intuition.
8. Why, according to Cousin, must the idea of the Infinite be equally real with that of the Finite? Is his argument conclusive?
9. State and illustrate the distinction between Analytical and Synthetical judgments. The latter are divisible into two distinct species. What are they, and what is the difference between them?
10. Explain and contrast the views entertained by Locke and Kant respectively as to the origin of the idea of Space. How far, according to Cousin, are both theories right, and how far are they both wrong?
11. State Reid's theory of consciousness, and Sir William Hamilton's objections thereto.

12. Does Causation imply any thing more than invariable sequence?
13. Explain the theories of Occasional Causes and of a Pre-established Harmony; and show that they had their origin in a common fallacy.
14. Distinguish between Natural and Hypothetical Realism; and state which, if either, is, in your judgment, the true theory of Perception.
15. In what respect does the Representative theory of Perception violate the condition of a legitimate hypothesis?
16. Show that the argument from common sense, while triumphant in Reid's hands, as a defence against Idealism, is altogether inconclusive in the hands of Brown.
17. Sir William Hamilton says:—"It is one merit of the philosophy of the Conditioned, that it proves Space to be only a law of thought, and not a law of things." It may be shown that this position renders the common-sense argument against Idealism quite as untenable and inconclusive in Sir William Hamilton's own hands, as he has proved it to be in the hands of Brown.
18. Give a summary of the arguments for and against the position, that inconceivability is the true test and criterion of impossibility.

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

JULY 1856.

MORAL PHILOSOPHY.

MR. BARNES.

[The Candidates are requested not to spend more than an hour upon this Paper.]

1. COMPARE the moral systems of Plato and Aristotle, specifying the points, if any, wherein they agree, and the points wherein they differ.
2. Explain and contrast the views of Plato and Aristotle respecting the nature of Pleasure.
3. Define Virtue, according to Aristotle, and explain each part of the definition. Is virtue in any respect an extreme, as well as a mean?
4. By what argument does Aristotle endeavour to support his position, that moral virtue is not innate; and what is Lord Bacon's answer thereto?
5. Why are the words ἐν βίῳ τελείῳ added by Aristotle to his definition of Happiness? How does he show that Happiness is not Pleasure, or Honour, or Virtue, or Wealth? Is there any connexion then between Happiness and Pleasure, or between Happiness and Virtue?
6. What, according to Aristotle, is the essential difference between Continence and Temperance? What is the opposite vice to Envy? and between what opposite vices is Truth a mean?
7. What, according to Aristotle, is the distinction between Distributive, Corrective, and Commutative Justice? How far does this distinction coincide with that laid down by Grotius between *Justitia Expletrix* and *Justitia Attributrix*?
8. Enumerate and define the four Cardinal Virtues as specified by Cicero? Of which of them is the love of money a violation? What is the classification of Virtues which Dr. Whewell proposes?
9. State the distinction between the Theory of Moral Sentiments and the Criterion of Morality; and mention instances in which these two questions have been confounded together by advocates, both of the Utilitarian, and of the Disinterested theory of morals. Was Mackintosh the first Ethical writer who pointed out the distinction in question?
10. Give a concise account of the moral systems of Hobbes, Clarke, and Hume; and point out the characteristic error of each.

11. Explain and compare the views entertained by Butler and Mackintosh respectively on the subject of Conscience.
12. How does Paley state the question as to the existence of a moral faculty? Is his statement satisfactory?
13. Why has the word *Sense* been employed for the purpose of denoting the moral faculty, and what inconvenience is involved in such an application of the term?
14. How does Butler establish a distinction as existing between self-love and the particular affections? Mackintosh carries the distinction still further?
15. Explain Hartley's theory of Association. Is it fair to charge it with being a refinement of the selfish system?
16. State and criticise Paley's definition of Virtue.
17. In what respect, if any, do the moral sentiments and the pleasures of imagination agree; and in what respect do they differ?
18. State the distinction between Perfect and Imperfect obligations. Is this properly an Ethical distinction? What inconvenience is involved in this use of the terms?

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE,

JULY 1856.

LOGIC.

MR. BARNES.

[The Candidates are requested not to spend more than an hour and a-half upon this Paper.]

1. STATE the distinction between Science and Art. Define Logic as a science, and as an art respectively. In what respect, if any, is it entitled to be considered as *ars artium*?
2. Distinguish between the Attributive and the Quantitative import of propositions; and state which is their primary import.
3. State Hobbes' theory of Predication; and show how far it is a sufficient account of the same, and how far it is defective.
4. Contrast the Scholastic view of Definition with Locke's; and show that the two views were essentially distinct.
5. Mr. Mill considers the *Dictum de Omni* as being peculiarly related to the system of Realism. Is it not, from its nature, equally compatible with Nominalism and Conceptualism, and, indeed, with any and every Metaphysical system?
6. State the substance of the controversy between Realism, Nominalism, and Conceptualism. What is the characteristic defect of each system?
7. What are the two axioms which Mr. Mill substitutes for the *Dictum de omni*? It may be shown that, so far as the proposed substitutes are an accurate expression of the import of syllogism, they are substantially equivalent to the *Dictum de omni*; and that, so far as they differ from the Dictum, they are defective as an exposition of the syllogistic import.
8. State Locke's exposition of inference, and point out its defectiveness. What fallacy is involved in his argument against the necessity of a universal premise?
9. State Mr. Mill's argument in support of his position that Syllogism is not a process of inference, and the grounds of your concurrence or dissent.
10. Is it a legitimate mode of inference to deduce the mortality of the Emperor Alexander from the mere circumstance that a number of individuals have died before him—in other words—to go at once *per saltum* from particulars to particulars, without any intermediate process of generalization?

11. What does Mr. Mill substitute for Syllogism as the universal type of reasoning? It may be shown, on Mr. Mill's own authority, that his proposed substitute depends for its validity in any given case upon totally *extralogical* considerations. Does this, in your judgment, invalidate its claim to be recognised as the universal type of reasoning?

12. Given *O* as the major premise, determine the mood and figure. Given *O* as the minor premise, determine the mood and figure. Given *A* as the conclusion, determine the mood and figure.

13. In what class of Syllogisms is *I* inadmissible as major premise, and why? If the middle term be distributed in each of the premises, can the conclusion be universal?

14. In the mnemonic names of the moods, what function is performed by the vowels and consonants respectively? Explain the import of each letter in the word *Disamis*.

15. Is it indispensable to the validity of syllogistic inference that the middle term should be distributed in one or other of the premises? If not, what is the essential law of inference?

16. In disproof of the alleged universality of the principle of Ultratotalism, it has been remarked by a recent writer, that the *Dictum de omni* inference is not reducible thereto, but that, on the contrary, the Ultratotal inference is reducible to the *Dictum de omni*. Is this opinion correct? and, if correct, how may it be proved? if incorrect, how is it to be disproved?

17. Two-thirds of the Bar are good lawyers ;
Two-thirds of the Bar are good logicians ;
therefore, Some good logicians are good lawyers.

The same writer observes that this is not, properly speaking, a syllogism at all, that is, an unelliptical statement of an act of reasoning. Is this opinion correct? and, if correct, how may it be proved? if incorrect, how is it to be disproved?

18. Is the modality of propositions properly a logical, or an extralogical consideration?

19. What is Mr. Mills' definition of Induction? Is Induction, so defined, a logical process at all?

20. State clearly the distinction between Logical Induction and Baconian Induction; and show, in the instances of Archbishop Whately and Mr. Mill, how a neglect of this distinction has led to a considerable amount of confusion upon the subject.

21. Is the mental operation, by which in any case we are enabled to infer, that what holds good of all the observed members of a class, is true of the whole class, or that certain observed individuals of a class are adequate representatives of the whole class, a logical process or not?

22. Is Archbishop Whately's analysis of inductive reasoning, whereby it is exhibited as a syllogism in Barbara, a correct exposition of the process of Logical Induction?

23. Characterize the nature and method of Induction *per simplicem enumerationem*. Are inferences, so obtained, always and necessarily precarious? If not, give an instance.

24. Mr. Macaulay, in his essay on Lord Bacon, makes the following observations:—"A plain man finds his stomach out of order. He never heard of Lord Bacon's name. But he proceeds in the strictest conformity with the rules laid down in the second book of the *Novum Organum*, and satisfies himself that minced pies have done the mischief. 'I ate minced pies on Monday and Wednesday, and I was kept awake by indigestion all night. I did not eat any on Tuesday and Friday, and I was quite well. I ate very sparingly of them on Sunday, and was very slightly indisposed in the evening. But on Christmas-day I almost dined on them, and was so ill that I was in great danger. It cannot have been the brandy which I took with them, for I have drunk brandy daily for years without being the worse for it.' Our invalid then proceeds to what is termed by Bacon the *vindemiatio*, and pronounces that minced pies do not agree with him." Is the plain man's induction valid or sufficient, according to the Baconian method? If not, wherein is it defective?

25. Explain Sir William Hamilton's theory of Predicate-Quantification; specify its operation with reference to (*A*) the conversion of propositions, and (*B*) the laws and structure of syllogism; and state your own opinion respecting its value as an addition to logical science.

26. Why is it that, in the combination of probabilities, the resulting probability is sometimes greater than any one of the antecedent probabilities taken separately, and sometimes less?

27. Is the application of mathematical science to the analysis and elucidation of the formal processes of thought, in your judgment, a help or an encumbrance to Logic?

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

LANGUAGE, LITERATURE, AND HISTORY OF FRANCE.

M. CHARLES JEAN DELILLE.

(Saturday, July 26, 1856. 10 A.M. to 1½ P.M.)

[THE Questions to be answered are divided into Sections. Each Section contains three Questions, arranged in the order of their difficulty. Candidates are to answer one Question (but not more) from each Section.]

SECTION I.

Traduisez en anglais un des passages suivants :

1. Pour bien écrire, il faut posséder pleinement son sujet; il faut y réfléchir assez pour voir clairement l'ordre de ses pensées, et en former une suite, une chaîne continue, dont chaque point représente une idée; et, lorsqu'on aura pris la plume, il faudra la conduire successivement sur ce premier tracé, sans lui permettre de s'en écarter, sans l'appuyer trop inégalement, sans lui donner d'autre mouvement que celui qui sera déterminé par l'espace qu'elle doit parcourir. C'est en cela que consiste la sévérité du style; c'est aussi ce qui en fera l'unité et ce qui en réglera la rapidité, et cela seul aussi suffira pour le rendre précis et simple, égal et clair, vif et suivi.—BUFFON.

2. Imaginons un ancien mécanicien, Archimède, par exemple, consulté sur les moyens d'élever à une grande hauteur l'eau contenue dans un vaste récipient métallique fermé. Il parlerait certainement de grands leviers, de poulies simples ou mouflées, de treuils, peut-être de son ingénieuse vis; mais quelle ne serait pas sa surprise, si, pour résoudre le problème, quelqu'un se contentait d'un fagot et d'une allumette! eh bien! je le demande, oserait-on refuser le titre d'inventeur à un procédé dont l'immortel auteur des premiers et vrais principes de la statique et de l'hydrostatique eût été étonné? L'appareil de Salomon de Caus, cette enveloppe métallique où l'on crée une force motrice presque indéfinie, à l'aide d'un fagot et d'une allumette, figurera toujours noblement dans l'histoire de la machine à vapeur.
ARAGO.

3. Quant à moi, personne ne peut dire
Que l'on m'ait rien appris : je sais à peine lire,
Et j'ai de l'ignorance à fond ; mais, franchement,
Avec mon petit sens, mon petit jugement,
Je vois, je comprends mieux ce que je dois comprendre,
Que vos livres jamais ne pourraient me l'apprendre.
Ce monde où je me trouve, et ce soleil qui luit,
Sont-ce des champignons venus en une nuit ?
Se sont-ils faits tout seuls ? Cette masse de pierre
Qui s'élève en rochers, ces arbres, cette terre,
Ce ciel planté là-haut, est-ce que tout cela
S'est bâti de soi-même ? Et vous, seriez-vous là
Sans votre père, à qui le sien fut nécessaire
Pour devenir le vôtre ? Ainsi, de père en père,
Allant jusqu'au premier, qui veut-on qui l'ait fait
Ce premier ? Et dans l'homme, ouvrage si parfait,
Tous ces os agencés l'un dans l'autre, cette âme,
Ces veines, ce poumon, ce cœur, ce foie . . . Oh ! dame,
Parlez à votre tour, comme les autres font ;
Je ne puis disputer, si l'on ne m'interrompt.

THOMAS CORNEILLE, *Le Festin de Pierre*, comédie.

SECTION II.

Traduisez en français un des passages suivants :

1. Before the election of the Merovingian Kings, the most powerful tribe, or nation, of the Franks, appointed four venerable chieftains to compose the *Salic* laws; and their labours were examined and approved in three successive assemblies of the people. After the baptism of Clovis, he reformed several articles that appeared incompatible with Christianity: the *Salic* law was again amended by his sons; and at length, under the reign of Dagobert, the code was revised and promulgated in its actual form, one hundred years after the establishment of the French monarchy.—GIBBON.

2. It was now in Doria's power to have rendered himself the sovereign of his country, which he had so happily delivered from oppression. The fame of his former actions, the success of his present attempt, the attachment of his friends, the gratitude of his countrymen, together with the support of the Emperor, all conspired to facilitate his attaining the supreme authority, and invited him to lay hold of it. But with a magnanimity of which there are few examples, he sacrificed all thoughts of aggrandizing himself to the virtuous satisfaction of establishing liberty in his country, the highest object at which ambition can aim.—ROBERTSON.

3. Nature seems to have taken a particular care to disseminate her blessing amongst the different regions of the world, with an eye to this mutual intercourse and traffic among mankind, that the natives of the several parts of the globe might have a kind of dependence upon one another, and be united together by their common interest. Almost every degree produces something peculiar to it. The food often grows in one country, and the sauce in another. The fruits of Portugal are corrected by the products of Barbadoes: the infusion of a China plant sweetened with the pith of an Indian cane. The Philippine Islands give a flavour to our European bowls. The single dress of a woman of quality is often the product of an hundred climates. The muff and the fan come together from the different ends of the earth. The scarf is sent from the torrid zone, and the tippet from beneath the pole. The brocade petticoat rises out of the mines of Peru, and the diamond necklace out of the bowels of Hindoostan.—ADDISON.

GRAMMAIRE.

SECTION III.

1. Quelle est la différence de signification entre les mots *point* et *pointe*, *rose* et *rosse*, *souffler* et *souffleter*, *bellâtre* et *belâtre*, *sensé* et *sensible*, *suggestion* et *sujétion*, *lieu* et *lieue*, *fonder* et *fondre*?

2. Quelles sont la signification et l'étymologie des mots *agio*, *bilan*, *budget*, *cadastre*, *céréales*, *échiquier*, *entrepôt*, *fisc*, *morcellement*, et *régie*?

3. Écrivez, sous forme de lettre, vos raisons pour vouloir embrasser la carrière du service civil de la compagnie des Indes orientales.

LITTÉRATURE.

[Les réponses aux questions de littérature et d'histoire pourront se faire en français ou en anglais.]

SECTION IV.

1. Quelle a été l'influence du règne de François 1^{er} sur la littérature en France?
2. Expliquez le sujet d'une comédie de Molière. Choisissez parmi ses chefs-d'œuvre *le Misanthrope*, *le Tartuffe*, *l'Avare*, ou *le Bourgeois gentilhomme*.
3. Expliquez quelques-uns des procédés employés par les poètes français dans la construction de leurs vers.

HISTOIRE.

SECTION V.

1. Quels sont les principaux historiens que la France a produits depuis le commencement du dix-neuvième siècle? Quels sont ceux auxquels vous donnez une préférence? Ajoutez les raisons sur lesquelles cette préférence est fondée.
2. Qu'est-ce que la féodalité? Expliquez le gouvernement féodal de la France à l'époque de la décadence des Carlovingiens.
3. Quelles étaient la situation et l'étendue du domaine originaire de la couronne sous Hugues Capet?

SECTION VI.

1. Quelles furent les causes des premières luttes de l'Angleterre et de la France, après la conquête de l'Angleterre par Guillaume de Normandie? Décrivez quelques-uns des grands événements qui signalèrent ces luttes pendant les règnes des premiers rois de la tige capétienne jusqu'à Louis IX.
2. Quels sont les faits mémorables du règne de Charles VII, qui amenèrent la réunion de la Guyenne à la couronne de France?
3. Développez quelques raisons à l'appui du fait que le règne de Louis XIV est l'époque la plus brillante de la monarchie en France.

ITALIAN.

WRITTEN EXAMINATION.

(Time allowed three hours and three quarters.)

MR. PANIZZI.

I.

[Candidates are required to translate into English prose the two following extracts.]

ERANO¹ entrati i Longobardi in quelli luoghi presso al Danubio; dove sendo² stati alcun tempo, e pervenuto il regno loro ad Alboino, uomo efferato ed audace, passarono il Danubio, e si azzuffarono con Comundo Re de' Zepidi, che teneva³ la Pannonia, e lo vinsero. E trovandosi nella preda Rosmunda figliuola di Comundo, la prese Alboino per moglie, e s' insignorì di Pannonia; e mosso⁴ dalla sua efferata natura fece del teschio di Comundo una tazza, con la quale in memoria di quella vittoria bevea.⁵ Ma chiamato da Narsete ne venne in Italia, e trovando quella in tante parti divisa occupò in un tratto Pavia, Milano, Verona, Vicenza, tutta la Toscana, e quasi la maggior parte della Flaminia. Talchè parendogli⁶ per tanti e sì subiti acquisti avere già la vittoria d'Italia, celebrò in Verona un convito, e per il molto bere diventato allegro, sendo il teschio di Comundo pieno di vino, lo fece presentare a Rosmunda Regina, la quale all' incontro di lui mangiava, dicendo con voce alta, in modo che quella potette udire⁷, che voleva che in tanta allegrezza la⁸ bevesse con suo padre. La qual voce fu come una ferita nel petto di quella donna, e deliberata di vendicarsi domandò Almachilde nobile e feroce giovane Lombardo che volesse⁹ amazzar Alboino e, sposando lei, impadronirsi del regno; al che Almachilde consentì.¹⁰—(MACHIAVELLI.)

[Candidates are requested to answer the following questions.]

- ¹ What is *erano*? What is the difference between *furono*, *errano*, *erano*?
- ² What is *sendo*? Is it usual to say *sendo*? Is it correct?
- ³ What is the present tense of the indicative of *teneva*?
- ⁴ What is *mosso*? What is *mossi*?
- ⁵ What is the difference between *bevea* and *beveva*?
- ⁶ What is *parendogli*?
- ⁷ What is the present of the indicative of *udire*?
- ⁸ What is *la*?
- ⁹ What is the present of the indicative of *volere*?
- ¹⁰ What is the perfect of the indicative of *sentire*?

II.

ROSMUNDA.¹

Di guerra dritto!

Nella più cruda inospita contrada
 Dritto fu mai, ch'empio furore, e scherno
 Le insepolti de' morti ossa insultasse?²
 Nol³ vegg'io sempre, a quella orribil cena
 (Banchetto a me di morte) ebro d'orgoglio,
 D'ira, e di sangue, a mensa infame assiso,
 Ir⁴ motteggiando? e, di vivande e vino
 Carco, nol veggio (ahi fera orrida vista!)
 Bere a sorsi lentissimi nel teschio
 Dell'ucciso mio padre? indi inviarmi
 D'abborrita bevanda ridondante
 L'orrida tazza? E negli orecchi sempre
 Quel sanguinoso derisor suo invito
 A me non suona? Empio! ei dicea: "Col padre
 "Bevi, Rosmunda." E tu, di un simil mostro
 Nata, innanzi mi stai?⁵ Se, lui trafitto,⁶
 Te fatto avessi dai più vili schiavi
 Contaminare, indi svenar; se avessi
 Arso, e disperso⁷ il cener vostro al vento,
 Vendetta io mai pari all'oltraggio avrei?⁸ — (ALFIERI.)

¹ Rosmunda, in Alfieri's tragedy of that name, addresses a daughter of Alboin by a former wife

[Candidates are requested to answer the following questions.]

² Would a prose writer express himself thus? Using the same words as those in these lines, how would he arrange them in a speech?

³ What is *nol*? [The person alluded to is Alboin.]

⁴ What is *ir*?

⁵ What is the perfect of the indicative of *stare*?

⁶ What is *traffitto*?

⁷ What are *arso* and *disperso*?

⁸ [Turn the passage from the words "Se, lui trafitto," to the end, into plain Italian prose.]

III.

[Candidates are requested to translate into Italian the following extract.]

ALBOIN, king of the Lombards, contemplated with delight the head of Cunimund, whom he had slain in battle; and his skull was fashioned into a cup to satiate the hatred of the conqueror, or, perhaps, to comply with the savage custom of his country. His reign was splendid and transient. Before he could regulate his new conquests, Alboin fell a sacrifice to domestic treason and female revenge. In a palace near Verona, which had not been erected for the barbarians, he feasted the companions of his arms. Intoxication was the reward of valour, and the king himself was tempted by appetite, or vanity, to exceed the ordinary measure of his intemperance. After draining many capacious bowls of Rhaetian or Falernian wine, he called for the skull of Cunimund, the noblest and most precious ornament of his sideboard. The cup of victory was accepted with horrid applause by the circle of the Lombard chiefs. "Fill it again with wine," exclaimed the inhuman conqueror: "fill it to the brim: carry this goblet to the queen, and request, in my name, that she would rejoice with her father." In an agony of grief and rage, Rosamond had strength to utter, "Let the will of my lord be obeyed!" and, touching it with her lips, pronounced a silent imprecation, that the insult should be washed away in the blood of Alboin. Helmichis, the king's armour-bearer, was the secret minister of her pleasure and revenge.—(GIBBON.)

IV.

[Candidates are requested to answer as many of the following questions as they can, if they cannot answer them all: the answers should be in English; but should any Candidate wish to use Italian in his answers, the Examiner will attach considerable value to this exertion.]

1. Who was Giovanni di Procida? What part did he really take in the Sicilian Vespers?

2. To what event and persons did Dante allude in the lines

Colui fesse in grembo a Dio
 Lo cor che in sul Tamigi ancor si cola?

3. In what part of Italy were the chief possessions of the family of Este?

4. When and where did Cola di Rienzi and Masaniello live?

5. For what work is Tiraboschi chiefly known?

6. Who wrote the "Annali d'Italia"?

EXAMINATION OF CANDIDATES FOR WRITERSHIPS IN THE
EAST-INDIA COMPANY'S SERVICE.

GERMAN EXAMINATION.

DR. ADOLPH HEIMANN.

I.

Uebersetzen Sie in's Deutsche:

To DR. MOORE.

Ellisland, March 23, 1789.

Dear Sir,

The gentleman who will deliver you this is a Mr. Nielson, a worthy clergyman in my neighbourhood, and a very particular acquaintance of mine. As I have troubled him with this packet, I must turn him over to your goodness, to recompense him for it in a way in which he much needs your assistance, and where you can effectually serve him. Mr. Nielson is on his way for France, and he wishes for your instructions respecting the most eligible mode of travelling, when he has crossed the channel. I should not have dared to take this liberty with you, but that I am told, by those who have the honour of your personal acquaintance, that, to be a poor honest Scotchman, is a letter of recommendation to you, and that to have it in your power to serve such a character gives you much pleasure.—(BURNS' Letters.)

II.

Uebersetzen Sie in's Englische:

- (a) Ich kenne dich, ich kenne deine Schwächen,
Ich weiß, was Gutes in dir lebt und glimmt!—
So sagte sie, ich hör' sie ewig sprechen,—
Empfange hier, was ich dir lang bestimmt,
Dem Glücklichen kann es an nichts gebrechen,
Der dies Geschenk mit stiller Seele nimmt;
Aus Morgenduft gewebt und Sonnenklarheit,
Der Dichtung Schleier aus der Hand der Wahrheit.

Und wenn es dir und deinen Freunden schwebt
Am Mittag wird, so wirf ihn in die Luft!
Sogleich umsäuselt Abendwindes Kühle,
Umhaucht euch Blumen-Würzgeruch und Duft.
Es schweigt das Wehen banger Erdgefühle,
Zum Wolkenbette wandelt sich die Gruft,
Besänftigt wird jede Lebenswelle,
Der Tag wird lieblich, und die Nacht wird helle.

(Goethe's Gedichte.)

- (b) Es sollte zuweilen scheinen, als gäbe es in den Verwirrungen selbst eine geheime Kraft, die den Menschen bildet und emporbringt, der ihnen zu steuern fähig ist. Während in der ganzen Welt erbliche Fürstenthümer oder Aristokratien die Herrschaft von Geschlecht zu Geschlecht überlieferten, behielt das geistliche Fürstenthum das Ausgezeichnete, daß es von der untersten Stufe der menschlichen Gesellschaft zu dem höchsten Range in derselben führen konnte. Eben aus dem niedrigsten Stande erhob sich jetzt ein Papst (Sixtus V.), der die Kraft und ganz die Natur dazu hatte, alle dem Unwesen ein Ende zu machen.—(L. Ranke's Fürsten und Völker von Süd-Europa.)

III.

Beantworten Sie einige von den Fragen in jedem der drei folgenden Abschnitte:

A. In der Grammatik.

1. Welches ist das Geschlecht der Substantive: Trift, Blume, Entzücken, Fluß, Dämmerung, Sonne, Mond, Klarheit, Höhe, Weib, Fräulein, Mädchen, Treue, Leidenschaft, Gabe, Nachsicht, Vertrauen?
2. Welches ist der Genitiv Sing. und Nom. Plur. von: der Graf, der Funke, das Herz, der Barbar, das große Haus, solcher edle Hauptmann, welche finstre Nacht, freundlicher Gruß, jene treue Freundin?
3. Welches ist der Genitiv Singular und Plural von der, die, das, als Pronomen Demonstrativ und Relativ?
4. Was ist drei viertel auf vier, halb ein, anderthalb und sechshalb?
5. Nennen Sie die Formen der 2ten Person Singular Act. im Indicativ des Present, Imperfect und Perfect, und im Imperativ von folgenden Verben: brechen, essen, graben, lassen, laufen, mögen, müssen, raten und wissen.
6. Welche Casus regieren die Präpositionen: zu, in, durch, unweit, wegen, mit, ohne, laut, außer, auf, nach und für?
7. Welche Casus regieren folgende Verben: brauchen, dienen, heißen, lassen, folgen, entbehren, gedenken, drohen, schaden, achten, sich erbarmen, und danken?
8. Welche Regeln müssen Sie beim Gebrauche des Verbs mögen beobachten? und übersetzen Sie:
 - (a.) I do not like to do it.
 - (b.) I should like to do it.
 - (c.) I had liked to do it.
 - (d.) The book which you would have liked to read.
9. Welches ist die Bedeutung der Conjunctionen: da, als, weil, indem, wie, wenn?
10. Wann steht das Verb am Ende des Satzes?

B. In der Literatur.

1. Hatten die alten Deutschen eine Literatur und eine Art Schrift?
2. Die ältesten Gedichte vor 1100 waren theils alliterirt, theils gereimt; was ist der Unterschied zwischen den beiden Formen?
3. Erzählen Sie den Inhalt von einem der drei Gedichte:
 - (a) der arme Heinrich;
 - (b) Parcival;
 - (c) Tristan und Isolde;
 und erwähnen Sie die Namen der Verfasser.
4. Was versteht man unter dem Worte: Volksbücher; was war ihr Inhalt, und wann wurden sie geschrieben?
5. Was können Sie von Opitz sagen, und wer waren seine berühmtesten Zeitgenossen?
6. Welches ist der Character der deutschen Literatur im 18ten Jahrhundert?
7. Welches waren die größten Autoren in dieser Zeit?
8. Was können Sie von Herder's Jugendleben und seinen vorzüglichsten Werken erwähnen?
9. Was versteht man unter der Romantischen Schule? Welches waren die Bestrebungen und die Führer derselben?
10. Was können Sie von den deutschen Uebersetzungen aus fremden Sprachen sagen?

C. In der Geschichte.

1. In welchem Buche spricht Tacitus besonders von den Deutschen; und was erwähnt er von ihren Sitten, ihren Fehlern und Tugenden?
2. Im Jahre 843 wurde der Vertrag von Verdun geschlossen; welche Fürsten machten diesen Vertrag, und weshalb ist er wichtig?
3. Vom Jahre 919 bis 1254 regierten drei Kaiserfamilien in Deutschland. Nennen Sie diese, und erwähnen Sie die größten Kaiser aus jeder Familie.
4. Erzählen Sie kurz die Geschichte des Kampfes zwischen Heinrich IV. und Gregor VII.
5. Was können Sie von Friedrich Barbarossa's Thaten in den Lombardischen Städten erwähnen?
6. Wie gelangten die deutschen Kaiser auf den Thron, durch Erbschaft oder Wahl?
7. Im Jahre 1414 war die berühmte Kirchenversammlung zu Konstanz; wer war der amwesende Kaiser; was wurde in Bezug auf die Kirchenspaltung festgesetzt, und wie verfuhr man mit Huss?
8. Wie wurde Karl V. von Moritz von Sachsen zum Passauer Frieden (1552) gezwungen?
9. Was ist der Grund, daß Deutschland in so viele kleine Reiche zerstückelt ist?
10. Wann und weshalb wurde das deutsche Reich förmlich aufgelöst?