

LEAVING CERTIFICATE, 1901.

EXAMINATION PAPERS.

ENGLISH.

LOWER GRADE.

Thursday, 20th 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.

VALUR.

SECTION I.

10. 1. Write out, and punctuate, the passage read for dictation.
2. Write an essay, of about two pages, on one of the following subjects:—
15. (a.) A comparison of the Navy and the Army as careers.
(b.) A character sketch of an acquaintance.
3. Paraphrase the following lines, so as to bring out their full meaning:—
- Youth repairs
His wasted spirits quickly, by long toil
Incurring short fatigue ; and though our years,
As life declines, speed rapidly away,
And not a *year but* pilfers as he goes
Some youthful *grace* that age would gladly keep,
The elastic *spring* of an unwearied foot,
That mounts the style with ease, or leaps the fence,
That play of lungs, inhaling and again
Respiring freely the fresh air, that makes
Swift pace or steep ascent no *toil* to me,
Mine have not pilfered yet ; nor yet impaired
My relish of fair prospect : scenes that soothed
Or charmed me young, no longer *young*, I find
Still soothing and of power to charm me still.
15. 4. Parse the six words italicised in the above passage.
10. Name and describe the metre in which the above passage is written, and mention any two English poems written in this metre.

5. Make a general analysis of the lines in Question 3 from "and though our years" to "Mine have not pilfered yet."
10. Distinguish between the meanings of *gratitude* and *gratuity*, *compliment* and *complement*; and illustrate the meaning of each word by a sentence in which it is used.
6. Give the derivation of *five* of the following words, and show how each has acquired its present meaning:—candid, extravagant, recreation, influence, lunatic, cynical, tantalise, rival, corroborate, vulgar.
10. 7. Point out the faults in the following sentences. *Explain why you consider them faults*, and re-write each sentence in an improved form:—
- (a.) The wise man is happy when he gains his own approbation, the fool other people's.
- (b.) You are in the morning of life, and that is the season of enjoyment.
10. (c.) Having examined the spot of the tragedy, the body was removed.
- (d.) Her hand has been so severely injured, that unless she has her forefinger amputated she will entirely lose the use of it.
- (e.) Socrates, who had been at one time a diligent scientific observer, then turned his back upon Nature in order to concentrate it upon Man.
8. Name, with mention of their authors, any *five* poems that refer to famous persons or events in British history.
10. Give a short description, if you can with quotations, of *two* of the poems you mention.

SECTION II.

(In the answers under this section, attention must be paid to accuracy and clearness of composition. Mere lists of events and dates will not be regarded as sufficient.)

9. Write a short account of the character and career of any *three* of the following:—Dunstan, Malcolm Canmore, Richard I., Hubert de Burgh, Wiclif, James I. of Scotland, Richard III., More, Knox, William Cecil, James I. of England, Blake, Marlborough, the Young Pretender, Clive, Burke, Nelson, Wilberforce, General Gordon.
10. 10. Explain what is meant by any *three* of the following, and give any facts you know connected with them, so as to show their importance in British history:—Roman roads, Heptarchy, War of Investitures, Cinque Ports, Provisions of Oxford, Statute of Præmunire, Lollardism, Star Chamber, Pilgrimage of Grace, Desmond's Rebellion, Westminster Assembly, Covenanters, Rye House Plot, Drapier Letters, Gordon Riots, Chartism, Free Trade.

SECTION III.

- 10. 11. Name the leading textile manufacturing districts of the United Kingdom, stating the chief seats of each manufacture and the sources from which the raw material of each industry is obtained.
- 10. 12. Take any two British Colonies, and give an account of the climate, products, means of communication, people, and government of each.
- 10. 13. Draw a map of South America, or of India, inserting mountain ranges, rivers, and chief towns; and indicate the various products and exports of each district.
- 10. 14. Indicate the position of *ten* of the following, and state any facts you know about them:— Tientsin, Culloden, Adelaide, Corunna, Aden, Chitral, Rouen, Biarritz, Corea, Cintra, Weimar, Kiel, Tours, Pisa, Kronstadt.

ENGLISH.

LOWER GRADE.

Thursday, 20th June.—10.45 A.M.

Passage for Dictation.

The author is aware that he runs a risk of forfeiting much of the kind favour of his friends by not following the counsels that have been so liberally bestowed upon him; but this was rendered impracticable by the contrariety of the excellent advice they offered. One recommended him to avoid the ludicrous; another advised him to shun the pathetic; a third assured him that he was tolerable at description, but cautioned him to leave narrative alone; while a fourth declared that he had a very pretty knack of turning a story, and was really entertaining when in a pensive mood, but was grievously mistaken if he imagined himself to possess a spirit of humour.

ENGLISH.

HIGHER GRADE AND FIRST PAPER FOR HONOURS.

Thursday, 20th June.—10 A.M. to 1 P.M.

Every Candidate should answer *nine* questions (AND NOT MORE THAN NINE), and every Candidate must take Questions 1 and 2, and, in addition, *three* other questions in Section I.

Higher Grade Candidates should take, also, *two* questions in Section II. and *two* in Section III.

VALUE

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.

SECTION I.

1. Write an essay, of about two pages, on one of the following subjects:—
 15. (a.) The conditions of modern civilization, as favourable or deleterious to health.
 - (b.) The relative value of Classics and of Modern Languages in a school curriculum.
2. Paraphrase the following lines, so as to bring out their full meaning:—

When I have borne in memory what has tamed
Great Nations, how ennobling thoughts depart
When men change swords for ledgers, and desert
The student's bower for gold, some fears unnamed
I had, my Country—am I to be blamed?
Now, when I think of thee, and what thou art,
Verily, in the bottom of my heart,
Of those unfilial fears I am ashamed.
For dearly must we prize thee; we who find
In thee a bulwark for the cause of men;
And I by my affection was beguiled:
What wonder if a Poet now and then,
Among the many movements of his mind,
Felt for thee as a lover or a child!
10. 3. "The vocabulary of a language may be borrowed, but its grammar is its own." Explain these two statements, and illustrate from the above passage their application to English.
4. Make a general analysis of the following sentence:—

"By observing in their dedications what qualities our writers think it will be most pleasing to others to compliment them with, one may form some judgment which are most so to themselves, and in consequence, what sort of people they are."
10. Parse the eight words italicized in the following sentence:—

"As we have *but half an hour to-morrow*, all *to-morrow's* lessons *but that on geography* will be taken the *day after*."
5. Give the derivation of the following words, and show how each has acquired its present meaning:—candid, extravagant, recreation, influence, lunatic, cynical, tantalize, rival, corroborate, vulgar.
10. 6. Explain, and illustrate by an example, what is meant by each of the following terms:—synonym, bathos, hybrid, tautology, hyperbole, heroic couplet, pastoral poem, archaism, alliteration, gerundial infinitive.

VALUE.

7. Point out the faults in the following sentences, explain why you consider them faults, and re-write each sentence in an improved form:—

(a.) Socrates, who was at one time a diligent scientific observer, then turned his back upon Nature in order to concentrate it upon Man.

10.

(b.) He said there were men in the parish who have been accustomed to go over the roads now closed from their earliest days.

(c.) Her hand was so severely injured, that unless she has her forefinger amputated she will entirely lose the use of it.

(d.) Some say that the Duke is dead, others that he is alive; for my part I believe neither.

(e.) Have we an intuitive apprehension of the difference between right and wrong; and if not, how do we come by it?

10

8. Take each of the following subjects, and describe any poem, or or passage from prose or verse, which treats of it, giving any quotations you can:—childhood, death, patriotism, love of nature, country life.

10.

9. Take any one of the recognised periods in the history of English literature. Name the chief authors of the period, show what kinds of literature flourished best during it, and describe any one longer work of the period so as to illustrate the qualities of its author's genius.

SECTION II.

(In the answers under this section, attention must be paid to accuracy and clearness of composition. Mere lists of events and dates will not be regarded as sufficient.)

10.

10. Explain what is meant by any *four* of the following, and give any facts you know connected with them, so as to show their importance in British history:—Roman roads, Heptarchy, War of Investitures, Cinque Ports, Provisions of Oxford, Statute of Præmunire, Lollardism, Star Chamber, Pilgrimage of Grace, Desmond's Rebellion, Westminster Assembly, Covenanters, Rye House Plot, Drapier Letters, Gordon Riots, Chartism, Free Trade.

10

11. Write short papers (of about a page each) on *two* of the following subjects:—The Conversion of the English to Christianity; the more immediate effects of the Norman Conquest; the grievances of the English under Henry III.; a comparison of the English and Scottish Reformations; the Divine Right of Kings; English colonization of America; the changes in our Constitution effected by the Revolution of 1688; Walpole's character and administration; history of the extension of the Franchise; history of religious tests since the Reformation.

SECTION III.

10. 12 Name the leading textile manufacturing districts of the United Kingdom, stating the chief seats of each manufacture, and the sources from which the raw material of each industry is obtained.
10. 13. Take any two British colonies, and give an account of the climate, products, means of communication, people, and government of each.
10. 14. Draw a map of South America, or of India, inserting mountain ranges, rivers, and chief towns; and indicate the various products and exports of each district.
10. 15. Indicate the position of *ten* of the following, and state any facts you know about them:—Tientsin, Culloden, Adelaide, Corunna, Aden, Chitral, Rouen, Biarritz, Corea, Cintra, Weimar, Kiel, Tours, Pisa, Kronstadt.

ENGLISH.

HONOURS.—SECOND PAPER.

Wednesday, 26th 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. Point out the characteristics of Chaucer's genius, and illustrate them, as far as possible, from the *Prologue*.
16. 2. Give some account of the Scottish poetry of the Fifteenth Century, showing in what respects it followed Chaucer, and in what respects it was original.
16. 3. Compare the characteristics of Elizabethan prose with those of Eighteenth Century prose, and illustrate your answer by reference to examples of each.
16. 4. "Prose and poetry in Shakespeare's plays serve, as a rule, for distinct purposes." Examine this statement, with illustrations.
16. 5. Describe and compare any two of Shakespeare's, or of Scott's, humorous creations.
16. 6. Describe Milton's character and ideals as they are shown in his early poems.

16. 7. Give some account of the rise of the English novel in the Eighteenth Century, and show in what respects it differed from the prose fiction of previous centuries.
16. 8. Compare shortly any two poems written in the Spenserian stanza two in heroic couplet, and two in blank verse.
16. 9. What is the significance of *The Lyrical Ballads* in English literary history? In what ways did it indicate a new departure in poetry?
16. 10. Compare the two members of any one of the following groups:—
(a) Spenser and Bunyan, (b) Addison and Steele, (c) Johnson and Goldsmith, (d) Tennyson and Browning.
16. 11. Write a short descriptive note on each of the following:—*Nonne Prestes Tale*, *Morte d'Arthur*, *Utopia*, *Tottel's Miscellany*, *Arcopagitica*, *Tale of a Tub*, *Old Mortality*, *Ode on a Grecian Urn*.

SECTION II.

Optional Questions.

12. Translate into modern English:—
16. Ðā ðæt ðā ongēaton ðā ærran gewinnan ðæt se Romanisca here was onweg gewiten ðā cōmon hie sōna mid sciphære on hiera land-gemæru, and slōgon ealle and cwealdon ðæt hie gemetton, and swā swā ripe ierðe fortrædon and fornōmon, and hie midealle forierm don. And hie ðā gft sendon ærendwrecan tō Rome, and wēpendre stefne him fultumes bædon, ðæt se earme eðel mid calle ne fordilgod ne wære, nē se nama ðære Romaniscan ðeode, se ðe mid him swā lange seān beorhte, fram frēmdra ðeoda ungeðwærnesse fornumen and fordilgod bēon sceolde. Ðā was gft here hider send, se was cumende on ungewēnedre tide, on hærfešte.
16. 13. Give the 3rd sing. and 3rd plur. preterite, and the past participle, of the strong verbs in the above passage.
Decline in Anglo-Saxon:—This young son, my good book.
16. 14. What is a dialect? Point out the main differences among the three dialects of Fourteenth Century English, and refer to the chief authors of that century, stating the dialect of each.
16. 15. Show the precise relation of Chaucer's language to that of Alfred and to that of Orm respectively. Discuss Chaucer's use of the final e, pointing out the various grammatical terminations in Old English which it represents.

LATIN.

LOWER GRADE.

Monday, 24th June.—10 A.M. to 12.30 P.M.

Candidates should in all cases attempt Question 1.

1. Translate into Latin :—

25. When a troublesome fellow was talking with Demaratus and had several times asked him this question, "Who is the best man in Sparta?" he answered, "He that is least like you." To some who were commending the Eleans for managing the Olympic games with so much justice and propriety, Agis said, "What great matter is it, if the Eleans do justice once in five years?" Plistonax, the son of Pausanias, replied to an orator of Athens, who said the Lacedæmonians had no learning, "True, for we are the only people of Greece that have learned no ill of you." To one who asked what number of men there was in Sparta, Archidamidas said, "Enough to keep bad men at a distance."

2. Translate :—

20. (a.) Inter hæc vis omnis belli versa in Capuam erat. obsidebatur tamen acrius quam oppugnabatur; nec aut famem tolerare servitia ac plebs poterant aut mittere nuntios ad Hannibalem per custodias tam artas. inventus est Numida qui acceptis litteris, evasurum se professus, præstaret promissum. per media Romana castra nocte egressus spem accendit Campanis, dum aliquid virium superesset, ab omni parte eruptionem temptandi. ceterum in multis certaminibus equestria proelia ferme prospera faciebant, pedites superabantur. sed nequaquam tam laetum vincere quam triste vinci ulla parte erat ab obsesso et prope expugnato hoste. inita tandem ratio est, ut quod viribus deerat, arte aequaretur.

[*The murder of Polydorus by Polymestor.*]

15. (b.) Est, ubi Troia fuit Phrygiæ contraria tellus Bistonis habitata viris. Polymestoris illic regia dives erat, cui te commisit alendum clam, Polydore, pater, Phrygiisque removit ab armis; consilium sapiens, sceleris nisi præmia magnas adiecisset opes, animi irritamen avari. ut cecidit fortuna Phrygum, capit impius ensem rex Thracum iuguloque sui demisit alumni; et tanquam tolli cum corpore crimina possent, exanimem scopulo subiectas misit in undas.

- 3 (a.) Give (1) the meaning, (2) the gender, (3) the ablative singular, (4) the genitive plural of the following words :—*vis, mos, funus, senex, iter, miles, frigus, volvus, abies, dies.*

- (b.) What is the exact meaning of *uter, uterque, utrimque, utroque—quisque, quisquam, quicumque, quivis*? Illustrate the force of each of these by a short Latin sentence.
18. (c.) Write down the comparative and superlative of *audax, providus, dives, nequam, acer, juvenis, bene, diu, prope, graviter*.
- (d.) Write short Latin sentences, translating them, to illustrate the constructions found with each of the following verbs:—*memini, invideo, gratulor, minor, potior*.
- (e.) Mark the quantity of every syllable of each of the following words:—*cogo, venio, venisti, veneunt, formidine, doce, ultra, bonis, pater, graves*.
4. Translate into Latin:—
- (a.) My friend told me that he would help me if he could.
- (b.) The richer a man becomes, the more he desires.
15. (c.) Then he asked me what I was going to do.
- (d.) On the 30th of March we arrived at Ephesus, and we started for home next day.
- (e.) Everyone believes that you were more brave than wise.
5. Give a short account of any *one* of the following wars:—The war with Pyrrhus, the war with Mithradates, the civil war between Cæsar and Pompey.
- 7.

LATIN.

HIGHER GRADE.

Monday, 24th June.—10 A.M. to 1 P.M.

Candidates will not receive a Certificate unless they reach the necessary standard both in Prose Composition and in Translation.

1. Translate into Latin:—
- * He caused Pagolo Guinigi to be called, took him in his arms, and with a feeble but affectionate voice he spake to him as follows:— (*oratio recta*) "Had I imagined, dear son, that fortune would have stopped my course in the midst of the way that conducted me to glory, and so soon interrupted the felicity of my arms, I would have better enjoyed the fruit of my pains. 'Tis possible I should not have left your territory so large, but I should have endeavoured to have left it more quiet, by creating fewer enemies to myself, and less envy to you. I should have contented myself, dear son, with the sovereignty of Lucca and Pisa, and instead of intending the conquest of Pistoia, and contracting the hatred of the Florentines by so many affronts, I should have endeavoured by all means possible to have gained their affection. By so doing, if I had not lengthened my days, I should have made them at least more happy, and left you more quiet and

secure. But fortune, who will have the ordering of all human affairs, gave me not so much judgment as was necessary to know her, nor so much time as was requisite to master her."

2. Translate into English :—

20 (a.) ad hoc discrimen procedunt postero die duorum opulentissimorum populorum duo longe clarissimi duces, duo fortissimi exercitus, multa ante parta decora aut cumulaturi eo die aut eversuri. anceps igitur spes metus miscbant animos ; contemplantibusque modo suam modo hostium aciem, cum oculis magis quam ratione pensarent vires, simul laeta simul tristia obversabantur. quae ipsis sua sponte non succurrebant, ea duces admonendo atque hortando subiciebant. Poenus sedecim annorum in terra Italia res gestas, tot duces Romanos, tot exercitus occisione occisos, et sua cuique decora, ubi ad insignem alicuius pugnae memoria militem venerat, referebat ; Scipio Hispanias et recentia in Africa proelia et confessionem hostium, quod neque non petere pacem propter metum neque manere in ea prae insita animis perfidia potuissent. adesse finem belli ac laboris. in manibus esse praedam Carthaginis, reditum domum in patriam ad parentes liberos coniuges penatesque deos. celsus haec corpore, voltuque ita laeto, ut vicisse iam crederes, dicebat.

20. (b.) Non alia magis est libera et vitio carens ritusque melius vita quae priscos colat quam quae relictis moenibus silvas amat. non illum avarae mentis inflammat furor qui se dicavit montium insontem iugis, non aura populi et vulgus infidum bonis, non pestilens invidia, non fragilis favor ; non ille regno servit aut regno imminens vanos honores sequitur aut fluxas opes, spei metusque liber ; haud illum niger edaxque livor dente degeneri petit ; nec scelera populos inter atque urbes sata novit nec omnes conscius strepitus pavet aut verba fingit ; mille non quaerit tegi dives columnis nec trabes multo insolens suffigit auro ; non cruor largus pias inundat aras, fruge nec sparsi sacra centena nivei colla submittunt boves : sed rure vacuo potitur et aperto aethere innocuus errat.

3. (a.) Translate the following sentences, and explain the exact force of the subjunctive in each :—

- 16 (i) an ego Brutos et Cassium impellerem ?
 (ii) laudavit Antonium quod Ciceroni pepercisset.
 (iii) ingemiscunt pugiles, non quod doleant, sed quia profundenda voce omne corpus intenditur.
 (iv) nihil ignoveris ; nihil omnino gratiae concesseris.

427

(b) Write short Latin sentences introducing the following words used with their proper constructions:—*rēfert, mutare, consulere, circumdare, convenire, mederi.*

(c) Explain the following expressions, illustrating your explanation by Latin examples:—*cognate accusative, predicative dative, locative case, genitive of price, indirect command.*

(d) Give the exact force of each of the following words:—*alter, alius, alias* (adv.), *alio* (adv.), *aliunde, aliter*; and mention the adverbs formed from *hic, ille, uterque, idem.*

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

2.

(a.) *tempore quanquam illo tellus quoque et aequora ponti,*

(b.) *dicit et centum potiore signis
munere donat.*

(c.) *regalique situ pyramidum altius.*

5. Translate into Latin:—

(a.) I am so far from hating him, that I shall try to do him as much good as possible.

(b.) The enemy thought that it would be impossible for our men to advance without falling into the trap.

10.

(c.) I wish you would tell me why you have made up your mind to do such a foolish thing.

(d.) Then, after staying with us for three months, our friends left and reached home in three days.

(e.) I know that you persuaded him to trust you, but I do not know how you persuaded him that you were speaking the truth.

6. Answer any one of the following questions:—

(a.) What were the regular magistracies at Rome in the last century of the republic? Indicate the relative official rank of the magistrates, and give a short account of the duties of each.

7.

(b.) Sketch briefly the career of any one of the following:—*Scipio Africanus major, Gaius Gracchus, Lucius Cornelius Sulla, Gnaeus Pompeius, Asinius Pollio.*

(c.) Explain the following terms:—*tribuni militares consulari potestate; senatus consultum ultimum; ordo equester; lex curiata de imperio; legatus Caesaris pro praetore.*

LATIN.

HONOURS.—FIRST PAPER.

Monday, 24th June.—10 A.M. to 1 P.M.

1. For Prose Composition:—

70. The great man of whom we have been thinking and reading during the last ten days was one of the most gifted of human beings. He was a true patriot and lover of the French people, who sought to realise the idea of his nation such as it presented itself to the minds of many in the first French Revolution, yet also looking forward into the future. He was a man of courage and resource, endowed with a superhuman energy, of charming manners, and of a wonderful eloquence. Some men govern the world by severity, others attract by their geniality; he belonged to the latter class. Yet he was by no means deficient in firmness and force of character. He knew how to set aside private enmities when public interests were involved; he was willing to wait if in another generation his conception could be realised; but he was cut off in the midst of his designs, his political life ended when that of most men is only beginning. He was the adversary of the old order of things, and the representative of the new; you may say that he was ambitious, but the ambition of a great man is rarely, if ever, far removed from what he believes to be the good of his country; and some will be inclined to think that if he had lived longer he would have shipwrecked France, and that his death has done more for him than his life could have done.

2. For Elegiac Verse (but candidates may translate the passage into Hexameters or Lyrics, if they prefer to do so):—

30. To whom shall I my evil case complain,
 Or tell the anguish of my inward smart,
 Sith none is left to remedy my pain
 Or deigns to pity a perplexéd heart;
 But rather seeks my sorrow to augment
 With foul reproach and cruel banishment?
 For they to whom I uséd to apply
 The faithful service of my learned skill,
 The goodly offsprings of Jove's progeny,
 That wont the world with famous acts to fill;
 Whose living praises in heroic style,
 It is my chief profession to compile;
 They, all corrupted through the rust of time,
 That doth all fairest things on earth deface,
 Or through un noble sloth, or sinful crime,
 That doth degenerate the noble race;
 Have both desire of worthy deeds forlorn,
 And name of learning utterly do scorn.

(SPENSER, *The Tears of the Muses.*)

OR

Write a Latin Letter or Dialogue on the Importance of a Fleet, with special reference to Athens, Rome, and Britain.

LATIN.

HONOURS.—SECOND PAPER.

Wednesday, 26th June.—2 to 5 P.M.

1. Translate into English :—

(a.) CICERO ATTICO SAL.

15. Unum etiam restat amico nostro ad omne dedecus, ut Domitio non subveniat. 'at nemo dubitat quin subsidio venturus sit. ego non puto. 'deseret igitur talem civem et eos quos una scis esse, cum habeat praesertim et ipse cohortes triginta?' nisi me omnia fallunt, deseret. incredibiliter pertimuit; nihil spectat nisi fugam, cui tu—video enim quid sentias—me comitem putas debere esse. ego vero quem fugiam habeo, quem sequar non habeo; quod enim tu meum laudas et memorandum dicis, malle quod dixerim me cum Pompeio vinci quam cum istis vincere, ego vero malo, sed cum illo Pompeio qui tum erat aut qui mihi esse videbatur; cum hoc vero qui ante fugit quam scit aut quem fugiat aut quo, qui nos tradidit, qui patriam reliquit, Italiam relinquit, si malui—contigit, victus sum.

(b.)

25. Longis Caesar producere noctem inchoat adloquiiis summaque in sede iacentem linigerum placidis compellat Acorea dictis: 'O sacris devote senex, quodque arguit aetas, non neglecte deis, Phariae primordia gentis terrarumque situs volgique edisserere mores et ritus formasque deum; quodcumque vetustis insculptum est adytis profer noscique volentes prode deos. si Cecropium sua sacra Platona maiores docuere tui, quis dignior unquam hoc fuit auditu mundique capacior hospes? fama quidem generi Pharias me duxit ad urbes, sed tamen et vestri; media inter proelia semper stellarum caelique plagis superisque vacavi, nec meus Eudoxi vincetur fastibus annus. sed cum tanta meo vivat sub pectore virtus, tantus amor veri, nihil est quod noscere malim quam fluvii causas per saecula tanta latentis ignotumque caput. spes sit mihi certa videndi Niliacos fontes, bellum civile relinquam.' finierat, contraque sacer sic orsus Acoreus: 'fas mihi magnorum, Caesar, secreta parentum prodere ad hoc aevi populis ignota profanis. sit pietas aliis miracula tanta silere, ast ego caelicolis gratum reor, ire per omnes hoc opus et sacras populis notescere leges.'

429

- (c.) A corruptissimo quoque poetarum figuras seu translationes mutuamur, tum demum ingeniosi scilicet si ad intelligendos nos opus sit ingenio. atqui satis aperte Cicero praeceperat, in dicendo vitium vel maximum esse a vulgari genere orationis atque a consuetudine communis sensus abhorrere. sed ille durus atque incruditus; nos melius, quibus sordet omne quod natura dictavit, qui non ornamenta quaerimus sed lenocinia. quasi vero sit ulla verborum nisi rei cohaerentium virtus; quae ut propria sint et dilucida et ornata et apte collocentur, si tota vita laborandum est, omnis studiorum fructus amissus est. atqui plerosque vidcas haerentes circa singula et dum inveniunt et dum inventa ponderant ac dimetiuntur. quodsi idcirco fieret ut semper optimis uterentur, abominanda tamen haec infelicitas erat quae et cursum dicendi refrenat et calorem cogitationis extinguit mora et diffidentia. miser enim et, ut sic dicam, pauper orator est, qui nullum verbum aequo animo perdere potest. sed ne perdet quidem qui rationem eloquendi primum cognoverit, tum lectione multa et idonea copiosam sibi verborum supellectilem comparavit et huic adhibuit artem collocandi, deinde haec omnia exercitatione plurima roboravit ut semper in promptu sint et ante oculos.
- 15.
2. Translate the following, and write short notes on any peculiarities of construction that you observe :—
- (a) nil habui sane, non modo multum.
- (b) nec vox hominem sonat.
- (c) phaselus ille quem videtis, hospites,
ait fuisse navium celerrimus.
- (d) quaeris quid agam. ita vivam ut maximos sumptus facio.
- 20.
- (e) si amabas, invenires mutuam,
ad danistam devenires, adderes fenusculum,
subriperes patri.
- (f) quotusquisque iuris peritus est, ut eos numeres qui volunt esse?
- (g) servi studiosiores ad opus fiunt liberalius tractando.
- (h) reiciundi amplius quam trium iudicium potestas.
- (i) si illa tibi placet, placenda dos quoque est quam dat tibi.
3. Answer any two of the following questions :—
- (a) State briefly the causes that were at work, from the time of the fall of Carthage onwards, tending to the destruction of the republican constitution of Rome and the establishment of monarchy.
- (b) Distinguish carefully, *patricii*, *nobiles* and *optimates*; and show how these terms are apt to be confused.
- (c) Historians of Rome usually represent the fall of the republic as a loss to mankind; suggest some facts which lead to a modification of this view.
- 25

- (d) What were the powers, duties, and privileges of the *tribuni plebis*? Sketch briefly the history of their office, with special reference to the time of Sulla, of Cicero, and of the early Empire.
- (e) What use was made of the *tribunicia potestas* by Augustus in the consolidation of his power? Show how his rule gained in popularity thereby.
- (f) Give some account of any two of the following:—
Ennius, Sallust, Lucan, Pliny the Younger.
- (g) Name the chief poets who were contemporaries or friends of Horace and Virgil, characterising them briefly, and mentioning anything that is known about their relations with either.

GREEK.

LOWER GRADE.

Friday, 21st June.--2 to 4.30 P.M.

I. Translate:—

[The Death of Cyrus.]

40. Παῖδες ἔμοι καὶ πάντες οἱ παρόντες φίλοι, ἔμοι μὲν τοῦ βίου τὸ τέλος ἤδη πάρεστιν· ἐκ πολλῶν τοῦτο σαφῶς γινώσκω ὑμᾶς δὲ χρῆ, ὅταν τελευτήσω, ὡς περὶ εὐδαίμονος ἐμοῦ καὶ λέγειν καὶ ποιεῖν πάντα. ἐγὼ γὰρ παῖς τε ὢν τὰ ἐν παισὶ νομιζόμενα καλὰ δοκῶ κεκαρπῶσθαι, ἐπεὶ τε ἤβησα, τὰ ἐν νεανίσκοις, τέλειός τε ἀνὴρ γενόμενος τὰ ἐν ἀνδράσι· σὺν τῷ χρόνῳ τε προϊόντι αἰὲ συναυξανόμενην ἐπιγιγνώσκειν ἰδοῦμαι καὶ τὴν ἐμὴν δύναμιν, ὥστε καὶ τοῦμὸν γῆρας οὐδεπώποτε ἠσθόμην τῆς ἐμῆς νεότητος ἀσθενέστερον γινόμενον, καὶ οὐτ' ἐπιχειρήσας οὐτ' ἐπιθωμήσας οἶδα ὅτου ἠτύχησα. καὶ τοὺς μὲν φίλους ἐπέειδον δι' ἐμοῦ εὐδαίμονας γενομένους, τοὺς δὲ πολεμίους ὑπ' ἐμοῦ δουλωθέντας· ὡν τ' ἐκτησάμην οὐδὲν οἶδα ὅ τι οὐ διεσωσάμην. νῦν δ' ἦν τελευτήσω, καταλείπω μὲν ὑμᾶς, ὦ παῖδες, ζῶντας, οὓσπερ ἔδοσαν μοι οἱ θεοὶ γενέσθαι, καταλείπω δὲ πατρίδην καὶ φίλους εὐδαμονοῦντας· ὥστε πῶς οὐκ ἂν ἐγὼ δίκαιως μακαρίζόμενος τὸν αἰὲ χρόνον μνήμης τυγχάνοιμι;

II. Translate into Greek:—

- (1) He sailed towards home though it was already mid winter.
- (2) Being asked of what country he was, he said he was a Persian.
- 20. (3) Cyrus promised to give each man five minas when they arrived at Babylon.
- (4) I wonder how those who accused Socrates persuaded the Athenians that he was worthy of death.
- (5) The dog said to the sheep, If I had not guarded you, men would have stolen you or wolves devoured (*κατεσθίω*) you.

III. (a) Give—

15. dat. plur. of *θρίξ*, *χείρ*, *μάρτυς*, *πρέσβυς*, *ἀστήρ*.
gen. sing. of *κρέας*, *ὄρος*, *λέων*, *γάλα*, *φυγάς*.
nom. fem. sing. of *έκών*, *ἡμισυς*, *μέλας*, *χρυσούς*, *ἀργυρούς*.

Decline *ύγιής* and *ήδών* (all genders) in sing. and plur.

Compare *πλησίον*, *χαριέντως*, *πρόθυμος*, *χρήσιμος*.

- (b) Parse *έφημε*, *έφυσας*, *έλήλαται*, *έσθήσαντο*, *έλλήγεγκται*, *ώκοδόμητο*, *ήσθήσεσθαι*, *έρρώγει*, *άσεται*, *διελέχθη*, and give the meaning of each word.

Give—

15. 1st aor. act. ind. 3rd plur. of *καλείν*, *χεῖν*, *μάχεσθαι*,
πλείν, *ἀρέσκειν*.
imperf. ind. act. 2nd sing. of *ἀπάγειν*, *ἀπέχειν*, *οἶεσθαι*,
έθίζειν, *έστιάν*.
fut. inf. act. of *τέμνειν*, *πορίζειν*, *βιβάζειν*, *αἰσχύνειν*,
έφιστάται.
perf. inf. pass. of *τιτρώσκειν*, *λείπειν*, *τάσσειν*, *τρέπειν*,
τρέφειν.

(c) Translate, explaining the cases :—

5. (1) οὐκ ἐξῆλθεν ἰκεῖνην τὴν στρατίαν.
(2) τῶν πόνων πωλοῦσιν ἡμῖν πάντα τὰγάθ' οἱ θεοί.
(3) ἀσμένοις τοῖς ἀνθρώποις τὸ φῶς ἐγένετο.
(4) τό γε παραντίκα εἶν σώματος ἔχει.
(5) πρὸς μητρὸς ἦν τῶν Εὐπατριδῶν.

(d) Express in Greek :—

- 5 (1) Wait until I come.
(2) They waited till darkness came on.
(3) Do not speak against me.
(4) You have children to tend (*θεραπεύω*) you.

GREEK.

HIGHER GRADE.

Friday, 21st June.—2 to 5 P.M.

(Candidates will not receive a Certificate unless they reach the necessary Standard both in Grammar and Translation.)

I. Translate :—

Ἀδικώτατά μοι δοκοῦσιν ἐγκαλεῖν οἱ πολλοὶ τῇ τύχῃ. νῦν μὲν γὰρ αὐτὴν αἰτιῶνται, φάσκοντες ἄπιστον εἶναι καὶ μηδὲν ἔχειν βέβαιον. εἰ δ' αἰ τοῖς αὐτοῖς παρέμενεν, οὐκ ἔστιν ὅπως οὐχὶ μείζονος καὶ δικαιοτέρας ἐτύγχανεν ἂν κατηγορίας. ὅπου γὰρ καὶ νῦν ὑράτε τοὺς εἰς πρᾶττοντας οὕτως ὄντας πονηροὺς καὶ βαρεῖς, καὶ ταῦτα τοῦ μέλλοντος ὑπάρχοντος ἀδήλου, πώσης ἂν οἶσθε αὐτοὺς ὑπερφηανίας

είναι μεσοτύς, εἰ μὴδὲ τὴν ἐλπίδα τῆς μεταβολῆς ὑφωρῶντο; ἔτι δὲ φασὶ πολλοὶ τὴν τύχην ἀκριτον εἶναι καὶ πονηροῖς ἀνθρώποις προσμένειν, τῶν χρηστῶν δὲ ἀμελεῖν, ἄλλως τε ὅταν ὀρώσι τοὺς ἠξιομένους τῶν παρ' ἐκείνης ἀγαθῶν βαρεῖς ὄντας καὶ ἀγεννεῖς. δοκεῖ δὲ μοι ἡ τύχη πρὸς αὐτοὺς δίκαια ἂν εἰπέιν ὅτι φύσει φιλόανθρωπος οὐσα αἰεὶ τισὶ παρέσστιν ἡμῶν, οὐχ αἰρουμένη τοὺς ἀξίους οὐδὲ τοὺς πονηροὺς, αἰεὶ δὲ οἷοις ἂν αὐτοῖς παραγένηται, τοιοῦτους αὐτοὺς ὄντας ἐξελέγχεσθαι. δεῖν οὖν τὴν αὐτῶν αἰτιάσθαι φύσιν, μὴ τὴν ἐκείνης, ὅτι τοιοῦτοι καθεστήκασιν. θαυμάζω δὲ πῶς ποτὶ οἱ πολλοὶ τὴν τύχην φασὶν ἐπικίνδυνον εἶναι καὶ μηδὲν τῶν παρ' αὐτῆς ὑπάρχειν βέβαιον. ἐκείνη γάρ ἐπειδὴν τινὶ δῶ τὰ παρ' αὐτῆς ἀγαθὰ, τούτοις οὐδένα κωλύει ὀρθῶς χρῆσθαι καὶ νῆ Δία γε εἰς τὰσφαλῆς αὐτοῖς κατατίθεσθαι, λέγω δὲ οὐκ εἰς τὴν οἰκίαν ἔνδον οὐδὲ κλεῖς ἐφιστάνας καὶ μοχλοῦς, ἀλλ' εἰς εὐνοϊαν ἀνθρώπων, πατρίδος εὐεργεσίαν, φίλων βοήθειαν.

28.

II Translate one of the following passages :—

(a) τοῖσι δὲ μύθων ἤρχε μέγας Τελαμώνιος Αἴας·
 *Ω πόποι, ἦδη μὲν κε καὶ δεῖ μάλα νηπίως ἔστιν
 γνοίη ὅτι Τρώεσσι πατὴρ Ζεὺς αὐτὸς ἀρήγει.
 τῶν μὲν γὰρ πάντων βέλε' ἄπεται, ὅστις ἀφήγῃ,
 ἢ κακὸς ἢ ἀγαθός· Ζεὺς δ' ἔμπης πάντ' ἰθύνει·
 ἡμῖν δ' αὐτῶς πᾶσιν ἐτώσια πίπτει ἔραζε.
 ἀλλ' ἄγετ' αὐτοὶ περ φραζώμεθα μῆτιν ἀρίστην,
 ἡμῖν ὅπως τὸν νεκρὸν ἐρίσσομεν, ἦδὲ καὶ αὐτοὶ
 χάρμα φίλοις ἐτάροισι γενώμεθα νοστήσαντες,
 οἱ που ἐεὐρ' ὀρώωντες ἀκηχέδατ', οὐδ' ἔτι φασὶν
 Ἐκτορος ἀνδροφόνιο μένος καὶ χεῖρας ἀάπτου
 σχήσεσθ', ἀλλ' ἐν νηυσὶ μελαίνησιν πεσέεσθαι.
 εἴη δ' ὅστις ἐταῖρος ἀπαγγέλειε τάχιστα
 Πηλεΐδῃ, ἐπεὶ οὐ μιν ὀτομαὶ οὐδὲ πεπύσθαι
 λυγρῆς ἀγγελίης, ὅτι οἱ φίλος ὦλεθ' ἐταῖρος.

17

(b) [Prometheus has foretold to Io her future troubles.]

ΧΟΡΟΣ.

ἦ γάρ τι λοιπὸν τῆδε πημάτων ἐρεῖς;

ΠΡΟΜΗΘΕΥΣ.

δυσχείμερόν γε πέλαγος ἀτηρᾶς δύης.

ΙΩ.

τί δῆπ' ἐμοὶ ζῆν κέρδος, ἀλλ' οὐκ ἐν τάχει
 ἔρριψ' ἐμαντὴν τῆσδ' ἀπὸ στύφλου πέτρας,
 ὅπως πέδιψ σκήψασα τῶν πάντων πόνων
 ἀπηλλάγη; κρεῖσσον γὰρ εἰσάπαξ θανεῖν,
 ἢ τὰς ἀπάσας ἡμέρας πάσχειν κακῶς.

ΠΡΟΜΗΘΕΥΣ.

ἦ δυσπετῶς ἂν τοὺς ἐμοὺς ἄθλους φέροις,
 ὅτῳ θανεῖν μὲν ἔστιν οὐ πεπρωμένον·
 αὐτῇ γάρ ἦν ἂν πημάτων ἀπαλλαγὴ·
 νῦν δ' οὐδὲν ἔστι τέρμα μοι προκείμενον
 μόχθων, πρὶν ἂν Ζεὺς ἐκπέσῃ τυραννίδος.

17.

ΙΩ.

ἢ γάρ ποτ' ἔστιν ἐκπισεῖν ἀρχῆς Δία ;

ΠΡΟΜΗΘΕΥΣ.

ἦδοί' ἄν, οἶμαι, τήνδ' ἰδοῦσα συμφοράν.

ΙΩ.

πῶς δ' οὐκ ἄν, ἦτις ἐκ Διὸς πάσχω κακῶς ;

ΠΡΟΜΗΘΕΥΣ.

ὡς τοίνυν ὄντων τῶνδ' εἰ σοὶ μαθεῖν πάρα.

III. [*As an alternative to these sentences Candidates may take the continuous passage of English that follows.*] Translate into Greek :—

(1) If I were a younger man, instead of being seventy years old, it would not be necessary for you to come here, but I should go to you.

(2) They are in much the same case as if a man were the owner of a fine horse without having ever learnt to ride.

30

(3) It is said that when Philip was correcting (*ἐπανορθοῦν*) a musician at dinner, the latter exclaimed, "Never, O my King, may you be so badly off as to understand these things better than I."

(4) With you I believe that I shall be honoured wherever I am, but that by myself I should not be able either to benefit a friend or ward off an enemy.

(5) Apart from being deprived of a comrade such as I shall never again find, it will be thought that I might have saved you had I been willing to spend money.

Alternative passage for Translation into Greek.

Alexander now prepared to take vengeance on the men of Lampsacus, who had always sided with Darius against himself. Anaximenes, his former teacher, and a native of that city came to meet him, hoping to dissuade him from his purpose. Alexander, being informed of this, turned to his army and swore by all the gods that he would do the very opposite of anything he was asked to do by his friend. His oath was reported to Anaximenes, who being brought into the king's presence and asked what he wanted, replied, "I am come to entreat you utterly to destroy Lampsacus, to plunder the houses and the temples, and to spare neither old nor young." Alexander, we are told, was annoyed at the device, but out of respect for his oath pardoned the men of the city.

30.

IV. (1) Give the stem of *πλοῦς*, *γέρον*, *γίνος*, *τιμῆ*, *πολίτης*.

Give the perf. imperat. 2nd pers. sing. of *δεδεῖναι*, and *ἴστημι*, subjunct. 3rd sing. of *κείμαι*, and pres. ind. sing. (all persons) of *δέιν*, "to bind."

- (2) Translate, with grammatical notes:—
- ἀθάνατον τὴν μνήμην κατέλιπον.
 - τοῦτον σύμμαχον κέκτημαι.
 - πῶς ἡμῖν ἔχεις;
 - ὀλίγου ἱμαντοῦ ἐπελαθόμην.
- (3) Translate, commenting on the use or the mood:—
- βούλει σοι εἶπω;
 - οὐ μὴ παύσωμαι φιλοσοφῶν.
 - σφοδρὸς ἦν ἐφ' ὃ τι ὀρμήσειεν.
 - οὐκ ἐπὶ τῷ δούλῳ εἶναι ἐκπέμπονται.
 - βραχὺς ὁ χρόνος ἀξίως διηγήσασθαι.
25. (4) (a) Express in Oratio Recta:—
ἀπεκρίνατο ὅτι βουλευόσιτο περὶ αὐτῶν ὅ τι δύναιτο ἀγαθόν.
(b) Translate into Greek in as many ways as you can:—"He sent messengers to tell."
(5) Give Greek idiom for—*every fifth year, within a few years, a short time afterwards, he was banished by the people, let us begin with Zeus.*

GREEK.

HONOURS.—FIRST PAPER.

Friday, 21st June.—2 to 5 P.M.

I. Translate:—

- (a) Ὡς ἔφαθ'· οἱ δ' ἄρα πάντες ἀκὴν ἐγένοντο σιωπῇ·
τοῖσι δὲ καὶ μετέειπε βῶθην ἀγαθὸς Μενέλαος·
Κέκλυτε νῦν καὶ ἐμεῖο· μάλιστα γὰρ ἄλγος ἴκανε
θυμὸν ἐμόν, φρονέω δὲ διακριθήμεναι ἤδη
Ἀργείους καὶ Τρῶας, ἐπεὶ κακὰ πολλὰ πέπασθε
εἴνεκ' ἐμῆς ἔριδος καὶ Ἀλεξάνδρου ἕνεκ' ἀρχῆς·
ἡμῶν δ' ὀπποτέρῳ θάνατος καὶ μοῖρα τέτοκται,
τεθναίῃ ἄλλοι δὲ διακρωθεῖτε τάχιστα.
οἴσατε δ' ὄρν', ἕτερον λευκόν, ἕτερον δὲ μέλαιναν,
Γῆ τε καὶ Ἥελίῳ· Διὶ δ' ἡμεῖς οἴσομεν ἄλλον·
ἄξετε δὲ Πριάμοιο βίην, ὄφρ' ὄρκια τάμνη
αὐτός, ἐπεὶ οἱ παῖδες ὑπερφίαλοι καὶ ἄπιστοι,
μὴ τις ὑπερβασίῃ Διὸς ὄρκια δηλήσῃται.
αἰεὶ δ' ὀπλοτέρων ἀνδρῶν φρένες ἠερέθονται·
οἷς δ' ὁ γέρον μετέρῳ, ἅμα πρόσω καὶ ὀπίσω
λεύσσει, ὅπως ὄχ' ἀρίστα μετ' ἀμφοτέροισι γένηται.
Write a grammatical note on μετέρῳ and μετ' ἀμφοτέροισι.
- (b) μάχῃ μὲν οὖν ἂν οὐχ ὑπερβαλοίμεθα
Πελασγῶν Ἄργος· εἰ δὲ μαλθακοῖς λόγοις
δυναίμεθ', ἐνταῦθ' ἐλπίδος προσήκομεν.
20. συμκροῖσι γὰρ τὰ μεγάλα πῶς ἔλοι τις ἂν

πόνουσι; ἀμαθῆς καὶ τὸ βουλεύσθαι τάδε.
 ὅταν γὰρ ἡβᾷ ἄνθρωπος, εἰς ὄργην πεσὼν,
 ὅμοιον ὥστε πῦρ κατασβέσσαι λάβρον·
 εἰ δ' ἡσύχως τις αὐτὸς ἐντείνοντι μὲν
 χαλῶν ὑπέικοι, καιρὸν εὐλαβοῦμενος,
 ἴσως ἂν ἐκπνεύσει· ὅταν δ' ἀνὴρ πνοάς,
 τύχῃσι ἂν αὐτοῦ ῥαδίως ὅσον θέλει.
 ἔνρῃσι δ' οἶκτος, ἐνὶ δὲ καὶ θυμὸς μέγας,
 παραδοκοῦντι κτῆμα τιμιώτατον.
 ἔλθων δὲ Τυνδάρων τέ σοι πειράσομαι
 πόλιν τε πείσαι τῷ λίαν χρῆσθαι καλῶς.
 καὶ ναῦς γὰρ ἐνταθεῖσα πρὸς βίαν ποδὶ
 ἔβαψεν, ἔστη δ' αὐθις, ἦν χαλὰ πόδα·
 μισεῖ γὰρ ὁ θεὸς τὰς ἄγαν προθυμίας,
 μισοῦσι δ' ἄστοι· δεῖ δέ μ', οὐκ ἄλλως λέγω,
 σώζειν σε σοφίᾳ, μὴ βίᾳ τῶν κρεισσόνων.

II. For Greek Prose :

60. The time and place at which this great poet flourished were such, that a person naturally endowed with good abilities could want nothing that might contribute to the highest literary cultivation. For he was born and brought up in Athens; that city which, alone of all the ancient cities of Greece, was a teacher to future ages in all that concerns good taste, philosophy, and poetry. Imbued from his earliest infancy with the rules of philosophy and eloquence, he was unwilling to abuse his oratorical power in the pursuit of political distinctions. At the same time, that he might not pass his life in inglorious obscurity, and that he might, so far as circumstances permitted, apply his eloquence and philosophy to the service of mankind, he turned his thoughts to the composition of his tragedies with such diligence and success that, at least in the opinion of many, he rendered doubtful the superiority of Sophocles himself. Indeed he proved himself the great teacher of his day, for, covered as it were, and sheltered by the shield of the theatre, he stealthily insinuated into the minds of his countrymen those doctrines which it would have been far from safe to utter in public.—PORSON *On Euripides*.

GREEK.

HONOURS (SECOND PAPER).

Thursday, 27th June.—2 to 5 P.M.

I. Translate :—

25. (1) Καὶ οἱ μὲν ἅμα τῇ ἔφ' ἔμελλον βοηθήσειν· Φρίνηχος δὲ ὁ τῶν Ἀθηναίων στρατηγός, ὡς ἀπὸ τῆς Λέρον ἐπίθετο τὰ τῶν νεῶν σαφῶς βουλομένων τῶν ξυναρχόντων ὑπομεινάτας διαναναμαχεῖν, οὐκ ἔφη οὐτ' αὐτὸς ποιήσειν τοῦτο οὐτ' ἐκείνοις οὐδ' ἄλλῳ οὐδενὶ ἐς δύναμιν ἐπιτρέψειν. ἔθου γὰρ ἔξεστιν ἐν ὑστέρῳ, σαφῶς εἰδὼτας πρὸς ὀπίστας τε ναῦς πολεμίας καὶ ὅσας πρὸς αὐτάς ταῖς σφετέραις, ἰκανῶς καὶ καθ' ἡσυχίαν παρασκευασαμένους ἔσται ἀγωνίσασθαι, οὐδέποτε τῷ αἰσχυρῷ ὀνειδεῖ εἶζας ἀλόγως διακινδυνεύσειν. οὐ γὰρ αἰσχυρὸν εἶναι Ἀθηναίους ναυτικῶ μετὰ καιροῦ ὑποχωρήσει, ἀλλὰ καὶ μετὰ ὀτουοῦν

τρόπον αἰσχίον ξυμβήσεσθαι, ἦν ἡσηθῶσι· καὶ τὴν πόλιν οὐ μόνον τῷ αἰσχυρῷ ἀλλὰ καὶ τῷ μεγίστῳ κινδύνῳ περιπίπτειν, ἣ μόνος ἐπὶ ταῖς γεγενημέναις ξυμφοραῖς ἐνδέχεσθαι μετὰ βεβαιοῦ παρασκευῆς καθ' ἰκουσίαν, ἢ πάνυ γε ἀνάγκη, προτέρα ποι ἐπιχειρεῖν, ποῦ δὲ, μὴ βιαζομένη γε, πρὸς αὐθαιρέτους κινδύνους ἵεναι;

- (2) Ῥαδαμάνθιος δὲ περὶ τὴν λεγομένην κρίσιν τῶν δικῶν ἄξιον ἄγασθαι, διότι κατεῖδε τοὺς τότε ἀνθρώπους ἡγουμένους ἐναργῶς εἶναι θεοῦ, εἰκότως, ἅτε κατὰ τὸν τότε χρόνον τῶν πολλῶν ἐκ θεῶν ὄντων, ὧν εἰς ἦν αὐτός, ὡς γε λόγος. εἰδὼς γὰρ περὶ ἐκάστων τῶν ἀμφισβητουμένων ὄρκον τοῖς ἀμφισβητούσιν ἀηλλάττετο ταχὺ καὶ ἀσφαλῶς. νῦν δὲ δὴ ὅτε μέρος μὲν τι, φαμέν, ἀνθρώπων τὸ παράπαν οὐχ ἡγοῦνται θεοῦ, οἱ δὲ οὐ φροντίζουσιν ἡμῶν αὐτοῦ διανοοῦνται, τῶν δὲ ὅη πλείστων ἰστί καὶ κακίστων ἢ δόξα, ὡς μικρὰ δεχόμενοι θύματα
25. καὶ θωπείας πολλὰ συναποστεροῦσι χρήματα καὶ μεγάλων σφῆς ἐκλούνται κατὰ πολλὰ ζημιῶν, οὐκέτι δὲ ἰστί τοῖς νῦν ἀνθρώποις ἢ Ῥαδαμάνθιος ἂν εἴη τέχνη πρέπουσα ἐν δίκαις. μεταβιβληκνῶν οὖν τῶν περὶ θεοῦ δόξων ἐν τοῖς ἀνθρώποις μεταβάλλειν δεῖ καὶ τοὺς νόμους· ἐν γὰρ λήξεισι δικῶν τοὺς μετὰ νόου τιθεμένους νόμους ἐξαιρεῖν χρὴ τοὺς ὄρκους τῶν ἀντιδικούντων ἑκατέρων, καὶ τὸν λαγχά-
νοντα τῷ τινα δίκην τὰ μὲν ἐγκλήματα γράφειν, ὄρκον δὲ μὴ ἐπομνῆσαι, καὶ τὸν φεύγοντα κατὰ ταῦτ' ἀρησιν γράψαντα παραδοῦναι τοῖς ἀρχουσιν ἀνάμωτον. δεινὸν γὰρ ποὺ δικῶν γ' ἐν πόλει πολλῶν γενομένων εὖ εἰδέναι σμικροῦ δεῖν τοὺς ἡμίσεις αὐτῶν ἐπιωρηκῆσθαι, ἐν ἑσσιτίοις τε ἀλλήλοισι εὐχερῶς συγγενομένους καὶ ἐν ἄλλαις συνουσίαις τε καὶ ἰδιωτικαῖς συγγενήσεσιν ἐκάστων.

II. Translate, with short grammatical notes :—

- (1) αἰαῖ, δέδοκται, πρέσβυ, τλήμονες φυγαί.
 (2) ἔστιν οὕστινας ἀνθρώπους τεθαύμακας ἐπὶ σοφίᾳ,
 (3) Κίμωνα παρὰ τρεῖς ἀφείσαν ψήφους τὸ μὴ θανάτῳ ζημιῶσαι.
 (4) ἐμοὶ δ' ἐπέτρεψαν οἱ θεοὶ
 σπονδὰς ποιῆσθαι πρὸς Λακεδαιμονίους μόνῳ.
 (5) τὸν ἄνδρ' ἀπάγοντες, ὅστις ἡμῖν ἤθελε
 σπονδὰς ποιῆσαι.
 25. (6) κείνος οὐκ ἔγνηεν ἀλλ' ἐγήματο.
 (7) τεθνῶσιν οἱ θανόντες· ἀλλ' ἴθ' εἰς δόμους.
 (8) ταῦτα πεπείσθω ὑμῖν.
 (9) ἔρδοι τις ἦν ἕκαστος εἰδείη τέχνην.
 (10) ΕΠ. τί σοι πιθώμεθ; ΠΕΙ. ὅ τι πίθησθε;
 (11) σὲ δ' ἄλλη τις γυνὴ κεκτῆσται,
 σόφρων μὲν οὐκ ἂν μάλλον, ἐντυχῆς δ' ἴσως.
 (12) οὐκ ἂν οἶδ' εἰ δυναίμην ἅπαντα ἐν μνήμῃ πάλιν λαβεῖν.

III. Answer any two of the following questions :—

25. (1) What constitutional changes are connected with the names of Cleisthenes, Aristides, Ephialtes? State briefly the functions of the βουλή at Athens and of the ἔφοροι at Sparta.

(2) Describe the army organisation and military tactics of Sparta, Athens, and Mæcedon, adding illustrations, where you can, from particular battles or campaigns.

(3) Show by instances the influence of religion on the internal politics and wars of Greece.

(4) Give a brief narrative of the successive Carthaginian invasions of Sicily.

(5) Trace the origin and rise of prose literature in Greece.

(6) Describe the political or social conditions reflected in the poems of Hesiod, Tyrtæus, Archilochus, Theognis.

FRENCH.

LOWER GRADE.

Friday, 21st June.—10 A.M. to 12.30 P.M.

Candidates must, in all cases, answer all Questions in Section I, and should attempt seven, and only seven, Questions from Section II.

SECTION I.

1. Translate into English:—

14. (a.) Un jour que j'accompagnais mon père à la chasse, la voix des chiens nous conduisit sur le revers d'une montagne boisée, dont les pentes, entrecoupées de châtaigniers et de petits prés, sont semées de quelques chaumières et de deux ou trois maisonnettes blanchies à la chaux (*lime*), un peu plus riches que les masures (*hovels*) de paysans, et entourées chacune d'un verger, d'un jardin, d'une haie vive (*quickset*), d'une cour rustique. Mon père, ayant retrouvé les chiens et les ayant remis en laisse (*leash*), cherchait de l'œil un sentier qui menait à une de ces maisons, pour m'y faire déjeuner et reposer un moment, car nous avions marché depuis l'aube du jour. Cette maison était habitée par un de ses amis, vieil officier des armées du roi, retiré du service, et finissant ses jours dans ces montagnes natales, entre une servante et un chien. C'était une belle journée d'automne. LAMARTINE.

12. (b.) Mes deux frères et moi, nous étions tout enfants. Notre mère disait : "Jouez, mais je défends Qu'on marche dans les fleurs, et qu'on monte aux échelles." Nous montions pour jouer au grenier du eouvent. Et là tout en jouant, nous regardions souvent, Sur le haut d'une armoire, un livre inaccessible. Nous grimpâmes un jour jusqu'à ce livre noir ; Je ne sais pas comment nous fîmes pour l'avoir, Mais je me souviens bien que c'était une Bible. Nous l'ouvrîmes alors tout grand sur nos genoux, Et, dès le premier mot, il nous parut si doux, Qu'oubliant de jouer, nous nous mimas à lire

VICTOR HUGO.

- 15. 2. Write from memory a French version of the passage read out.
- 3. Translate into French :—

“Twelve years ago, Miranda,” continued Prospero, “I was Duke of Milan, and you were a princess and my only heir.* I had a younger brother, whose name was Antonio, to whom I trusted everything; and as I was fond of retirement and deep study I commonly left the management† of my State affairs to your uncle, my false brother (for so indeed he proved). I, neglecting all worldly ends, buried among my books, did dedicate my whole time to the bettering of my mind. My brother, Antonio, being thus in possession of my power, began to think himself the duke indeed.”

LAMB.

* heir = héritière (f). † management = direction (f).

SECTION II.

- 7. 4. Write in the plural in French :—La plante a une fleur blanche. L’oiseau vole. C’est mon sou. Cet enfant perdra son joujou. And in the singular :—Ces hommes sont-ils vieux ? Les fils des avocats sont laborieux. And in the feminine singular.—Les garçons ont vu des lousps. Le compagnon de mon frère est arrivé.
- 7. 5. Give the infinitive of *conduisit*, *remis*, *ayant*; the imperative in full of *dire* and *savoir*; present indicative in full of *souvenir*; present and past participles of *ouvrir*; present subjunctive in full of *mener* and *oublier*.
- 7. 6 Translate into French :—I am going. He used to sing. Do they work? They were not playing. Wednesday, June 19th, 1901. Nine holes. The ninth lesson.
- 7. 7. Give the adjectives corresponding to innocemment, aveuglément, traîtreusement, prodigalement, sagement, pis.
- 7. 8. Distinguish between the use of *quel* and *lequel*, *cela* and *celui-là*; *puisque* and *depuis que*, and write one sentence to illustrate each word.
- 7. 9. What adjectives are placed after the noun in French? Write one sentence to illustrate each rule you give.
- 7. 10. Distinguish between un *brave* homme and un homme *brave*; son *propre* habit and son habit *propre*; la *dernière*, année and l’année *dernière*. Say when *aide* and *garde* are masculine and when feminine.
- 11. Translate into English :—

(a) La pitié est souvent un sentiment de nos propres maux dans les maux d’autrui. C’est un habile prévoyance des malheurs où nous pouvons tomber. Nous donnons du secours aux autres, pour les engager à nous en donner en de semblables occasions; et ces services que nous leur rendons sont, à proprement parler, des biens que nous nous faisons à nous-même par avance.

DE LA ROCHEFOUCAULD.

(b) Petit poisson deviendra grand,
 Pourvu que Dieu lui prête vie.
 Mais le lâcher en attendant,
 Je tiens pour moi que c'est folie :
 Car de le rattraper il n'est pas trop certain.

Un Tiens vaut, dit-on, mieux que deux Tu l'auras.
 L'un est sûr, l'autre ne l'est pas. LA FONTAINE.

12. Give an account of the life of any *one* of the following :—

Molière,
 Corneille,
 Racine.

or

Give some account of one of the following works :—

7

Hernani,
 Les Femmes Savantes,
 La Jeune Sibérienne,
 Horace,
 Athalie,
 One Episode from Sans Famille,
 Le Roi des Montagnes,
 La Fortune de d'Artagnan.

13. Translate into English :—

- (1.) Veuillez prendre livraison de ces marchandises et les réexpédier à leur destination sous remboursement des frais.
- (2.) Nous avons le plaisir de vous adresser ci-joints deux effets payables comme suit, à savoir :

Fr. 4000 sur Jaune et C^{ie} payable au 10 prochain.

Fr. 2000 sur Noir et Blanc payable au 20 prochain.

7.

Nous vous prions de les envoyer à l'acceptation et de les faire encasser à l'échéance au crédit de mon compte.

- (3.) Veuillez m'envoyer des remises sans faute le 15 prochain.
- (4.) Il s'en est suivi une hausse.
- (5.) Emballage ordinaire franco.
- (6.) Assemblée générale des actionnaires.

14. Translate into French :—

- (1.) We are in receipt of your favour of the 16th inst. with invoice and bill of lading for timber, per steamer "Maud." We return the invoice for correction, as you have omitted to credit us with 5 per cent. discount as arranged. On your returning the same corrected, we will forward you a banker's draft for the amount.

7.

- (2.) Herewith we beg to hand you cheque to balance your account.

- (3.) Please find enclosed our price list for the present week.
- (4.) In reply to your advertisement for a clerk, I beg to apply for the vacant post.
- (5.) These parcels are already a week behind time.
- (6.) Our traveller will call on you shortly.

FRENCH.

LOWER AND HIGHER GRADES AND HONOURS.

Friday, 21st 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.

King George III. was well known for the unaffected simplicity and kindness of his manners. When in the country, he used to walk about unattended by any pomp, and without a single guard. In one of his excursions, during the hay harvest, in the neighbourhood of Weymouth, he passed a field where only one woman was at work. His Majesty asked her where the rest of her companions were. The woman answered that they had gone to see the King. "And why did you not go with them?" rejoined His Majesty. "I would not give a pin to see him!" replied the woman. "Besides, the fools that are gone to town will lose a day's work by it, and that is more than I can afford to do. I am a widow, and I have five children to work for." "Well, then," said the monarch, putting some money into her hand, "you may tell your companions who are gone to see the King, that the King came to see you."

FRENCH.

HIGHER GRADE AND FIRST PAPER FOR HONOURS GRADE.

Friday, 21st June.—10 A.M. to 1 P.M.

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

SECTION I.

1. Translate:—

- (a.) La Grèce en ma faveur est trop inquiète.
De soins plus importants je l'ai crue agitée,
Seigneur, et, sur le nom de son ambassadeur,
J'avais dans ses projets conçu plus de grandeur.
Qui croirait, en effet, qu'une telle entreprise
Du fils d'Agamemnon méritât l'entremise;
- 6.

Qu'un peuple tout entier, tant de fois triomphant,
N'eût daigné conspirer que la mort d'un enfant ?
Mais à qui prétend-on que je le sacrifie ?
La Grèce a-t-elle encor quelque droit sur sa vie ?

(RACINE.)

- 6 (b.) Parfois, lorsque tout dort, je m'assieds plein de joie
Sous le dôme étoilé qui sur nos fronts flamboie ;
J'écoute si d'en haut il tombe quelque bruit ;
Et l'heure vainement me frappe de son aile
Quand je contemple, ému, cette fête éternelle
Que le ciel rayonnant donne au monde la nuit.
Souvent alors j'ai cru que ces soleils de flamme
Dans ce monde endormi n'échauffaient que mon âme ;
Qu'à les comprendre seul j'étais prédestiné ;
Que j'étais, moi, vaine ombre obscure et taciturne,
Le roi mystérieux de la pompe nocturne ;
Que le ciel pour moi seul s'était illuminé.

(VICTOR HUGO.)

- 8 (c.) Quoiqu'il fit froid et qu'il y eût même encore de la neige, la
terre commençait à végéter ; on voyait des violettes et des
primevères ; les bourgeons des arbres commençaient à
poindre, et la nuit même de mon arrivée fut marquée par le
premier chant du rossignol, qui se fit entendre presque à
ma fenêtre, dans un bois qui touchait la maison. Après
un léger sommeil, oubliant à mon réveil ma transplanta-
tion, je me croyais encore dans la rue de Grenelle, quand
tout à coup ce ramage me fit tressaillir, et je m'écriai, dans
mon transport : Enfin tous mes vœux sont accomplis !
Mon premier soin fut de me livrer à l'impression des objets
champêtres dont j'étais entouré. Au lieu de commencer à
m'arranger dans mon logement, je commençai à m'arranger
pour mes promenades, et il n'y eut pas un sentier, pas un
taillis, pas un bosquet autour de ma demeure, que je
n'eusse parcouru dès le lendemain.

(ROUSSEAU.)

10. 2. (a.) Write from memory a French version of the passage read out.
(b.) Translate into French :—

February 1.

MY DEAR ANNE,

22. I MAKE no apology for my silence, because I know
how little people think of letters in such a place as Bath.
You must be a great deal too happy to care for Upper-
cross, which, as you well know, affords little to write about.
We have had a very dull Christmas ; Mr. and Mrs. Mus-
grove have not had one dinner party all the holidays. I
do not reckon the Hayters as anybody. The holidays,
however, are over at last : I believe no children ever had
such long ones. I am sure I had not. The house was
cleared yesterday, except of the little Harvilles ; but you
will be surprised to hear that they have never gone home.
Mrs. Harville must be an odd mother to part with them so

long. I do not understand it. They are not at all nice children in my opinion; but Mrs. Musgrove seems to like them quite as well, if not better, than her grandchildren. What dreadful weather we have had!

(JANE AUSTEN.)

SECTION II.

3. Make short sentences in English—and give their translation in French—to show when the auxiliary verbs *will, would, should, may, might* can have their meaning expressed in French by the tense or mood of the principal verb, and when they must be rendered by distinct verbs.

4. Distinguish, by translating them into English, between the following verbs:—*garder* and *se garder de, passer* and *se passer de, étonner* and *s'étonner, retourner* and *se retourner, entendre* and *s'entendre, apercevoir* and *s'apercevoir, faire* and *se faire à, agir* and *s'agir*.

5. Give the two meanings of each of the following words, the one as a verb, the other as a noun or adjective:—*joue, bois, lit, lâche, cru, court, sort, peigne*.

6. Translate the following sentences, using both *devoir* and *falloir*:—*I must go. I should go. I ought to have gone. I have had to go.*

7. Make short sentences in French to illustrate the meaning of:—*avant, devant, dessus, au-dessus de, de bonne heure, à la bonne heure, moins que, à moins que*. Give also the English translation of your sentences.

8. In what various ways can, or must, the English passive voice be rendered in French? Illustrate your answer by translating:—

I am told that this cannot be done.

It is proposed that a statue be erected to his memory.

What cannot be cured must be endured.

He is not allowed to say what has been decided.

SECTION III.

9. Account historically for the double forms *cor* and *corne, mil* and *mille*.

10. Give the exact etymology, with some comments, of the following pronouns:—*dont, lui, en, leur, eux, tien, ceci, moi*.

11. What is the historical reason of the fact that “the *s* is the mark of the plural”?

12. Account for the presence of a circumflex accent in the following words:—*âme, âne, âge, mûr, assidûment, dû, chantâmes, aînê*.

13. Translate into Modern French:—

- Or poez savoir que mout esgarderent Constantinoble cil qui onques mais ne l'avoient veüe: que il ne pooient mie cuidier que si riche vile peüst estre en tout le monde, com il virent ces hanz murs et ces riches tours dont ele eret close tout entour a

la reonde, et ces riches palais et ces hautes iglises, dont il avoit tant que nuls nel peüst croire, se ne le veist a l'ueil, et le lonc et le lé de la vile qui de toutes les autres eret souveraine.

(VILLEHARDOUIN.)

SECTION IV.

8. 14. Give a complete and clear summary of any *one* striking scene of either Molière, Racine, Corneille, Marivaux, or Beaumarchais, *which you have actually read in French.*
8. 15. Give a rendering in French prose of either a fable of La Fontaine or a poem of Victor Hugo, and, if possible, quote a few lines from it. (A rendering of Hugo's piece, Question 1*b*, will not be accepted.)
8. 16. Give a summary of any short story of either Chateaubriand, Vigny, Coppée or Daudet, *which you have actually read in French*, and say wherein lie its chief merits.
8. 17. Give the title, author, and approximate date of publication, of *four* of the *most important* works, other than plays, written in the XVIIth, XVIIIth, and XIXth centuries respectively (four for each century).

SECTION V.

18. Translate into English :—
8. Un colis de marchandises. Le cours du jour. Spéculer à la hausse. Des primes d'exportation. Les matières premières. Un fondé de pouvoirs. Une maison de premier ordre. La Banque d'Angleterre a abaissé son taux d'escompte.
19. Translate into French :—
8. The market is overstocked. Enclosed please find draft on London at eight days' sight for £100. The most favoured nation clause. I hasten to acknowledge your favour of 12th inst. duly received by us to-day.
20. Translate, and answer in French, *one* of the following advertisements.
8. (a) Wanted, immediately, in a shipbroker's office, a foreign correspondent. Write, stating experience and qualifications, to
- (b) Wanted, clerk, for sugar refiners. Shorthand, book-keeping, typewriting. State age, experience, present employment, and salary expected.

FRENCH.

HONOURS—SECOND PAPER.

Thursday, 27th June.—10 A.M. to 1 P.M.

Candidates must, in all cases, answer Questions 1, 2, and 3, and should attempt at least three (AND NOT MORE THAN FIVE) of the remaining Questions.

SECTION I.

1. Translate into French:—

25. One other picture of this time is worth remembering, as showing that Rousseau was not wholly blind to social circumstances, and as illustrating, too, how it was that his way of dealing with them was so much more real and passionate, though so much less sagacious in some of its aspects, than the way of the other revolutionists of the century. One day, when he had lost himself in wandering in search of some site which he expected to find beautiful, he entered the house of a peasant, half dead with hunger and thirst. His entertainer offered him nothing more restoring than coarse barley bread and skimmed milk. Presently, after seeing what manner of guest he had, the worthy man descended by a small trap into his cellar, and brought up some good brown bread, some meat, and a bottle of wine, and an omelette was added afterwards. Then he explained to the wondering Rousseau, who was a Swiss, and knew none of the mysteries of the French fisc, that he hid away his wine on account of the duties, and his bread on account of the *taille*, and declared that he would be a ruined man if they suspected that he was not dying of hunger. All this made an impression on Rousseau which he never forgot. "Here," he says, "was the germ of the inextinguishable hatred which afterwards grew up in my heart against the vexations that harass the common people, and against all their oppressors."

JOHN MORLEY.

SECTION II.

2. Translate into English:—

10. (a.) Les pieds nus dans ses sabots, faisant claquer son fouet derrière ses bêtes, il les chassait dès l'aube vers les friches, à la lisière d'un bois que domine la vallée. Là, vautre dans l'herbe tandis que les vaches pâturaient, il lisait un vieux Almanach liégeois trouvé à la maison dans un coin de l'âtre, et dont il connaissait quasi toutes les pages par cœur. Lorsqu'il était las de lecture, il se couchait sur le dos et regardait les nuages courir dans le ciel ou les papillons voltiger sur les genêts. Ayant l'intelligence curieuse et éveillée, il observait les oiseaux, les arbres, les insectes, comparait les formes diverses des choses et pénétrait petit à petit dans le domaine enchanté de la nature. Gourmand autant que curieux, il était peu de plantes dont il n'eût expérimenté à ses dépens les vertus aromatiques ou amères : il connaissait tout ce qu'il y a de bon à manger dans les champs et dans les bois. De l'été à l'automne il vivait avec

délice de cette vie végétale, communiant sous toutes les espèces avec la nature, emplissant ses narines d'odeurs sylvestres et son estomac de fruits sauvages. Fraises des bois, noisettes blanches comme lait, prunelles bleues par les premières gelées, tout servait à assaisonner son croûton de pain de ménage et à suppléer à la nourriture insuffisante qu'il trouvait au logis. Gorgé de fruits acides, grisé de vertes odeurs, sentant bon l'herbe et la terre, il rentrait au gîte à la brune et s'endormait en rêvant d'arbres et d'oiseaux.

ANDRÉ THEURIET.

(b.) *Pensée d'automne.*

L'automne va finir ; au milieu du ciel terne,
 Dans un cercle blafard et livide que cerne
 Un nuage plombé, le ciel dort : du fond
 Des étangs remplis d'eau monte un brouillard qui fond
 Collines, champs, hameaux dans une même teinte
 Sur les carreaux la pluie en larges gouttes tinte ;
 La froide bise siffle ; un sourd frémissement
 Sort du sein des forêts ; les oiseaux tristement,
 Mêlant leurs cris plaintifs aux cris des bêtes fauves,
 Sautent de branche en branche à travers des bois chauves
 Et semblent aux beaux jours envolés dire adieu.
 Le pauvre paysan se recommande à Dieu,
 Craignant un hiver rude ; et moi dans les vallées,
 Quand je vois le gazon sous les blanches gelées
 Disparaître et mourir, je reviens à pas lents
 M'asseoir le cœur navré près des tisons brûlants,
 Et là je me souviens du soleil de septembre,
 Qui donnait à la grappe un jaune reflet d'ambre,
 Des pommiers du chemin pliant sous leur fardeau,
 Et du trèfle fleuri, pittoresque rideau
 S'étendant à longs plis sur la plaine rayée,
 Et de la route étroite en son milieu frayée,
 Et surtout des bleuets et des coquelicots,
 Points de pourpre et d'azur dans l'or des blés égaux.

THEOPHILE GAUTIER.

SECTION III

3. Explain the difference in meaning between the following French and English words and illustrate these differences by appropriate sentences:—1. *reflect* and *réfléchir* ; 2. *ingenuity* and *ingénuité* ; 10
 3. *fresh* and *fraîs* ; 4. *abate* and *abatire* ; 5. *apt* and *apte* ; 6. *advertisement* and *avertissement* ; 7. *actual* and *actuel* ; 8. *humour* and *humeur* ; 9. *pursuit* and *poursuite* ; 10. *vivacious* and *vivace* ; 11. *stranger* and *étranger* ; 12. *agree* and *agrèer* ; 13. *native* and *natif* ; 14. *realize* and *réaliser* ; 15. *achieve* and *achever*.
4. Explain the differences in meaning (i.e. words which are identical in origin or orthography), and illustrate these differences by appropriate sentences:—*relief*, *support*, *regard*, *prejudice*, *age*, 8
distraction, *argument*, *avarice*.

447

5. Define and distinguish the following series of French synonyms :
 1. *part, partie, partage, portion, parti* ; 2. *mort, décès, trépas* ; 3.
 8. *pathos, galimatias, phébus* ; 4. *partial and partiel* ; 5. *lache, poltron, pusillanime, couard* ; 6. *enfantin and puéril* ; 7. *folie, démence, sottise, égarement*.
6. Trace the etymology and original meaning of the following words :—*charme, charmant, gêne, désormais, étonner, naguère xaurien, nonchalant*.
7. What is meant in French philology by doublets? Give the doublet form of the following 14 words :—*homme, direct, ministère, hôtel, frère, grêle, blasphème, farouche, meuble, porche, opérer, solliciter, délié, laisser*.
8. Translate the following sentences, and explain why the indicative is used in the two first and the subjunctive in the two last :—
- (a.) Vous verrez qu'il fera des bêtises.
 (b.) Croyez vous que les planètes sont habitées ?
 (c.) Croyez vous que la planète Mars soit habitée ?
 (d.) Vous verrez à ce qu'il fasse son devoir.
9. Translate the following sentences, and explain the use of the subjunctive in each case :
- (a.) C'est l'esprit le plus délié que je connaisse.
 8. (b.) Je désire à cette affaire une solution qui satisfasse toute le monde.
 (c.) Quel est le diplomate qui puisse sortir d'une définition aussi embrouillée ?
 (d.) Si vous voulez venir me voir et que je sois empêché, nous conviendrons d'un autre jour.

SECTION IV.

10. Characterise in a few words the comedies of Emile Augier.
11. Mention two masterpieces of de Vigny and of Théophile Gautier ; compare and contrast their characters as men, and their characteristics as men of letters.
12. Assign the following works to their respective authors. Characterise them in a few words :—*Cinq Mars ; Poèmes antiques et barbares ; l'Année Terrible ; Mauprat ; Cousin Pons ; l'Essai sur les Mœurs ; les Confessions ; les Lettres Provinciales*.
13. Give a brief account of the life and work of Michelet and Guizot.

SECTION V.

14. Write an essay in French (not exceeding 40 lines) on one of the following subjects :—
- (a.) L'influence de Napoléon a été néfaste pour la France.
 8. (b.) L'entente cordiale entre la France et l'Angleterre est indispensable au progrès de la civilisation.
 (c.) L'étude des langues modernes élargit à la fois le cœur et l'intelligence.

GERMAN.

LOWER GRADE.

Thursday, 20th 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.

1. Translate into English:—

15.

(a) Ludwig hatte in jener furchtbaren Nacht, als das Schiff scheiterte, sich auf einen Balken geschwungen. Wind und Wellen trieben ihn in kurzer Zeit weit hinweg. Endlich legte sich der Sturm, und es wehte nur noch eine sanfte Brise. Der Jüngling, der sich bisher mit aller Kraft an sein hölzernes Ross geklammert hatte, setzte sich nun aufrecht und erholte sich etwas. Als aber der Tag anbrach, sah er nichts als Himmel und Wasser. So brachte er den ganzen Tag, völlig durchnäßt und ohne irgend eine Erquickung, auf dem Meere zu. Die Sonne neigte sich bereits zum Untergange, und alle Hoffnung auf Rettung schien vergebens. Da erblickte er plötzlich in weiter Ferne die weißen Segel eines Schiffes, das im Glanze der Abendsonne näher und näher herankam. Er zog sein Taschentuch hervor und schwenkte es unaufhörlich— und siehe! er wurde bemerkt und durch ein Boot aus seiner gefährvollen Lage befreit. Nachdem er sich mit Speise und Trank gestärkt hatte, erzählte er die Geschichte des Schiffbruches und bat den Kapitän, ihn an das nächste Land zu bringen. „Das würde ich mit Freuden thun, junger Freund,“ erwiderte dieser, „aber, wie Sie sehen, befinden Sie sich auf einem englischen Kriegsschiff. Ich darf kein Haar breit von der mir vorgeschriebenen Richtung abweichen. Wenn uns kein anderes Schiff begegnet, müssen Sie es sich gefallen lassen, die Reise nach Amerika mitzumachen.“

Christoph v. Schmid.

(b.)

Der Blumen Bitte.

Ich ging ganz früh im kühlen Thau
Zur grünen Au
Und wollte Blumen pflücken.
Ich wollte mich zum Abendtanz
Mit einem Kranz
Von schönen Blumen schmücken.

10.

Da war es mir, als weinten sie,
Als flehten sie:
„D laß uns, laß uns stehen!
Eh's Abend wird und wohl noch eh't,
Sind wir nicht mehr,
Dann ist's um uns geschehen.“

Und Abend ward es wiederum,
 Ich sah so trumm,
 So still die Stümlein stehen.
 Sie senkten all' ihr Köpfelein
 Und schliefen ein—
 Es war um sie geschehen.

Hoffmann v. Fallersleben.

15. 2. (a.) Write from memory a German version of the passage read out.
 (b.) Translate into German (using the *familiar* form of the 2nd person):—
- My dear Fred, I am not quite well to-day. Come to me at three o'clock this afternoon, and stay till (say, till the) supper. I should be glad, if you would read a pretty story to me. Have you still the book which you showed me last week? I think it belongs to William Brook. Bring it with you if you have not sent it back. I am not lying in (say, in the) bed, but I am very weak, and can do nothing. My father says, I must not leave the house for a few days. I must have caught cold last night. I walked to Whitefield, and it was nearly midnight when I got home again. Please, tell my brother George who brings you this letter whether you will come. Ever yours, Charles Fox.
- 20.

SECTION II.

3. Give the nominative and genitive singular and the nominative plural, with the definite article, of the German for *any twelve* of these words:—room, field, road, hole, cake, worm, fly, nail, coach, key, sack, journey, knight, lady, cap, ribbon.
4. Decline, singular and plural, the German for *sweet cake, no good man, that high mountain*; and, in the singular, the German for *Francis, Mary*.
4. 5. Write out the cardinal numbers from 1 to 20; and the ordinal from 1st to 6th; and give the German for $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{2}$.
6. Write out (giving, in the 2nd person singular and plural, only the *familiar* form):—
- (a.) The present indicative and imperfect subjunctive active of *geben* and *mögen*.
4. (b.) The imperfect indicative and conditional active of *fennen*.
- (c.) The present indicative passive and perfect subjunctive passive of *loben*.
7. Write out:—
- 4 (a.) The 3rd person singular present, imperfect and perfect indicative active of *denken*, *wollen*, *werden*, *entgehen*, *denken*, *abschneiden*.

- (b.) The *familiar* 2nd person singular present indicative, imperfect subjunctive, and imperative active of *lesen*, *bejehen*, *wiffen*, *fterben*, *vernehmen*, *aufjehen*.

SECTION III.

4. 8. Give *four* masculine nouns in *er*; and *four* others of the same gender which, though not ending in *er*, are declined in the same way; and state in what way they are declined.
4. 9. Explain the different ways in which *der*, *die*, *das* are used; and state in what respect their declension differs in different ways.
4. 10. Form complete sentences showing what cases are used with the prepositions *bei*, *für*, *auf*, *troß*, *feit*, *mit*, *von*.
4. 11. Mention six German authors of the last two centuries, giving the title of one work of each (not mentioned in the next question), and stating in a word what kind of work it is.
4. 2. Mention the authors of *any ten* of the following poems; and, if possible, write out the first verse of one of them:—*Die Bürgichaft*, *der Erlkönig*, *der Kaifer und der Abt*, *Hofers Tod*, *das Schwert*, *die Kuh*, *Löwenritt*, *das Hufeifen*, *Lorelei*, *das Schwertlied*, *der Postillon*, *der Handschuh*, *Hermann und Dorothea*.

GERMAN.

LOWER AND HIGHER GRADES AND HONOURS.

Thursday, 20th 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.

A gentleman was travelling over a steep mountain in a post-coach. As the road was very dangerous at one place, he said to his servant, "I want to sleep a little while; wake me shortly before that spot." When he opened his eyes, after some hours, his first question was, "Are we near the place?" "Oh, no," said the servant; "it is long behind us. You were fast asleep at the time, and I did not like to disturb you." "You fool," cried his master, "if a misfortune had happened, and the carriage had fallen over the rock, I should have shot you on the spot." "Oh, but you may be sure, sir," replied the servant, "after such treatment I should not have remained an hour longer in your service."

[NOTE.—Use the *familiar* form of the pronoun when the master speaks, and the *polite* form when the servant speaks.]

451

GERMAN.

HIGHER GRADE AND FIRST PAPER FOR HONOURS.

Thursday, 20th June.—2 P.M. to 5 P.M.

Candidates must, in all cases, answer Questions 1 and 2, Section I.; and should attempt EIGHT questions (and eight questions ONLY) from the other Sections.

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

SECTION I.—TRANSLATION AND COMPOSITION.

1. Translate into English :—

15.

(a.) Da wo das silberblaue Band des Mainstromes sich nach der alten freien Reichsstadt Frankfurt hinzieht, und Landhäuser und Fruchtfelder und schmucke Dörfer sich von hüben und drüben zuminken, trabte Otto von Trautwangen sorglos dahin und wusste nicht, worüber er sich mehr freuen sollte, über die blühenden Frucht bäume und die sanften Hügel und Thäler, oder über die fröhlichen Menschen, welche diese bewohnten. In solcher Stimmung kam er zu einer Herberge, die unfern vom Ufer des Flusses lag, und deren Vorbach, aus einer Laube von Weinblättern und Jasmin bestehend, den jungen Ritter freundlich einlud, die Mittagsstunden über hier auszuruhen. Nachdem er sein edles Streitross in den Stall geführt und ihm Futter vorgeschüttet hatte—denn niemand anders durfte sich dem feurigen Tiere nahen—saß Herr Ott' unter dem kühlen Laubdach, mit Flasche und Becher vor sich, darin der edle rheinische Wein goldig blinkte unter der tiefen Umschattung des dunkeln Grünes. Da trat ein Mann aus der Hausthür, wohl nicht viel älter als Otto, aber mit ernstem und sonnengebräuntem Antlitz. Die Tracht bekundete den Ritter; doch war sein Waffeneug rostig und staubig wie von weiter Fahrt; und dabei so einfach und schmucklos, daß sie gar seltsam abstach von der prächtigen silbernen Rüstung des jüngeren Mannes. Der Fremde grüßte mit derber, treuherziger Höflichkeit, setzte sich dem jungen Ritter gegenüber und ließ sich gleichfalls Rheinwein bringen. Otto war anfangs wenig zufrieden mit diesem Trinkgenossen, doch merkte er bald, daß der Fremde zu jener Art von Leuten gehörte, wie wir sie wohl in unserem lieben Deutschland anzutreffen pflegen: scharfkantige, unscheinbare Steine von außen, denen aber die letzte Berührung leuchtende Funken entlockt; und wer recht in das Innere zu dringen versteht, der findet wohl ein über alle Maßen köstliches Gold. Der Fremde war weit in der Welt umher gewesen und dennoch ein biedere: treuer Deutscher geblieben, dem der Abstand erst recht gezeigt hatte, wie teuer das alte Vaterland zu halten sei.

Friedrich Baron de la Motte Fouqué,
Der Zauberring.

- (b.) Und so sprang ich hinweg, das Bündelchen unter dem Arme,
 An der Mauer hinab, fand an der Thüre dich stehn
 Deines Gartens. Du lächeltest mir und sagtest: „Meris,
 Sind die Lärmen den dort deine Gesellen der Fahrt?
 Fremde Küsten besuchst du nun, und köstliche Waren
 Handelst du ein und Schmuck reichen Matronen der Stadt.
 Aber bringe mir auch ein leichtes Ketten; ich will es
 Dankbar zahlen: so oft hab' ich die Zierde gemüncht!“
 10. Stehen war ich geblieben und fragte, nach Weiße des Kaufmanns,
 Erst nach Form und Gewicht deiner Bestellung genau,
 Gar bescheiden erwogst du den Preis; da blickt' ich indessen
 Nach dem Halse, des Schmucks unserer Königin wert.
 Hestiger tönte vom Schiff das Geschrei; da sagtest du freundlich:
 „Nimm aus dem Garten noch einige Früchte mit dir!
 Nimm die reifsten Orangen, die weißen Feigen; das Meer bringt
 Keine Früchte, sie bringt jegliches Land nicht hervor.“
 Goethe, Meris und Dora.

10. 2. (a.) Write from memory a German version of the passage read out
 (b.) Translate into German:—

At one time, when Bruce was hiding from the English, he asked his men to meet him at a farmhouse. He reached the house first, and walked boldly in. There was no one there but an old woman, who asked him who he was and what he wanted. “I am a travelling man without a home,” Bruce said, “I am just making my way through the country.” “All travellers,” cried the good dame, “are welcome here, for the sake of one.” “And who may he be?” the king asked, and, at the same time, he seated himself on a low stool by her side. “Robert the Bruce, our rightful lord,” she replied, “and I hope to live to see him made king over all Scotland yet.” Then Bruce told the good woman who he was. “Since you love him so well, good dame, you will be glad to see him before you; I am Robert Bruce.” “You!” she cried, “where are your men, then?” “I have none with me just now,” replied Bruce, “and I must go on alone.” “Nay, but that shall not be!” the old lady cried, “I have two stout sons, brave and trusty men, and they shall be your servants for life and death.”

25.

SECTION II.—GRAMMAR.

3. Give the nominative and genitive singular, and the nominative plural, with the definite article, of the German for *any ten* of these words:—hedge, thicket, bridegroom, wasp, butterfly, moth, step, society, meeting, bag, blow, target, aim, object, season, injury.
- 5.
4. Decline the German for:—(*singular and plural*) what excellent wine; such a noble knight (*in two ways*); none of his relatives; no truer friend; (*singular*) King Frederick the Great; somebody; everybody.
- 5.
5. Distinguish between:—der Natur, die Natur; die Neuheit, die Neugier; die Reinheit, die Keuschheit; die Aufforderung, die

453

Anforderung; der Ruin, die Ruine; er schuf, er schaffte; der Streich, der Strich; nahebei, beinahe; geschäftig, geschäftlich; stelle dich vor, stelle dir vor.

- 6. State the rule regarding the sequence of tenses in indirect statement or reported speech. Also translate into German (giving both forms of the verb of the dependent clause, where they may be used):—He says he is poor; he wrote he would come; they said they had not done it; he said he had not done it; I asked him whether he had been there; we did not know whether we should come.
- 5.
- 7. Write out:—
 - (a) The 3rd person singular of present, imperfect, and perfect indicative active of *abrat*, *auff breiden*, *widersprechen*, *entkommen*, *mißfallen*, *sich behelfen*.
 - 5.
 - (b) The 2nd person singular of imperfect subjunctive and imperative, and the infinitive with *zu*, of *vernehmen*, *ansetzen*, *aufsetzen*, *sich ergeben*, *durcbbrechen*, *durcbbrechen*.
- 8. State the rule regarding the nature and grammatical treatment of verbs compounded with prepositions used both as separable and inseparable prefixes, and illustrate the rule by three pairs of such verbs.
- 5.

SECTION III.—PHILOLOGY AND WORD-FORMATION

- 9. Nouns compounded with *man* commonly form their plurals in one of two ways: give five examples of each way.
- 5.
- 10. Form verbal nouns (with definite article and meaning) from *any ten* of these:—*ziehen*, *schreiben*, *schreiben*, *erscheinen*, *erkennen*, *pflügen*, *zwingen*, *pfeifen*, *streiten*, *reiten*, *tragen*, *zeigen*, *ankommen*.
- 5.
- 11. Give the German for the following countries, together with the respective appellation of a native of the country (with the indefinite article), and the corresponding adjective (*e.g.*, England, an Englishman, English):—Europe, Asia, America, Russia, France, Scotland, Holland, Austria, Bavaria, Denmark.
- 5.
- 12. Give *five* adjectives (with their meanings) in *sthaft*; *five* in *stellig*; and *five* in *sig*.
- 5.
- 13. The following English words correspond *etymologically* to German words of somewhat different meaning. Give *any ten* of the corresponding German words (in the case of nouns, add the definite article) and their meanings: stove, chalk, lake, groove, dagger, ditch, meadow, mind, timber, dish, glad, haggard, hoary, to cough, to leap.
- 5.

SECTION IV.—LITERATURE AND COMMERCIAL CORRESPONDENCE.

(Not more than two questions to be answered from this Section.)

- 14. What is the difference between the *Minnesänger* and the *Meistersänger*? Mention *three* of the chief poets connected with each of these groups, and the more important of their works.
- 5.

5. 15. State what you know of *two* of these writers :—Klopstock, P. Gerhardt, S. H. Voß, C. Geibel.
5. 16. Name *five* writers of the Romantische Schule, and mention *one* work of each, and some more detailed account of any one of these works.
5. 17. Assign *any ten* of the following works to their respective authors, stating, in a word, to what class of literature they belong :—
 Musarion, Romancero, Quintus Firlin, Iphigenia auf Tauris, Kritische Wälder, die Journalisten, Liebesfrühling, Triny, der Geisterseher, der Eid, das Mädchen von Heilbronn, Oberon.
5. 18. Write, in German, to some German acquaintance of yours, telling him, or her, that you have completed your course at school, and what you are now going to do.
5. 19. Acknowledge the foregoing letter by commenting somewhat fully on your friend's plans, either in favourable or unfavourable terms, as you may think fit.
5. 20. Translate into German :—"Dear sir, I hasten to acknowledge receipt of your favour of yesterday's date, and I beg to assure you that no pains will be spared by us to execute your esteemed order to your entire satisfaction. Some little time will of course be required to find exactly what you want ; but we shall endeavour to get your wants supplied as quickly as possible. I take the liberty of enclosing price-current of new articles which have been quite recently imported from the East, and shall be glad if you can make any use of any of them. I am, dear sir, your faithful servant, John White."

GERMAN.

HONOURS.—SECOND PAPER.

Monday, 24th June.—2 to 5 P.M.

Candidates must, in all cases, answer Questions 1 and 2, Section I. ; and should attempt EIGHT questions (and eight questions ONLY) from the other Sections.

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

SECTION I.—TRANSLATION AND COMPOSITION.

1. Translate into English :—

- (a.) Ein Kiefernwald in Pommern war der erste deutsche Wald, den ich so recht nach Herzenslust durchstreifen durfte. Dort habe ich meine Vorliebe für die Kiefernwälder der Mark gefunden, für die schlichten, stillen Linien der Landschaft, für die Einfachheit der Natur, die etwas hat von einer hartgearbeiteten, frommen Hand, die sich segnend auf ein unruhiges Haupt legt. Und nach einer
- 8.

solchen Hand greift man im Leben immer wieder, und an ihr wird man immer wieder stark. Märkische Heide birgt schließlich für den Norddeutschen doch den Gesundbrunnen. Damals wußte ich davon noch nichts. Die größte Erinnerung bleibt mir aus jener Zeit der erste Schrei des Hirsches, den ich hörte. Es war Nacht. Die Fenster des alten Jägerhauses waren geöffnet. Da weckte es mich. Dröhnend, machtvoll wie Orgelton, aber mit der Resonanz wild zitternder Leidenschaft zog das Schreien des Hirsches durch die Dunkelheit, fremd und unverständlich für das Kind, wie aus einer Welt der Gefahr und des Kampfes.

Agnes Harder, Die Reise durch mein Zimmer.

8. (b.) Aber nicht bloß für den Lebens- und Entwicklungsgang des großen schwäbischen Lyrikers sind diese Briefe von Bedeutung, insofern sie ein bisher in fast völliges Dunkel gehülltes Kapitel daraus enthalten: auch an sich sind sie mannigfacher Vorzüge und Reize wegen höchst lesenswert. Morike ist überall Meister der Darstellungskunst und verfügt über das glückliche Vermögen, seine jedesmalige Stimmung in durchaus naiver Weise voll ausklingen zu lassen. Der Ton, den er hier anschlägt, ist von dem Ton seiner späteren Briefe merklich verschieden. Das jugendliche Alter macht sich sehr geltend: die Hoffungsfreudigkeit und Zuversicht des in das Leben Eintretenden, die Ansprüche und Enttäuschungen des mit dem Leben Ringenden kommen zu passendem Ausdruck. Der Stil ist noch nicht so gereift und durchsichtig wie in seinen höheren Lebensjahren, dafür aber mehr feurig und kraftvoll, frisch und fest, oft bis zur Verbheit.

Rudolf Krauß.

(c.) Herbstnacht.

8. Ich schreit' hinan die Waldeebahn
In Finsternis und Schweigen;
Da kommt ein Sausen dumpf heran,
Da rührt sich's in den Zweigen:
Der Geist der Nacht ist aufgewacht,
Er singt in dunklen Zungen;
Hei! wie so wild das braust und schwillt,
Von Berg zu Berg geschwungen.
Dahin, daher, wie Wogen im Meer,
Wiegen die Wipfel und schwanken,
Schon rieselt das Laub herab im den Staub,
Schon brechen Ast' und Ranken;
Der Eiche First ersetzt und birst,
Die Fichte fracht vom Hange;
Der Waldbach zischt, verfehrt in Gisch,
Wie eine bäumende Schlange.

E. Geibel.

2. Translate into German:—

24. a. They were nearing the house through a long avenue of chestnuts whose variegated leaves were already beginning to strew the ground beneath and they could see the vista open

upon the windows of the Priory, lighted up by the yellow October sunshine. In that sunshine stood a tall young fellow, dressed in a shooting suit, whom the Consul recognised at once as the son of his companion. As if to accentuate the graces of this vision of youth and vigour, near him, in the shadow, an old man had halted, hat in hand, still holding the rake with which he had been gathering the dead leaves in the avenue; his back bent, partly with years, partly with the obeisance of a servitor. There was something so marked in this contrast: in this old man standing in the shadow of the fading year, himself as dried and withered as the leaves he was raking, yet pausing to make his reverence to this passing sunshine of youth and prosperity in the presence of his coming master, that the Consul, as they swept by, looked after him with a stirring of pain. "Rather an old man to be still at work," he said. Beverdale laughed. "You must not let him hear you say so," he replied; "he considers himself quite as fit as any younger man in his place, and, though he's nearly eighty, I'm inclined to believe it."

BRET HARTE, *Stories of Light and Shadow.*

12. b.—(1.) He is said to be very rich, but I doubt it.
 (2.) I count on your telling me the truth under all circumstances.
 (3.) Whatever he may do, I don't believe a word he says.
 (4.) Since seeing you the last time, I have been laid up with a bad cold.
 (5.) Take care you don't reckon without your host.
 (6.) "Lightly come, lightly go," he said, and spent his last farthing.

SECTION II.—PHILOLOGY, WORD-FORMATION, AND SYNTAX.

5. 3. Mention *five* nouns used both in the masculine and the feminine gender, and *five* others used in the masculine and the neuter genders, but with different meanings in both cases. Add the respective plurals and meanings.
5. 4. Give the German for:—He who hears me,—they who were here —that which pleases me most,—of those who are well inclined towards me,—from all that one hears,—all that knew me,—everybody that has common sense,—everybody whose children are grown up,—many a one that thinks himself fortunate.
5. 5. Form abstract nouns (with the definite article and meaning) from *any ten* of the following adjectives:—*ichlecht, hold, stolz, träge, bange, feige, fromm, spröde, blaß, nüchtern, minder, jung, gottlos.*
5. 6. By means of prefixes, not prepositions, form derivative verbs (with their meanings) from *any ten* of these:—*Herberge, Haupt, müde, lustig, Köstle, bitter, herrlich, Stief, süß, Wurzel, Gold, Erbe, Wasser, edel.*

457

- 5. 7. Give the meaning, or meanings, of *any ten* of the following reflexive verbs, and state what cases or prepositions are required by them :—sich schämen, sich widersetzen, sich verstehen, sich vorsetzen, sich begeistern, sich verpflichten, sich vorgehen, sich schiden, sich kümmern, sich bemächtigen, sich rächen, sich vergehen, sich aufdrängen, sich befaßen.
- 5. 8. Give the meanings of, and state what cases or prepositions are required by, *any ten* of the following adjectives :—fähig, förderlich, eifersüchtig, gleichgiltig, empfänglich, überzeugt, erfahren, habhaft gemacht, gierig, beschämt, höflich, stolz.
- 5. 9. Give the *factitive* (or *causative*) verbs (with the meanings) corresponding to the following verbs :—verschwinden, essen, einfließen, säugen, einschlafen, wiegen, stehen, schwimmen, trinken, versinken.
- 5. 10. Give the meanings of *any ten* of the following past participles, used as adjectives denoting certain mental or physical qualities :—gelassen, vermeßen, bejahrt, unterjert, beschaffen, verführt, beredt, überspannt, gebiegen, verschämt, abgeschmact, verlogen, verlegen, beleibt.
- 5. 11. Show how the dental consonants (*t, th, d*) correspond in English and German.

SECTION III.—LITERATURE.

(Not more than three questions to be answered from this Section.)

- 5. 12. State what you know of Gotfried von Straßburg and Walter von der Vogelweide.
- 5. 13. Characterise the influence of Luther on the development of the German language and literature.
- 5. 14. Give an account of the Romantic School.
- 5. 15. Review briefly the German lyrical poetry of the last century.
- 5. 16. State what you know of Kerner, Wieland, Eichendorff.

SPANISH.

Monday, 24th June.—2 P.M. to 5 P.M.

Candidates should answer all the questions in Section I., and should attempt four (but NOT MORE THAN FOUR) questions from Section II. No certificate will be awarded unless the necessary standard is reached both in composition and in translation.

SECTION I.

1. Translate into English :—

(1.) Cádiz! al pronunciar este nombre mil recuerdos asaltan la imaginación del viajero. Ciudad famosa en la historia de nuestra revolución política, por haber sido la cuna de nuestra libertad y el teatro de ruidosos sucesos; ciudad célebre y

8.

floreiente un día, cuando, dueños los Españoles de las Américas, era, por decirlo así, el punto de depósito para el comercio universal del mundo! Ciudad renombrada siempre por la cultura de sus moradores, por la civilización de sus costumbres, por la belleza y gracia de sus mujeres, por la limpieza de sus calles y de sus casas. Pocos panoramas habrá más bellos en el mundo y casi ningún cuadro en la naturaleza que cautive más los ojos del espectador por su hermosura, que el que ofrece la vista de la ciudad de Cádiz, desde uno de los vapores que hacen la travesía de Sevilla á este puerto cuando toca al término de su expedición, á los viajeros que extasiados contemplan la linda ciudad que se levanta sobre el mar á la manera de un palacio de plata.

- (2.) Perla del mar! estrella de occidente!
 Hermosa Cube! tu brillante cielo
 La noche cubre con su opaco velo,
 Como cubre el dolor mi triste frente.
 Voy á partir! La chusma¹ diligente
 Para arrancarme del nativo suelo
 Las velas iza,² y pronta á su desvelo
 La brisa acude de tu zona ardiente.
 Adios! patria feliz, Eden querido!
 Do quier que el hado³ en su furor me impela,
 Tu dulce nombre halagará mi oído.

6.

¹ crew. ² hoists. ³ fate.

- (3.) DON DIEGO y su criado, SIMÓN.

Don Diego.—Mira, Simón, te encargo que no lo digas. Tú eres hombre de bien y me has servido muchos años con fidelidad. Ya ves que hemos sacado á esa niña nel convento y nos la llevamos á Madrid.

Simón.—Sí, señor.

Don D.—Pues bien. Pero te vuelvo á encargar que á nadie lo descubras.

S.—Bien está, señor. Jamás he gustado de chismes.*

Don D.—Ya lo sé, por eso quiero fiarme de tí. Yo, la verdad, nunca había visto á la tal doña Paquita; pero mediante la amistad con su madre, he tenido frecuentes noticias de ella; he leído muchas de las cartas que escribía; he visto algunas de su tía la monja, con quien ha vivido en Guadalajara; en suma, he tenido cuantos informes pudiera desear acerca de sus inclinaciones y su conducta. Ya he logrado verla; he procurado observarla en estos pocos días, y á decir verdad, cuantos elogios hicieron de ella me parecen escasos.

8.

S.—Sí, por cierto. Es muy linda y . . .

Don D.—Es muy linda, muy graciosa, muy humilde. Y sobre todo—aquel candor, aquella inocencia! Y talento.—Sí, señor, mucho talento.—Conque, para acabar de informarte, lo que yo he pensado es . . .

S.—No hay que decirme lo.

Don D.—¿No? Por qué?

S.—Porque ya lo adivino. Y me parece excelente idea.

* Tittle-tattle.

459

2. Translate into Spanish :—

Murillo, the celebrated painter of the Spanish school, was born at Seville, in the year 1618. Having shown a very early inclination for painting, he was placed under the care of his uncle, Juan de Castillo, but, as the latter removed soon afterwards from Seville to Cadiz, the boy did not remain long with him.

20

Murillo had a great desire to visit Italy, in order to improve himself by studying the works of the great masters. But his means were not sufficient for him to undertake such a journey. He did not, however, allow himself to be discouraged by difficulties, and, collecting all his resources, started for Madrid, where he called upon Velásquez, and asked for his advice. Velásquez treated the youth with much kindness, and, not considering it necessary for him to go to Italy, procured for him many opportunities of copying works of the Italian and Flemish schools, which belonged to the King and nobles of of Spain.

3. Write in Spanish a short description of any Spanish or English book you have read,

14.

or,

Any holiday trip you have taken.

12.

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

5. Represent in English letters the pronunciation of the following Spanish words, using as an equivalent for *j* (or *g* before *e* and *i*) *kh*, for final *d dh*, and for *ll* *ly*, and mark the accented syllable of each word ; as, for example, *Madrid* = *Madreédh*, *Quijote* = *keekhotay*, *lleno* = *lyáyno* :—

8.

Aranjuez, *Gijón*, *Guadalquivir*, *Egipcio*, *siguiente*, *vergüenza*, *oigo*, *oímos*, *Dominguez*, *izquierda*, *hijuela*, *lluvia*, *leccion*, *excepcion*, *huesped*, *discipulo*.

SECTION II.

1. Give the plural of the nouns *voz*, *ley*, *reloj*, *crisis*, *rubí*, *lunes* ; and the feminine of the adjectives *azul*, *joven*, *francés*, *mayor*, *encantador*, *prudente*.

6.

2. Form the superlative absolute of *rico*, *nuevo*, *amable*, *frio*, *largo*, *cierto*.

6.

3. Give the adjectives expressing *of*, or *belonging to* the following countries, or towns : *Portugal*, *Castilla*, *Chile*, *Madrid*, *Málaga*, *La Habana* ; and the countries, or towns, to which the following adjectives refer : *francés*, *alemán*, *belga*, *atalón*, *andaluz*, *filipino*.

6.

4. Give the first person singular and first person plural of the present indicative and the first and third person singular of the past definite of the verbs *pedir*, *decir*, *querer*, *traer*, *poder*, *traducir*.

6.

5. How do you render the prepositions *to*, *of*, or *in* before the verb in the following sentences :—

6. I think *of* going there.
 I am beginning *to* learn Spanish.
 I have succeeded *in* finding him.
 I shall try *to* do it.
 He has ceased *to* trouble us.
 Have you much *to* do ?
 The shop is *to* let.
 He will not be long* *in* returning.

**tardar*.

6. When is *for* in English to be rendered by *para* and when by *por* ? Give examples. And what is the difference in meaning between *estar para* and *estar por* ?

7. Distinguish between the following words :—

6. *Ir* and *andar*, *pedir* and *preguntar*, *cubrir* and *cobrar*, *ciudad* and *pueblo*, *plaza* and *plazo*, *letra*, *cartra* and *esquela*.

SPANISH.

Monday, 24th 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.

A traveller arrived at an inn one cold night in winter. Being unable to get near the fire, as the inn was full of people, he called out to the servant, "Boy, take my horse a glass of brandy*." All the people immediately went out to see the horse drink brandy, and the traveller took a comfortable seat near the fire. In a few minutes the boy came back and said : "Sir, your horse will not drink the brandy." "Then bring it to me," said the traveller, "and I will drink it."

* Say *aguardiente*.

ARITHMETIC.

LOWER GRADE.

Wednesday, 19th 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.

6. 1. Multiply 5006980 by 2500790, giving the answer in words as well as in figures.

461

- 6. 2. A man owes his creditors £2656, but can only pay them 8s. 7½d. in the pound; how much money has he?
- 6. 3. Divide £100 between A, B, and C, so that A may have £20 more than B, and £30 more than C.
- 12. 4. What is meant by the greatest common factor of two numbers, and what by their least common multiple?
Find those of 3150, 3525, and 825 by resolution into prime factors.
- 8. 5. In a school $\frac{2}{3}$ of the scholars are girls and the rest boys. If $\frac{3}{4}$ of the girls and $\frac{1}{2}$ of the boys be absent, what fraction of the whole number of scholars is present?
- 6. 6. (1) Reduce £9·21875 to pounds, shillings, and pence.
- 6. (2) Simplify $\frac{4\cdot403 + \cdot0165 - \cdot000556}{1580 \times \cdot0064}$.
- 8. 7. A man borrowed £280, and repaid it 9 months later; find the simple interest due at $4\frac{3}{4}$ per cent. per annum.
- 12. 8. A grocer bought a box of tea containing 3 cwt. 2 qr. 22 lb. for £36, and sold the tea at 2s. the pound; find (1) the amount of his profit, (2) the gain per cent. on his outlay.
- 12. 9. An oblong piece of land is 165 yards long and 143 yards broad; find (1) its area in acres, roods, and poles, (3) its rent at £3 6s. per acre.
- 9. 10. Find the value of 52·5 kilometres of copper wire at ·15 centimes per centimetre, taking £1 as equivalent to 25 francs 20 centimes.

ALGEBRA.

LOWER GRADE.

Wednesday, 19th 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.

- 3. 1. Simplify
 $4a - 2b + c - d - \{a - (b - 2c + d)\} - \{a + b - 2(c + d)\} - (a - b - c + 2d)$
- 6. 2. Multiply together
 $b + c - a, c + a - b, a + b - c,$
and find the value of the product when
 $a = 1, b = 2, c = 3.$
- 3. Divide
- 4. $12a^4 - 4a^3b - \frac{17}{3}a^2b^2 + ab^3 - 6b^4$ by $6a^2 - ab - 6b^2.$

4. Resolve into factors
9. (1) $x^2 - 15x + 36$;
 (2) $6a^2 + 5ab - 6b^2$;
 (3) $a(a - b + c - d) - b(c - d)$.
5. Solve the equations
12. (1) $\frac{1}{3}(4x - 1) - \frac{1}{4}(3x - 1) = \frac{1}{6}(7x - 1)$;
 (2) $a(x - a) - b(x - 2a) = b^2$;
 (3) $\begin{cases} x + y + z = 9, \\ 2x - y + z = 8, \\ x - y - 2z = 0. \end{cases}$
6. Explain how to find the highest common factor of two algebraical quantities, all of whose factors are known.
9. Find the highest common factor of
 $x^4 - 3x^3 + 4x^2 - 4x$ and $x^4 - 5x^2 + 2x$.
6. 7. A man buys $10a$ tons of coal at $8b$ shillings per ton and sells it at $6b$ pence per hundredweight ; show that his profit amounts to $\pounds ab$.
8. Add a third term to each of the following expressions so as to make the whole expression a perfect square :
9. (1) $x^2 + 10xy$;
 (2) $a^2b^2 - \frac{2}{3}a^2bc$.
9. Solve the equations
11. (1) $\frac{x + 3}{x - 3} - \frac{x + 1}{x - 1} = \frac{16}{3}$;
 (2) $\frac{x}{a - b} - \frac{a}{x - b} = 0$.
8. 10. Divide $\pounds 400$ between A, B, and C, so that C's share may be $\pounds 70$ more than twice A's and $\pounds 40$ less than thrice B's.
11. Reduce the fraction $\frac{a + \sqrt{b}}{c + \sqrt{d}}$ to a fraction with no surds in the denominator.
14. Simplify

$$\frac{\sqrt{3}}{\sqrt{3} + \sqrt{2}} + \frac{\sqrt{2}}{\sqrt{3} - \sqrt{2}}$$

GEOMETRY.

LOWER GRADE.

Wednesday, 19th 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.

463

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. On the same base and on the same side of it, there cannot be two triangles having their sides which are terminated in one extremity of the base equal to one another, and likewise those which are terminated in the other extremity equal to one another.
12. *ABC* and *DBC* are two isosceles triangles on the same side of a common base *BC*, prove that the straight line *AD* must fall within one of the triangles.
2. If two straight lines intersect, the vertically opposite angles are equal.
12. *AB* and *CD* are two straight lines which bisect each other, prove that the opposite sides of the quadrilateral *ACBD* are equal.
3. If a parallelogram and a triangle be upon the same base and between the same parallels, the area of the parallelogram is double that of the triangle.
13. *ABCD* is a quadrilateral, and *CE* is drawn from *C* equal and parallel to *BD*, show that the triangle *ACE* is equal in area to *ABCD*.
4. *ABC* is an acute-angled triangle, on *AB, AC* squares *ABDE, ACFG* are described, and *BH, CK* are drawn from *B, C* perpendicular respectively to *GF, DE*. Prove that the straight line *BG = CE*, and that the rectangle *AK = AH*.
- 8.
5. If a straight line be cut externally, the sum of the squares on its segments is double the sum of the squares on half the line and on the line between its middle point and the point of section.
12. A straight line *MN*, 10 inches in length, is produced to *P*, and the areas of the squares on *MP* and *NP* are together equal to 212 square inches, find the length of *NP*.
6. Describe a square that shall be equal to a given rectangle.
13. Construct a rectangle that shall be equal to a given square, and have the sum of two adjacent sides equal to a given straight line.
7. The diameter is the greatest chord in a circle, and of the others that which is nearer the centre is greater than that which is more remote, and conversely.
- 7.
8. If a straight line be a tangent to a circle, and a chord be drawn from the point of contact, the angles which the chord makes with the tangent are equal to the angles in the alternate segments of the circle.
14. *PT* is a tangent and *PQR* is a secant to the circle *QRT*, a circle with *T* as centre passes through *Q*, and cuts *PQ* again in *S*, show that the angle *RTS* is equal to the angle *RPT*.

ARITHMETIC.

HIGHER GRADE.

Wednesday, 19th 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

6. 1. Find the cost of making a road 12 miles 5 furlongs 121 yards in length, at £86 13s. 4d. per mile.
2. New sovereigns weigh 123·27 grains, and are allowed to remain in circulation till their weight is reduced to 122·5 grains. A thief obtained new sovereigns and reduced them to the latter weight, thereby retaining gold worth £231; how many sovereigns did he reduce in weight?
6. 3. State and prove the rule for reducing a mixed circulating decimal to a vulgar fraction, taking as an example $\cdot 112\bar{6}$.

Simplify

$$\begin{array}{r}
 \frac{1}{13} - \frac{1}{14} - \frac{1}{14} - \frac{1}{15} \\
 \frac{1}{24} - \frac{1}{25} - \frac{1}{25} - \frac{1}{26} \\
 \hline
 \frac{1}{12} - \frac{1}{13} - \frac{1}{13} - \frac{1}{14} \\
 \hline
 \frac{1}{23} - \frac{1}{24} - \frac{1}{24} - \frac{1}{25}
 \end{array}$$

17.

(1)

(2) $2\cdot73 \times 4\cdot063 \times \cdot08991$.

8. 4. A tank is 6·43 metres long, 4·51 metres broad, 2·85 metres deep; find the weight of the water in kilogrammes, assuming that a cubic centimetre of water weighs a gramme.
5. What is meant by the least common multiple of two or more numbers? Express your definition so as to include fractional numbers.
11. Find the least common multiple of $11\frac{1}{4}$, $4\frac{3}{8}$, $6\frac{9}{15}$.
6. A mortgage bond yields interest at the rate of $3\frac{1}{2}$ per cent., which after deduction of income-tax at 1s. 2d. in the pound is divided between A, B, and C in the proportion of 3, 4, and 5. If A receive £6 11s. 10d. as his share for a year, what is the sum which has been lent on mortgage?
8. 7. Find the compound interest on £3628 17s. 10d. for 3 years at 4 per cent. per annum, correct to the nearest penny.
- 9

465

8. Three men, A, B, C, ride a mile race at the rates of 20, $18\frac{1}{2}$, and 18 miles per hour respectively; if B has 120 yards start, and C 209 yards start, find which of the three will win, in what time, and by how many yards.
10. A boy multiplies 423 by a certain number and obtains 67789 as his answer. If both the *evens* are wrong but the other figures are right, find the correct answer.

ALGEBRA.

HIGHER GRADE.

Wednesday, 19th 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. Simplify

6. (1)
$$\frac{(x^3 + y^2)(x^2 + y^3) - x^2y^2(xy + 1)}{(x^2 + y^2)^2 - xy(x^2 + y^2) - x^2y^2}$$

(2)
$$\{x(x+2) - 2a\}^2 + \{x^2 - 1 - 2a\}^2 - 2\{x(x+1) - 2a\}^2.$$

2. If $a^3 + pa^2 + q = 0$, show that $x^3 + px^2 + q$ is exactly divisible by $x - a$.

Apply this theorem to find the factors of $x^3 - 3x^2 + 4$.

3. If $a = \frac{x^2 - y}{1 - xy}$, $b = \frac{y^2 - x}{1 - xy}$, show that $a + bx + y = b + ay + x = 0$.

and hence find values of x and y .

4. One bag contains sovereigns and sixpences, another contains half-crowns and florins. The value of the money in each bag is the same, and is less than five pounds, also the number of sovereigns is the same as the number of half-crowns, and the number of florins is the same as the number of sixpences; how many are there of each?

5. Solve the equations

(1)
$$(a+x)^3 + (b+x)^3 + (c+x)^3 = 3(a+x)(b+x)(c+x);$$

(2)
$$\frac{y^2 + z^2}{34} = \frac{z^2 + x^2}{26} = \frac{x^2 + y^2}{10} = \frac{xyz}{15};$$

(3)
$$(a-x)^{\frac{1}{3}} - (b-x)^{\frac{1}{3}} = (a-b)^{\frac{1}{3}}.$$

6. In Cape Colony the ratio of the white to the coloured population is as 8 to 25, in Natal as 1 to 10, and in the two colonies together as 1 to 4. If the coloured population in Cape Colony exceed that in Natal by 64900, find the white population of each colony.
- 9.
7. If $13\sqrt{3} = (4 - \sqrt{x})(3 + \sqrt{y})$, find x and y , having given that x , y and \sqrt{xy} are rational quantities.
- 10.
8. Find the condition that the roots of the equation, $ax^2 + bx + c = 0$, may be real and unequal.
- 13
- Determine the values of k for which the equation
- $$11x^2 - 4x + 4 = k(x^2 + x + 1)$$
- shall have equal roots, and find the corresponding values of x .
9. Find an expression for the sum of n quantities of an arithmetic series. If the n th term of an arithmetic series be m , and the m th term be n , prove that the $(m + n - 1)$ th term is 1.
- 12.

GEOMETRY.

HIGHER GRADE.

Wednesday, 19th 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. The three angles of any triangle are together equal to two right angles.
- 10
- In the triangle ABC the perpendiculars BM , CN meet in H ; if K be the mid-point of AH , and D be the mid-point of BC show that KN is equal to KM , and DN to DM .
2. Angles in the same segment of a circle are equal.
- 11.
- Two circles $ABCD$, $CDEF$ have a common chord CD ; if AB be parallel to EF , show that the angle ACE is equal to the angle BDF .
- 12
3. If from any point outside a circle a tangent and secant be drawn to the circle, the square on the tangent shall be equal to the

rectangle contained by the whole secant and its external segment.

AB, AC are tangents to the circle BCE , and D is the mid-point of the chord BC ; prove that, if OE be any radius, OE will touch the circle which passes through the points A, D, E .

4 If G be a point on the median AD of the triangle ABC such that $AG = 2GD$, and P be any point in the plane, show that

11. (1) $PA^2 + 2PD^2 = 3PG^2 + 6GD^2$;
 (2) $PA^2 + PB^2 + PC^2 = 3PG^2 + GA^2 + GB^2 + GC^2$.

5. P is any point on a circle whose centre is A , PQ is drawn from P equal and parallel to a given straight line; if AQ be bisected in R , find the locus of R .

6. If two triangles have an angle of the one equal to an angle of the other, and the sides about the equal angles proportionals, the triangles shall be similar.

6. If two triangles have an angle of the one equal to an angle of the other, and the sides about the equal angles proportionals, the triangles shall be similar.

13. In the side AB of the triangle ABC a point D is taken, and DE is drawn parallel to BC to meet AC in E . If the triangle ADE be turned about A in the plane ABC so as to come into the position APQ , show that BP, CQ intersect on the circle circumscribing ABC .

7. Divide a straight line similarly to a given divided line.

13. ABC is a triangle whose base BC is divided in D so that $BD = \frac{1}{3}DC$, and AD is divided in E and F so that $AE = \frac{1}{2}EF = FD$; if EG be drawn parallel to BF to meet AC in G , show that $AG = \frac{1}{6}GC$.

8. A, B, C, D are four points which are not in the same plane; show that a point O may be found equally distant from A, B, C, D .

15. If the opposite sides of a tetrahedron are equal in pairs, show that its triangular faces are equal in every respect, and that the centre of its circumscribing sphere is the intersection of the straight lines joining the mid points of the pairs of opposite sides.

ELEMENTARY TRIGONOMETRY AND LOGARITHMS.

HIGHER GRADE.

Tuesday, 25th 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 measurement of angles, (1) by degrees and their subdivisions, (2) by radians.
9. A circle is such that an angle of one minute at the centre is subtended by an arc of 1.375 inches, find the length of the radius in yards, taking π as $\frac{22}{7}$.
2. Define the cosine of an angle, and trace the change in the cosine, as the angle increases from 180° to 360° .
9. Prove that $\cos^2 A (\tan^2 A - \sin^2 A) = \sin^4 A$.
3. Prove geometrically that $\cos(A+B) = \cos A \cos B - \sin A \sin B$ where A and B are each acute angles, but $A+B$ is obtuse; and deduce the corresponding formulæ for $\cos(A-B)$ and $\cos 2A$.
9. Prove that
4. $\sin(A+B) \sin(A-B) = \sin^2 A - \sin^2 B = \cos^2 B - \cos^2 A$.
11. If A, B, C be the angles of a triangle, and $\sin^2 A = \sin B (\sin B + \sin C)$, show that $A = 2B$.
5. Find an expression for all the angles which have the same sine as a given angle a .
13. Solve the following equations, giving the general values of θ :—
 - (1) $\sin 2\theta = 1$;
 - (2) $\sin^2 \theta = \sin \theta \cos \theta + \sin \theta - \cos \theta$.
6. Prove that in any triangle

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c} = \frac{1}{2R}$$

Hence show how the remaining sides and angle of a triangle may be found when two angles and a side are known.
8. Define a logarithm.
7. Having given $\log 2 = .301$, deduce (without employing a table of logarithms) the values of $\log 500$, $\log 32$, $\log .125$.
11. With the same data, find $\log 100$ to the base 2.

469

11. 8. If the lengths of CA, AB , the sides of a triangle ABC , be 98.64 and 75.61 feet, and the included angle A be $50^\circ 14' 20''$, find the other angles with the aid of a table of logarithms.
10. 9. A flagstaff is erected at A , and subtends an angle α at a point B due east of A , and an angle β at a point C due south of B , all these points being in the same horizontal plane; show that the height of the flagstaff is

$$\frac{BC \sin \alpha \sin \beta}{\sqrt{\sin^2 \alpha - \sin^2 \beta}}$$

ALGEBRA.

HONOURS GRADE.

Wednesday, 19th 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.

15. 1. If a, b, c, d, e are five quantities such that a, b, c are in arithmetic progression, b, c, d in harmonic progression, and c, d, e in arithmetic progression, prove that a, c, e are in geometric progression.

2. Prove that the number of permutations of n things, of which p are the same, and q are the same, and the rest different, is

15.
$$\frac{n!}{p! q!}$$

Find the number of permutations of the letters of the word *monotonous* in which the two n 's come together.

3. State the Binomial Theorem, and prove it for a positive integral index.
15. If $(1+x)^n = 1 + c_1x + c_2x^2 + \dots + c_nx^n$, find the value of $c_1 + 2c_2 + 3c_3 + \dots + nc_n$.

Alternative Questions.

15. 4a. Prove that, when n is odd, $x^n + 1$ is a factor of $x^{2n} + 1$.
Resolve $x^{15} + 1$ into four factors.

Or

15. 4b. If $\frac{x^2 - y}{1 - xy} = p, \frac{y^2 - x}{1 - xy} = q$, prove that $\frac{p^2 - q}{1 - pq} = x, \frac{q^2 - p}{1 - pq} = y$.
Find any other values of x and y which satisfy the first two equations.

5a. Solve the equations:

15. (1) $a^6 - a^2(x^2 + 1) + x = 0$;
 (2) $x^3 + 3abx = a^3 - b^3$;
 (3) $\begin{cases} x(2x - y) = a(2a - b), \\ y(2y - x) = b(2b - a). \end{cases}$
Or

5b. Eliminate x, y, z from the equations,

$$\begin{cases} ax + by + cz + d = 0, \\ bx + ay + dz + e = 0, \\ cx + dy + az + b = 0, \\ dx + cy + bz + a = 0. \end{cases}$$

Prove that the equations,

15. $\begin{aligned} xy &= ac + bu, \\ yz &= bd + cv, \\ zu &= ce + dx, \\ uv &= da + ey, \\ vx &= eb + az, \end{aligned}$

are not independent, but that, if any three of them are given the other two can be deduced.

6a. Explain how the relation between x and a function of x may be exhibited to the eye in a graphic manner.

Draw the graphs corresponding to the equations,

15. (1) $y^2 = x(x^2 - 1)$,
 (2) $y^2 = (x - 1)(x - 2)(x - 3)$,

and point out their relation to each other.

Or

6b. Define a recurring series.

15. If the scale of relation of the series $u_1 + u_2 x + u_3 x^2 + \dots$ be $1 - 3x + 2x^2$, find its sum to infinity and show that
 $u_n = u_2 (2^{n-1} - 1) - 2u_1 (2^{n-2} - 1)$.

GEOMETRY.

HONOURS GRADE.

Wednesday, 19th 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. A point moves in a plane so that the sum of the squares of its distances from two given points is constant, prove that its locus is a circle.
 13. $ABCD$ is a quadrilateral inscribed in a circle, centre O , and its diagonals intersect at right angles in E ; prove that the feet of the eight perpendiculars drawn from O and E to the sides of the quadrilateral are concyclic.

471

2. Explain how line segments are added.

13. If A, B, C, D are fixed collinear points, and O is a variable point in the same straight line, and X is another point in the line, such that

$$4OX = OA + OB + OC + OD,$$

show that the position of X is independent of that of O .

3. Two circles being given, find the locus of a point from which the tangents drawn to the two circles are equal.

13. If P be a variable point on a fixed straight line, prove that the tangent drawn from P to a given circle which does not meet the line is equal to the distance of P from either of two fixed points, and find the points.

4. Prove that spheres may be circumscribed about and inscribed in any tetrahedron.

13. A tetrahedron has its four triangular faces equal in every respect, show that the centres of its circumscribed and inscribed spheres coincide.

Alternative Questions.

13. 5a. $ABCD$ is a plane quadrilateral and P, Q, R, S are the mid-points of DA, AB, BC, CD ; find a point O such that the angles POQ, QOR, ROS, SOP shall be equal to the angles A, B, C, D .

Or

13. 5b. Define the centre of similitude of two circles, and prove its fundamental property.

Prove that the centres of similitudes of three circles are the six vertices of a complete quadrilateral.

6a. If P, Q, R be points in the sides BC, CA, AB of a triangle ABC , such that $EP \cdot CQ \cdot AR = CP \cdot AQ \cdot BR$, prove that P, Q, R are collinear.

13. If BC be produced to D , and a point E be taken on BC such that DE be equal to the tangent drawn from D to the circumscribing circle of the triangle ABC , and if straight lines EF, EG , parallel to AB, AC meet AC, AB in F, G , prove that D, F, G are collinear.

Or

6b. If through any point O in the plane of the triangle ABC straight lines AO, BO, CO be drawn to the vertices meeting the opposite sides of the triangle in L, M, N , then

$$BL \cdot CM \cdot AN + CL \cdot AM \cdot BN = 0.$$

13. If two triangles have their vertices two and two on three concurrent straight lines, prove that the intersections of the three pairs of the corresponding sides are collinear.

- 7a. Define a harmonic range and a harmonic pencil.
 Prove that if Q, P, A, B, C, D be six points in a circle such that $P(ABCD)$ is a harmonic pencil, then $Q(ABCD)$ is also a harmonic pencil.
13. $ABCD$ is a quadrilateral inscribed in a circle, and AC passes through the intersection of the tangents at B and D ; if P be any point on the circumference, prove that $P(ABCD)$ is a harmonic pencil.
- Or*
13. 7b. If any number of points are collinear, prove that their polars with respect to any circle are concurrent.
 If four points form a harmonic range, prove that their polars with respect to any circle form a harmonic pencil.

TRIGONOMETRY AND LOGARITHMS.

HONOURS GRADE.

Tuesday, 25th 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 circular measure of an angle.
15. Trace the graphs of $\sin \theta$ and $\sin 3\theta$ from $\theta = 0$ to $\theta = 2\pi$, and show from your diagram that, if $\sin \theta$ be given, there are, in general, three values of $\sin \theta$.
2. Find an expression for all the angles which have the same cosine as a given angle.
15. Find all the values of θ which satisfy the equation
- $$a(1 - \cos \theta) = b(1 - \sin \theta).$$
3. A ship is sailing due north, and a lighthouse is observed to be in a certain direction to the west of north; when the ship is 13 miles further on its course the angle made by the direction of the lighthouse with the course of the ship is twice as great as it was; and when 11 miles still further it is the complement of the first angle; find how near to the lighthouse the ship will pass.
- 15.

478

Alternative Questions.

- 4a. Prove that the limiting value of
- $$\left(\cos \frac{a}{n} \right)^n$$
15. when n is infinite is unity ; and that the limiting value of

$$\left(\cos \frac{a}{n} \right)^{n^2} \text{ is } e^{-\frac{a^2}{2}}.$$

Or

- 4b. Investigate expressions for the radii of the inscribed and escribed circles of a triangle in terms of the sides of the triangle.
15. Find the numerical value of these radii when the sides of the triangle are 121 ; 606 ; 725.

- 5a. State and prove De Moivre's theorem for a fractional index.
15. Find all the values of $(-1)^{\frac{1}{2}}$.

Or

- 5b. Sum to n terms
15. (1) $\sin \alpha + \sin (\alpha + \beta) + \sin (\alpha + 2\beta) + \dots$;
 (2) $\sin^2 \alpha + \sin^2 (\alpha + \beta) + \sin^2 (\alpha + 2\beta) + \dots$

- 6a. Prove that the distance between the inscribed and circumscribed centres of a triangle is

$$\sqrt{R^2 - 2Rr}.$$

15. If these centres coincide, show that
- $$4 \sin^2 \frac{1}{2} A - 4 \sin \frac{1}{2} A \cos \frac{1}{2} (B - C) + 1 = 0,$$
- and deduce that the triangle is equilateral.

Or

15. 6b. Resolve $x^{2n} - 2x^n \cos n\alpha + 1$ into factors, and deduce the factors of $\cos n\theta - \cos n\alpha$.

ELEMENTS OF DYNAMICS.

ADDITIONAL MATHEMATICAL SUBJECT.

Tuesday, 25th 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.

10. 1. A railway traveller faces the engine, and observes external objects reflected in a mirror on the opposite side of the compartment. Will these objects appear to approach him or to recede from him, and with what velocity as compared with the velocity of the train ?
12. 2. Define acceleration. Explain carefully how the measure of an acceleration is affected by a change in the units of space and time.
The acceleration with which a body falls under the action of gravity is 32 foot-second units ; express this acceleration in mile-minute limits
10. 3. Prove the parallelogram of velocities.
A ferry-boat is rowed across a stream which runs at the rate of 2 miles an hour. If the speed of the boat be 4 miles an hour, find in what direction it must be rowed relatively to the direction of the current in order that its actual path may be at right angles to the banks of the stream.
12. 4. A body falls from rest with uniform acceleration g ; obtain expressions for its velocity at the end to t seconds, and for the distance fallen in that time.
On a certain planet a body falls 10 feet during the first second ; how far will it fall during the fourth second ?
15. 5. Show how to find the resultant of a number of forces acting at a point and all in the same plane.
State whether your method applies, with or without modification, to the case when the forces are not all in the same plane.
Forces of 4, 3, 6 units act at a point and are parallel to the sides BC , CA , AB of the isosceles triangle ABC in which each of the equal sides AB , BC is equal to twice the base CA ; find the resultant force in magnitude and direction.

475

VALUE.

EXAMINATION PAPERS.

389

6. Explain the action of a lever.

The arms of a light lever are inclined at an angle of 120° , and it is found that when in equilibrium with the longer arm horizontal, the weight is three times the power; find the ratio of the weight to the power when the shorter arm is horizontal, both weight and power acting vertically in each case.

12.

7. Prove that the resultant pressure exerted by a liquid on a submerged body is equal to the weight of the liquid displaced, and state its line of action.

12.

A vessel containing water rests on a table, and a substance weighing $2\frac{1}{2}$ lb., whose specific gravity is $5\frac{1}{4}$, is held by a string so as to be submerged in the water; find by how much the pressure on the table is increased.

8. Explain the principle of Bramah's press.

A Bramah's press has two circular pistons, whose diameters are 1 inch and 1 foot respectively; the smaller piston is moved by a lever 3 feet long, the fulcrum being 8 inches from the piston. What force must be applied at the handle of the lever in order that the larger piston may raise a weight of 3 tons 12 cwt.?

12.

HIGHER DYNAMICS.

ADDITIONAL MATHEMATICAL SUBJECT.

(Higher Grade and Honours.)

Tuesday, 25th 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 Nos. 4, 5, 6.

1. Forces acting at a point are proportional in magnitude and parallel in direction to the sides of a closed polygon (not necessarily in one plane) taken in order; prove that the forces are in equilibrium.

15. Show that, if forces acting at a point are in equilibrium and are parallel to the sides of a polygon, *e.g.* a quadrilateral, the forces are not necessarily proportional to the lengths of the sides.

Five forces acting at a point are parallel to the sides of a regular plane pentagon, and their magnitudes taken in order are proportional to 2, 4, 4, 2, $3 + \sqrt{5}$; prove that the forces are in equilibrium.

2. If a point be in motion in a straight line with uniform acceleration opposite to the initial direction of motion, prove that it will pass twice through any point in the first part of its path, and that the velocities at that point will be equal in speed and opposite in direction.
- 15.

Find, by separate considerations of the motions parallel to and at right angles to the direction of acceleration, the corresponding theorem for a point moving with uniform acceleration inclined to its initial velocity.

3. An iron cylinder floats between water and mercury with its axis vertical, the length of the cylinder being equal to the depth of the water. If the specific gravities of iron and mercury be $7\frac{1}{2}$ and $13\frac{1}{2}$ respectively, and the height of the water barometer be 14 times the length of the cylinder, prove that the pressure on the lower end of the cylinder is to the pressure on the upper end in the ratio of 3 to 2.
- 15.

Alternative Questions.

- 4a. Find the least force up the plane necessary to move a mass up a rough inclined plane.

If the plane make an angle θ with a horizontal plane, and the force along the plane which will just drag the mass up the plane is to that which will just prevent it from slipping down as l to m , prove that the coefficient of friction is $\frac{l - m}{l + m} \tan \theta$.

Or

- 4b. Define a couple.

Show that a system of forces in one plane reduces to a force or a couple.

15. Two uniform heavy beams, each of which is $6\frac{1}{2}$ feet long and 56 lbs. in weight, stand on a smooth plane, being connected at the top by a hinge and joined at the bottom by a light inextensible string 5 feet in length; show that the reaction at the hinge on each beam is equal and opposite to the pull of the string and find its magnitude.

- 5a. Prove that the path of a projectile is a parabola, when the action of the air is neglected, and show that the speed at any point is the same as that caused by a fall from the directrix to that point.

15. A projectile reaches the horizontal plane from which it was projected after $t_1 + t_2$ seconds; show that its height after t_1 seconds was $\frac{1}{2}gt_1t_2$.

Hence, or otherwise, find when its height was a maximum.

477

Or

15. 5b. A point moving with constant acceleration not in the direction of motion is initially at P , after t seconds at Q , and after t seconds more at R . If S be the mid-point of the straight line PR , prove that QS is parallel to the direction of acceleration and is equal to the distance through which the particle would have moved in t seconds, starting from rest with the same acceleration.

6a. Define momentum.

A system consists of a number of particles whose momenta are known in magnitude and direction; show how to determine the momentum of the whole system in magnitude and direction.

15. Two mice of equal weight are placed at opposite ends of a light string which passes over a smooth light pulley. If one mouse remain at the same part of the string while the other runs up the string with uniform velocity relatively to the string, determine the actual motion of each mouse.

Or

6b. Explain the term *Coefficient of Restitution* in connection with impact, describing experiments which justify its use.

15. Spherical particles m and m' moving in the same straight line with velocities v and v' collide, if u and u' be their velocities after impact, and e be the coefficient of restitution, express u and u' in terms of the other quantities.

Show from your result that if e be unity, and the spheres be of equal mass, they will exchange velocities.

GEOMETRICAL CONICS.

ADDITIONAL MATHEMATICAL SUBJECT.

(Higher Grade and Honours.)

Tuesday, 25th 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.

7. 1. If P be a point on a conic, PM the perpendicular on the directrix, PG the normal at P meeting the axis in G , prove that $PG = eSM$ where S is the focus, and e the eccentricity.

15. 2. Prove that the tangents drawn to a parabola at the extremities of a focal chord intersect at right angles in the directrix.

If the normal at L , the extremity of the latus rectum, meet the axis in M and the curve in N , prove that $MN = 3LM$.

15. 3. Prove that the rectangles contained by the segments of two intersecting chords of a parabola are in the ratio of the parameters of the diameters which bisect the chords.
- If the extremities of the chords lie on a circle, show that the chords are equally inclined to the axis of the parabola.
14. 4. If PN be the perpendicular drawn to the axis from any point of an ellipse, prove that $PN^2 : AN \cdot NA' = BC^2 : AC^2$.
14. Deduce the relation between any ordinate of an ellipse, and the ordinate of the corresponding point of the auxiliary circle.
14. 5. If from a point O , tangents OP, OQ be drawn to an ellipse of which S is a focus, prove that the angles OSP, OSQ are equal.
14. If a tangent to an ellipse meet the tangents at its vertices in R, R' , prove that the circle on RR' as diameter passes through both foci.
6. Define an asymptote.
11. If a chord of a hyperbola meet the curve in P, P' and the asymptotes in Q, Q' , prove that $QP = P'Q'$.
7. If a plane cut a right cone so as to meet all the generating lines on the same side of the vertex, prove that the curve of section is an ellipse.
15. If A, B be the vertices of the ellipse, and V the vertex of the cone, show that the eccentricity of the ellipse is

$$\frac{VA - VB}{AB}$$

ANALYTICAL GEOMETRY.

ADDITIONAL MATHEMATICAL SUBJECT.

(Higher Grade and Honours.)

Tuesday, 25th 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. Find the co-ordinates of a point which divides in a given ratio the straight line joining two given points.
10. Find the co-ordinates of the mid-points of the sides of the triangle $(5, - 2), (3, 4) - 3, - 4$, and the co-ordinates of its centroid.

479

2. Show that the equation of any straight line may be put into the form $x \cos \alpha + y \sin \alpha - p = 0$, and find the geometrical meaning of α and p .

If this straight line pass through the points (x, y) , $(x' y')$, find the values of $\tan \alpha$ and p in terms of these co-ordinates.

3. Obtain an expression for the tangent of the angle between the lines $y = mx + c$, $y = m'x + c'$, and deduce the condition that these lines may be (1) parallel, (2) at right angles.

Find the equations of the straight lines through the point $(5, 6)$, respectively parallel and perpendicular to the line $3x + 4y = 1$.

4. Find the area of the triangle whose angular points are (x_1, y_1) , (x_2, y_2) , (x_3, y_3) .

What is the explanation of a negative result ?

5. Draw the loci represented by the equations,

- (1) $x - y = 1$,
 (2) $x^2 - a^2 = 0$,
 (3) $(x - a)^2 + (y - b)^2 = 0$,
 (4) $(x - 1)(x - 2) + (y - 3)(y - 4) = 0$.

16

6. Find the equation of the circle which passes through the origin, and cuts off intercepts a, b from the axes OX, OY .

15

Find the points in which this circle is met by the line $y = mx$, and deduce the equation to the tangent at the origin.

7. Show that the circles, $x^2 + y^2 = a^2$ and $x^2 + y^2 + a^2 = 2bx + 2cy$, cut each other at right angles.

18.

Find the equation of their common chord, and prove analytically that it is at right angles to the line joining their centres.

BOOK-KEEPING.

Friday, 21st June.—2 P.M. to 4.30 P.M.

On 1st July 1900, Peter Watt started business as a cloth manufacturer and merchant, with £2,000 in the British Linen Company Bank and £3,000 due to him by J. Bennet.

During July, August, and September he made the following transactions :—

	Day or (Sales) Book.	Led. Fol.	£	s.	d.
1900.					
August 10.	Milton and Son, Manufactured Goods	- - -	129	15	0
" 15.	T. Wright, Manufactured Goods	- - -	61	15	0

LEAVING CERTIFICATE.

		<i>Returns Book.</i>	Led. Fol.	£	s.	d.
1900	August 13	Milton and Son, Manufactured Goods not up to sample - - - - -		6	5	0

		<i>Invoice (or Purchases) Book.</i>	Led. Fol.	£.	s.	d.
1900.	July 15.	Buchanan Bros., Wool for manufacturing - - - - - J. and C. Brown, Sundry Goods used in manufacturing		321	5	0
				162	10	0

		<i>Other Transactions.</i>	£	s.	d.
1900.	July 1.	Agreed to purchase from John Forbes Buildings and Offices for - - - - -	3,000	0	0
	" "	Paid him (by cheque) - - - - -	1,500	0	0
	" "	Accepted his Bill at 3 months for - - - - -	1,500	0	0
	" 3.	Bought of Johnston & Co., Machinery and Plant	3,250	0	0
	" 15.	Purchased Coals for Engine and paid by cheque	56	10	0
	" 31.	Received from J. Bennet repayment of loan	3,000	0	0
	" "	Received from him Interest thereon	12	10	0
	" "	Lodged J. Bennet's cheque in B.L. Co. Bank	3,012	10	0
	Aug 3.	Paid Johnston & Co. (by cheque)	3,250	0	0
	" 30.	Cash drawn from B. L. Co. Bank	60	0	0
	" 31.	Paid Wages (in cash)	50	1	3
	Sept. 1.	Consigned to Milton & Son for sale on commis- sion, manufactured goods invoiced at	127	6	6
	" "	Paid Carriage of ditto (in cash)	6	1	0
	" 8.	Received from T. Wright and lodged in B.L. Co. Bank - - - - -	58	13	3
	" "	Discount allowed to him - - - - -	3	1	9
	" 10.	Paid Buchanan Bros. (by cheque) - - - - -	289	2	6
	" "	Discount allowed by them - - - - -	32	2	6
	" 15.	Received from Milton & Son, and lodged in B.L. Co. Bank - - - - -	117	6	6
	" "	Discount allowed to them - - - - -	6	3	6
	" 26.	Milton and Son report having sold goods consi- gned to them for - - - - - And their commission is - - - - - And they enclose their cheque to account which is lodged in B. L. Co. Bank - - - - -	156	14	0
	" "		7	16	8
	" 30.	Cash drawn from B. L. Co. Bank - - - - -	100	0	0
	" "	Paid wages (in cash) - - - - -	30	0	0
	" "	Allow £75 for depreciation of Machinery. Value of Stocks at 30th Sept.:— Manufactured Goods, £129 13s.; Wool, £110 3s.; Coals, £24 1s. 9d.; Sundry Goods, £94 8s. 3d.	31	16	4

53. Enter the Cash, Bank, and Discount entries in the Cash Book, and the remainder of the "other transactions" in the Journal.
60. Write up Peter Watt's Ledger.
The Day, Returns, and Invoice Books' entries may be posted direct from this paper to the Ledger, but the Ledger folios must be filled into the Led. Fol. columns.
27. When the Ledger is completed, frame a Profit and Loss Account and a Balance Sheet.

481

COMMERCIAL ARITHMETIC.—FIRST PAPER.

Thursday, 27th June.—2 P.M. to 2.30 P.M.

This paper will be taken up at the end of *half-an-hour*, when the other paper will be given out.

The sums are not to be copied out, and all the calculations required are to be performed mentally.

More importance will be attached to accuracy than to quickness.

Fill this in first (Name of School _____)
(Name of Pupil _____)

1. Add these *across*, place the totals in the spaces on the right.

10.

7924	3816	5204	768	1398	4265	5600	832	
3872	1405	6234	1733	4265	836	1274	3508	
138	5672	3088	5671	8824	5903	7800	1833	
5243	739	1527	8933	1076	2694	330	4165	
2756	4193	574	2707	385	7707	8042	5247	

2. Find the value of

15.

	£	s.	d.	£	s.	d.
5 per cent. of	104	7	6			
$2\frac{1}{2}$ "	164	10	0			
1 "	20	8	4			
$12\frac{1}{2}$ "	431	5	4			
7 "	650	0	0			
12 articles at	1s.	$6\frac{1}{2}d.$				
15 "	£10	4s.	0d.			
20 "	£2	7s.	9d.			
24 "		$6\frac{3}{4}d.$				
50 "		2s.	6d.			
88 "		$\frac{3}{4}d.$				
100 "	£1	7s.	6d.			
144 "		$2\frac{1}{4}d.$				

3. Add

£	s.	d.
1,437	14	3
960	11	6
4,425	8	10
736	15	$6\frac{1}{2}$
2,034	10	8
6,715	9	11
8,044	16	10
736	10	$4\frac{3}{4}$
1,935	19	9
5,027	3	$10\frac{1}{2}$
293	17	4
7,164	14	3

COMMERCIAL ARITHMETIC.—SECOND PAPER.

Thursday, 27th 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.

5. 1. A man owes £4000, but can only pay 12s. $4\frac{1}{2}d.$ in the pound ; find the value of his assets.
 - 6 2. A tank is 12 feet 3 inches long, 5 feet 6 inches broad, and 3 feet 5 inches deep ; find how many gallons it contains, taking a gallon as $277\frac{1}{8}$ cubic inches.
 - 6 3. If a metre be 39·37 inches, find, to the nearest second, how long a man takes to walk a kilometre at the rate of 4 miles an hour.
 - 6 4. A person invests £950 in the $2\frac{1}{2}$ per cents. at 103, brokerage $\frac{1}{8}$ per cent. ; find his income for a quarter of a year.
 - 7 5. The weight of a freshly coined sovereign is 123·27 grains, but when they are reduced to 122·5 grains they are returned to the mint to be recoined ; if 100,000 such sovereigns are returned to the mint, find the loss of value, measured in standard sovereigns, correct to 3 decimal places.
 - 7 6. A dealer buys coal at 19s. per ton and sells it at 1s. 6d. per cwt. If he sell, on an average, 25 cwt. daily, and his expenses amount to 8s. 6d. a day, find what percentage of his receipts is profit.
 - 10 7. A sum of money is put on deposit at 4 per cent., the interest, omitting fractions of a penny, being added to the principal half-yearly. After two years the amount on deposit was £286 16s. 9d. ; find the sum originally deposited.
 - 12 8. A farmer pays rent on 516 acres 3 roods 20 poles at £2 18s. per acre, but he sublets 52 acres 2 roods 6 poles at £4 6s. 8d. per acre ; find (1) the net rent he pays, (2) how much this amounts to per acre of the part he retains (correct to the nearest penny).
 - 10 9. A money changer pays persons going to France 25 francs for one pound, and persons returning from France a guinea for 27 francs ; if he make an equal profit from the same number of francs on each occasion, express the real value of a franc in pence.
-