

LEAVING CERTIFICATE EXAMINATION, 1902.

EXAMINATION PAPERS.

ENGLISH.

LOWER GRADE.

Thursday, 12th June.—10 A.M. to 12.30 P.M.

Every Candidate should answer *nine* questions (AND NOT MORE THAN NINE), of which *five* must be in Section I., *two* in Section II., and *two* in Section III. Questions 1, 2, and 3 must be attempted.

VALUE

SECTION I.

- 10. 1. Write out, and punctuate, the passage for dictation.
- 15. 2. Write an essay, of about two pages, on one of the following subjects :—
  - (a.) The advantages of Travel.
  - (b) Epitaphs.
- 15. 3. Paraphrase the following lines, so as to bring out their full meaning :—
 

From the black-red ether, bursting broad,  
Sallies the sudden whirlwind. Straight the sands,  
Commov'd around, in gathering eddies play :  
Nearer and *nearer still* they darkening come ;  
Till, with the general all-involving storm  
Swept up, the whole continuous wilds arise ;  
And by their *noon-day* fount dejected *thrown*,  
Or sunk at night in sad disastrous sleep,  
Beneath descending hills, the caravan  
Is buried *deep*. In Cairo's crowded streets  
Th' impatient merchant, wondering, waits in vain,  
And Mecca saddens at the long delay.
- 10. 4. Show, by an examination of any three lines of the above passage, how it differs from prose.

VALUE

5. Parse the five words italicised in question 3.  
 Make a general analysis of the following :—
10. “ Without being so presumptuous as to hope to emulate the rich humour, pathetic tenderness, and admirable tact which pervade the works of my accomplished friend, I felt that something might be attempted for my own country of the same kind with that which Miss Edgeworth so fortunately achieved for Ireland.”
10. 6. Write ten short sentences, each containing one of the following words correctly used so as to bring out its full meaning :— affect, sumptuous, universal, athwart, collusion, wherewith, mitigate, continuous, mutual, howsoever.
7. Point out the faults in the following sentences. Say why you consider them faults, and re-write each sentence in an improved form :—
10. (a.) I am neither an ascetic in theory or practice.  
 (b.) A clergyman in Perthshire wishes to purchase a small pony to do the work of a minister.  
 (c.) Another bullet hit the butt of his rifle, thus saving his life.  
 (d.) Entering the drawing-room the conviction came to him that he was in the dwelling of an individual of refined taste.  
 (e.) Nature has denied to us the power of closing our ears which she gave us in respect of our eyes.
10. 8. Name one famous literary work by each of the following writers, indicating the kind to which it belongs and the approximate date of its appearance :—Keats, Pope, Hooker, Dryden, Browning, Jeremy Taylor, Cowper.  
 Give a fuller description of any *one* of the above works.

#### SECTION II.

10. 9. Write a short account of any *one* of the following reigns or ministries, with special regard to (a) domestic changes, (b) wars :— Alfred the Great, Henry III., Edward III., Henry VIII., James I., Charles II., Walpole, George III., Palmerston.
10. 10. Give some account of any *four* of the following, so as to show their significance and importance in British history :—Cæsar's Invasion of Britain, Celtic Christianity, Danegeld, Domesday Book, The Maid of Norway, The White Ship, The Crusades, Edward I.'s Invasion of Wales, The First English Parliament, The Poll-tax, Battle of Shrewsbury, Siege of Orleans, Perkin Warbeck, Act of Supremacy, Six Articles, The Smithfield Fires, Battle of Zutphen, Insurrection of Essex, Hampton Court Conference, The Policy of “Thorough,” Root and Branch Bill, Instrument of Government, The Trial of the Seven Bishops, Battle of the Boyne, National Debt, The Rising of 1715, South Sea Bubble, Seven Years' War, Trial of Warren Hastings, Peninsular War, Siege of Lucknow, First Home Rule Bill.

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SECTION III.

- 10. 11. Describe in detail any two routes from London to Japan, mentioning the principal places passed on the way.
- 10. 12. Draw a map of Africa showing the possessions of the principal European Powers.
- 10. 13. Describe from source to mouth the course of any *four* of the navigable rivers of Great Britain.
- 10. 14. Say where *ten* of the following places are situated, and mention anything for which each of the ten is remarkable:—Cintra, Dongola, Klondyke, Nice, Formosa, Harrismith, Ferrara, Leyden. New Orleans, Missolonghi, Gothenburg, Ajaccio, Staffa, Poitiers, Ratisbon, Edgehill.

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ENGLISH.

LOWER GRADE.

Thursday, 12th June.—10.45 A.M.

*Passage for Dictation.*

The engagement commenced at three in the afternoon by a furious cannonade, under cover of which a battalion of the Portuguese army attacked the redoubt. They were received with the most determined resistance, but succeeded in gaining possession of the heights behind, and their general, believing that they were to be reinforced by masses of infantry, essayed one of those daring and skilful manœuvres which characterized his tactics. All who heard him issue orders took confidence from his quick and decisive intellect; all who saw him caught mettle from his extraordinary composure and unparalleled audacity.

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ENGLISH.

HIGHER GRADE AND FIRST PAPER FOR HONOURS.

Thursday, 12th June.—10 A.M. to 1 P.M.

Every Candidate should answer *nine* questions (AND NOT MORE THAN NINE). Every Candidate must take Questions 1 and 2, and *three* other questions in Section I. Higher Grade Candidates should take, also, *two* questions in Section II., and *two* in Section III.

Honours Candidates are not required to answer questions from Sections II. and III., but may do so. The full number of marks can be obtained in Section I.

VALUE.

## SECTION I.

15. 1. Write an essay, of about two pages, on one of the following subjects :—
- (a.) The Growth of the British Empire.
- (b.) Gambling.
- (c.) The Inventions of the Future.
2. Paraphrase the following passage, so as to bring out its full meaning :—
- What, am I poor of late ?  
 'Tis certain, greatness, once fallen out with fortune,  
 Must fall out with men too : what the declined is  
 He shall as soon read in the eyes of others  
 As feel in his own fall : for men, like butterflies,  
 Show not their mealy wings but to the summer ;  
 And not a man, for being simply man,  
 Hath any honour ; but honour for those honours  
 That are without him, as place, riches, and favour,  
 Prizes of accident as oft as merit :  
 Which, when they fall, as being slippery standers,  
 The love that leaned on them as slippery too,  
 Do one pluck down another, and together  
 Die in the fall. But 'tis not so with me :  
 Fortune and I are friends : I do enjoy  
 At ample point all that I did possess,  
 Save these men's looks.
15. 3. "Metaphor lies hid in all language." Illustrate this statement from the above passage.
10. 4. Take each of the following subjects, and describe any passage in prose or verse which treats of it, giving any quotations you can :—a sea fight, music, the love of fame, the rose, a dream.
5. Point out the faults in the following sentences. Say why you consider them faults, and re-write each sentence in an improved form :—
- (a.) You and I are both agreed upon these sort of questions.
- (b.) Few of his friends except myself felt aggravated by his absence.
10. (c.) I never remember to have stated my opinion verbally, though I have often expressed it in writing.
- (d.) Entering the drawing-room the conviction came to him that he was in the dwelling of an individual of refined taste.
- (e.) Nature has denied to us the power of closing our ears which she gave us in respect of our eyes.

VALUE. 6. Parse the words italicised in the following :—

He is *most* loved *that hath most goods*.

Make a general analysis of the following sentence :—

10. When applied to the novelist himself, the tone of criticism to which we allude will, when justly examined, be found to rest chiefly on that depreciating spirit which would undermine the fair fame of an accomplished writer by showing that he has not achieved what he did not attempt.

10. 7. Say what you know of the derivation and history of *five* of the following words :—bedlam, dainty, handiwork, envy, feat, nickname, buxom, whole, conceited, animosity, minster, ajar, nostril, weird, sovereign, children.

10. 8. Give a brief account of *four* of the following works :—Marmion, The Lady of Shalott, The Rubaiyat of Omar Khayyam, The Shepherd's Calendar, The Dunciad, Christabel, Adonais, Lycidas, Utopia, The Eve of St. Agnes, The Ballad of Sir Patrick Spens.

10. 9. Give some account of any *one* of the principal characters in Shakespeare's tragedies, describing exactly the part that he or she plays in the plot of the piece.

SECTION II.

10. 10. Write a short account of any *one* of the following reigns or ministries, with special regard to (a) domestic changes, (b) wars :—Alfred the Great, Henry III., Edward III., Henry VIII., James I., Charles II., Walpole, George III., Palmerston.

10. 11. Give some account of any *four* of the following, so as to show their significance and importance in British history :—Caesar's Invasion of Britain, Celtic Christianity, Danegeld, Domesday Book, The Maid of Norway, The White Ship, The Crusades, Edward I.'s Invasion of Wales, The First English Parliament, The Poll-Tax, Battle of Shrewsbury, Siege of Orleans, Perkin Warbeck, Act of Supremacy, Six Articles, The Smithfield Fires, Battle of Zutphen, Insurrection of Essex, Hampton Court Conference, The Policy of "Thorough," Root and Branch Bill, Instrument of Government, The Trial of the Seven Bishops, Battle of the Boyne, National Debt, The Rising of 1715, South Sea Bubble, Seven Years' War, Trial of Warren Hastings, Peninsular War, Siege of Lucknow, First Home Rule Bill.

SECTION III.

10. 12. Describe in detail any two routes from London to Japan, mentioning the principal places passed on the way.

10. 13. Draw a map of Africa showing the possessions of the principal European Powers.

VALUE.  
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14. Describe from source to mouth the course of any *four* of the navigable rivers of Great Britain.
15. Say where *ten* of the following places are situated, and mention anything for which each of the ten is remarkable :—Cintra, Dongola, Klondyke, Nice, Formosa, Harrismith, Ferrara, Leyden, New Orleans, Missolonghi, Gothenburg, Ajaccio, Staffa, Poitiers, Ratisbon, Edgehill.

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ENGLISH.

HONOURS.—SECOND PAPER.

Wednesday, 18th June.—10 A.M. to 1 P.M.

*About SIX questions should be answered. At least FOUR of these must be taken from Section I.*

SECTION I.

16. 1. Illustrate from Chaucer's work his minute observation of personal appearance and character.
16. 2. Compare Malory's *Morte D'Arthur* and Tennyson's *Idylls of the King*, showing how each reflects the characteristics of the age in which it was written.
16. 3. What part was taken in the Revival of Learning by Sir Thomas More, Erasmus, John Colet, and Bishop Fisher ?
16. 4. Explain the metrical construction of the Sonnet, and illustrate your answer by examining any well-known example of that form of verse.
16. 5. "In narration he (Shakespeare) affects a disproportionate pomp of diction, and a wearisome train of circumlocution, and tells the incident imperfectly in many words, which might have been more plainly delivered in few." Discuss this criticism.
16. 6. Briefly describe one example of each of the following types of character as they are portrayed by Shakespeare :—The man of action ; The professional fool ; The affected courtier.
16. 7. Compare the prose writing of any one of these three authors—  
Bacon, Sir Thomas Browne, Milton,  
with that of one of these three—  
Bunyan, Swift, Defoe.
16. 8. Give some account of the rise of the periodical Essay in the Eighteenth Century.

VALUE.

16. 9. What do you understand by the Classical style in English poetry? Give examples.
16. 10. Compare any two lyrics of the Nineteenth Century with any two of the Sixteenth.
11. Write short descriptive notes on six of the following:—*The Man of Lawe's Tale, The Vision of William Concerning Piers the Ploughman, Tyndale's New Testament, The Dance of the Seven Deadly Sins, The History of the World, Mother Hubbard's Tale, The Anatomy of Melancholy, MacFlecknoe, The Rape of the Lock, The Vanity of Human Wishes, She Stoops to Conquer, Humphry Clinker, Michael, Ode to Autumn, Redgawntlet, A Dream of Fair Women, Esmond, David Copperfield.*
16. 12. Give an account of any two English poems which have the form of a dramatic monologue.

## SECTION II.

*Optional Questions.*

13. Translate into modern English:—

þā hīe on Ēastseaxe cōmon tō hīera geweorce and to hīera scipum, þā gegaderade sīo lāf eft of Ēastenglum and of Norðhymbrum micelne hēre onforan winter, and befaeston hīra wīf and hīra scipu and hīra feoh on Ēastenglum, and fōron ānstrecas daeges and nihtes, þæt hīe gedydon on ānre wēstre ceastre on Wirhealum, sēo is Lēgaceaster gehāten. þā ne mehte sēo fird hīe nā hindan offaran, āer hīe wāeron inne on þēm geweorce; besāeton þeah þæt geweorc utan sume twēgen dagas, and genāmon cēapes eall þæt þær būtan waes, and þā meñn ofslōgon þe hīe foran forīdan mehton būtan geweorce, and þæt corn eall forbaern-don, and mid hīra horsum fretton on āelere efenehðe. And þæt waes ymb twelf mōnað þæs þe hīe āer hīder ofer sāe cōmon.

16. 14. Parse fully all the strong verbs in the above passage, giving the principal parts in each case.
16. 15. How did the Scandinavian Invasions affect the History of the English Language?
16. 16. Distinguish between a dialect and a language. What is the historical relation between Lowland Scots and Standard English?



VALUE.

## LATIN.

## LOWER GRADE.

Monday, 16th June.—10 A.M. to 12.30 P.M.

*Candidates should in all cases attempt Question 1.*

## 1. For Prose Composition :—

25. When Cosimo succeeded his father, he was forty years of age, and being already a man of great authority and fortune on his own account, found his way clear before him. He had largely increased his paternal inheritance by commerce, and he used his means so generously that there was hardly any man of weight in Florence who had not sought and received help from him in moments of need. Thus every day saw the increase of his influence, which was employed by him to destroy the last remains of the power of the Albizzi and their friends. These, goaded to desperation, rose in rebellion, and drove him into exile, not daring to do worse.

## 2. Translate :—

20. (a) Sed nostri milites dato signo cum infestis pilis procurerissent atque animadvertissent non curri a Pompeianis, usu periti ac superioribus pugnis exercitati, sua sponte cursum repræserunt et ad medium fere spatium constiterunt, ne consumptis viribus adpropinquarent, parvoque intermisso temporis spatio ac rursus renovato cursu pila miserunt celeriterque, ut erat præceptum a Cesare, gladios strinxerunt. neque vero Pompeiani huic rei defuerunt. nam et tela missa exceperunt et impetum legionum tulerunt et ordines conservarunt, pilisque missis ad gladios redierunt. eodem tempore equites ab sinistro Pompei cornu, ut erat imperatum, universi procurerunt omnisque multitudo sagittariorum se profudit. quorum impetum equitatus noster non tulit, sed paulatim loco motus cessit, equitesque Pompei hoc acrius instare et se turmatim explicare aciemque nostram a latere aperto circumire coeperunt.

*[The Countryman who stays at Home.]*

15. (b) Felix, qui propriis ævum transegit in arvis,  
ipsa domus puerum quem videt, ipsa senem :  
non freta mercator tremuit, non classica miles,  
non rauci lites pertulit ille fori.  
indocilis rerum, vicinae nescius urbis  
adspectu fruitur liberiore poli.  
frugibus alternis, non consule computat annum :  
autumnum pomis, ver sibi flore notat.  
erret et extremos alter scrutetur Hiberos :  
plus habet hic vitæ, plus habet ille viae.

3. (a) Give (1) the meaning, (2) the gender, (3) the genitive singular, (4) the genitive plural of the following words :—*senatus-consultum, respublica, vox, sacerdos, custos, lis, urbs, opus, corpus.*

(b) What are the adverbs formed from the adjectives *audax, gravis, bonus, malus, nequam* ? Give the comparative and superlative of those adverbs.



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(c) Write down the principal parts of *esto, pango, comio, redeo, redde, nolo, spondeo, audeo, prosum, ordior.*

(d) Write short Latin sentences, translating them, to illustrate the constructions usual with each of the following verbs:—*circumdo, obliviscor, suadeo, invideo, ulor.*

40.

(e) Mark the quantity of every syllable of the following words:—*mendicis, impedimentum, homines, mercedis, telluris, pecudis, pano, rapio, divido, patior.*

4 Translate into Latin:—

(a) When I have completed this work at home, I will go with you to the country.

(b) The wiser a man becomes, the more he desires wisdom.

(c) He threatened to kill me if I did not obey him.

(d) The consul sent his son to Rome to tell the Senate that the enemy had asked for peace.

(e) The king asked the young man how old he was, and how long he had lived at Athens.

5. Give a short account of the career of any one of the following:—*Scipio Africanus major, Sertorius, C. Gracchus, C. Marius, Agricola.*

LATIN.

HIGHER GRADE.

Monday, 16th June.—10 A.M. to 1 P.M.

*Candidates will not be allowed to pass unless they reach the necessary standard both in Prose Composition and in Translation.*

1. For Prose Composition:—

25.

Curious to see who it was, the soldier dragged him out, and recognised the face of Claudius, the late Emperor's uncle. He showed him to his comrades who were near, and, possibly in jest, they saluted him as their new prince, raised him at once upon their shoulders, and carried him in triumph to the camp. The citizens who saw him carried by, marked his piteous look of terror, and thought the poor wretch was carried to his doom. The Senate heard that he was in the camp, but only sent to bid him take his place among them, and heard seemingly without concern that he was there detained by force. But the next day found them in a different mood. The populace had been clamouring to have a monarch, the praetorians had sworn obedience to their new-found emperor, the city guards had slipped away, and the Senate, divided and disheartened, had no course left them but submission.

VALUE. 2. Translate into English :—

20. (a) Denique ille ipse M. Marcellus, cuius in Sicilia virtutem hostes, misericordiam victi, fidem ceteri Siculi perspexerunt, non solum sociis in eo bello consuluit, verum etiam superatis hostibus temperavit. urbem pulcherrimam, Syracusas, quae cum manu munitissima esset tum loci natura terra ac mari clauderetur, cum vi consilioque cepisset, non solum incolumem passus est esse, sed ita reliquit ornatam ut esset idem monumentum victoriae, mansuetudinis, continentiae, cum homines viderent et quid expugnasset et quibus pepercisset et quae reliquisset. tantum ille honorem habendum Siciliae putavit ut ne hostium quidem urbem ex sociorum insula tollendam arbitraretur. itaque ad omnes res Sicilia provincia semper usi sumus ut, quidquid ex sese posset efferre, id non apud eos nasci, sed domi nostrae conditum iam putaremus. quando illa frumentum quod deberet non ad diem delit? quando id quod opus esse putaret non ultro pollicita est? quando id quod imperaretur recusavit? itaque ille M. Cato sapiens cellam penariam reipublicae nostrae, nutricem plebis Romanae Siciliam nominabat.

20. (b) Ac velut effusa si quando grandine nimbi praecipitant, omnis campis diffugit arator omnis et agricola et tuta latet arce viator, aut amnis ripis aut alt. fornice saxi, dum pluit in terris, ut possint sole reducto exercere diem : sic obrutus undique telis Aeneas nubem belli, dum detonet omnis, sustinet, et Lausum increpitat Lausoque minatur : 'quo moriture ruis maioraque viribus audes? fallit te incautum pietas tua.' nec minus ille exsultat demens; saevae iamque altius irae Dardanio surgunt ductori, extremaque Lauso Parcae fila legunt : validum namque exigit ensem per medium Aeneas iuvenem totumque recondit. transit et parmam mucro, levia arma minacis, et tunicam, molli mater quam neverat auro, implevitque sinum sanguis; tum vita per auras concessit maesta ad Manes corpusque reliquit. at vero ut voltum vidit morientis et ora, ora modis Anchisiades pallentia miris, ingemuit miserans graviter dextramque tetendit, et mentem patriae subiit pietatis imago.

3. (a) Explain the exact force of *dum* with different tenses of the indicative and with the subjunctive.

Illustrate your explanation by short Latin sentences.

(b) Distinguish between *omnes* and *cuncti*; *unus* and *singuli*; *nemo* and *non nemo*; *aliquis* and *quidam*.

(c) Translate the following sentences, and account for the case of the nouns or pronouns printed in *italics*, and for the mood of the verbs in *italics*.

VALUE.

- (i) ego *animi* pendeo, quid illud sit *negotii*.
- (ii) *vestra* interest ne imperatorem pessimi faciant.
- (iii) quid *mih*i Celsus agit ?
- (iv) tu *velim* nos absentes *defendas*.

(d) Write short Latin sentences to show the constructions usually found with the following verbs :—*paenitet, permittere, meminisse, docere, indulgere*.

4. Scan the following lines, and give the names of the metres in which they are written :—

35.

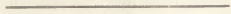
- (a.) hoc anima atque animus vincti sunt foedere semper.
- (b.) hoc duce Romanum est solis utrumque latus.
- (c.) portus Alexandria supplex  
et vacuum patefecit aulam.

5. Translate into Latin :—

- (a.) Whether we stay or go back, we shall have to resist an attack.
- (b.) If I were in your place, I should not hesitate to say what I thought.
- (c.) About three months ago my friends asked me if I thought this thing would happen.
- (d.) The general ordered his men to spare any of the townspeople who asked for quarter.

Answer any *one* of the following questions :—

- (a.) Give a short account of the career of any *one* of the following :—*Tiberius Gracchus; Jugurtha; Cato Uticensis; Germanicus*.
- (b.) Describe the judicial reforms of Sulla; and give a summary of the history of the *equites* during the last eighty years of the Republic.
- (c.) Tell what you know of the following places :—*Luca, Munda, Actium; Baiæ, Venusia, Tusculum; Velabrum, Vicus Tuscus, Mons Sacer*.



VALUE.

## LATIN.

HONOURS.—FIRST PAPER.

Monday, 16th June.—10 A.M. to 1 P.M.

## 1. For Prose Composition:—

70.

He was not a man who held it good public economy to pull down on the mere chance of building better. Mr. Lincoln's faith in God was qualified by a very well founded distrust of the wisdom of man. Perhaps it was his want of self-confidence that more than anything else won him the unlimited confidence of the people, for they felt that there would be no need of retreat from any position he had deliberately taken. The cautious, but steady, advance of his policy during the war was like that of a Roman army. He left behind him a firm road on which public confidence could follow; he took America with him where he went; what he gained he occupied, and his advanced posts became colonies. The very homeliness of his genius was its distinction. His kingship was conspicuous by its workday homespun. Never was ruler so absolute as he, nor so little conscious of it; for he was the incarnate common-sense of the people. He seems to have had but one rule of conduct, always that of practical and successful politics, to let himself be guided by events, when they were sure to bring him out where he wished to go, though by what seemed to unpractical minds, which let go the possible to grasp the desirable, a longer road.

## 2. For Hexameters:—

30

They sought the bark; a wary pilot first  
Well in his scacraft skilled, each landmark taught.  
And now the chief delay'd not, for their vessel  
Was on the waters; by the sea-girt cliffs  
She floated, while the ready warriors plied  
Near the tide-beaten sands the well-poised oar.—  
Deep in her hold all the bright gear of war,  
Armour and arms were stowed, as fitted best  
The willing purpose of their way.—And now  
By favouring winds propelled, e'en as a bird  
She cut the waves that foamed around her prow.  
Thus ere the second day had closed upon them—  
So swift they swept the deep—the eager host  
Saw the bright cliffs and lengthened headlands rise,  
And knew in that steep shore their destined port.

## For Elegiacs —

“What one are thou, thus in torne weede yclad?”  
“Vertue, in price whom ancient sages had.”  
“This bridle what?” “Mind's rages to restrain.”  
“Why bear you tooles?” “I love to take great paine.”  
“Why wings?” “I teach above the stars to fly.”  
“Why treade you death?” “I onely cannot die.”

OR

Write a Latin Speech for, or against, Conscription; or a Dialogue in which the advantages and disadvantages of compulsory military service are discussed.

VALUE.

LATIN.

HONOURS.—SECOND PAPER.

Wednesday, 18th June.—2 to 5 P.M.

1. Translate into English :—

(a.) Legem etiam iudiciariam tulit, homo castus atque integer, iudiciorum et iuris auctor. in quo nos fefellit. antesignanos et manipulares et Alaudas iudices se constituisse dicebat. at ille legit aleatores, legit exules, legit Graecos.—o concessum iudicium praeclarum! o dignitatem consilii admirandam! avet animus apud consilium illud pro reo dicere—Cydam Cretensem, portentum insulae, hominem audacissimum et perditissimum. sed fac non esse: num Latine scit? num ex iudicium genere et forma? num, quod maximum est, leges nostras moresve novit? num denique homines? est enim Creta vobis notior quam Roma Cydae. dilectus autem et notatio iudicium etiam in nostris civibus haberi solet. Gortynium vero iudicem quis novit aut quis nosse potuit? nam Lysiadem Atheniensem citatus iudex non responderit excuseturque Areopagites esse nec debere eodem tempore Romae et Athenis res iudicare, accipietne excusationem is qui quaestioni praeerit, Graeculi iudicis, modo palliati, modo togati? an Atheniensium antiquissimas leges negleget?

18.

(b.) Saepe mihi dubiam traxit sententia mentem, curarent superi terras, an nullus inesset rector, et incerto fuerent mortalia casu, nam cum dispositi quaesisses foedera mundi, praescriptosque mari fines, annique meatus, et lucis noctisque vices, tunc omnia rebar consilio firmata dei, qui lege moveri sidera, qui fruges diverso tempore nasci, qui variam Phoeben alieno iusserit igni compleri solemque suo, porrexerit undis litora, tellurem medio libraverit axe. sed cum res hominum tanta caligine volvi adspicerem, laetosque diu florere nocentes vexarique pios, rursus labefacta cadebat religio, causaeque viam non sponte sequebar alterius, vacuo quae currere semina motu affirmat, magnumque novas per inane figuras fortuna, non arte, regi; quae numina sensu ambiguo vel nulla putat vel nescia nostri. abstulit hunc tandem Rufini poena tumultum absolvitque deos. iam non ad culmina rerum iniustos crevisse queror: tolluntur in altum ut lapsu graviore ruant.

20.

- VALUE. (c.) Vides quam honesti, quam severi dies, quos iucundissimae remissiones sequebantur. adhibebamur cottidie cenae : erat modica, si principem cogitares. interdum acroamata audiebamus, interdum iucundissimis sermonibus nox ducebatur. summo die abeuntibus nobis (tam diligens in Caesare humanitas) xenia sunt missa. sed mihi ut gravitas cognitionum, consilii honor, suavitas simplicitasque convictus, ita locus ipse periucundus fuit. villa pulcherrima cingitur viridis agris, imminet litori, cuius in sinu fit cum maxime portus. huius sinistrum brachium firmissimo opere munitum est, dextrum elaboratur. in ore portus insula adsurgit, quae inlatum vento mare obiacens frangat tutumque ab utroque latere decursum navibus praestet, adsurgit autem arte visenda : ingentia saxa latissima navis provehit : haec alia super alia deiecta ipso pondere manent ac sensim quodam velut aggere construuntur. eminent iam et apparet saxeam dorsum impactosque fluctus in immensum elidit et tollit, vastus illic fragor canumque circa mare. saxis deinde pilae adiciuntur, quae procedente tempore enatam insulam imitentur. habebit hic portus et iam habet nomen auctoris eritque vel maxime salutaris : nam per longissimum spatium litus importuosum hoc receptaculo utetur.
- 20
2. Translate the following, and write short notes on any peculiarities of construction that you observe :—
- (a) populabundus agros ad oppidum venit.
- (b) ne hostes quidem sepultura invident.
- (c) neque Herculi quisquam decumam vovit umquam, si sapiens factus esset.
- 18
- (d) pars ingenti subiere feretro,  
triste ministerium.
- (e) at etiam litteras, quas me sibi misisse diceret, recitavit.
- (f) forsitan Ausonias ibis frenare cohortes.
- (g) unde plures erant, omnes fuere.
- (h) macte, inquit, virtute simulque his versibus esto.
- (i) saepe malum hoc nobis, si mens non laeva fuisset,  
de caelo tactas memini praedicere quercus.
3. Answer any two of the following questions :—
- (a) During what period of Roman History was the influence of the Senate greatest ? Account for its prominence at that time.
- (b) What were the political aims and achievements of C. Gracchus and C. Marius ? Consider how far they may be held to be the forerunners of Julius Caesar.
- 24.
- (c) To what extent were there Political Parties, with principles or "platforms," in Cicero's time ? Define the interests and aims of such Parties as can be distinguished.
- (d) In what ways did Octavian differ from Julius Caesar ? Account for the success of the former, referring briefly to events which favoured him, to his own character, and to the ability of his associates.

VALUE.

- (e) Sketch the growth of Roman Oratory, mentioning (with approximate dates) a few of the most distinguished orators before and after the time of Cicero.
- (f) Compare the poetry of Cicero's contemporaries—especially Lucretius and Catullus—with that of the Augustan age. What are the qualities of each, and which seems to you to rise to the higher level ?
- (g) Write a short account of the literary career of Virgil or Horace, showing the ideas or aspirations which guided the poet from time to time, and the circumstances which favoured the development of his genius.

GREEK.

LOWER GRADE.

Friday, 13th June.—2 to 4.30 P.M.

I. Translate :—

Ὁ δὲ Πολύβριον ἤρξε μὲν ἐναντιὸν, ἀπειργάσατο δὲ τὴν βασιλείαν τυραννίδι ὁμοίαν. ἔν τε γὰρ Φαρσάλῳ τῶν πολιτῶν τινὰς τοὺς κρατίστους ἀπέκτεινεν, ἔκ τε Λαρίσης πολλοὺς φυγάδας ἐποίησε. ταῦτα δὲ ποῦναι καὶ οὗτος ἀποθνήσκει ὑπ' Ἀλεξάνδρου, ὡς τιμωροῦντος τῷ Πολυδώρῳ καὶ τὴν τυραννίδα καταλύοντος. ἐπεὶ δ' αὐτὸς παρέλαβε τὴν ἀρχήν, χαλεπὸς μὲν Θετταλοῖς βασιλεὺς ἐγένετο, χαλεπὸς δὲ Θηβαίοις καὶ Ἀθηναίοις πολέμιος, ἀδίκος δὲ ληστής καὶ κατὰ γῆν καὶ κατὰ θάλατταν. τοιοῦτος δ' ὢν καὶ αὐτὸς αὐτὸ ἀποθνήσκει, ἔργῳ μὲν ὑπὸ τῶν τῆς γυναικὸς ἀδελφῶν, βουλῇ δὲ ὑπ' αὐτῆς ἐκείνης. τοῖς τε γὰρ ἀδελφοῖς ἐξήγγειλεν ὅτι ὁ Ἀλέξανδρος ἐπιβουλεύει αὐτοῖς, καὶ ἔκρυψεν αὐτοὺς ἐνδον ὄντας ὅλην τὴν ἡμέραν, καὶ εἰρούσα μεθύοντα τὸν Ἀλέξανδρον καὶ καθυδόντα τὸ ξίφος αὐτοῦ ἐξήγγεικεν, ὡς δ' ἦσθετο ὀκνοῦντας εἰσιέναι ἐπὶ τὸν Ἀλέξανδρον τοὺς ἀδελφοῖς, εἶπεν ὡς εἰ μὴ ἤδη πράξειεν, ἐξεγείρει αὐτόν. ὡς δ' εἰσηλθὼν, ἐπισπάσασα τὴν θύραν εἶχετο τοῦ ῥόπτρου(!), ἕως ἀπέθανεν ὁ ἀνήρ.

(!) ῥόπτρον, "knocker" (of the door).

II. Translate into Greek :—

- (1) He thought that he himself was the happiest of men, not knowing what had happened.
- (2) For three days and three nights they did not cease (παύομαι) from fighting against larger numbers.
- (3) We fear that the enemy may suddenly (ἐξαίφνης) appear and cross the river.
- (4) You ought not to have persuaded us to make such a peace.
- (5) My friend has gone to his brother to tell him the state of affairs.

40

20



VALUE.

## III. (a) Give—

gen. sing. of πλοῦς, ἔως, κέρας, ἀστήρ, Σοφοκλῆς, Ἑρμῆς.  
acc. plur. of υἱός, ποιητής, ὄστρον, κάλλος, στάσις, βασιλεύς.  
dat. sing. fem. of πρᾶος, χρυσοῦς, μέλας, πᾶς, εἷς, ὄδε.

Compare ταχύς, ἔχθρός, εὐγενής, εὖ, ἡδέως, σοφῶς.  
Parse τόλμης, αἰδοῦ, γόνασι, πολῖτα, σφῶν, ὄτον.

## (b) Parse fully, giving the principal parts of each verb—

15. ἦσθεο, ἀνεωγμένα, ἀνήλωκα, μέμνησο, ἔδεται, ἐκαλέσω,  
ἐπελάβου, ἐφιέντων, πευσόμενον.

Give—

2nd sing. 2nd aor. imperat. act. of βάλλω, ἔχω, λαμβάνω,  
βαίνω.

1st sing. fut. ind. of ἐλαύνω, αισθάνομαι, γινώσκω, πάσχω.  
aor. inf. pass. of ἀγγέλλω, πλέκω, ἴστημι, τιμῶ.

## (c) Translate, with notes on the syntax :—

10. (1) οὐ διὰ μακροῦ ἤξουσιν οἱ ξένοι.  
(2) πόσον ἐθέλεις διδάσκειν ;  
(3) ταῦτ' ἐπὶ τῶν πατέρων ἐγένετο.  
(4) οὐκ οἶδα ὁ τι χρῆσμαι ἐμαυτῷ.  
(5) ἐπιχειρητέον ἐστὶ τῷ ἔργῳ.

## (d) Give examples of the uses of διὰ and παρά, of μὴ with the subjunctive and the infinit., and of ἂν with the optative.

## GREEK.

## HIGHER GRADE.

Friday, 13th June.—2 to 5 P.M.

(Candidates will not be allowed to pass unless they reach the necessary Standard both in Grammar and Translation.)

## I. Translate :—

28. ἐνταῦθα δὴ τούτων αὐτὴν ἀρετὴν τίς οὐκ ἂν ἀγασθείη; οἱ καὶ πολὺ πλείονας ὀρώντες τοὺς πολεμίους, καὶ ἐν Κορίνθῳ δυστυχίματος γεγενημένοι τοῖς ἰππεύσιν, οὐδὲν τούτων ὑπελογίσαντο, οὐδ' ὅτι καὶ Θετταλοῖς τοῖς κρατίστοις ἰππεύσιν εἶναι δοκοῦσιν ἐμελλόν μάχεσθαι, ἀλλ' αἰσχρόνμενοι εἰ παρόντες μηδὲν ὠφελήσουσιν τοὺς συμμαχοῦς, ὡς εἶδον τάχιστα τοὺς πολεμίους, συνέρραξαν, ἐρώντες ἀνασώσασθαι τὴν πατρῶν δόξαν. καὶ μαχόμενοι αἰτίοι μὲν ἐγένοντο τὰ ἔξω πάντα σωθῆναι τοῖς Μαντινεύσιν, αὐτῶν δὲ ἀπέθανον ἄνδρες ἀγαθοί, καὶ ἀπέκτειναν δὲ δῆλον ὅτι τοιοῦτους. καὶ τοὺς μὲν φίλους νεκροὺς οὐ προήκαιο, τῶν δὲ πολεμίων ἐνίους ὑποσπόνδους ἀπέδωσαν. τῷ δ' αὖτ' Ἐπαμεινώνδα ἐνθυμουμένῳ ὅτι ὀλίγων μὲν ἡμερῶν ἀνάγκη ἔσοιτο ἀπέναι διὰ τὸ ἐξῆκειν τῇ στρατείᾳ τὸν χρόνον, εἰ δὲ καταλείψοι ἐρήμους οἷς ἦλθε σύμμαχος, ἐκείνοι πολιορκήσουσιν ἐπὶ τῶν ἀντιπάλων, οὐκ εἰδοὶκε δυνάτον εἶναι ἅμα ἂν παρελθεῖν, λογιζόμενῳ ὅτι, εἰ μὲν νικήσῃ, πάντα ταῦτα ἀναλύσοιτο· εἰ δὲ ἀποθάνοι, καλὴν τὴν τελευταίην ἡγήσατο εἶσεσθαι πειρωμένῳ τῇ πατρίδι ἀρχῆν Πελοποννήσου καταλατπεῖν.

σπυράσσω “dash together”: ἀναλύεσθαι “resolve” (doubts).

VALUE. II. Translate one of the following passages :—

17. (a) Τὸν δ' ἀπαμειβόμενος προσέφησ; Εὐμαιε σὺβῶτα·  
 ἄδειλὲ ξείνων, ἢ μοι μάλα θυμὸν ὄρισας  
 ταῦτα ἕκαστα λέγων, ὅσα δὴ πάθες ἠδ' ὄσ' ἀλήθης.  
 ἀλλὰ τὰ γ' οὐ κατὰ κόσμον, ὁμοιοι, οὐδέ με πείσεις  
 εἰπὼν ἀμφ' Ὀδυσῆϊ τί σε χρὴ τοῖον ἔοντα  
 μαψιδίως ψεῦδεσθαι; ἐγὼ δ' εἰ οὔα καὶ αὐτὸς  
 νόστον ἐμοῖ ἀνακτος, ὃ τ' ἤχθητο πᾶσι θεοῖσι  
 πάγχυ μάλ', ὅττι μιν οὔτι μετὰ Τρώεσσι δάμασαν  
 ἢε φίλων ἐν χερσίν, ἐπεὶ πόλεμον τολῦπενσε.  
 τῷ κέν εἰ τύμβον μὲν ἐποίησαν Παναχαιοί,  
 ἠδέ κε καὶ ῶ παῖδ' ἐμέγα κλέος ἦρατ' ὀπίσσω.  
 αἰτάρ ἐγὼ παρ' ἕνεσιν ἀπὸτροπος· οὐδέ πολυιδε  
 ἔρχομαι, εἰ μὴ πού τι περιφύρων Πηνελόπειά  
 ἐλθῆμεν ὀτρύνησιν, ὄτ' ἀγγελίη ποθέει ἔλθῃ.

(b) [Electra holds in her hands the urn which is supposed to contain the ashes of Orestes. She addresses Orestes.]

νῦν μὲν γὰρ οὐδὲν ὄντα βαστάζω χερσῶν·  
 δόμων δέ σ', ὦ παῖ, λαμπρὸν ἔξεπεμψ' ἐγὼ.  
 ὦ, ὠφελον πάροθεν ἐκλιπεῖν βίον,  
 πρὶν ἐς ἐόνην σε γαῖαν ἐκπέμψαι, χερσῶν  
 κλέψασα ταῦνδε, κἀνασώσασθαί φόνου,  
 ὅπως θανὼν ἐκείσο τῇ τούτ' ἡμέρᾳ,  
 τύμβον πατρῴου κοινὸν εἰληχῶς μέρος.  
 νῦν δ' ἐκτὸς οἴκου κἀπὶ γῆς ἄλλης φυγᾶς  
 κακῶς ἀπόλοι, σῆς κασιγνήτης δίχα·  
 κοῦτ' ἐν φίλαισι χερσῶν ἢ τάλαυ' ἐγὼ  
 λαντροῖς σ' ἐκόσμησ'· οὔτε παμφλέκτου πυρὸς  
 ἀνελόμην, ὡς εἰκός, ἄθλιον βῆρος.  
 οἴμοι τάλαυα τῆς ἐμῆς πάλαι τροφῆς  
 ἀωφελήτου, τὴν ἐγὼ θάμ' ἀμφὶ σοὶ  
 πόνῳ γλυκεῖ παρέσχον.

III. Translate into Greek :—

30. (1) I bade him throw away whatever in the world he held dearest, that he might escape the jealousy of fortune.  
 (2) If I had thought that you, at your age, would be able to do so much harm to your friends, I would not have released (ἀφίμι) you.  
 (3) Do not show this letter to anyone, either man or woman, till you hear of our arrival at the place for which we are bound.  
 (4) Would that it were possible to become a skilled speaker without spending (ἀναλίσκω) so much time and giving large sums to a teacher!  
 (5) No one can deny that those who take the side of the tyrant deserve to be slain by the whole body of citizens.  
 (6) In the course of this night, or of the following day, we hope either to take the city or perish bravely in the attempt.

VALUE.

*Alternative passage for Translation into Greek.*

30. A story about Plato is worth recording as indicating his character. On one occasion he was lodging (*καταλίω*) at Olympia with some strangers, who were highly pleased with his manners and conversation. Not a word, however, did he say about the Academy or about Socrates; he merely told them that his name was Plato. Some time later they paid him a visit at Athens, and so friendly was his welcome that they were encouraged to say, "Now *do* let us see your namesake, the associate of Socrates; take us to the Academy that we may have the honour of hearing him discourse to his pupils." With his wonted smile he replied, "I am he." They were amazed to find the great man so simple, and able to win friends by easy human intercourse.

IV. (1) Give perf. infin. of *δνούμαι*.pres. infin. of *πευῶ*.perf. pass. ind. 3rd sing. of *ἀπονίζω*.fut. part. nom. sing. fem. of *συμπνέω*.aor. indic. 3rd plur. of *μάχομαι*.opt. 1st plur. of *κάρημαι*.fut. ind. 2nd sing. of *δίψιδω*.2nd aor. ind. act. 2nd sing. of *ἐκθρόσκω*.2nd aor. pass. part. dat. sing. masc. of *συναλλάσσω*.imperf. ind. 3rd plur. of *προσιέναι*.

5.

(2) Translate with grammatical notes:—

(a) *ξηλώ σε τοῦ νοῦ.*(b) *αἱ νῆες αὐτοῖς ἀνδράσιν ἀπώλοντο.*(c) *τὸ σὸν μέρος ἢ πόλις ἐάλω.*(d) *οὐδενὸς οὗτου οὐ σοφώτερος ἦν.*(e) *ὑπὸ σάλπιγγος ἐπορεύοντο.*

5.

(3) Translate with notes on the syntax:—

(a) *εἴθ' εὐρομέν σ', Ἄδμηγε, μὴ λυπούμενον.*(b) *τᾶλλα σωπῶ πόλλ' ἂν ἔχων εἰπεῖν.*(c) *οὐκοῦν ὅταν δὴ μὴ σθένω πεπαύσομαι.*(d) *τὰ τοιαῦτα οὐτ' ἐγένετο οὐτ' ἂν ἐγένετο.*(e) *τὰ τοιαῦτα οὐτ' ἐγένετο μήτε γένοίτο.*

5.

(4) Distinguish *πείθειν*, *πέισαι*: *ἀποθνήσκειν*, *ἀποθανεῖν*: *ἀνοβαίνειν*, *ἀναβιβάζειν*: *συμβουλεύειν*, *συμβουλευέσθαι*: *ἐκάτερος*, *ἕκαστος*.

Explain the force of the prepositions in the following compounds, giving the English of each word:—

5.

*μεταπέμπομαι*, *μεταμέλομαι*, *μεταδίδωμι*: *ἀποδίδωμι*, *ἀπαγορεύω*,  
*ἀπεργάζεσθαι*: *διαγιγνώσκω*, *διαμάχομαι*, *διαλέγομαι*: *ἀναχωρῶ*,  
*ἀναγιγνώσκω*, *ἀνάγω*: *περιαρῶ*, *περιγίγνομαι*, *περιορῶ*.

VALUE.

GREEK.

HONOURS.—FIRST PAPER.

Friday, 13th June.—2 to 5 P.M.

I. Translate:—

(1) Τὸν δ' ἄρ' ὑπόδρα ἰδὼν προσέφη πολύμητις Ὀδυσσεύς·  
 'Ἀτρεΐδην, ποῖόν σε ἔπος φέγειν ἔρκος ἐδόντων  
 οὐλόμην', αἶθ' ὄφελлес ἀικελίον στρατοῦ ἄλλου  
 σημαίνειν, μηδ' ἄμμιν ἀναστέμεν' οἷσιν ἄρα Ζεὺς  
 ἐκ νεότητος ἔδωκε καὶ ἐς γῆρας τολυπεύειν  
 ἀργαλέους πολέμους, ὄφρα φθιώμεσθα ἕκαστος,  
 οὕτω δὴ μέμονας Τρώων πόλιν εἰρνώγυιαν  
 καλλείψειν, ἧς εἶνεκ' οἴζυομεν κακὰ πολλὰ;  
 σῆγα, μή τίς τ' ἄλλος Ἀχαιῶν τοῦτον ἀκούσῃ  
 μῦθον, ὃν οὐ κεν ἀνὴρ γε διὰ στόμα πᾶμπαν ἄγοιτο,  
 ὅς τις ἐπίσταιτο ἧσι φρεσὶν ἄρτια βάζειν  
 σκηπτοῦχός τ' εἴη, καὶ οἱ παιθόιατο λαοὶ  
 τοσσαῖδ' ὄσσοισιν σὺ μετ' Ἀργείοισιν ἀνάσσεις'  
 νῦν δέ σευ ὀνοσάμην πάγχυ φρένας, ὅσον ἔειπες'  
 ὅς κέλευι πολέμοιο συνεσταότος καὶ αὐτῆς  
 νῆας εὖστέλμους ἀλαδ' ἑλκόμεν, ὄφρ' ἔτι μάλλον  
 Τρωσὶ μὲν εὐκτὰ γένηται ἐπικρατέουσι περ ἔμπης,  
 ἡμῖν δ' αἰπὺς ὄλεθρος ἐπιβρέπη.  
 Explain the mood ἐπίσταιτο.

20.

ΚΑΡΙΩΝ, ΔΙΚΑΙΟΣ.

(2) ΚΑ. ἔα, τίς ἔσθ' ὁ προσίων οἴτοσί;  
 ΔΙ. ἀνὴρ πρότερον μὲν ἄθλιος, νῦν δ' εὐτυχής.  
 ΚΑ. δῆλον ὅτι τῶν χρηστῶν τις, ὡς ἔοικας, εἰ.  
 ΔΙ. μάλιστ'. ΚΑ. ἔπειτα τοῦ δέει; ΔΙ. πρὸς τὸν θεὸν  
 ἦκω· μεγάλων γάρ μοι στὶν ἀγαθῶν αἰτίος.  
 ἐγὼ γὰρ ἰκανὴν οὐσίαν παρὰ τοῦ πατρὸς  
 λαβῶν ἐπήρουν τοῖς δεομένοις τῶν φίλων,  
 εἶναι νομίζων χρήσιμον πρὸς τὸν βίον.  
 ΚΑ. ἦ ποῦ σε ταχέως ἐπέλεπεν τὰ χρημάτα.  
 ΔΙ. κομιδῇ μὲν οὖν. κἀγὼ μὲν ᾤμην οὐς τέως  
 εὐηργέτησα δεομένους ἔξεν φίλους  
 ὄντως βεβαίους, εἰ δεηθείην πότε  
 οἱ δ' ἐξετρέποντο κοῦκ ἐδόκουν ὄρ' ἵν' μ' ἔτι.  
 ΚΑ. ἀλλ' οὐχὶ νῦν. ΔΙ. ἀνθ' ὧν ἐγὼ πρὸς τὸν θεὸν  
 προσευξόμενος ἦκω δικαίως ἐνθάδε.  
 ΚΑ. τὸ τριβώνιον δὲ τί δύναται πρὸς τὸν θεόν,  
 ὃ φέρει μετὰ σοῦ τὸ παιδάριον ταυτί; φράσον.  
 ΔΙ. καὶ τοῦτ' ἀναθήσων ἔρχομαι πρὸς τὸν θεόν.  
 ΚΑ. μὴν οὖν ἐμνήθης δῆτ' ἐν αὐτῷ τὰ μεγάλα;  
 ΔΙ. οὐκ' ἀλλ' ἐνεργήσω' ἔτη τριακαϊδέκα.  
 ΚΑ. τὰ δ' ἐμβάδια; ΔΙ. καὶ ταῦτα συνεχεμάζετο.  
 ΚΑ. καὶ ταῦτ' ἀναθήσων ἔφερεις οὖν; ΔΙ. νῆ τὸν Δία.  
 ΚΑ. χαριεῖτά γ' ἦκεις δῶρα τῷ θεῷ φέρων.

20.

II. For Greek Prose:

Then turning towards Philip, who fell on his knees and kissed his father's hand, "If," says he, "I had left you by my death this rich inheritance, to which I have made such large additions, some regard would have been justly due to my memory on that account; but now when I voluntarily resign to you what I might have still retained, I

- VALU. may well expect the warmest expression of thanks on your part. With these, however, I dispense, and shall consider your concern for the welfare of your subjects, and your love of them, as the best and most acceptable testimony of your gratitude to me. It is in your power, by a wise and virtuous administration, to justify the extraordinary proof
60. which I, this day, give of my paternal affection, and to demonstrate that you are worthy of the confidence which I repose in you. And if the time should ever come when you shall wish to enjoy the tranquillity of private life, may you have a son endowed with such qualities that you can resign your sceptre to him with as much satisfaction as I give up mine to you."—ROBERTSON.

## GREEK.

## HONOURS—SECOND PAPER.

Thursday, 19th June.—2 to 5 P.M.

## I. Translate:—

(1)

[Lysias charges Eratosthenes with the murder of Polemarchus.]

25. δὲ γὰρ, ὦ ἄνδρες δικασταί, Ἐρατοσθένην δυοῖν θάτερον ἀποδείξει, ἢ ὡς οὐκ ἀπήγαγεν αὐτὸν, ἢ ὡς δίκαιός τοι ἔπραξεν. οὗτος δὲ ὁμολόγησεν ἀδίκως συλλαβεῖν, ὥστε ῥαδίαν ὑμῖν τὴν διαψήφισιν περὶ αὐτοῦ πεποιήκει. καὶ μὲν δὴ πολλοὶ καὶ τῶν ἀστῶν καὶ τῶν ξένων ἤκουσι εἰσόμενοι τίνα γνώμην περὶ τούτων ἔχετε. ἂν οἱ μὲν ἡμέτεροι ὄντες πολῖται μαθόντες ἀπίασιν ὅτι ἡ δίκην δώσουσιν ἂν ἂν ἐξαμάρτωσιν, ἢ πράξαντες μὲν ἂν ἐφίενται τύρανοι τῆς πόλεως ἔσονται, δυστυχίσαντες δὲ τὸ ἴσον ὑμῖν ἔξουσιν. ὅσοι δὲ ξένοι ἐπιδημοῦσιν, εἰσονται πότερον ἀδίκως τοὺς τριάκοντα ἐκκηρύττουσιν ἐκ τῶν πόλεων ἢ δίκαιος. εἰ γὰρ δὴ αἰτοὶ οἱ κακῶς πεπονθότες λαβόντες ἀφ' ἑσέων, ἢ που σφᾶς αὐτοῖς ἠγγήσονται περιέργους ὑπὲρ ὑμῶν τιμαυρομένους. οὐκ οὖν δεινὸν εἰ τοὺς μὲν στρατηγούς οἱ ἐνίκων ναυμαχοῦντες, ὅτε διὰ χειμῶνα οὐχ οἰοί τ' ἔφασαν εἶναι τοὺς ἐκ τῆς θαλάττης ἀνελεῖσθαι, θανάτῳ ἐξημῶσατε, τοὺτους δὲ, οἱ ἰδιῶται μὲν ὄντες καθ' ὅσον εἰδύναντο ἐποίησαν ἠτηθήναι ναυμαχοῦντας, ἐπειδὴ δὲ εἰς τὴν ὄρχην κατέστηται, ὁμολογοῦσιν ἐκόντες πολλοὺς τῶν πολιτῶν ἀκρίτους ἀποκτείνουσι, οὐκ ἄρα χρὴ αὐτοὺς καὶ τοὺς παῖδας ὑφ' ὑμῶν ταῖς ἐσχάταις ζημίας κολάζεσθαι;

(2)

[A legislator must be allowed to frame his ideal, even though it may not all be practicable.]

14. Ἐνοεῖν δὲ ἡμᾶς τὸ τοιούτῳ ἐστὶ χρεῶν ἐκ παντὸς τρόπου, ὡς τὰ νῦν εἰρημένα πάντα οὐκ ἂν ποτε εἰς τοιοῦτους καιροὺς ἐμπέσοι, ὥστε ἐμβῆναι κατὰ λόγον οὕτω ξέμπαντα γενόμενα. ἔχει δὴ τὰ τοιαῦτα οὐ κακῶς τίνα τρόπον εἰρημένα, χρὴ δ' ἐπαναλαμβάνειν πρὸς αὐτὸν τὰ τοιαῦτα. πάλιν ἄρα ἡμῖν ὁ νομοθετῶν φράζει τὸδε: Ἐν τοίοις τοῖς λόγοις, ὦ φίλοι, μὴδ' αὐτὸν δοκεῖτέ με λελθῆναι τὸ νῦν λεγόμενον, ὡς ἀληθῆ διεξέρχεται τίνα τρόπον. ἀλλὰ γὰρ ἐν ἐκάστοις τῶν μελλόντων ἔσεσθαι δικαιοτάτον οἶμαι τὸδε εἶναι, τὸν τὸ παράδειγμα δεικνύντα, οἷον δεῖ τὸ ἐπιχειροῦμενον γίνεσθαι, μὴδὲν ἀπολείπειν τῶν καλλίστων τε καὶ ἀληθεστάτων· ὧ δὲ ἀδύνατόν τι ἐμβάίνει τούτων γίνεσθαι, τοῦτο μὲν αὐτὸ ἐκκλίνει καὶ μὴ πράττει, ὃ τι δὲ τοῦτου τῶν λοιπῶν ἐγγυτάτῃ ἐστὶ καὶ ἐπιγγεεστάτον ἐφ' ὧν τῶν προσκόντων πράττει, τοῦτ' αὐτὸ διαμνησθῆναι ὅπως ἂν γίγηται τὸν νομοθέτην δ' εἶσαι τέλος ἐπιθεῖναι τῇ βουλήσει, γενομένου δὲ τοῦτου, τότ' ἤδη κοινῇ μετ' ἐκείνου σκοπεῖν ὃ τι ἐμφέροι τῶν εἰρημένων.

VALUE II. (a) Translate with notes on the syntax :—

- (1) ἄλλ' ὄμοσον μὴ μητρὶ φίλῃ τάδε μυθήσασθαι.
- (2) κύων ὧς, ὃς τ' ἐπὶ νεβρῶν βλημένος ἄξιη.
- (3) φεῦ, φεῦ, τὸ μὴ τὰ πράγματ' ἀνθρώπου ἔχειν φωνήν, ἢ ἦσαν μηδὲν οἱ δεινοὶ λόγοι.
- (4) οὐ μὴ λαλήσεις ἄλλ' ἀκολουθήσεις ἐμοί ἀνίσας τι δευρὶ θάπτον;
- (5) ἐγώ, εἴπερ ἄλλω τῷ ἀνθρώπῳ πειθοίμην ἂν, καὶ σοὶ πείθομαι.
- (6) διδάσκει με ὡς μὴ εἰδὸτ' αὐτὸν μηδέν.
- (7) τίνα οἴεσθε ὄντων' οὐ βραχεῖα προφάσει ἀποστήσεσθαι;
- (8) φοβείσθε μὴ δυσκολώτερόν τι νῦν διακείμει ἢ ἐν τῷ πρόσθεν βίῳ.
- (9) ὑμᾶς εἰδῆναι ἡγοῦμαι τοῦτον οὕτω σκαιὸν εἶναι ὥστε οὐ δύνασθαι μαθεῖν τὰ λεγόμενα.
- (10) κἂν εἰ πολλαὶ εἰσιν, ἔν γέ τι εἶδος ταυτὸν πᾶσαι ἔχουσι.

25.

(b) How are the following particles used :—ἢ μὴν, ἀλλ' ἢ, μὲν οὖν, οὐ μὴν ἀλλά, οὐ γὰρ ἀλλά, ἀλλὰ γάρ, καὶ γάρ, ἄρα, δῆθεν, δῆρα?

III. Answer any two of the following questions :—

- (1) What are the chief arguments for and against the personality of Homer?
- (2) Who were the Sophists? What was their relation to Socrates?
- (3) Give the plot and analyze the structure of any Greek play with which you are familiar, adding the Greek terms for each division of the play.
- (4) What foreign influences affected the early civilisation of Greece?
- (5) Trace the history of the Kingship in Greece and the Archonship at Athens.
- (6) Give a brief account of any three of the following events and of the circumstances which led to them:—the Revolt of Mitylene; the Peace of Nicias; the Peace of Antalcidas; the destruction of Olynthus; the battle of Issus.

25.

FRENCH.

LOWER GRADE.

Friday, 13th June.—10 A.M. to 12.30 P.M.

To secure full marks, the whole of this Paper should be answered.

1 Translate into English :—

(a.) Avant d'aller annoncer à sa mère son heureuse matinée, Pierre rentra un instant dans sa barque pour examiner les réparations qu'il aurait à faire à ses filets. Mais quelle ne fut pas sa surprise lorsqu'en les soulevant il aperçut à ses pieds une bourse qui renfermait plus de deux mille francs en or! Sa première pensée fut de croire que c'était un oubli de l'inconnu,

14.



VALUE.

et, courant sur-le-champ après lui, il l'aperçut qui causait au milieu d'un groupe d'étrangers. "Monsieur," lui dit Pierre, "voici une bourse que vous avez oubliée tout à l'heure dans ma barque." "C'est une erreur, je n'ai rien oublié dans votre barque : mais cette bourse, fût-elle à moi, mon ami, je vous dirais de la garder pour prix de votre probité!"

"Mais au moins, Monsieur, vous me direz votre nom, afin que je sache quel est mon bienfaiteur." Pour toute réponse, l'homme à qui il s'adressait se dégagea de la foule en détachant l'agrafe\* de son manteau, qui tomba dans les mains du pauvre Pierre de plus en plus surpris. Le pêcheur se décida enfin à retourner au logis.

## LE FRONT.

- (b.) Max se frottait le front : "Quel est ce blanchissage † ?"  
Lui demanda sa sœur : "As-tu donc le front noir ?"  
—"J'étais un peu méchant ; maman pourrait le voir."  
C'est écrit sur mon front quand je ne suis pas sage."

Et Max frotte encore davantage.

7.

Il croit qu'en essuyant les marques s'en iront.

Pas du tout : son front devient rouge,

Et sa mère, en rentrant, dit, avant qu'il ne bouge :

"Max vient d'être méchant ; c'est écrit sur son front !"

(L. RATISBONNE.)

(c.) "La médecine est à la mode parmi nous ; elle doit l'être. C'est l'amusement des gens oisifs et désœuvrés, qui, ne sachant que faire de leur temps, le passent à se conserver. S'ils avaient eu le malheur de naître immortels, ils seraient les plus misérables des êtres. Une vie qu'ils n'auraient jamais peur de perdre ne serait pour eux d'aucun prix. Il faut à ces gens-là des médecins qui les menacent pour les flatter, et qui leur donnent chaque jour le seul plaisir dont ils soient susceptibles, celui de n'être pas morts."

7.

(J. J. ROUSSEAU.)

2. Write from memory a French version of the passage read out.

15.

3. Translate into French :—

At the end of fifteen or sixteen years, however, it happened one day that the young princess, running about the castle and mounting from room to room, reached a turret, in a little gallery of which she saw a good old woman. "What are you doing there, my good woman?" said the princess. "I am spinning, † my pretty child," replied the old woman, who did not know her. "Oh, how pretty that is!" said the princess. "How do you do it? What is that plaything in your left hand? Lend it me, that I may try if I can do it as well." She had scarcely taken the spindle, § when she wounded her hand and fainted ¶ away.

\* agrafe=hook. † blanchissage = washing ‡ spin = filer.  
§ the spindle = le fuseau. ¶ faint away s'évanouir.



VALUE.

4. Write in the plural:—*nez, trou, genou, sou, feu* (noun), *bal, cheval, celui, ce, lequel*. Give the masculine of *fraîche, favorite, impératrice, causeuse, active, gentille, jeune*.
5. Give the present and past participles of *avoir, coudre, mourir, vivre*; the 3rd person singular and the 2nd person plural of the present indicative of *faire, vouloir*; and of the present subjunctive of *venir, punir*; the 3rd person singular of the future indicative of *voir, aller*; the first person plural of the imperfect subjunctive of *moudre, vaincre*; the infinite of *lui, me, pu, su*.
6. Translate into French:—I am speaking to him. Is that your book? Give it to me if you please. No! I cannot give it to you because I have promised it to her.
7. Give the adverbs corresponding to the adjectives *bon, petit, mauvais* with the comparatives of both the adjectives and adverbs.
8. Write in French words:—William the First, Edward the Seventh, 26th June, 1902.
8. Translate into French:—I live in Scotland. There are fewer inhabitants in all Scotland than in London. The room in which I am sitting is forty feet long by thirty wide. My eldest brother is a foot taller than I. It rains more in spring than in winter.

## FRENCH.

LOWER AND HIGHER GRADES.

Friday, 13th June.—10.45 A.M.

*This Paper must not be seen by any Candidate.*

*To be read out once or twice by the Supervising Officer (or a Teacher) at 10.45 A.M. The substance of this story is to be reproduced by the Candidates in French from memory. No notes may be made while it is being read.*

When the Christians under King Richard the First of England defeated the Saracens, the Sultan seeing his troops fly, asked what was the number of the soldiers who were making all this slaughter. He was told that it was only King Richard and his men, and that they were all on foot. "Then," said the Sultan, "God forbid that such a noble fellow as King Richard should march on foot," and sent him a noble charger. The messenger took it to the King and said, "Sire, the Sultan sends you this charger that you may not be on foot." The King was as cunning as his enemy, and ordered one of his captains to mount the horse in order to try him. The captain obeyed; but the animal proved fiery; and the captain being unable to hold him in, he set off at full speed to the Sultan's pavilion. The Sultan expected he had got King Richard; and was not a little mortified to discover his mistake.

VALUE.

FRENCH.

HIGHER GRADE.

Friday, 13th June.—10 A.M. to 1 P.M.

Candidates must, in all cases, answer Questions 1, 2 and 3 (Section I); and should attempt FOUR questions (and FOUR only) from the other Section.

No candidate will be allowed to pass unless the necessary standard is reached both in Composition and in Translation.

## SECTION I.

1. Translate into English:—

(a.) Marchons ! Mais où m'entraînez-vous ?

Enfants du vieil aveugle, en quel lieu sommes nous ?

—Syros est l'île heureuse où nous vivons, mon père.

—Salut, belle Syros, deux fois hospitalière !

Car sur ses bords heureux je suis déjà venu ;

Amis, je la connais. Vos pères m'ont connu :

Ils *croissaient* comme vous, mes yeux s'ouvraient encore

Au soleil, au printemps, aux roses de l'aurore.

J'étais jeune et vaillant. Aux danses des guerriers,

A la course, aux combats, j'ai paru des premiers ;

J'ai vu Corinthe, Argos, et Crète et les cent villes,

Et du fleuve Egyptus les rivages fertiles.

Mais la terre et la mer, et l'âge et les malheurs,

Ont épuisé ce corps fatigué de douleurs.

La voix me reste. Ainsi la cigale innocente,

Sur un arbuste assise, et se console et chante.

Commençons par les dieux : Souverain Jupiter,

Soleil qui vois, entends, connais tout ; et toi, mer,

Fleuve, terre, et noirs dieux des vengeances trop lentes,

Salut ! Venez à moi, de l'Olympe habitantes,

Muses ! vous savez tout, vous déesses ; et nous,

Mortels, ne savons rien qui ne vienne de vous.

(A. CHÉNIER.)

(b.) Dupuis (à Marianne, sa domestique) : Vous êtes une maladroite ! Taisez-vous ! Ne dirait-on pas que cette malle pleine de linge est une montagne à porter ? (A sa femme) : Figure-toi, ma chère, que cette sotte fille ne trouve rien de si plaisant que de laisser rouler ma malle du haut en bas de l'escalier !

Marianne : Eh ! monsieur, depuis que vous n'avez dit que vous alliez à Rome, je ne sens plus ni bras ni jambes, moi ! je n'ai plus de forces ! Aller à Rome ! ma foi ! voilà du nouveau . . . et du beau !

Dupuis : Cette fille est folle ! . . . De quoi vous mêlez-vous, s'il vous plaît ?

10. Marianne : De rien. Mais c'est une drôle d'idée, tout de même, qui vous prend de laisser Madame toute seule,—à son âge,—pour aller à Rome ! Bien heureux si vous la retrouvez, . . . je n'en répond pas . . .

VALUE.

*Dupuis* (se contenant) : Marianne, prenez garde ! Vous voyez que je ne suis pas content !

*Marianne* : Je crois bien ! Vous n'êtes pas content des autres, parce que vous n'êtes pas content de vous ; c'est l'usage.

*Dupuis* (éclatant) : Je vous chasse, Marianne !

*Mme. Dupuis* (sévèrement) : Allez vite en bas, ma fille.

*Dupuis* : Je vous chasse ! Quand ce serait le dernier mot que je dirais dans ma maison, il sera obéi. (*Marianne sort.* *Dupuis à sa femme*) : C'est votre faute, aussi, ma chère amie. Vous laissez vos domestiques se mettre vis-à-vis de vous sur le pied d'une familiarité déplacée—et voilà ce qui arrive ! Vous avez entendu que j'ai chassé cette fille ?

(O. FEUILLET.)

12. 2. (a.) Write from memory a French version of the passage read out.

(b.) Allow me to say in your presence, that I don't believe one single word Sir Barnes Newcome says, when he tells me that he is very sorry for some intelligence he has to communicate. He lies, Mr. Boltby : he is very glad. I made up my mind that in whatsoever company I met him, and on the very first day I found him—hold your tongue, sir ; you shall speak afterwards and tell more lies when I have done—I made up my mind, I say, that, on the very first occasion, I would tell Sir Barnes Newcome that he was a liar and a cheat. He takes charge of letters and keeps them back. Did you break the seal, sir ? There was nothing to steal in my letter to Miss Newcome. He tells me people are out of town, whom he goes to see in the next street, after leaving my table, and whom I see myself half-an-hour after he lies to me about their absence.

25.

(THACKERAY.)

3. Answer the following questions on the italicised words in Questions I a. and I b. :—

(a.) *croissaient*. Parse this form, and distinguish it from *croisaient* and *croyaient*.

(b.) *Paru*. Parse and distinguish from *paré* and *pari*.

(c.) *Assise*. Parse this form and give the primitive tenses of the verb of which it is a part.

12.

(d.) *Vienne*. Account for the use of the subjunctive.

(e.) Form a verb from each of the following words :— *chère, bras, nouveau, beau* ; and a noun from each of the following :— *soffe, haut, bas, vite*.

(f.) Parse *en* (haut en bas) and *en* (je n'en répons pas).

(g.) Give the genders of *âge, malheur, douleur*, and distinguish between *depuis que* and *puisque*.

VALUE

## SECTION II.

4. Translate:—What a surprise! The accident that happened yesterday. Which of these houses is yours? He had three sons, two of whom are dead. Who was it who said that? Who is the friend you spoke of? He who will not work shall have nothing to eat.
- 7.
5. Translate:—Il ne sait pas s'y prendre. Nous nous sommes pris de querelle. Je vous y prends. Bien lui en prit d'être armé. Qu'est-ce qui vous prend? Prenez-vous en à vous-même. Elle s'est prise d'amitié pour vous?
- 7.
6. Translate the following sentences, saying whether the verbs in italics are in the subjunctive or in the indicative, and account for the mood used:—
7. J'irai volontiers si je trouve quelqu'un qui m'*accompagne*.  
Nous n'avons pas entendu dire qu'il *renonce* à son projet.  
Ne savez-vous pas que le soleil *se lève* plus tôt en cette saison?  
Je ne crois pas que ce travail *dépasse* vos forces.
7. Translate:—
- (a.) One must not believe all that one is told. Answer, when you are asked a question. Has anyone come to see me?  
This artist is very much spoken of.
- 7
- (b.) He came without being invited. Seeing is believing. My being absent need not prevent you from coming.
8. Explain the origin of the negatives *ne . . . rien, ne . . . personne*; give similar compound negatives, and show, by illustrative sentences, how *rien* and *personne* can have a negative meaning even when used without *ne*.
- 7.
9. Where does the *t* come from in *aime-t-il, va-t-il*, and the *s* in *je viens, je vois*. Account fully for the form of the future *j'aurai*.
- 7.

## FRENCH.

## HONOURS—FIRST PAPER.

Friday, 13th June.—10 A.M. to 1 P.M.

1. Translate into French:—

45. The art of pleasing is a very necessary one to possess, but a very difficult one to acquire. It can hardly be reduced to rules; and your own good sense and observation will teach you more of it than I can. Do as you would be done by, is the surest method that I know of pleasing; I observe carefully what pleases you in others, and probably the same things in you will please others. If you are pleased with the complaisance and attention of others to your humours, your tastes, or your weaknesses, depend upon it, the same complaisance and attention on your part to theirs, will equally please them. Take the tone of the

VALUE. company that you are in, and do not pretend to give it; be serious, gay, or even trifling, as you find the present humour of the company; this is an attention due from every individual to the majority. Do not tell stories in company; there is nothing more tedious and disagreeable; if, by chance, you know a very short story, and exceedingly applicable to the present subject of conversation, tell it in as few words as possible; and even then throw out that you do not love to tell stories, but that the shortness of it tempted you.

(CHESTERFIELD.)

- 2. Write an essay in French on one of the following subjects:—
  - (a.) Que les Français ont tort de négliger les jeux athlétiques dans leur éducation nationale.
  - (b.) Que les Français sont mauvais colonisateurs.
  - (c.) Que la construction d'un tunnel sous la Manche reliant l'Angleterre à la France serait un bienfait pour la civilisation.

30.

FRENCH.

HONOURS—SECOND PAPER.

Thursday, 19th June.—10 A.M. to 1 P.M.

Candidates must, in all cases, answer Section I, and should attempt FOUR (and not more than FOUR) of the Questions in Section II.

SECTION I.—TRANSLATION.

1. Translate into English:—

(a.) Il y a un autre système, un autre parti à prendre, celui des chercheurs de vérité et de nouveauté, des remueurs d'idées, des Staël, des Lessing comme des Voltaire; ici le mot d'ordre, c'est que le mouvement, quel qu'il soit et tant qu'on peut se le donner, est le plus grand bien de l'esprit comme du corps. L'esprit humain ne compte que sous un perpétuel aiguillon. Le plus grand danger pour lui est de devenir stagnant et de croupir. Mieux vaut s'user que se rouiller. Nous sommes des machines, d'admirables machines; ne laissons pas s'épaissir et se figer en nous les huiles des rouages. Certaines idées sont belles, mais, si vous les répétez trop, elles deviennent des lieux communs: "Le premier qui les emploie avec succès est un maître, mais, quand elles sont usées, celui qui les emploie encore court risque de passer pour un écolier déclamateur." C'est Voltaire, l'excellent critique qui a dit cela, et à propos de Racine fils. Les choses justes elles-mêmes ont besoin d'être renouvelées et retournées; c'est la loi, c'est la marche. Un souverain qui monte sur le trône n'est pas plus jaloux de refondre toute la monnaie de ses prédécesseurs et de la marquer à son effigie, que les critiques nouveaux venus, pour peu qu'ils se sentent de la valeur, ne sont portés en général à casser et à frapper à neuf les jugements littéraires émis par leurs devanciers. Il y a quelque abus peut-être, mais cela ne vaut-il pas mieux que d'avoir de ces jugements comme des monnaies usées, effacées, qui glissent entre les doigts et qu'on ne distingue plus? Art, critique,

20.

VALUE.

recommençons donc toujours, et ne nous endormons pas. Ce que Virgile a remarqué des semences est vrai des hommes : il faut les trier, les épurer, les agiter sans cesse ; autrement tout dégénère. Tous les genres sont bons, hors le genre ennuyeux ; tous les défauts peuvent servir le talent, hormis la faiblesse. On se trompe sur les généalogies littéraires, si on les prend de trop près et comme à bout portant, dans le sens apparent et superficiel. Le vrai successeur direct d'un grand homme, c'est son égal et son pareil dans l'âge suivant.

STE. BEUVE.

(b.)

*Reply of a veteran soldier of Napoleon to Marshal Marmont, who pleads as an excuse for betraying the Emperor, that the Marshals were tired of the endless wars.*

15.

Et nous, les petits, les obscurs, les sans-grades,  
 Nous qui marchions fourbus, blessés, crottés, malades,  
 Sans espoir de duchés ni de dotations ;  
 Nous qui marchions toujours et jamais n'avancions ;  
 Trop simples et trop gueux pour que l'espoir nous berne  
 De ce fameux bâton qu'on a dans sa giberne ;  
 Nous qui par tous les temps n'avons cessé d'aller,  
 Suant sans avoir peur, grelottant sans trembler,  
 Ne nous soutenant plus qu'à force de trompette,  
 De fièvre, et de chansons qu'en marchant on répète ;  
 Nous sur lesquels pendant dix-sept ans, songez-y,  
 Sac, sabre, tourne-vis, pierres à feu, fusil,  
 — Ne parlons pas du poids toujours absent des vivres !—  
 Ont fait le doux total de cinquante-huit livres ;  
 Nous qui coiffés d'oursons sous les ciels tropicaux,  
 Sous les neiges n'avions même plus de shakos ;  
 Qui d'Espagne en Autriche exécutions des trottes ;  
 Nous qui pour arracher ainsi que des carottes  
 Nos jambes à la boue énorme des chemins,  
 Devions les empoigner quelquefois à deux mains ;  
 Nous qui pour notre toux n'ayant pas de jujube,  
 Prenions des bains de pied d'un jour dans le Danube ;  
 Nous qui n'avions le temps quand un bel officier  
 Arrivait, au galop de chasse, nous crier :  
 " L'ennemi nous attaque, il faut qu'on le repousse !"  
 Que de manger un blanc de corbeau sur le pouce,  
 Ou vivement, avec un peu de neige, encor,  
 De nous faire un sorbet au sang de cheval mort ;  
 Nous . . . , nous ne l'étions pas, peut-être fatigués ?

## SECTION II.

2. Write ten short sentences, each containing one of the following words, so as to bring out the difference in meaning from the cognate word in English. In every case give a translation :—  
 10. *sentence, vilain, vicaire, vaisselle, verge, tuteur, trouble, trépasser, transpirer, avertir.*
10. 3. Trace the etymology and the original meaning of the following ten words :—*acquitter, payer, aîné, aloi, (en) amont, (en) aval, blâme, chétif, créance, dimanche.*



VALUE.

4. Translate the following sentences to illustrate the differences in the use of the respective prepositions :—

- (1.) The soldiers lived on bread and water.
- (2.) His success has entirely depended on his industry.
- (3.) He survived all his children.
- (4.) I pity you.
- (5.) He enjoys very good health.
- (6.) He ascended the throne of his ancestors.
- (7.) He died a glorious death.
- (8.) It is difficult to remedy the evil.
- (9.) We must obey the dictates of reason.
- (10.) I want a new book.

10.

5. Translate the following idiomatic phrases, and trace where you can the original meanings of *en* and *y* :—

- (1.) Vous n'y êtes pas. Vous y êtes.
- (2.) Il y va de son bonheur.
- (3.) Je saurai bien m'y prendre.
- (4.) Je ne lui en veux pas le moins du monde.
- (5.) Il s'en est donné.
- (6.) En venir aux mains.
- (7.) Il s'en faut de peu.
- (8.) N'en pouvoir mais.
- (9.) S'en tenir à.
- (10.) En être pour.

10

6. Translate the following sentences, and explain the mood and tense of the words in italics :—

- (a.) Tout ce que raconte Vasari serait vrai, que la grandeur de Raphaël n'y *perdr*ait rien.
- (b.) Sitôt que l'allouette *eut quitté* sa famille, le possesseur du champ vint avecque son fils.
- (c.) Comment il *s'est fait* qu'avec ses agréments Jane Austen *n'ait rencontré* sur sa route aucun de ces jeunes hommes qu'elle aime à décrire, on l'ignore.
- (d.) Que je *fasse* des excuses, il ne m'en voudra pas moins pour l'avoir offensé.
- (e.) Quand nous arrivâmes au milieu de la plaine, l'ennemi *apparut* [or] *apparaissait* sur le flanc de l'armée.

10.

7. Translate the following passage into modern French, adhering as closely to the original as is consistent with modern usage :—

Mais encores que mon feu père de bonne mémoire eût adonné tout son étude à ce que profitasse en toute perfection et savoir politique, et que mon labeur correspondit très bien, voire encore outrepassât son désir toutefois, comme tu peux bien entendre, le temps n'était tant idoine ne commode es lettres comme est de présent, et n'avait copie de telz précepteurs comme tu as eu. Le temps était encore ténébreux, et, sentant l'infélicité et calamité des Goths, qui avaient mis à destruction toute bonne littérature. Mais par la bonté divine, la lumière et dignité a été de mon âge rendue es lettres, et y vois tel amendement que de présent, à difficulté serais-je reçu en la première classe des petits grimauds, qui en mon âge virile étais, non à tort réputé le plus savant dudit siècle.

10.



VALUE.

## COMMERCIAL FRENCH.

Wednesday, 18th June.—2 to 3.30 P.M.

*The whole of this Paper should be answered.*

Translate into English :—

Le Havre, le 3 Février 1902.

Messieurs James Brown et Cie.,  
Courtiers en métaux,  
Glasgow.

MESSIEURS,

Nous avons bien reçu votre lettre du 30 de l'écoulé et le prix-courant qu'elle contenait.

Comme nous nous attendons à une reprise prochaine des affaires sur notre place, nous voudrions recevoir, dans le plus bref délai, la commande ci-dessous, que nous vous chargeons d'expédier par le premier vapeur en chargement pour le Havre.

16

100 tonnes de fonte d'Ecosse en gueuse, la tonne de 1000 kilos.

50 tonnes de feuilles de tôle d'un demi-pouce d'épaisseur.

100 boîtes de fer-blanc, à 100 feuilles le quintal.

Nous vous demandons de faire en sorte que nous obtenions de bonnes qualités de fontes, et surtout de veiller à ce qu'il soit fait un bon choix de fer-blanc parmi les parties qui se trouvent sur votre marché.

Veillez effectuer l'assurance et nous en faire parvenir la police avec les connaissements et votre facture.

Pour le montant qui vous sera dû, nous vous autorisons à tirer sur nous à trois mois de date.

Agréez, Messieurs, nos salutations bien empressées.

A. LEGRAND &amp; CIE.

2. Reply to the above letter, acknowledging receipt, and stating if you have been able to execute the orders given and arrange for shipment, and, if so, mention that you enclose the documents and draw as requested.

24.

3. Translate the following market report :—

La raideur de ce jour a été motivée par la ferme attitude de la province, par l'arrêt des filatures et par les haussiers, ce qui donne lieu à de vives inquiétudes du côté des baissiers. Les affaires ont été plutôt calmes; d'ailleurs il n'y avait guère que des acheteurs à découvert cherchant à se couvrir, et des haussiers augmentant peu à peu leurs engagements, mais, comme les vendeurs ont été très rares, le marché a été presque inactif. Le fond de l'article reste très ferme.

12.

4. Turn into French the following advertisement, and write a letter applying for a situation with the firm in question, stating your age, if you have had any experience of office work, if you have learned book-keeping and shorthand, and if you are able to write a business letter in any foreign language :—

24.

"Messrs. Leblanc, Sons & Co., of Marseilles, require a young man for their shipping-office in that city. One with a knowledge of book-keeping and shorthand, and acquainted with some foreign language preferred."

VALUE. 5 (a.) Explain in English the following French business terms:—

- (1.) Le taux de l'escompte.
- (2.) Vendre au comptant ou à terme.
- (3.) Le gérant d'une succursale.
- (4.) Les approvisionnements ont fait défaut
- (5.) Papier à longue échéance.
- (6.) Le relevé d'un compte.
- (7.) Solde de compte porté à nouveau.
- (8.) Un article de provenance étrangère.

24. b.) Translate into French the following expressions:—

- (1.) Bills of Lading in duplicate.
- (2.) The cancelling of the contract.
- (3.) To make an estimate of the loss.
- (4.) To get a good investment for one's money.
- (5.) To enter the amount in the cash-book.
- (6.) The underwriters accept the risk.
- (7.) Mr. A. is on the Board of Directors.
- (8.) He is a shipowner and grain merchant.

GERMAN.

LOWER GRADE.

Thursday, 12th June.—2 to 4.30 P.M.

To secure full marks, the whole of this Paper should be answered. Additional marks will be given for fair writing in the German character.

SECTION I.—TRANSLATION AND COMPOSITION.

1. Translate into English:—

(a) Vor langen Zeiten wanderte einmal ein Riese (giant) auf der großen Landstraße. Pflöglich trat ihm ein unbekannter Mann entgegen und rief: „Halt! keinen Schritt weiter!“—„Was!“ sprach der Riese, „wer bist du, kleiner Kerl, den ich zwischen den Fingern zerdücken kann, daß du mir den Weg verbietest?“—„Ich bin der Tod,“ erwiderte der andere, „mir widersteht niemand, und auch du mußt meinen Befehlen gehorchen.“ Der Riese aber wollte nicht nachgeben und fing an mit dem Tode zu ringen. Es war ein langer, heftiger Kampf; zuletzt aber gab der Riese seinem Gegner einen Schlag mit der Faust, daß er neben einem Steine niederfiel, und ging seiner Wege. Da klagte der Tod: „Was soll daraus werden, wenn ich hier liegen bleibe? Es stirbt niemand mehr auf der Erde, und sie wird so voll von Menschen, daß sie nicht mehr Platz haben, neben einander zu stehen.“ Endlich kam ein junger Mensch des Weges, frisch und gesund, sang ein Lied und schaute lustig um sich. Als er den Fremden liegen sah, ging er zu ihm, richtete ihm den Kopf auf und gab ihm einen kräftigen Trunk aus seiner Flasche, sodas er bald wieder aufstehen konnte. „Weißt du, wer ich bin, dem du geholfen hast?“ fragte er den Jüngling.—„Nein,“ erwiderte dieser, „ich kenne dich nicht.“—„Ich bin der Tod,“ sagte der Fremde, „und verlohne niemand, auch dich nicht. Doch veriprede ich dir, daß ich dich nicht pflöglich überfallen, sondern erst meine Boten senden will.“ Des Todes Boten aber sind die Krankheiten.

Nach Grimm.

- VALUE. (b)
- Die Sonne, sie machte den weiten Ritt  
Um die Welt;  
Und die Sterne sprachen: „Wir reisen mit  
Um die Welt!“  
Und die Sonne schalt sie: „Ihr bleibet zu Har's,  
Denn ich brenn' euch die goldenen Keuglein aus  
Bei dem feurigen Ritt um die Welt!“  
Die Sternlein gingen zum lieben Mond  
In der Nacht,  
Und sie sprachen: „Du, der auf den Wolken thronst  
In der Nacht,  
Laß uns wandeln mit dir, denn dein milber Schein  
Verbrennet uns nimmer die Keuglein!“  
Und er nahm sie, Gefellen der Nacht.  
Willkommen, Sternlein und guter Mond,  
In der Nacht!  
Ihr versetzt, was still in dem Herzen wohnt  
In der Nacht;  
Kommt, zündet die himmlischen Lichter an,  
Daß ich lustig mit tanzen und spielen kann  
In den freundlichen Spielen der Nacht!
- Ernst Moritz Arndt.

15. 2. (a.) Write out from memory a German version of the passage read out.

(b.) Translate into German:—

25. Charles and George went to the same school, and liked each other very much (*omit*). On Charles's fourteenth birthday his friend came and brought him a pretty stick as a present. It was in summer, and the weather was very fine. "What say you (*say, sayest thou*) to a long walk?" asked George, who was a few weeks older than the other. Charles was only too glad to go with him. On their way they came to a brook where several children were playing. Suddenly one of them, a little girl, fell into the water, which was pretty deep. The younger of the two boys, who saw it first, jumped in at once, and his friend helped him to save the child. How heartily the mother thanked them when she heard what they had done!

#### SECTION II.—GRAMMAR.

4. 3. Give the nominative and genitive singular, and the nominative plural, with the definite article, of the German for *any twelve* of these words:—hour, night, tooth, leg, wall, bottle, battle, roof, bush, shrub, star, wolf, lion, fox, bird, butterfly.
4. 4. Decline, singular and plural, the German for *hard stone, her little daughter, which boy*, and the second personal pronoun (in the *familiar* form only—*thou*).
4. 5. The nouns *Ther, Eer, Wand, Feiter* are used in two genders: show how the two genders differ from each other both as regards meaning and the formation of the plural.
4. 6. Give the German words for:—4, 8, 15, 37, 52, 61, 83, 211, 616; the 3rd, 101st;  $\frac{2}{3}$ ,  $1\frac{1}{2}$ ; on the 2nd of May 1902.

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VALUE. 7. Write out—giving, in the 2nd person singular and plural, only the familiar (not the polite) form:—

- (a.) The present indicative and imperfect subjunctive active of *nehmen* and *dürfen*.
- 4. (b.) The imperfect indicative and imperative active of *lesen*.
- (c.) The present and perfect indicative passive of *sehen*.

8. Write out:—

- (a.) The 3rd person singular present, imperfect, and pluperfect indicative active of *sein*, *mögen*, *wissen*, *entgehen*.
- 4. (b.) The familiar 2nd person singular of present and imperfect subjunctive, and of imperative of *setzen*,  *thun*, *vorlesen*, *vergeben*.

9. Translate into German:—

- The child fell out of the window.
- This boy came to school without his books.
- Place the plates on the table.
- The sick woman lay on her bed.
- 8. Why do you stand behind the door?
- After my work I can go with you.
- She remained at home because of the weather.
- The soldiers fought bravely in spite of the heat.

GERMAN.

LOWER AND HIGHER GRADES.

Thursday, 12th June.—2.45 P.M.

*This Paper must not be seen by any Candidate.*

*To be read out once or twice by the Supervising Officer (or a Teacher) at 2.45 P.M. The substance of this story is to be reproduced by the candidates in German from memory. No notes may be made while it is being read.*

An old woman was returning from the town to her village with a basket full of potatoes on her head. It was a hot day, and the road was very dusty. A farmer, who came driving the same way with his cart, took pity on her. "Can I take you home with me, my good woman?" he asked. She gladly accepted the offer, took the load off her head, and placed it on the cart. She then climbed up herself, and when she was seated she took the basket up again on her knees. The farmer was astonished. "Why do you not set down your potatoes?" he said. "Oh, my good sir," she replied, "it is so kind of you to let me sit on your cart, but it would be too much if your poor horse had also to draw my heavy basket."

VALUE

GERMAN.

HIGHER GRADE.

Thursday, 12th June.—2 to 5 P.M.

*The whole of this Paper should be answered. No Candidate will be allowed to pass unless the necessary standard is reached both in composition and in translation.*

*Additional marks will be given for fair writing in the German character.*

## SECTION I.—TRANSLATION AND COMPOSITION.

1. Translate into English:—

(a.) Der Knabe, welcher kein Wort und keine Bewegung seiner Führerin verlor schritt in scheinbarer Demuth an ihrer Seite einher, denn er glaubte, neben einem überirdischen Wesen zu wandeln. Kaum einen Hintenschuß vom Stadthore entfernt lag der Alten Wohnung, ein niedriges Hüttlein, von uralten, dicken Bäumen umgeben. Die Eigentümerin schloß die Thüre auf und rief mehrere Male: „Schwarzmann! Schwarzmann!“ bis sich mit lautem Miauen ein ungeheurer schwarzer Kater von den Zweigen eines der Bäume auf ihre Schultern schwang. „Ei, du leichtfertiger Gesell!“ scherzte die Alte und streichelte den freundlich schmeichelnden Liebling, „treibst du dich herum, anstatt das Haus zu hüten, wenn die Gebieterin nicht daheim ist?“ Das Tier schnurrte behaglich, und schien den jungen Fremdling neugierig anzuschauen, der, durch so viel Sonderbares befüßt, es kaum wagte, einen Blick in die leuchtenden Augen zu werfen. Nachdem sie in die Hütte eingetreten waren, schloß Mutter Lene sorgfältig hinter sich zu und führte Ardim bald in ein reinliches Stübchen, an das eine kleine Küche stieß. Hier hieß sie ihn niedersitzen, schürte die Glut des Herdes und bereitete in Eile einen wohlgeschmeckenden Kuchen, der dem hungrigen Knaben trefflich mundete. Hierauf legte sie ihm die Hände auf das Haupt, sagte einen Spruch in einer fremden Sprache her, gleich einem Gebete, und forderte ihn alsdann auf, ihr eine kleine Treppe hinauf zu folgen, die aus der Küche auf einen engen Speicher führte, wo sie ihm einen mit Moos gefüllten Sack zur Lagerstätte anwies. Danach entfernte sie sich und überließ den Knaben sich selbst und seinen Gedanken. Er streckte sich auf das ungewohnte Lager hin, und bald fühlten sich seine Glieder von jener behaglichen Wärme durchströmt, die der Vorbote sanfter Ruhe ist; und Schwarzmann, der nicht lange nachher in demselben Raume die gewohnte Ruhestätte suchte, fand den neuen Gefährten süß schlummernd und kauerte sich vertraulich an des glücklichen Schlafers Seite nieder.

Karl Schindler.

(b.)

Zum Freunde kam ich, den ich manches Jahr  
Nicht mehr geseh'n, und froh begrüßt' er mich.  
„Und deine Gattin?“ fragt' ich.—„Diese,“ sprach er,  
Antwortend mir, „ist schon vorausgegangen,—  
Wir beide geh'n ihr um ein Weildchen nach.“  
Dann holt' er Wein, wir tranken und versenkten  
Uns in Ginn'ung alter froher Tage.  
Als aber läng're Zeit vergangen war,  
Fragt' ich noch einmal ihn nach seiner Gattin,  
Und wiederum sprach er: „Sie ging voraus,  
Und um ein Weildchen werden wir ihr folgen.“  
Da fiel es mir aufs Herz, wie er es meint';  
Ihm in die Augen blickend, welche schon  
Mir Antwort gaben, fragt' ich: „Ist sie tot?“  
„Ja,“ sprach er, „ja,“ und seine Worte klangen  
So fest nicht mehr, „sie ist vorausgegangen.“

Johannes Trojan.

- VALUF. 2. Answer the following questions on the foregoing passages :—
- 5. Du leichtfertiger Geiß—give the dative of this.
  - 5. Sieß ihn niederſiegn—account for the form of the infinitive ; and mention some other verbs that are similarly construed.
  - 10. Durdftrömt—account for this form of the participle.
  - 10. Und froß begrüßt' er mich—turn this into the passive construction.
3. (a) Write from memory a German version of the passage read out.
- (b) Translate into German :—

25. The Roman poet Ennius, and the famous statesman and captain Scipio, were intimate friends, and visited each other almost daily. One day Scipio had a number of letters to write which were to be sent off immediately, and when he saw the poet approaching he shouted to his slave in the vestibule, "Tell the gentleman that your master is not at home." Ennius, however, had already reached the door and heard these words, but, on receiving the message from the slave, he went away without any remark. Next day Scipio had occasion to go to Ennius' house to speak to him on an important matter. But when he knocked at the door the poet, who had seen him coming, called out, "I am not at home." Scipio was astounded, and said, "How am I to understand this?" "Understand it as you like," replied his friend, "but you must at least admit that I am more polite than you. Yesterday your door-keeper told me that you were not at home, and I did not doubt his word; but to-day I tell you myself that I am not at home, and you won't believe me."

SECTION II.

- 4. Give the nominative and genitive singular, and the nominative plural, with the definite article, of the German for any ten of these words :—plough, rake, fork, frock, greatcoat, pan, ceiling, pilgrim, market, sentence, question, rule, volume, danger, proof, host.
- 5. Write out :—
  - (a.) The 3rd person singular of the present and perfect indicative, and of the imperfect subjunctive active of *betreiben*, *entfenden*, *weißagen*, *durcflaufen*, *durcflaufen*.
  - 5. (b.) The 2nd person singular of the imperfect indicative and imperative active, and the infinitive with *zu*, of *abnehmen*, *ausmessen*, *besetzen*, *verfechten*, *aufheben*.
- 5. C. Illustrate by complete sentences (with translation) the government of the propositions *samt*, *vermöge*, *trotz*, *zufolge*, *weder*, *sonder*, *bis*, *laut*, *um*, *timen*.
- 7. Give the German for the following names of countries, together with the respective appellation of a native (with the indefinite article), and the corresponding adjective (*e.g.*, Scotland, a Scotchman, Scottish) :—Africa, Germany, Russia, Spain, Italy, Turkey, Greece, Portugal, Poland, Hungary.



8. The following English words correspond *etymologically* to German words of somewhat different meaning. Give *any ten* of the corresponding German words, with their meanings:—crafty, naughty, shallow, bold, stout, dreary, dumb, slim, hour, yeast, bird, string, rise, spoon; to dip.
9. Give the German for the following numerical expressions:—twice a week, every other day, a triple string, to drive in a coach and six, in  $2\frac{1}{2}$  years (to be expressed in two ways), 1001 nights, a girl in her teens, you have to choose one of the three, a vigorous sexagenarian.

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GERMAN.

HONOURS.—FIRST PAPER.

Thursday, 12th June.—2 to 5 P.M.

*Additional marks will be given for fair writing in the German character.*

I. Translate into German:—

45. “To Loches.” The name of a castle, or rather prison, yet more dreaded than Plessis itself, fell like a death-toll upon the ear of the young Scotchman. He had heard it described as a place destined for the workings of those secret acts of cruelty with which even Louis shamed to pollute the interior of his own residence. There were in this place of terror dungeons under dungeons, some of them unknown even to the keepers themselves; living graves, to which men were consigned, with little hope of further employment during the rest of their life than to breathe impure air and feed on bread and water. At this formidable castle were also those dreadful places of confinement called *cages*, in which the wretched prisoner could neither stand upright, nor stretch himself at length—an invention, it is said, of the Cardinal Balue. It is no wonder that the name of this place of horrors, and the consciousness that he had been partly the means of despatching thither two such illustrious victims, struck so much sadness into the heart of the young Scot, that he rode for some time with his head dejected, his eyes fixed on the ground, and his heart filled with the most painful reflections.—SIR WALTER SCOTT.

II. Write a German essay on one of the following subjects:—

30. Die Annehmlichkeiten des Landlebens im Vergleich zu denen des Stadtlebens  
Die Liebe zur Heimat und zum Vaterlande.  
Die Beziehungen zwischen Maria Stuart und Elisabeth.
-

VALUE.

GERMAN.

HONOURS.—SECOND PAPER.

Monday, 16th June.—2 to 5 P.M.

*The whole of this Paper should be answered.*

*Additional marks will be given for fair writing in the German character.*

SECTION I.—TRANSLATION.

1. Translate into English :—

10.

(a.) Sie lächelte, verbeugte sich mit Anmut und Würde und bat uns in ihr Haus einzutreten. Sie that das alles ruhig und formvoll, mit den einfachen Manieren der besten Gesellschaft, ohne Uebereilung und ohne einen Schatten von Verlegenheit. Doch schien sie mich verflohen ein wenig zu beobachten, während sie sich erkundigte, wann ich angekommen wäre, und ob ich nicht erkannt gewesen sei, Herrn Schulz hier zu finden. Indem ich ihr nun von dem zufälligen Zusammentreffen mit dem Freunde berichtete, bogen wir um die Ecke, und in der hohen Mauer aus rauhen Felssteinen öffnete sich vor uns eine kleine Thüre, durch die wir in einen kühlen Hof traten. Ein Hund lag träumend an der Kette unter einem hellgrünen Feigenbaum; und ein klarer Wassertrahl floss eintönig murmelnd aus einer eisernen Röhre in ein steinernes Becken, neben welchem ein seltsam geformtes kupfernes Schöpfgefäß hing. Links, im dichten Schatten der Ulmen und Platanen, lag das Haus, umkränzt von Rosen und Wein, ein kleines höfliches Gebäude mit grünen Läden und fest vergitterten Fenstern im Erdgeschoß.

Johannes van Devald.

10

(b.) Im Sommer 1729, als die königliche Familie sich einige Zeit in Wasserhausen aufhielt, hatte sich der Zorn des Königs gegen das ältere Geschwisterpaar in solchem Maße erhöht, daß er sie, die Nachzeiten ausgenommen, ganz aus seiner und der Mutter Gegenwart verbannte. Nur insgeheim, des Nachmittags, wenn der König seinen Spaziergang machte, durfte sich die Mutter des Umgangs mit ihren Kindern erfreuen; dabei wurden jedoch jedesmal Wachen angestellt, um sie von der Rückkehr des Königs zu benachrichtigen, von dem man sich, wenn er die Uebertretung seines Befehles wahrgenommen hätte, keiner glimpflichen Behandlung gewärtigen durfte. Eines Tages hatten die Wachen indes ihren Auftrag so schlecht besorgt, daß man plötzlich, ganz unvorbereitet, den wohlbekanntem Schritt des Königs auf dem Gange hörte; das Zimmer der Königin hatte keinen zweiten Ausgang, und so blieb kein anderes Rettungsmittel, als daß der Prinz eilig in einen Wandschrank schlüpfte, während die Prinzessin sich unter dem Bette ihrer Mutter versteckte. Aber der König, ermüdet von der Hitze, setzte sich auf einen Sessel und schlief zwei lange Stunden, während welcher die Geschwister es nicht wagen durften, ihre sehr unbehaglichen Gefängnisse zu verlassen.

Franz Kugler.

VALUE.

- (c.) Aus der dampfenden Stadt entfloß mein Weibchen mir gestern,  
 Hat sich dem grünenden Schuß lachender Fluren vertraut.  
 Und wo weilest du nun, mein Liebchen, im fernen Gelände,  
 Während des Tages Stut lei! am Himmel verglimmt?  
 Singst du hinaus mit den Mädchen, zu sammeln das Döft auf der Wiese,  
 Das vom belasteten Baum freubigen Sprunges entfällt?  
 Drüben am Waldesfaum zieht sachte die Herde herüber,  
 Und der Pflüger entschürt singend das müde Gespann.  
 Ober kehrest du heim vom Berg durch säuselnde Waldung  
 Mit der freundlichen Last saftiger Beeren im Korb?  
 10. Droben vom Abhang blicket ein Bleh neugierig herunter,  
 Während gäudener Stanz scheidend die Wipfel berührt.  
 Ober weißt du am Quell unferne dem dämmernden Garten?  
 Eben kehret vom Trog munter das scheetige Hind.  
 Unter die Möhre stellst du den Krug, die Blumen zu tränken,  
 Die auf dem Fenstergesims dort in der Kammer dir blühen.  
 Längst schon überprudelt der Krug, du sitzt am Raine,  
 Blickest mit träumendem Aug' in den verrinnenden Bach.

Wilhelm Herß.

## SECTION II.

2. Answer the following questions on the foregoing passages :—  
 (a.) Wann ich angekommen wäre, und ob ich nicht erstaunt gewesen sei—  
 comment on these subjunctive forms.
5. (b.) Die Maßigkeiten ausgenommen;—von dem man sich keiner gimpflichen  
 Bezahlung gewärtigen durfte;—express these in a somewhat different way  
 without changing the meaning.  
 (c.) Comment on freubigen Sprunges—sachte—unferne.
3. Translate *idiomatically* into German :—  
 (a.) He ought to have done it, but would not listen to reason.  
 (b.) The leader was followed by fifty picked men.  
 10. (c.) This little boy is said to be uncommonly clever.  
 (d.) You will oblige me very much by doing what I told you.  
 (e.) He is a good-for-nothing fellow, who will never come to  
 anything.
4. Write (with translations) *ten* short sentences, each containing one  
 of the following verbs correctly used, so as to bring out its meaning and  
 construction :—söhnen, steuern (in a figurative sense), sich annehmen, ver-  
 zichten, streben, wehren, sich widmen, sich verstehen, zeihen, sich weiden, verdienen, sich  
 5. trösten, sich trösten, schmachten, entsagen.
5. Illustrate the use of prepositions by giving the German for *ten* of  
 the following adverbial expressions :—for heaven's sake, out of reach,  
 beyond doubt, for this very reason, notwithstanding his promise, to be  
 5. just in time, to lie at anchor, from to-day, in any case, on strong  
 grounds, out of breath, on his arrival, in the Isle of Man, from pure  
 jealousy.
6. Form abstract nouns, with the definite article and meaning, from  
 5. any *ten* of these :—roh, rauh, eitel, dunkel, sicher,ieber, finster, geschwind, bekant,  
 müde, sanft, heil, sinnlos, träge, schadenstoch.

VALUE.

- 5. 7. Give the meaning, and if possible synonyms, of *any ten* of these words:—Hülfe, Weiber, Gefade, Gemach, Truhe, Wange, Beranlassung, Schweiß, Berzug, betroffen, altfränkisch, kirre, flatterhaft, heimsuchen, schweigen.
- 5. 8. Explain the force of the prefix *ge-* in *Geiß* and *Gebeiß*, and give five other instances of each kind, with the definite article and meaning.
- 5. 9. From *each* of the following verbs give three derivative nouns or adjectives, with their meanings:—*freveln, betrügen, reden, laden, schaffen.*

ITALIAN.

Monday, 16th June. --2 to 5 P.M.

*The whole of this Paper should be answered. No Candidate will be allowed to pass unless the necessary standard is reached both in Translation and in Composition*

1. Translate:—

10. (a.) Alla perfine, si gridò la stazione di Cupra Marittima. La fermata fu lunga, e non giovò che io battessi i piedi; la vaporiera non dava segno di vita. Temetti d'un guasto occorso in qualche ordigno, o d'un ostacolo attraversato sulla via; ed era già allo sportello per pigliar lingua dal primo guardiano che avessi veduto, quando un suono di corno diede il segnale della partenza. Ah, manco male; per questa volta a Grottamare ci si va. Ancora dodici minuti e tutti pari! Non starò a dire da che piede scendessi. Già prima che il convoglio si fermasse, m'era buttato fuori con mezza persona dallo sportello, per girar la maniglia. Balzai, credo, dallo smontatoio prima che i guardiani scendessero; diedi il mio biglietto al portinaio, e via come una saetta. Cesarino, che era venuto ad attendere il mio arrivo, durò fatica a raggiungermi. Udiì la sua voce e mi fermai appena quel tanto che gli consentisse di giungermi a pari.—Orbene,—gli chiesi, come sta?—Benissimo, signore; vi aspetta.—

10. (b.) Sento in quel fondo gracidar la rana,  
 Indizio certo di futura piovà;  
 Canta il corvo importuno, e si riprova  
 La folaga\* a tuffarsi alla fontana:  
 La vaccherella in quella falda piana  
 Gode di respirar dell'aria nova,  
 Le nari allarga in alto, e sì le giova  
 Aspettar l'acqua che non par lontana:  
 Veggio le lieve paglie andar volando,  
 E veggio como obliquo il turbo spira,  
 E va la polve qual paleo† rotando:  
 Leva le reti, o Restagnon, ritira  
 Il gregge agli stallaggi: or sai che, quando  
 Manda suoi segni il ciel, vicina è l'ira.

\* folaga = moor-hen. † paleo = top.

VALUÉ.

- (c.) Confessando i propri mali, quantunque palesi, l'uomo nuoce molte volte ancora alla stima, e quindi all'affetto che gli portano i suoi più cari: tanto è necessario che ognuno con braccio forte sostenga se medesimo, e che in qualunque stato, e a dispetto di qualunque infortunio, mostrando di se una stima ferma e sicura, dia esempio di stimarlo agli altri, e quasi li costringa colla sua propria autorità. Perchè se l'estimazione di un uomo non comincia da esso, difficilmente comincerà ella altronde: e se non ha saldissimo fondamento in lui, difficilmente starà in piedi. La società degli uomini è simile ai fluidi; ogni molecola dei quali, o globetto, premendo fortemente i vicini di sotto e di sopra e da tutti i lati, e per mezzo di quelli i lontani, ed essendo ripremuto nella stessa guisa, se in qualche posto il resistere e il rispingere diventa minore, non passa un attimo, che concorrendo verso colà a furia tutta la mole del fluido, quel posto è occupato da globetti nuovi.
10. 2. Write from memory an Italian version of the passage read out.
3. Translate into Italian:—
- One of the blacks, who understood Arabic, hearing me speak thus, came towards me, and said, Brother, be not surprised to see us; we are inhabitants of this country, and come hither to-day to water our fields, by digging little canals from this river, which comes out of the neighbouring mountain. We observed something floating upon the water, and went to see what it was. When we perceived your boat, one of us swam into the river, and brought it thither, where we fastened it, as you see, until you should awake. Pray tell us your history, for it must be extraordinary; how did you venture into this river, and whence did you come? I begged of them first to give me something to eat, promising that afterwards I would satisfy their curiosity.
25. 4. Write in Italian a letter to a friend in Rome, informing him that you are to visit Italy shortly, and telling him which city you most keenly look forward to seeing, and why.
5. Translate the following sentence, and explain the precise shade of meaning conveyed by the termination of each of the nouns italicised:—
4. Non vi fidate di questa *donnaccia*; essa è una *ciarlona* e *bugiardona*, anzi una *bugiardonaccia* sfacciata; essa ha pure una *linguaccia* impudente; la sua *linguetta* sa trovare agli stessi *angiolini* del cielo dei *machioni* e *dijettoni*.
6. Write six short sentences (with translations) each containing one of the following words correctly used so as to bring out its full meaning:—*altrui*, *cecchessia*, *ciascheduno*, *ognorachè*, *qualora*, *tuttavia*.

7. Write out the imperative of *andare* and *vedere*, the present subjunctive of *stare* and *porre*, the past definite (*passato remoto*) of *piacere* and *venire*, and the past participle of *trarre* and *salire*.

8. Translate into idiomatic Italian :—Where do you get these pretty flowers from?—He is much older than you would think.—Tell him to let me know at what time I can see him to-morrow.—I don't exactly mean that he is a bad man.—Provided he keeps his word, we have nothing to say against him.—Please don't forget to give my kind regards to your brother.

## ITALIAN.

Monday, 16th June.—2.45 P.M.

*This Paper must not be seen by any Candidate.*

*To be read out once or twice by the Supervising Officer (or a Teacher) at 2.45 P.M. The substance of this story is to be reproduced by the Candidates in Italian from memory. No notes may be made while it is being read.*

A merchant who had become rich through a life of hard work, was walking one hot day in the garden of his country house, when he caught his gardener taking a nap under a tree. He scolded him soundly for his laziness, and ended by telling him that such a sluggard did not deserve to enjoy the light of the sun. "Exactly," said the gardener, "and that was the reason why I crept into the shade."

## SPANISH.

Monday, 16th June.—2 P.M. to 5 P.M.

*The whole of this Paper should be answered. Candidates will not be allowed to pass unless they reach the necessary standard both in composition and in translation.*

## SECTION I.

1. Translate into English :—

(1.) Hallándose Aben Jucef meditando una expedición contra Castilla, se le presentó el astuto infante D. Juan, asegurándole que venía á su servicio y por este medio logró que le diese el mando de cinco mil caballos con destino á la conquista de Tarifa. Presentóse en efecto delante de la plaza que, defendida por D. Alonzo Pérez de Guzmán, rechazó con denuedo\* los repetidos y formidables asaltos de los sitiadores. Conoció el infante la dificultad de su empresa, pero más irritado con una resistencia que ofendía su amor propio, juró no abandonarla hasta conseguirla, si no con su valor, por cualquiera otro medio. Supo que D. Alonzo, temiendo los peligros del bloqueo, había sacado de Tarifa á su hijo único, niño de pocos años, y le había trasladado á un pueblo cercano. Inmediatamente dispuso le

\* boldly.



VALUE.

robasen y se le llevasen al campo; y participando á su padre que le tenía en su poder, le intimó luego que si no vendía la plaza, perecería el niño á filo\* de su espada. El noble D. Alonzo, haciéndose superior á los sentimientos de la naturaleza, no vaciló un momento y aseguró al infante que defendería á Tarifa hasta exhalar sus últimos alientos.

## LA MONA.

- (2.) Subió una mona á un nogal†  
Y cogiendo una nuez verde,  
En la cáscara‡ la muerde;  
Con que lo supo§ muy mal.  
Arrojó el animal  
Y se quedó sin comer.  
Así suele suceder  
A quien su empresa abandona,  
Porque halla como la mona  
Al principio que vencer.

8.

## DOÑA MARIA—DOÑA GREGORIA.

*Doña Greg.*—Ni en mi cuarto ni aquí encuentro la carta, Doña Maria.

*Doña Maria.*—No se canse V. más en buscarla, Doña Gregoria.

*D<sup>a</sup> Greg.*—Yo misma la recibí del cartero. No sé donde puedo haberla escondido. Una distracción de las mías.

*D<sup>a</sup> M.*—¿ Está V. segura de que la tal carta era para mí?

*D<sup>a</sup> Greg.*—Á Doña Maria del Pilar decía el sobre, calle de la Estrella, número 23, cuarto principal, habitación de huéspedes. En esta casa no hay más Pilar que V.

*D<sup>a</sup> M.*—Pues no sé de quién pueda venir. Á mí nadie me escribe.

*D<sup>a</sup> Greg.*—Algún antiguo conocimiento de su padre de V. El era muy rico, ¿ verdad?

12.

*D<sup>a</sup> M.*—Muy rico no; pero cuando vino á Madrid, contaba con cincuenta mil duros para mi dote.

*D<sup>a</sup> Greg.*—Y, ¿ todo lo perdieron ustedes?

*D<sup>a</sup> M.*—Lances de fortuna, Doña Gregoria. Un millón poseíamos, en billetes de banco por cierto; y, al morir mi padre .... haga V. cuenta que ni un maravedí nos quedó. Había una deuda, que importaba más de otro tanto; era mi padre muy hombre de bien, y quiso pagarla.

*D<sup>a</sup> Greg.*—Ya. Debiendo .... y teniendo conciencia .... No tenía conciencia de huésped su padre de V. Si me hubieran pagado á mí todos los que me han debido hospedaje, ya hubiera dejado este ejercicio tan afanoso.

\* at the edge of. † Walnut tree. ‡ Shell. § *Supo* here in sense of *guatí*.

20. VALUE. 2. Translate into Spanish :—

We left New York for Liverpool by one of the steamers of the White Star Line. We had a good passage, and only took six days to cross the Atlantic. The first day the sea was rather rough,\* but afterwards it became calmer, and we were able to remain all day on deck, enjoying the fresh breezes of the ocean. The officers of the ship were very kind, doing all in their power to make us comfortable. On arriving at Liverpool the Custom House officials† came on board to examine our luggage, after which we were allowed to go on shore.

We said good-bye to the friends whose acquaintance we had made during the voyage, hoping that we might have the pleasure of meeting them again on the return journey.

10. 3. Write from memory a Spanish version of the passage read out.

SECTION II.

8. 4. Give the feminine of the following nouns :—*pariente, fraile, gallo, conde, héroe, Belga*. And write (in full) the past definite tense, and the first person singular present and imperfect subjunctive of the verbs :—*estar, poner, oír, coger, empezar, seguir*.

8. 5. Mention the relative pronouns in Spanish, and form short sentences showing their use.

6. (a) Translate into English the following idiomatic expressions :—

- (1.) Vd. debe hacer eso *cuanto antes*.
- (2.) *Jamás volveré á ir allá*.
- (3.) *Yo estaba para decírselo á Vd.*
- (4.) *Eso se ha echado á perder.*
- (5.) *Un día sí y otro no.*
- (5.) *Salga lo que saliere.*

(b) Translate into Spanish :—

- (1.) There is nothing more to see here.
- (2.) I was told you were abroad.
- (3.) Before we go away I should like to call on a friend.
- (4.) Take care that you are not deceived.
- (5.) You ought to have done this before.
- (6.) Would you not have done the same, if you had been there ?

12. 7. Write in Spanish a letter to a friend in Spain (using the familiar form *tú*), telling him that you have been learning Spanish and would like to visit Spain during the summer holidays, in order to get practice in speaking, and asking him to let you know if you could stay with him, what route you should take, &c.

\* agitada. † los aduaneros.

VALUE.

SPANISH.

Monday, 16th June.—2.45 P.M.

*This Paper must not be seen by any Candidate.*

*To be read out once or twice by the Supervising Officer (or a Teacher) at 2.45 P.M. The substance of this story is to be reproduced by the Candidates in Spanish from memory. No notes may be made while it is being read.*

One day a young man went to a rich merchant and asked him for the loan of five hundred pesetas. The merchant opened his desk and took out the sum, which the young man put in his pocket without counting it. Seeing this, the merchant asked for the money, and putting it back in his desk, said:—"My friend, I cannot lend you anything, for, in my opinion, a man who receives money without counting it shows that he has no intention of paying it back."

## ARITHMETIC.

## LOWER GRADE.

Wednesday, 11th June.—10 A.M. to 11.30 A.M.

*All the work must be shown, and such explanation added as is required to indicate the methods adopted.*

Additional marks will be given for neatness, arrangement, and style.

8. 1. Multiply 54098 by 6709, and give the meaning of each line of your work.
7. 2. Amongst how many persons can £249 be divided, if each receive £3 13s. 2½d., and how much will remain over?
7. 3. A piece of material weighing 50 kilogrammes costs £8 6s. 8d.; what is the value of a portion which weighs 6 kilogrammes 350 grammes?
7. 4. If a dollar be worth 4s. 2d., and a rupee 1s. 3½d., how many rupees are 186 dollars worth?
5. Simplify

$$(1.) \quad \frac{3}{4} + \frac{7}{12} + \left( \frac{7}{15} \text{ of } 1\frac{1}{7} \right)$$

$$\frac{5}{6} + \frac{9}{10} - \left( \frac{2}{3} \text{ of } \frac{13}{20} \right)$$

$$(2.) \quad \begin{array}{r} 1521531 \\ 4148925. \end{array}$$

6. In the following piece of work, state what is done in each step, showing the reason for it:—
10.  $\frac{7}{10} + \frac{4}{15} + \frac{5}{6} = \frac{21}{30} + \frac{8}{30} + \frac{25}{30} = \frac{54}{30} = \frac{9}{5} = 1\frac{4}{5}$ .
10. 7. If .087 of a ton cost £4.71, find the value of 3.4 cwts., expressing the answer in pounds, shillings and pence to the nearest penny.
10. 8. A debtor owes his three creditors £1200, £900, and £300 respectively; if his assets be £850, what should each creditor receive?
10. 9. If a cistern measures 3.75 metres in length, 2.6 metres in breadth, .92 metres in height, find how many litres it will hold; a litre being a cubic decimetre.
10. 10. Five per cent. of an army are killed in battle, and fifteen per cent. of the survivors die of wounds and disease, leaving 18088 men alive; what was the original number of men in the army?

ALGEBRA.

LOWER GRADE.

Wednesday, 11th June.—3 P.M. to 4.30 P.M.

All the work must be shown, and such explanation added as is required to indicate the methods adopted.

Additional marks will be given for neatness, arrangement, and style.

1. If  $a = 1, b = 2, c = 3, d = 0$ , find the value of
4. (1)  $a(b-c) + b(c-d) - c(d-a) - d(a-b)$ ;  
 (2)  $\sqrt{(b+c)^2 - (a+b)^2} - \sqrt{(a+b)(c-d)}$ .
2. State and prove the rule of signs in multiplication.
10. Simplify  $(p-q)(r-s) - (p-r)(q-s) + (p-s)(q-r)$ .
3. Divide  $x^4 - 56x + 15$  by  $x^2 - 4x + 1$ , and verify the result when  $x$  is made equal to 10.
6. 4. Simplify

$$\frac{x - \frac{2}{x} - 1}{\frac{x}{6} + 1}$$

$$\frac{\frac{1}{a} + \frac{1}{b} - \frac{1}{a+b} - \frac{1}{c}}{\frac{1}{a} - \frac{1}{c} - \frac{1}{a-c} + \frac{1}{b}}$$

5. Resolve into factors
- (1)  $a^2 + a - 110$ ;
8. (2)  $4x(x-1) - 3$ ;
- (3)  $x^2 + ax + 2ay - 4y^2$ .
6. Solve the equations
14. (1)  $(x-1)(x+1) = (x-3)(x+12)$ ;
- (2)  $a(x-b) - b(a+b) = a(a-c) - b(x+c)$
- (3)  $(x-23)(x+23) = (x-22)(x+22) - (x-2)(x+2)$ .
7. Find the highest common factor of  $2x^3 + x^2 - 4x - 3$  and  $2x^3 + x^2 - 9$ ; and determine the value of  $x$  which will make both expressions equal to zero.
8. A man buys  $\frac{2}{3}$  of an estate at £12 per acre, and the remainder at £20 per acre, and, by selling the whole at £18 per acre, he makes a profit of £500; find the size of the estate.
7. 9. A can do a piece of work in  $m$  hours, B can do the same in  $n$  hours. If A works for  $p$  hours, how long will B take to finish the work?
10. Solve the equations
- 21<sup>2</sup> (1)  $\begin{cases} \frac{1}{3}x - \frac{1}{2}y = 1, \\ \frac{1}{2}x + \frac{1}{3}y = 2; \end{cases}$
- (2)  $x^2 + (a+c)x + 2ac = 2a^2$ ;
- (3)  $\sqrt{\frac{x-2}{x+1}} + \sqrt{\frac{x+1}{x-2}} = \frac{5}{2}$
- verifying your answers in each case.

## G E O M E T R Y.

### LOWER GRADE.

Wednesday, 11th June.—12 Noon to 2 P.M.

All ordinary symbols and contractions are allowed.

*All the steps of the proofs must be given*, and the previous propositions, &c., on which they depend, should be indicated.

It is not necessary to write out the general enunciations of propositions, but the particular enunciations should be written out, except when they are given as part of the question.

Additional marks will be given for neatness, good style, and accurately drawn figures.

VALUE.

1. Bisect a given straight line.
13. I wish to bisect  $PQ$ , but the hinge of my compasses has become fixed, so that the distance between the points is less than half but more than a quarter of  $PQ$ ; find a construction by which I can bisect  $PQ$ .
2. Prove that the greater angle of every triangle has the greater side opposite to it.
13.  $LMN$  is an isosceles triangle,  $L$  being the vertex; if  $P$  be a point in  $MN$ , prove that  $LP$  is less than  $LM$ .
3. Prove that the sum of the interior angles of any rectilineal figure is equal to twice as many right angles as the figure has sides, diminished by four right angles.
14.  $ABC$  is an equilateral triangle in which  $AD$  is drawn perpendicular to  $BC$ , meeting it in  $D$ ; if  $DA$  be produced to  $E$ , show that  $BAE$  is equal to the angle of an equiangular polygon of twelve sides.
4. Describe a parallelogram which shall be equal to a given triangle, and have one of its angles equal to a given angle.
14. Describe a parallelogram which shall be equal to a given triangle, and have one of its sides equal to half the base of the triangle, and another side equal to a given straight line.  
Explain whether this is always possible.
5. If a straight line be divided into any two parts, prove that the square on the whole line together with the square on one part is equal to twice the rectangle contained by the whole line and that part together with the square on the other part.
10. Show that this proposition corresponds to a well-known algebraical formula.
6. Prove that if two circles meet in a point on one side of the straight line joining their centres, they will also meet in a second point on the other side of the line, but in no other point.
- 10.
7. Prove that the angle at the centre of a circle is double the angle at the circumference which stands on the same arc.
- 8.
8. Upon a given straight line describe a segment of a circle containing an angle of half a right angle.
- 8.



VALUE.

## ARITHMETIC.

## HIGHER GRADE.

Wednesday, 11th June.—10 A.M. to 11.30 A.M.

All the work must be shown, and such explanation added as is required to indicate the methods adopted.

Additional marks will be given for neatness, arrangement, and style.

1. Find the value of a cubic foot of gold which weighs 1210 lbs avoirdupois, if a sovereign be worth 113 grains of pure gold, and one lb. avoirdupois contains 7000 grains.
2. A train 156 feet long is going at a speed of 60 miles per hour; how long will it take to cross completely a bridge 295 feet long?
3. Simplify
  - (1)  $\frac{1}{\frac{1}{2} + \frac{1}{\frac{1}{3} + \frac{1}{\frac{1}{2} + \frac{1}{\frac{1}{3}}}}}$ ;
  - (2)  $\frac{\sqrt{.81} \times \sqrt[4]{1.331}}{\sqrt{.0484} \times \sqrt[4]{.027}}$ ;
  - (3) .0011 cubic metre + .11 cubic decimetre + 11 cubic centimetres.
4. Define the present worth of a sum due at a future date and explain the difference between true discount and banker's discount.
5. Find the difference between the true discount and the banker's discount on £520 due a year hence at 4 per cent.
6. Multiply 47.23956 by 18.7878, using the contracted method so as to obtain the result correct to 2 decimal places without superfluous work.
7. Find the cost of excavating a cutting one mile long,  $13\frac{1}{2}$  feet broad, and 4 feet deep, at the rate of 6d. per cubic yard for the first foot in depth, the rate increasing 1d. per cubic yard for each foot in depth.
8. A man sells £10,000 in a  $2\frac{3}{4}$  per cent. stock at 95 and buys £8500 in a 4 per cent. stock at 106 (brokerage included in each price). If he deposit the rest of the money in the bank at  $2\frac{1}{2}$  per cent., find the change in his income.
9. If the pressure of air in a diving bell be 68 lb. 1 oz. on a square inch, express that pressure in grammes on a square centimetre, taking an inch as  $2\frac{2}{3}$  centimetres and 10 lb. as  $4\frac{2}{3}$  kilogrammes.
10. A certain sum of money at a certain rate of compound interest amounts in 3 years to £703.04 and in 4 years to £731.1616; find the rate and the sum.

VALUE.

ALGEBRA.

HIGHER GRADE.

Wednesday, 11th June.—3 P.M. to 4.30 P.M.

All the work must be shown, and such explanation added as is required to indicate the methods adopted.

Additional marks will be given for neatness, arrangement, and style.

1. Expand  $(1 + x + x^2 + x^3)^3$ .

10. Prove the identity.

$$(b + c - a)^2 (b - c) + (c + a - b)^2 (c - a) + (a + b - c)^2 (a - b) + 4(b - c)(c - a)(a - b) \equiv 0.$$

2. Prove that  $a^m \times a^n = a^{m+n}$ , when  $m$  and  $n$  are positive integers.

10

Explain how this theorem is used to obtain a meaning for a negative power of a number, as, for example,  $x^{-4}$ .

3. Solve the equations

12.

$$(1) \frac{x^2 - x + 1}{x^2 + 2x + 5} = \frac{x^2 - x - 1}{x^2 + 2x + 3};$$
$$(2) \begin{cases} \frac{x + 2}{a} = \frac{y + 2}{b}, \\ (a - b)^2 + abxy = 0. \end{cases}$$

7

4. If  $y = x - 1$ , and  $x^3 + 2x^2 + 3x + 4 = Ay^3 + By^2 + Cy + D$  for all values of  $x$ , find the values of  $A, B, C, D$ .

5. Prove that a quadratic equation cannot have more than two different roots.

10.

If  $\alpha, \beta$  be the roots of  $x^2 - px + q = 0$ , and  $2\alpha - \beta, 2\beta - \alpha$  be the roots of  $x^2 - p'x + q' = 0$ ; express  $p', q'$  in terms of  $p, q$ .

6. Solve the equations

14

$$(1) x^2 + x + \frac{12}{x^2 + x} = 8;$$
$$(2) \begin{cases} x^2 - xy = 6, \\ 5xy + 4y^2 = 19. \end{cases}$$

7. When are quantities in harmonic progression?

Find two numbers whose geometric and harmonic means are 5 and 3 respectively.

9.

8. If  $\frac{by + cz}{b^2 + c^2} = \frac{cz + ax}{c^2 + a^2} = \frac{ax + by}{a^2 + b^2}$ , prove that  $\frac{x}{a} = \frac{y}{b} = \frac{z}{c}$ .

- VALUE. 9. Lengths of three carpets at 3s. 6d., 3s. 9d., and 4s. 6d. per yard were ordered, the sum of the lengths being 114 yards, and the total cost £22. By mistake the lengths were altered in rotation, so that the length cut of the first carpet was that ordered for the second, of the second that ordered for the third, and of the third that ordered for the first. If the total cost be now the same as before, find how many yards of each carpet were ordered.
- 10.

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GEOMETRY.

HIGHER GRADE.

Wednesday, 11th June.—12 NOON to 2 P.M.

All ordinary symbols and contractions are allowed.

*All the steps of the proofs must be given*, and the previous propositions, &c., on which they depend, should be indicated.

It is not necessary to write out the general enunciations of propositions, but the particular enunciations should be written out except when they are given as part of the question.

Additional marks will be given for neatness, good style, and accurately drawn figures.

1. Define a right angle, parallel straight lines, a rectangle, a square.
 

If the square described on one side of a triangle be equal to the sum of the squares on the other two sides, prove that the angle contained by these sides is a right angle.
17.
 

If the square described on one side of a triangle be greater than the square described on the other two sides, prove that the angle contained by these sides is greater than a right angle.
2. If a straight line be divided equally and unequally, prove that the sum of the squares on the unequal parts is equal to twice the square on half the line together with twice the square on the line between the points of section.
10.
 

A straight line 46 inches long is divided into two parts, the sum of the squares on which is 1220 square inches; use the preceding theorem to find the length of each part.
3. If the opposite angles of a quadrilateral be supplementary, prove that a circle can be described through its vertices.
12.
 

Two chords of a circle intersect at right angles, and a quadrilateral is formed by drawing tangents at the extremities of the chords; prove that a circle can be described through its vertices.

VALUK. 4. Inscribe a pentagon in a given circle.

A star is formed by producing the alternate sides of a regular pentagon; prove that the points of the star form a regular pentagon.

14.

Show also that the side of the larger pentagon is equal to the sum of a side and a diagonal of the smaller pentagon.

5. Equal triangles, which have one angle of the one equal to one angle of the other, have their sides about the equal angles reciprocally proportional.

12.

$ABCD$  is a trapezium in which  $AB$  is parallel to and greater than  $DC$ ,  $BD$  meets  $AC$  in  $E$ , and  $DF$  is drawn from  $D$  parallel to  $CB$ , meeting  $AC$  in  $F$ ; prove that  $EF$  is a third proportional to  $EA$  and  $EC$ .

6. If from any angle of a triangle a straight line be drawn perpendicular to the base, prove that the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

8.

7. If three planes meet each other, prove from first principles that the lines of intersection are either concurrent or parallel.

9.

8.  $ABCD$  is a tetrahedron, each of whose edges touches a given sphere without being produced; prove that

9.

$$AB + CD = AC + BD = AD + BC.$$

ELEMENTARY TRIGONOMETRY AND LOGARITHMS.

HIGHER GRADE.

Tuesday, 17th June.—10 A.M. to 11.30 A.M.

All ordinary symbols and contractions are allowed.

Additional marks will be given for neatness, good style, and accurately drawn figures.

1. Explain the relation between the circular measure of an angle and its measure in degrees.

10.

The diameter of the moon subtends an angle of 31 minutes at the surface of the earth; taking the distance of the moon as 238,941 miles, and a radian as  $57^{\circ} 18'$ , find the length of the diameter of the moon.

2. Give a geometrical proof, applicable to all cases, of the formula

$$\cos(A + 90) = -\sin A.$$

11.

Write down the corresponding formula for  $\sin(A + 90^{\circ})$ , and deduce the values of  $\cos(A + 180^{\circ})$ ,  $\sin(A + 180^{\circ})$ .

- VALUE. 3. Prove the identities
12. (1)  $\sin A + \sin B = 2 \sin \frac{A+B}{2} \cdot \cos \frac{A-B}{2}$ ;  
 (2)  $\sin 3A = 4 \sin A \sin (60^\circ + A) \sin (60^\circ - A)$ .
4. Obtain an expression including all angles which have the same cosine as a given angle.
14. Write down the expressions for all angles which have (a) the same sine, (b) the same tangent as a given angle.  
 Find all the solutions of the equation  
 $\sin^2 \theta \cos \theta = \sin \theta \cos^2 \theta$ .
10. 5. If  $A, B, C$  be the angles of a triangle, prove  
 (1)  $\cos A + \cos B \cos C = \sin B \sin C$ ,  
 (2)  $\tan A + \tan B + \tan C = \tan A \tan B \tan C$ .
14. 6. Explain how a table of logarithms may be employed to save labour  
 (1) in multiplication, (2) in extraction of roots.  
 Make a double use of your table of logarithms to find  $x$ , when  
 $(1.045)^x = 1.5$ .
8. 7. In the triangle  $ABC$ ,  $A = 40^\circ 25'$ ,  $a = 84$ ,  $b = 75$ . Show that in this case  $B$  has only one possible value, and find that value.
12. 8. The base of a circular tower subtends an angle  $2\alpha$  at a point  $A$  in its plane; at a point  $B$  in the same plane, but 100 feet nearer the tower, the angle subtended is  $2\beta$ ; obtain an expression for the radius of the tower in terms of  $\sin \alpha$  and  $\sin \beta$ , and calculate its value when  $\sin \alpha = .1$ ,  $\sin \beta = .125$ .

## ALGEBRA.

## HONOURS GRADE.

Wednesday, 11th June.—3 P.M. to 4.30 P.M.

All the work must be shown, and such explanation added as is required to indicate the methods adopted.

Additional marks will be given for neatness, arrangement, and style.

Candidates may try six questions, namely Nos. 1, 2, 3, and one of the alternatives in each of Nos. 4, 5, 6.

1. Prove that if two rational integral functions of  $x$  of the  $n$ th degree be equal for more than  $n$  values of  $x$ , they will be equal for all values of  $x$ .
15. By applying this theorem, resolve into partial fractions

$$\frac{x^2 + px + q}{(x-a)(x-b)(x-c)}$$

2. Find the number of selections of  $n$  things taken  $r$  together. If  $C_r$  be this number, prove from first principles that

- 15. (1)  $C_r = C_{n-r}$
- (2)  $C_1 + C_2 + C_3 + \dots + C_n = 2^n - 1$ .

3. Prove the Binomial Theorem for a positive integral index. If

$$(1 + x)^n = a_0 + a_1 x + a_2 x^2 + \dots + a_n x^n,$$

- 15. prove that  $a_0^2 + a_1^2 + \dots + a_n^2 = \frac{2n}{\binom{2n}{n}}$ .

Show also that if

$$n = mr - 1, \quad a_r = (m-1)a_{r-1}.$$

Alternative Questions.

4a. If

$$a(x + y) = x, \quad b(x + y) = y, \quad c(x + y) = z,$$

- 15. prove that

- (1)  $2abc + bc + ca + ab = 1,$
- (2)  $\frac{x^2}{a(1-bc)} = \frac{y^2}{b(1-ca)} = \frac{z^2}{c(1-ab)}.$

If

$$\frac{p(q+r-p)}{l} = \frac{q(r+p-q)}{m} = \frac{r(p+q-r)}{n},$$

prove that

$$\frac{l(m+n-l)}{p} = \frac{m(n+l-m)}{q} = \frac{n(l+m-n)}{r}.$$

Or

4b. Solve the equations :

- 15. (1)  $\sqrt{x - \frac{1}{x}} + \sqrt{1 - \frac{1}{x}} = x;$
- (2)  $\frac{1}{5}(x^4 + 4y^4) = (x+y)^2 + y^2 = 29;$
- (3)  $(b-c)(x-a)^4 + (c-a)(x-b)^4 + (a-b)(x-c)^4 = 0.$

5a. If  $f(x)$  denote

$$1 + x + \frac{x^2}{1 \cdot 2} + \frac{x^3}{1 \cdot 2 \cdot 3} + \dots$$

- 15. prove that  $f(x)$  is convergent for all values of  $x$ .

Prove that when  $x$  and  $y$  are real quantities  $f(x) \times f(y) = f(x+y)$ , and deduce that  $f(x) = \{f(1)\}^x$ .



VALUE. Or

5b. Define the arithmetic mean and the geometric mean of any number of positive quantities, and show that the former cannot be less than the latter.

15. If  $a, b, c$  be three positive unequal real quantities, prove that

$$(1) \frac{b}{c} + \frac{c}{a} + \frac{a}{b} > 3,$$

$$(2) (a+b+c)^3 - a^3 - b^3 - c^3 > 24abc.$$

6a. Prove that in any scale of notation of which the radix is  $r$ , if the sum of the digits of an integral number be divisible by  $(r-1)$ , the number itself is so divisible.

15. A number is formed in the scale of  $r$  by beginning with unity, and writing down the first  $n$  digits in order. The number is multiplied by  $r-2$  and  $n$  is added. Prove that the result is the number obtained by writing the last  $n$  digits beginning with the last.

Or

15. 6b. Show that the expression  $u_n = n(n+1)(n+2)$  can be thrown into the form  $f(n) - f(n-1)$ , and that the expression  $an^3 + bn^2 + cn + d$  can be similarly expressed.

Hence find the sum of  $n$  terms of the series whose  $r$ th term is

$$4r^3 + 3r^2 + r.$$

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## GEOMETRY.

### HONOURS GRADE.

Wednesday, 11th June.—12 Noon to 2 P.M.

All ordinary symbols and contractions are allowed.

All the steps of the proofs must be given, and the previous propositions, &c., on which they depend, should be indicated.

Additional marks will be given for neatness, good style, and accurately drawn figures.

Candidates may attempt seven questions, namely, Nos. 1, 2, 3, 4, and one of the alternatives in each of Nos. 5, 6, 7.

1. If the opposite angles of a quadrilateral be supplementary, a circle can be described through its vertices.
- 13 Two circles have a common chord  $AB$ , and a double chord  $CBD$ ; two other chords  $CF, DE$  intersect in  $G$ ; prove that  $A, E, G, F$  are concyclic points.

VALUE. 2.  $ABC$  is a triangle whose base  $BC$  is divided in  $D$ , so that

$$mBD = nDC;$$

show that

$$mAB^2 + nAC^2 = (m+n) AD \cdot AH,$$

13.

where  $H$  is the point in which  $AD$  meets the circumscribing circle

Deduce that, when  $D$  is the mid point of  $BC$ ,

$$AB^2 + AC^2 = 2(AD^2 + BD^2).$$

3. The sides about the equal angles of equiangular triangles are proportional, those sides being homologous which are opposite to equal angles.

13.

$BC, BD$  are two intersecting straight lines, and  $A$  is a point in this plane, such that the angle  $ABC$  is less than the angle  $CBD$  find two points in  $BC$  equally distant from  $A$  and  $BD$ .

4. Define a Harmonic Range, and show that if  $C$  and  $D$  are harmonic conjugates with respect to  $A$  and  $B$ , then  $A$  and  $B$  are harmonic conjugates with respect to  $C$  and  $D$ .

13.

A circle is described touching a straight line  $AB$  in  $C$ , and having its diameter a harmonic mean between  $AC$  and  $CB$ ; prove that it touches the circle on  $AB$  as diameter.

*Alternative Questions.*

5a. Construct a triangle having given the centre of the circumscribing circle, the centre of the nine-point circle, and the mid point of one of the sides.

13.

Or

5b. Explain the principle of inversion, and prove that the inverse of a circle is, in general, a circle.

13.

Prove that a system of non-intersecting coaxial circles inverts into a system of concentric circles when either of the limiting points of the coaxial system is taken as the centre of inversion.

6a. If any transversal meet the sides  $BC, CA, AB$  of a triangle in  $D, E, F$  respectively then

$$AF \cdot BD \cdot CE = BF \cdot CD \cdot AE.$$

Prove that the tangents drawn to a circle at the vertices of an inscribed triangle meet the opposite sides of the triangle in three collinear points.

13.

Or

6b. Explain what is meant by the resultant, or sum, of two directed straight lines  $AB, AC$ ; and show that in this sense the resultant of any number of directed straight lines is independent of the order in which they are taken.

13.

- VALUE  
13.
- 7a. Define the polar of a given point with regard to a given circle.  
 $A$  is a point within a circle, and  $AB$  is drawn from  $A$  perpendicular to the polar of  $A$ , meeting it in  $B$ ; if  $PAQ$  be any chord through  $A$ , show that
- $$PB : BQ = PA : AQ.$$
- Or
- 7b.  $ABCD$  is a tetrahedron in which  $AB$  is at right angles to  $CD$ , and  $AC$  is at right angles to  $BD$ ; prove that  $AD$  is at right angles to  $BC$ .
- 13
- Show that if each edge of a tetrahedron be at right angles to the opposite edge, the mid points of all the edges will lie on a sphere.

### TRIGONOMETRY AND LOGARITHMS.

#### HONOURS GRADE.

Tuesday, 17th June.—10 A.M. to 11.30 A.M.

All ordinary symbols and contractions are allowed.  
 Additional marks will be given for neatness, good style, and accurately drawn figures.

Candidates may try six questions, namely, Nos. 1, 2, 3, and one of the alternatives in each of Nos. 4, 5, 6.

1. Define the tangent of an angle of any magnitude.  
 Draw the graphs corresponding to the equations  
 $y = \tan x$ , and  $y = \cos x$ ,  
 and from your diagram indicate in which quadrants the solution of the equation,  $\tan x = \cos x$ , is to be found.
- 15.
2. If, in a triangle  $ABC$ , the sides  $b, c$  and the angle  $A$  be known, and  $a$  be expressed in the form  $(b - c) \sec \phi$  find  $\tan \phi$  in terms of  $b, c, A$ , and state the advantage of this formula.
- 5.
- If  $a$  be also expressed in the form  $(b + c) \sin \psi$ , prove that  
 $(b - c)^2 \tan^2 \phi + (b + c)^2 \cos^2 \psi = 4bc$ .
3. Find the trigonometrical ratios of  $30^\circ$ .
- 15.
- From the top of a cliff 150 feet high, the angle of depression of a boat due north of the observer is  $30^\circ$ , that of a boat in a direction  $60^\circ$  east of north is  $45^\circ$ ; find approximately the distance between the boats.

#### Alternative Questions.

- 4a. Prove geometrically that

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

Prove that

$$\begin{aligned} & \cos 2(A+B+C) + \cos(2A+B+C) + \cos(A+2B+C) \\ & + \cos(A+B+2C) + \cos(B+C) + \cos(C+A) + \cos(A+B) \\ & = 8 \cos(A+B+C) \cos \frac{B+C}{2} \cos \frac{C+A}{2} \cos \frac{A+B}{2} - 1. \end{aligned}$$

15.

VALUE. Or

4b. In any triangle  $ABC$  prove that

$$15. \quad 2 \left( 1 + \sin \frac{A}{2} \right) \left( 1 + \sin \frac{B}{2} \right) \left( 1 + \sin \frac{C}{2} \right) = \left( \cos \frac{A}{2} + \cos \frac{B}{2} + \cos \frac{C}{2} \right).$$

5a. If  $OABCD$  . . . be a regular heptagon in which  $OB = b, OC = c,$  prove that

$$b(b+c)^2 = c^2(2b+c).$$

Or

5b. Define an inverse function.

Prove that

$$15. \quad \tan^{-1} \frac{a+b}{1-ab} + \tan^{-1} \frac{b+c}{1-bc} + \tan^{-1} \frac{c+a}{1-ca} = 2 \tan^{-1} \frac{a+b+c-abc}{1-bc-ca-ab}.$$

6a. Assuming De Moivre's theorem, prove that

$$15. \quad \cos \theta = 1 - \frac{\theta^2}{2} + \frac{\theta^4}{4} - \dots; \text{ and } \sin \theta = \theta - \frac{\theta^3}{3} + \frac{\theta^5}{5} - \dots$$

$AT$  is a tangent to a circle at  $A$ ; and  $P$  is a point on the circumference, such that the arc  $AP = AT, T$  and  $P$  being on the same side of the radius  $OA$ . If  $TP$  meet  $AO$  produced in  $X$ , show that, when  $T$  moves up to  $A$ , the ultimate value of  $AX$  is  $3AO$ .

Or

6b. Sum the series

$$\tan^2 x \tan 2x + \frac{1}{2} \tan^2 2x \tan 4x + \frac{1}{2^2} \tan^2 4x \tan 8x + \dots \text{ to } n \text{ terms.}$$

Prove that, if  $a = \frac{2\pi}{n}$ ,

$$15. \quad \cos \theta + \cos (\theta + a) + \cos (\theta + 2a) + \dots + \cos (\theta + n - 1)a \\ = \sin \theta + \sin (\theta + a) + \sin (\theta + 2a) + \dots + \sin (\theta + n - 1)a = 0;$$

and give a geometrical illustration.

ELEMENTS OF DYNAMICS.

ADDITIONAL MATHEMATICAL SUBJECT.

Tuesday, 17th June.—2 P.M. to 3.30 P.M.

All the steps of the proofs must be given, and the work of the calculations should be shown in full. Additional marks will be given for neatness, good style, and accurately drawn figures.

1. A body is in motion with a velocity whose components measured parallel to the rectangular axes  $OX, OY$  are 3, 4 respectively; it receives an acceleration whose components along the same axes are 2, 8 respectively; find the magnitudes of the resultant velocity before and after the acceleration.

- VALUE. 2. A body is impelled in a certain direction with velocity  $V$ , and has an acceleration  $a$  opposite to this direction ; find expressions for the velocity after a time  $t$ , and the distance travelled during that time.
11. With what velocity must a body be thrown upwards, so as to rise exactly 144 feet ? ( $g=32$ .)
3. Enunciate the Parallelogram of Forces, and show that it may be deduced from the Parallelogram of Velocities.
14.  $ABCD$  is a parallelogram and forces act at a point  $P$  proportional in magnitude to  $PA, PB, PC, PD$ , and in their respective directions ; prove that their resultant passes through the point of intersection of the diagonals of the parallelogram.
4. Define the centre of gravity of a body.
10. From a circle 5 inches in diameter and of uniform thickness a circle 3 inches in diameter is cut, the circles touching internally ; find the centre of gravity of the portion remaining.
5. A body of weight  $W$  is supported on an inclined plane by a force  $P$  acting parallel to the plane ; find the relation between  $P$  and  $W$ .
11. A heavy body is supported on a plane by a string tied to a nail at the top of the plane, so that the string is parallel to the plane. The plane is attached by a hinge to a horizontal plane. If the tension of the string be equal to the weight of 6 lb. when the nail is 3 inches above the horizontal plane, find the tension after the plane has been turned on the hinge until the nail is 5 inches above the horizontal plane.
6. How do we measure the work done by an agent ?
12. A bullet while passing along a gun-barrel 4 feet in length is acted on by a pressure equal to the weight of 2 hundred-weights ; how much work has been done on the bullet when it leaves the gun ? and what form has this work taken ?
7. What do we mean by the statement that the specific gravity of a certain substance is (for instance) 13.6.
12. A cubic foot of water weighs 1000 oz., and the specific gravity of iron is  $7\frac{1}{4}$  ; find the weight of a cubic inch of iron.
8. State Boyle's Law.
10. A bladder contains 90 cubic inches of air when exposed to the pressure of the atmosphere, the height of the water barometer being 30 feet ; find the volume of the air in the bladder when it is sunk in water to a depth of a quarter of a mile.

VALUE.

HIGHER DYNAMICS.

ADDITIONAL MATHEMATICAL SUBJECT.

Higher Grade and Honours.

Tuesday, 17th June.—2 P.M. to 3.30 P.M.

All the steps of the proofs must be given, and the work of the calculations should be shown in full. Additional marks will be given for neatness, good style, and accurately drawn figures.

Candidates may try six questions, namely, Nos. 1, 2, 3, and an alternative in each of Nos. 4, 5, 6.

1. What is the moment of a force about a given point ?

15. Prove that the sum of the moments of (1) any two, (2) any three, forces acting in one plane about a given point in the plane is equal to the moment of their resultant about the same point.

2. Determine the position of the centre of gravity of a uniform triangular plate.

15. ABCD is a square cut out of uniform paper, the length of each side being 24 millimetres; if the vertex A be folded in, so as to coincide with the point of intersection of the diagonals, find the distance of the new centre of gravity from the sides of the square.

3. If a body be projected under the action of gravity with horizontal velocity U and vertical velocity V, find its position and velocity after an interval t.

15. A shot is discharged horizontally in the direction of the centre of a target 200 yards distant with a speed of 1800 feet per second; how far below the centre will it strike the target ?

Alternative Questions.

4a. Masses P and Q are connected by a string passing over a smooth pulley whose weight may be neglected; find the velocity of the masses after they have moved n feet from rest. Find also the tension of the string.

15. If the velocity after moving 9 feet be 12 feet per second, and the tension be equal to the weight of 15 ounces, find P and Q.

Or

4b. Prove that the measure of a given velocity varies inversely as the unit of distance and directly as the unit of time. How does the measure of a given acceleration vary ?

15. If the velocity and acceleration of a falling body after one second's fall from rest be expressed by the numbers 32 and 320 respectively, find what units of space and time are employed.



- VALUE. 5a. Investigate the conditions of equilibrium of a body which floats on the surface of a liquid.

15. A uniform bar is supported at its centre of gravity ; to one end a weight of 4 lb. is attached, which is counterbalanced by a substance at the other end,  $\frac{5}{8}$  of which are immersed in water ; if, however, the weight be increased to 5lb., only  $\frac{5}{13}$  of the substance will be immersed : find the weight and specific gravity of the substance.

Or

15. 5b. Describe two principal kinds of air pumps in common use, and explain their actions.

If the capacities of the receiver and barrel of an air pump, in which there is no space not traversed by the piston, be 120 and 6 cubic inches respectively, find, correct to 3 decimal places, the density of the air in the receiver after the eighth ascent of the piston.

15. 6a. State the laws of friction.

A ladder, inclined at an angle  $\theta$  to the horizon, rests on a rough pavement and against a rough wall, and is on the point of slipping ; if the coefficients of friction be  $\mu$  and  $\mu'$  respectively, prove that

$$\tan \theta = \frac{1 - \mu\mu'}{2\mu}$$

Or

15. 6b. If a rigid body be in equilibrium under the action of 3 forces, find all the conditions which the forces must satisfy.

Three equal uniform rods are joined by hinges to form a triangle  $ABC$ , which is suspended by a string fastened to the mid-point of  $BC$  ; find the reactions at  $B$  and  $C$ .

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## GEOMETRICAL CONICS.

### ADDITIONAL MATHEMATICAL SUBJECT.

(Higher Grade and Honours.)

Tuesday, 17th June.—4 P.M. to 5.30 P.M.

All ordinary symbols and contractions are allowed.

All the steps of the proofs must be given, and the previous propositions, &c., on which they depend, should be stated.

Additional marks will be given for neatness, good style, and accurately drawn figures.

15. 1. Prove that in any conic the part of the tangent intercepted between the curve and the directrix subtends a right angle at the focus.
- $PQ$  is a tangent to a conic at  $P$  which meets the directrix at  $Q$ , and  $R$  is another point in the directrix : if  $P$ ,  $Q$ ,  $R$  and the eccentricity of the conic be known, find the focus.

VALUE. 2. Prove that in the parabola  $PN^2 = 4AS.AN$ .

$PP'$  is a cord of a parabola which makes equal angles with the axis and directrix; show that the latus rectum is equal to the sum or difference of the ordinates of  $P$  and  $P'$ , according as these points are on the same or opposite sides of the axis.

15.

3. Prove that any diameter of a parabola bisects all chords parallel to the tangent at its extremity.

10.

4. If the tangent to the ellipse at  $P$  meet the axis minor  $BC$  in  $t$ , and  $n$  be the foot of the perpendicular from  $P$  on  $BC$ , prove that  $BC^2 = Ct.Cn$ .

20.

Two ellipses have the same centre and vertices; prove that the tangents at the extremities of their latera recta meet on either axis minor produced.

10.

5. In the ellipse prove that the sum of the squares on two conjugate diameters is constant.

6. Prove that any tangent to a hyperbola makes with the asymptotes a triangle of constant area.

20.

$A$  is a vertex of an isosceles triangle  $ABC$ ,  $P$  is any point in  $AB$  and  $BQ$  is drawn parallel to  $PC$  to meet  $AC$  produced in  $Q$ ; prove that  $PQ$  always touches a certain hyperbola, and find the vertex and focus.

ANALYTICAL GEOMETRY.

ADDITIONAL MATHEMATICAL SUBJECT.

(Higher Grade and Honours.)

Tuesday, 17th June.—12 Noon to 1.30 P.M.

All the steps of the proofs must be given. Additional marks will be given for neatness, good style, and accurately drawn figures.

The co-ordinate axes may be assumed to be rectangular.

1. Show that every equation of the first degree represents a straight line.

13.

Show that the equation

$$(3x + 2y - 1)(2x + 3y - 1) = 0$$

represents two straight lines, and find their point of intersection.

2. Obtain the equation of a straight line passing through the points  $(x', y')$ ,  $(x'' y'')$ .

13.

If the co-ordinates of  $A$  be  $(3, 0)$ , those of  $B$   $(0, 3)$ , and those of  $C$   $(-3, 0)$ ; and if  $D$  divide  $AB$  so that  $AD = \frac{2}{3} AB$ , and  $E$  divide  $BC$  so that  $BE = \frac{2}{3} BC$ ; find the points in which  $DE$  cuts the co-ordinate axes.

VALUE.

3. Show that the equation

$$ax^2 + 2hxy + by^2 = 0$$

always represents two straight lines through the origin; and prove that the tangents of the angles formed at their intersection are

13.

$$\pm \frac{2\sqrt{h^2 - ab}}{a + b}.$$

4. Find the area of the triangle contained by the lines

13.

$$4y = x + 3, \quad 2x = y + 1, \quad 3y = 11 - x,$$

illustrating by a figure.

5. Find the equation of the circle, which has  $(a, b)$  as centre, and passes through the point  $(c, d)$ .

13.

What are the co-ordinates of the other end of the diameter, one end of which is  $(c, d)$ ?

6. Having given that the straight line

$$x \cos a + y \sin a = p$$

13.

is a tangent to the circle

$$x^2 + y^2 = 9,$$

find the possible values of  $p$  and the co-ordinates of the corresponding points of contact.

7. Transform the equation

$$x(x^2 + 3y^2) = \sqrt{2} \cdot a^3$$

13.

by turning the axes through an angle of  $45^\circ$ , and reduce the transformed equation to its simplest form.

## BOOK-KEEPING.

Friday, 13th June.—2 P.M. to 4.30 P.M.

The following were the balances in the ledger of Walter Thomson, merchant, Edinburgh, at 30th April, 1902:—

	Dr.			Cr.		
	£	s.	d.	£	s.	d.
Capital ... ..	—	—	—	1,500	0	0
Bank of Scotland ... ..	170	0	0			
Cash ... ..	22	7	0			
Tea ... ..	700	0	0			
Coffee ... ..	600	0	0			
Bills receivable (James Forsyth's)	100	0	0			
Bills payable ... ..	—	—	—	60	0	0
Richard Wilson ... ..	56	6	6			
Bruce and Livingstone ... ..	—	—	—	88	13	6
	<u>£1,648</u>	<u>13</u>	<u>6</u>	<u>£1,648</u>	<u>13</u>	<u>6</u>

His transactions during May were as follow:—

May		£	s.	d.
1.	Sold Richard Wilson:—			
	150 lbs. tea at 1s 7d	£11	17	6
	120 lbs. coffee at 1s 1d	6	10	0
				<u>18 7 6</u>
2.	Bill payable due to-day paid by the Bank of Scotland and debited to his (Walter Thomson's) account	60	0	0
3.	James Forsyth's acceptance, due 20th current, discounted with Bank of Scotland, proceeds credited to his (Walter Thomson's) account	99	15	0
	Discount charged by Bank	0	5	0
5.	Purchased from Bruce and Livingstone, Colombo:—			
	1,500 lbs. tea at 1s 2½d	90	12	6
7.	Drew from Bank and remitted Bruce and Livingstone to account by draft	100	0	0
8.	Sold to James Forsyth, 200 lbs. tea at 1s 8½d	17	1	8
10.	Sold to William Temple, 100 lbs. coffee at 1s 0½d	5	4	2
12.	Purchased from Robert Purdie, 2,000 lbs coffee at 10d	83	6	8
13.	Sold to William Temple:—			
	1,000 lbs. coffee at 1s 0½d	£52	1	8
	500 lbs. tea at 1s 8½d	42	14	2
				<u>94 15 10</u>
14.	Received from William Temple to account and lodged in Bank	50	0	0
16.	Received from Richard Wilson (in cash)	53	10	0
	Discount allowed to him	2	16	6
	Lodged in Bank	60	0	0
17.	Paid Robert Purdie by cheque	79	3	4
	Discount allowed by him	4	3	4
19.	Purchased from Robert Purdie, 500 lbs coffee at 10d	20	16	8
20.	James Forsyth's bill due to-day returned dishonoured and debited by Bank to Walter Thomson's account, with charges 10s 4d	100	10	4
21.	Drew from Bank	10	0	0
	Paid salaries for month (in cash)	15	0	0
	Paid sundry charges for month (in cash)	5	0	0



1. Add the following sums vertically and horizontally and find the grand total.

£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
207	14	3	321	15	10	28	17	9	631	5	7	520	0	6	500	15	6
512	9	9	719	4	7	371	7	3	72	16	8	413	12	5	142	3	4
176	10	4½	445	13	8	414	13	6½	114	14	11	240	5	7½	97	10	3½
527	17	6	873	9	2	801	5	4	138	3	2	17	18	9	370	18	9
389	7	9½	96	19	8½	990	18	0½	501	0	9	125	3	4½	412	17	7½

13.

2. Write down the values of—

A dozen articles at 5s. 8½d. each	...	...	_____
One article at £4 7s. 9d. per dozen	...	...	_____
47,165,302 - 17,854,667	...	...	_____
£10,417 15s. 3½d. - £9,923 4s. 10¾d.	...	...	_____
571,275 ÷ 25	...	...	_____
4,389 × 125	...	...	_____
½ + ¾ + ⅝ + ⅞	...	...	_____
3·725 + ·0065 + 41·85	...	...	_____
Express £1·775 in £ s. d.	...	...	_____
"    £3·60625    "	...	...	_____
"    15s. 9d. as a decimal of £1	...	...	_____

COMMERCIAL ARITHMETIC.—SECOND PAPER.

Thursday, 19th June.—2.30 P.M. to 4 P.M.

All the work must be shown, and such explanation added as is required to indicate the methods adopted.

Additional marks will be given for neatness, arrangement, and style.

6. 1. Find to the nearest penny the cost of 11 tons 3 cwt. 2 qrs. 16 lbs. at £12 16s. 6d. per ton.
6. 2. (1) Add  $1\frac{1}{3}$ ,  $2\frac{2}{15}$ ,  $3\frac{3}{4}$ , and divide their sum by the difference between  $\frac{4}{5}$  and  $\frac{5}{3}$ .
- (2) Simplify 2·879 of £1 + 9·06 of 1s. + ·24 of 1d.
8. 3. Name one principal coin in use in each of the following countries:—Germany, France, India, United States of America; and express £100 as nearly as you can in terms of each of these coins.



- VALUE. 4. The average profit per annum made in a business during 3 years was £5,744, but during the first two of these years the average profit was £4,843, while during the last two it was £6,417 ; find each separate year's profit.
6. 5. A map is on the scale of 6 inches to a lineal mile ; how many acres does a square inch represent ?
8. 6. Express in tons and vulgar fraction of a ton the weight of the lead required to cover 294 square yards with lead one-eighth of an inch thick, a cubic foot of lead weighing 710 lbs.
8. 7. A sum of money, lent at  $4\frac{1}{2}$  per cent. interest, after deduction of income tax at 1s. 3d. in £1, yields £71 14s.  $4\frac{1}{2}$ d. annually ; find the sum lent.
10. 8. The traffic receipts of a railway in 1900 were £1,987,000, and its expenses were £1,144,000. In 1901 it was found that the receipts had fallen  $2\frac{1}{2}$  per cent., while the expenses had risen  $\frac{1}{2}$  per cent. ; find to 2 decimal places by what percentage of itself the profit in 1900 exceeded the profit in 1901.
10. 9. Assuming that a cubic centimetre of water weighs a gramme, and that a foot is .305 metres and a kilogramme is 2.205 lb., find the weight of a cubic foot of water in ounces avoirdupois, correct to the nearest ounce, without unnecessary work.