LEAVING CERTIFICATE, 1896.

EXAMINATION PAPERS.

ENGLISH.

LOWER GRADE.

Tuesday, 16th June. 10 A.M. *to* 12.30 P.M.

Every Candidate should answer *nine* questions, and no more, 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.

SECTION I.

1. Write out, and punctuate, the passage read for dictation.

2. Write a short essay of about two pages on *one* of the following subjects :—

   (*a*) The character and career of Richard I., *or* of Oliver Cromwell, *or* of the Young Pretender.

   (*b*) A letter to a friend, containing an invitation to spend a holiday with you.

3. Paraphrase the following lines, so as to bring out their full meaning :—

   > 'Tis easy to resign a toilsome place,
   > But not *to manage* leisure with a grace.
   > Absence of occupation is not rest ;
   > A mind quite vacant is a mind distress'd.
   > The veteran steed, *excused* his *task* at length
   > In kind compassion of his failing strength,
   > And turn'd into the park or mead *to graze,*
   > Exempt from future service all his days,
   > *There* feels a pleasure perfect in its kind,
   > Ranges at liberty, and snuffs the wind.
   > But when his lord would quit the busy road,
   > To taste a joy like that he has bestow'd,
   > He proves, less happy than his favour'd brute,
   > A life of ease a difficult *pursuit.*

4. Point out the words of classical origin in the passage quoted in Question 3. Give the derivation of *five* of these words.

   Parse the words italicised in the above passage.

5. Make a *general* analysis of the following sentence :—" He held it to be the duty of all true Christians to form congregations apart, to which only those whose religion and morality were beyond question should be admitted."

Parse each of the following italicised words :—(*a*) I shall *go*, if *necessary*. (*b*) Give *me* my *walking*-stick. (*c*) She did nothing *but scream*. (*d*) Tell no one *else*.

6. Explain, and give an example of, (*a*) nominative absolute, (*b*) adverbial clause, (*c*) direct and indirect speech.

Give examples of the different sounds represented by *ough* and *ei* in English. What consonants in the English alphabet are phonetically unnecessary, and why ?

Give the origin and meaning of the following abbreviations :— i.e., e.g., viz., R.S.V.P.

7. Correct the errors in the following sentences, and give reasons for your corrections :—

(*a*) We are all apt to imagine that what is, always has and always will be.

(*b*) I meant to have called on him, when I first came.

(*c*) He is not one of those who interfere in matters with which he has no concern.

(*d*) Having had much experience in these departments, the reader may rely on the truth of the following observations.

(*e*) That she was a somnambulist I know, as I have seen her under its influence.

8. Name and describe the metre in which the passage in Question 3 is written. With what other English metres are you acquainted ? Describe them, and quote an example of each.

9. Describe, and quote from, *three* songs and *three* ballads with which you are familiar. Name the authors, if they are known.

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. Write a connected account of the career and reign of any *one* of the following sovereigns :—Cnut ; John ; Richard II. ; Henry VII. ; Elizabeth ; Charles II. ; George II.

11. Describe so as to show their importance, any *three* events in the following list :—Battle of Senlac ; Battle of the Standard ; Provisions of Oxford ; Death of the Maid of Norway ; Treaty of Bretigny ; Rise of the Lollards ; Battle of Bosworth ; Dissolution of the Monasteries ; Defeat of the Armada ; Petition of Right ; Battle of Worcester ; Habeas Corpus Act ; Peace of Utrecht ; Battle of Culloden ; American Declaration of Independence ; the Peninsular War ; the Indian Mutiny.

12. Write a short paper on *one* of the following :—The Crusades ; the origin and result of the Wars of the Roses ; the growth of royal power under the Tudors ; the effects of the English Revolution of 1688 ; the effects of the Scientific Inventions of the last and the present Century ; the Abolition of Slavery.

Section III.

13. What are the principal causes which affect the climate of a district ? Illustrate your answer by examples.

14. Where are the following places?—Balaclava, Darien, Salamanca, Glencoe, Langside, Khartoum, Sebastopol, Rouen, Plassey, Versailles? Choose *five* of these places, and say what important events are connected with them.

15. From what parts of the world do the following articles chiefly come to Great Britain?—Rice, cotton, figs, wool, sago, alpaca, cochineal, cork, mahogany, ostrich feathers.

16. Write a description of Wales : its chief mountains rivers, ports, and commerce.

17. Describe the course of the Forth and of the Trent ; mention the chief towns on the banks of each ; and state in what the industry of each town consists.

ENGLISH.

Lower Grade.

Tuesday, 16th June.   10.45 a.m.

Passage for Dictation.

Few virtues have been more eulogized by moralists than generosity ; but among the many who recommend the duty of giving, I am surprised that there are few who inculcate the ignominy of receiving, or show that by the frequent acceptance of gift or relief from others, we in some measure forfeit our native freedom and independence. Besides the deleterious effects on the recipient, this constant intercourse of benefaction and acknowledgment is often injurious even to the giver ; for the habitual humiliations of a circle of retainers must necessarily exaggerate the comparative magnitude of the patron, and foster self-conceit.

ENGLISH.

Higher Grade and First Paper for Honours Grade.

Tuesday, 16th June.   10 a.m. to 1 p.m.

Every Candidate should answer *nine* questions, and no more ; 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.

Honours Grade 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 a short essay of about two pages on *one* of the following subjects :—
    (*a*) Spring wild flowers.
    (*b*) Your favourite holiday occupation.
    (*c*) A comparison of *Treasure Island* (or any other modern book of adventure) with *Robinson Crusoe*.

2. Paraphrase the following poem, so as to bring out the full meaning :—

> O Friend ! I know not which way I must look
> For comfort, being, as I am, opprest
> To think that now our life is only drest
> For show ; mean handiwork of craftsman, cook,
> Or groom !—We must run glittering like a brook
> In the open sunshine, or we are unblest :
> The wealthiest man among us is the best :
> No grandeur now in Nature or in book
> Delights us.   Rapine, avarice, expense,
> This is idolatry ; and these we adore :
> Plain living and high thinking are no more ;
> The homely beauty of the good old cause
> Is gone ; our peace, our fearful innocence,
> And pure religion breathing household laws.

Name and describe the metrical structure of the above poem.

What is meant by the *heroic measure* (or iambic pentameter), and by the *romantic measure* (or iambic tetrameter) ?   What are the principal kinds of verse or of stanza that have been made of these in English poetry ?   Quote an example of each kind you mention.

4. Point out any *figures of speech* that occur in the above poem.

Define *metonymy, hyperbole, anticlimax ;* and illustrate each by an example.

Give the origin and meaning of the following abbreviations :— i.e., e.g., viz., R.S.V.P.

5. Make a general analysis of the following sentence :—

" Fatally deficient as the Revolution was in positive principles, yet, as time cools our passion and gives us a juster perspective, this will become more and more clear, that the lawlessness of the last ten years of the century was less, not greater, than that which had been universal since the Regency."

Explain accurately, and illustrate by an example, the meaning of each of the following terms :—parenthetic sentence, finite verb, synthetic language, apodosis.

6. Parse the words italicised in the following sentences, and give in each case the origin and exact meaning of the grammatical usage :—
   (*a*) I am *going* to-morrow.
   (*b*) Read Burke, *than whom* none is more eloquent.
   (*c*) Two *a penny*.
   (*d*) *Since then* I have not seen him.
   (*e*) *I* was asked the same *question*.

7. Explain carefully the ambiguity, and the causes of ambiguity, in the following sentences ; and re-write each, so as to express clearly and definitely one of its possible interpretations :—
   (*a*) My Christian and surname begin and end with the same letter.
   (*b*) So I promised to say nothing which I hoped would conciliate him.

(c) He maintained that publicans detested drunkards as much as teetotalers.

(d) The manuscript contains only one religious poem by Henryson.

(e) When did you tell him you would come ?

8. Name, with a short description or with quotations, poems in which the following are celebrated or referred to :—Agincourt, Venice, Flodden, Nelson, Blenheim, Cromwell, Corunna, Kempenfelt.

9. Illustrate from Chaucer, or Shakespeare, or Scott, each of the following :—pathos, humour, terror, irony, hypocrisy ; and add a brief criticism to show what seems to you admirable in the scenes or passages 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.)

10. Write a connected account of any *two* of the following :—Dunstan, Hubert de Burgh, Wiclif, Maid of Orleans, Sir Thomas More, Laud, Clarendon, Shaftesbury, Bolingbroke, Wilkes, Warren Hastings, Lord John Russell.

12. Describe, so as to show their importance, any *four* events in the following list :—

Agricola's Conquests in Britain ; the Treaty of Wedmore ; the Constitutions of Clarendon ; the Battles of Lewes and Evesham ; Wat Tyler's and Jack Cade's Rebellions ; the Breach with Rome under Henry VIII. ; the Murder of Darnley ; the Thirty Years' War ; the Ship-money Writs ; the Declaration of Rights ; the War of the Spanish Succession ; the Stamp Act ; the Catholic Emancipation Act ; the Indian Mutiny.

12. Give short papers on any *two* of the following :—

The Crusades ; Social and Religious Movements in the time of Chaucer ; Elizabeth's Settlement of Church and State ; the Rise of Puritanism ; the effects of the English Revolution on the social life and literature of the Eighteenth Century ; Burke's attitude to the political questions of his time ; the effects of scientific invention on the industrial organization of our century.

Section III.

13. What are the principal causes which affect the climate of a district Illustrate your answer by examples.

14. Where are the following places, and what events are associated with them ?—Balaclava, Darien, Salamanca, Glencoe, Langside, Khartoum, Sebastopol, Rouen, Plassey, Versailles.

15. Write a short account of the physical features of Africa, describing its principal mountain ranges, lakes, and rivers. What portions of Africa are under British influence ?

16. Write a description of the West Indian Islands, their physical formation climate, chief towns, and exports.

17. State what you know of the physical geography of Canada, name its chief ports, and describe its government.

ENGLISH.

Honours.—Second Paper.

Monday, 22nd 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.

1. Illustrate the essential characteristics of Chaucer's originality.

2. Examine the advantages and disadvantages of " allegory " as a form of literature; and compare any *two* English allegories with which you are acquainted.

3. Describe and compare any *three* of Shakespeare's humorous creations.

4. Define what is meant by a Lyric Poem; distinguish carefully between the various kinds of Lyric poetry; and illustrate your answers from poems you know.

5. What schools of deliberately artificial writing have become fashionable or obtained currency in our country ? Refer to some of the leading authors whose works illustrate those fashions, and to some of the causes that introduced or favoured them.

6. Discuss the influence exerted on English literature by any *one* of the following :—The Norman Conquest, Puritanism, the Revolution of 1688.

7. Give a short account of the works of the Scottish followers of Chaucer in the fifteenth and sixteenth centuries.

8. Compare the romantic poetry of Scott and of Byron.

9. State what you know of the following prose works :— *Utopia, Areopagitica, Vicar of Wakefield, Sartor Resartus, Tale of a Tub.*

10. Examine and illustrate the characteristic points of difference between the poetry of Pope's time and that of Wordsworth's time.

Section II.

Optional Questions.

11. Translate into Modern English :—

Ðeah wĕ ðisse worulde wlĕnca tilien swiðe, and in wuldre scīnen swiðe ; ðeah wĕ ūs gescierpen mid ðȳ rēadestan gŏdwĕbbe, and gefrætwien mid ðȳ beorhtestan golde, and mid ðǣm ðēorwierðestum gimmum ūtan ymbhōn ; hwæðre wĕ sculon on

nearonesse ende gebīdan. Ðēah-ðe ðā mihtigestan and ðā rīcestan hāten him reste gewyrcean of marmanstāne, and mid goldfrætwum and mid gimcynnum eall āstæned, and mid seolfrenum rūwum and gödwebbe eall oferwrigen, and mid dēorwierðum wyrtgemengnessum eall gestrēded, and mid gold-lēafum gestrēowod ymbūtan, hwæðre se bitera dēað ðæt tōdæleð eall. Ðonne bið se gleng āgoten, and se ðrym tōbrocen, and ðā gimmas tōglidene, and ðæt gold tōsceacen, and ðā līchaman tōhrorene and tō dūst gewordene.

12. (a) Give the 3rd sing. present, 3rd sing. preterite indicative, and past participle of: feohtan, brecan, sittan, ceosan, etan.

(b) Give the nominative plural of: freond, wif, sunu, þegen, wundor.

(c) Trace the origin of the following forms, and account for the letters italicised:—*them, amidst, anent, thence, seldom.

(d) Explain and illustrate the following:—metathesis, syncope, aphaeresis, apocope.

13. Examine and illustrate the leading characteristics of Old English literature before the Norman Conquest.

14. Give a detailed account of the Old English Dialects, showing their respective relations to the English of Chaucer.

15. State what you know of *The Owl and the Nightingale, The Prick of Conscience, Pearl, "Mandeville's" Travels, Brut.*

LATIN.

LOWER GRADE.

Thursday, 18th June. 10 A.M. to 12.30 P.M.

Candidates should in all cases attempt Question 1.

1. Translate into Latin :—

Thus the Aequians were attacked on both sides, and seeing there was no escape, surrendered and prayed for mercy. Cincinnatus granted them their lives, and allowed them all to depart home unharmed after passing under the yoke, except Gracchus Cloelius and the other commanders. These he kept as prisoners of war, and he divided the spoil among his victorious soldiers. In this manner Cincinnatus rescued the blockaded army, and returned in triumph to Rome; and when he had delivered his country from its enemies, he laid down his office on the sixteenth day, and returned to his fields, crowned with glory and honoured by the people, but poor and contented in his poverty.

2. Translate into English :—

Ulysses and Ajax.

(a)　　　　Tibi dextera bello
utilis ; ingenium est, quod eget moderamine nostro
tu vires sine mente geris : mihi cura futuri.
tu pugnare potes : pugnandi tempora mecum
eligit Atrides.　tu tantum corpore prodes,
nos animo.　quantoque ratem qui temperat, anteit
remigis officium, quanto dux milite maior,
tantum ego te supero.　nec non in corpore nostro
pectora sunt potiora manu ; vigor omnis in illis.
at vos, o proceres, vigili date præmia vestro.

Negotiations with Barbarians.

(*b*) Tum maximus natu ex eis, " missi sumus " inquit " a gente
nostra, qui sciscitaremur, qua tandem re fretus arma nobis
inferres ? " ad hanc percontationem Gracchus exercitu se
egregio fidentem venisse respondit, quem si ipsi visere velint,
quo certiora ad suos referant, potestatem se eis facturum esse :
tribunisque militum imperat, ut ornari omnes copias peditum
equitumque et decurrere iubeant armatas. ab hoc spectaculo
legati missi deterruerunt suos ab auxilio circumsessæ urbi
ferendo.

3. (*a*) Give the (1) meaning, (2) gender, (3) genitive singular, of the
following nouns :—*vās, vās, tus, gens, genus, ordo, pălŭs, pālŭs,
seges, cinis.*

Mark the quantity of the last syllable but one, when the
genitive is a word of three syllables.

(*b*) Parse the following words, and give the 1st person present
indicative active, and other principal parts, of the verbs from
which they come :—*cessistis, peterentur, quaesieris, coepisti,
nacti estis, gesturus, caruerunt, morarere, vinxisti, pepigero,
differres, dedisses.*

(*c*) Give the comparative and superlative of :—*bene, male,
vetus, maledicus, idoneus, acer :* and give the Latin words for
here, hither, hence—where, whither, whence.

(*d*) Distinguish between *duo, alter, secundus, bini, bis ;* and
give the corresponding forms (so far as they exist) in the case of
the numbers *one* and *three.*

Distinguish between *quidam, quis* (indefinite), *quisquam,
aliquis, quisquis, quilibet.*

4. Translate into Latin :—

  1. I have no one to help me.

  2. I know that he would have returned if you had allowed
    him.

  3. There is no one here who does not think so.

  4. Tell me how many friends you will bring with you.

  5. He will return to you at Rome on the 30th March.

5. Answer *one* (not both) of the following questions :—

  (*a*) Give some account of any *one* of the following :—*C.
  Gracchus—Sulla—Catiline—the Emperor Tiberius,*

  Or,

  (*b*) Explain the terms *dactyl, spondee, caesura, elision ;* and
  give the scansion of the last five lines of passage 2 (*a*) (*nos
  animo,* to *praemia vestro*).

LATIN.

HIGHER GRADE AND FIRST PAPER FOR HONOURS GRADE.

Thursday, 18th 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 :—

    According to the Athenians, Adeimantos, the Dauntless (for such is the meaning of his name), fled in terror at the beginning of the fight, followed by his countrymen, and they were already well on their way when a boat, which no one was known to have sent, met them, and the men in it cried out, "So, Adeimantos, thou has basely forsaken the Greeks, who are now conquering their enemies as much as they had ever hoped to do!" Adeimantos would not believe; but when the men said that they would go back with him and die if they should be found to have spoken falsely, he turned his ship and reached the scene of action when the issue of the fight was already decided. This story the Corinthians met with the stout assertion that they were among the foremost in the battle; and it is added that their rejoinder was borne out by all the rest of the Greeks.

2. Translate into English :—

    (*a*) Esse quid hoc dicam, vivis quod fama negatur
          et sua quod rarus tempora lector amat?
       hi sunt invidiae nimirum, Regule, mores,
          praeferat antiquos semper ut illa novis.
       sic veterem ingrati Pompei quaerimus umbram,
          sic laudant Catuli vilia templa senes.
       Ennius est lectus salvo tibi, Roma, Marone
          et sua riserunt saecula Maeoniden:
       rara coronato plausere theatra Menandro,
          norat Nasonem sola Corinna suum.
       vos tamen, o nostri, ne festinate, libelli:
          si post fata venit gloria, non propero.

    (*b*) Ludis vero dimissis, cursu prope omnes tendere ad imperatorem Romanum: ut ruente turba in unum, adire, contingere dextram cupientium coronas lemniscosque (*ribbons*) iacientium, haud procul periculo fuerit. sed erat trium ferme et triginta annorum; et cum robur iuventae tum gaudium ex tam insigni gloriae fructu vires suppeditabat. nec praesens omnium modo effusa laetitia est, sed per multos dies gratis et cogitationibus et sermonibus revocata: esse aliquam in terris gentem, quae sua impensa, suo labore ac periculo bella gerat pro libertate aliorum: nec hoc finitimis aut propinquae vicinitatis hominibus aut terris continenti iunctis praestet: maria traiciat, ne quod toto orbe terrarum iniustum imperium sit, et ubique ius, fas, lex potentissima sint. una voce praeconis liberatas omnes Graeciae atque Asiae urbes. hoc spe concipere audacis animi fuisse: ad effectum adducere et virtutis et fortunae ingentis.

3. Translate into Latin :—

    (*a*) He could not, without encountering many serious dangers, prevent the enemy from taking this path.
    (*b*) He said that he knew no one who would conduct the war better than Fabius.

    (c) They were so far from refusing this request that, if the
leader of the Cherusci had not interposed, they would
have given a hundred hostages to the Romans.

    (d) Construct short sentences exhibiting the following words
used with their proper constructions :—*moneo, invideo,
impero, decet, rēfert, paenitet.*

4. Answer *one* (not both) of the following questions :—

    (a) State briefly the chief duties and privileges of a *consul,
praetor, aedile, quaestor, Tribune of the Plebs ;*

        or,

    (b) Describe shortly the battles of *Pharsalia, Philippi,* and
Actium. Name the leaders on either side, and indicate
the importance of the issue that was at stake in each
case.

LATIN.

Honours. Second Paper.

Monday, 22nd June. 2 to 5 p.m.

1. Translate into Latin :—

    The movement was short-lived, threatening as was its march
at first. It spread through Syria without let or hindrance, and
all beyond the Taurus was won by the usurper's arms. It
seemed that there was no time to be lost; and the Emperor
was on his way to face the struggle in which an Empire was
at stake, when the news came that Cassius was no more, having
met an inglorious death by the hand of a petty officer of his own
army, the victim of revenge more probably than of loyal feeling.
The Emperor heard the tidings calmly, showed regret at the
death of the pretender, and would sanction no vindictive
measures, though Faustina, whom idle rumour has accused of
urging Cassius to revolt, had written to him before in a tone of
passionate resentment, praying him not to spare the traitor, but
to think of the safety of his children.

2. Translate into English :—

    (a) Cossus at insequitur Veientis caede Tolumni,
        Vincere cum Veios posse laboris erat.
    O Veii veteres, et vos tum regna fuistis,
        Et vestro posita est aurea sella foro :
    Nunc intra muros pastoris bucina lenti
        Cantat et in vestris ossibus arva metunt.
    Forte super portae dux Veius adstitit arcem
        Colloquiumque sua fretus ab urbe dedit.
    Dumque aries murum cornu pulsabat aheno,
        Vinea qua ductum longa tegebat opus,
    Cossus ait "forti melius concurrere campo."
        Nec mora fit, plano sistit uterque gradum.
    Di Latias iuvere manus ; desecta Tolumni
        Cervix Romanos sanguine lavit equos.

(5)   Edictum domini deique nostri,
       Quo subsellia certiora fiunt
       Et puros eques ordines recepit,
       Dum laudat modo Phasis in theatro,
       Phasis purpureis ruber lacernis,
       Et iactat tumido supinus ore :
       " Tandem commodius licet sedere,
       Nunc est reddita dignitas equestris ;
       Turba non premimur nec inquinamur " :
       Haec et talia dum refert supinus,
       Illas purpureas et arrogantes
       Iussit surgere Leïtus lacernas.

    (c) Et hercule omnia haec, quae a me de facetiis disputantur,
non maiora forensium actionum quam omnium sermonum con-
dimenta sunt, nam sicut quod apud Catonem est—qui multa
rettulit, ex quibus a me exempli causa complura ponuntur—per
mihi scitum videtur, C. Publicium solitum dicere " P. Mummium
cuivis tempori hominem esse," sic profecto se res habet,
nullum ut sit vitae tempus, in quo non deceat leporem humani-
tatemque versari. Sed redeo ad cetera. Est huic finitimum
dissimulationi, cum honesto verbo vitiosa res appellatur; ut cum
Africanus censor tribu movebat eum centurionem, qui in Pauli
pugna non adfuerat, cum ille se custodiae causa diceret in castris
remansisse quaereretque, cur ab eo notaretur, " non amo " inquit
" nimium diligentes." Acutum etiam illud est, cum ex alterius
oratione aliud excipias atque ille volt; ut Salinatori Maximus,
cum Tarento amisso arcem tamen Livius retinuisset multaque
ex ea proelia praeclara fecisset, cum aliquot post annos Maximus
id oppidum recepisset rogaretque eum Salinator, ut meminisset
opera sua se Tarentum recepisse, " quidni " inquit " meminerim ?
Numquam enim recepissem nisi tu perdidisses."

3. Translate the following, explaining and illustrating, by example,
    all peculiarities of expression or construction :—

    (a) Persarum regis potestas pacis et belli.
    (b) Facere omnia aut voluptatis causa aut eorum, quae
         secundum naturam sunt, adipiscendi.
    (c)   huic ego volgus
           Errori similem cunctum insanire docebo.
    (d)   tune hinc spoliis indute meorum
           Eripiare mihi ?
    (e)   Dispeream ni
           Submosses omnes.
    (f) Relicturi agros omnes erant, nisi ad eos Metellus Roma
         litteras misisset.
    (g)   Voltus nimium lubricus aspici.
    (h)   Ausculta paucis ; et quid ego te velim et tu quod
         quaeris scies.
    (i)   Valeri genus, unde superbus
           Tarquinius regno pulsus fuit.
       Why is the reading " fugit " to be preferred here ?
    (k)   Limosoque lacu per noctem obscurus in ulva
           Delitui dum vela darent si forte dedissent.
       How would you punctuate the second line ?

4. Answer *one* (not both) of the following questions :—

      (*a*) Write a short Latin essay describing the character and career of *either* Julius Cæsar *or* Augustus.

      (*b*) Translate into Latin Elegiac verse :—

The Foray.

The last of our steers on the board has been spread,
And the last flask of wine in our goblet is red;
Up, up, my brave kinsmen! belt swords and begone,
There are dangers to dare, and there's spoil to be won.
The rain is descending; the wind rises loud;
And the moon her red beacon has veil'd with a cloud;
'Tis the better, my mates! for the warder's dull eye
Shall in confidence slumber, nor dream we are nigh.
Our steeds are impatient! I hear my blythe grey!
There is life in his hoof-clang, and hope in his neigh;
Like the flash of a meteor, the glance of his mane
Shall marshal your march through the darkness and rain.

                                     (Scott.)

5. Answer *one* (not both) of the following :—

      (*a*) Describe in outline the policy pursued by Rome towards the nations she conquered and her methods of governing them.

      (*b*) Consider the poetry of Virgil and Horace as expressive of an enthusiasm for (1) the City of Rome, (2) Italy and the Italians, (3) the Emperor and the new Imperial system. How are these elements related to one another?

GREEK.

Lower Grade.

Wednesday, 17th June.   2 to 4.30 P.M.

I. Translate :—

[Conversation between Diogenes and Alexander in the lower world.]

    ΔΙΟΓ. τί τοῦτο, ὦ Ἀλέξανδρε; καὶ σὺ τέθνηκας, ὥσπερ καὶ ἡμεῖς ἅπαντες;

    ΑΛΕΞ. ὁρᾷς, ὦ Διόγενες· οὐ παράδοξον δέ, εἰ ἄνθρωπος ὢν ἀπέθανον.

    ΔΙΟΓ. οὐκοῦν ὁ Ἄμμων ἐψεύδετο, λέγων ἑαυτοῦ σε εἶναι υἱόν· σὺ δὲ Φιλίππου ἄρα ἦσθα;

    ΑΛΕΞ. Φιλίππου δηλαδή· οὐ γὰρ ἂν ἐτεθνήκειν Ἄμμωνος ὤν.

    ΔΙΟΓ. ἀλλὰ γελῶ ἔγωγε ἀναμνησθεὶς οἷα ἐποίει ἡ Ἑλλάς, ἄρτι σε παρειληφότα τὴν ἀρχὴν κολακεύοντες[1], καὶ στρατηγὸν αἱρούμενοι ἐπὶ τοὺς βαρβάρους, καὶ ὡς θεῷ θύοντες. ἐκεῖνο δὲ ἡδέως ἂν μάθοιμι παρὰ σοῦ, πῶς φέρεις ὁπόταν ἐννοήσῃς ὅσην εὐδαιμονίαν ἀπολιπὼν δεῦρο ἀφῖξαι· οὐ γὰρ λυπεῖ ταῦτά σε ὑπὸ τὴν μνήμην ἰόντα; τί δακρύεις, ὦ μάταιε; οὐ ταῦτά σε ὁ σοφὸς Ἀριστοτέλης ἐπαίδευσε μὴ οἴεσθαι βέβαια εἶναι τὰ παρὰ τῆς τύχης;

    ΑΛΕΞ. οὐ σοφὸς ἐκεῖνος, ἀλλὰ γόης[2], ὦ Διογένες, ἄνθρωπος καὶ κόλαξ.

      [1] κολακεύειν, " to flatter."   [2] γόης, " a juggler."

I. Translate into Greek :—

    (1) The Indians said that their king had sent them thither.

    (2) On the same night the ships set sail for home.

    (3) I know that I am dear to most of the citizens.

    (4) Who is so clever at speaking as to be able to persuade you?

    (5) He came up to Cyrus and begged (δεῖσθαι) him not to put the boy to death.

    (6) Whenever the prison (δεσμωτήριον) was opened, we used to go in to Socrates.

III. (a) Give the genit. sing. and dat. plur. of :—ποιητής, ἔαρ, ἔθνος, ἐλπίς, κέρας, οὖς, ὑγιής, βελτίων.

    Give stems, voc. sing. and acc. plur., of γεωμέτρης, ἅρμα, κύων, Ποσειδῶν.

    Give comparatives and superlatives of κοῦφος, σοφός, καλός, χαρίεις, σωφρόνως, αἰσχρῶς, ῥᾴδιον, ἡδέως.

    (b) Give the future and aor. act. 1st pers. sing. of ἐλαύνω, λαμβάνω, ἥμι, σβέννυμι, γιγνώσκω, κάμνω, πίνω, ὀνίνημι.

    Augment ἐθίζω, ἕλκω, ὠθῶ, ἀνέχομαι, ἐῶ, ἀνοίγω, ἄγνυμι, οἰκοδομῶ. Give a single example in each case.

    Parse τλῆθι, σχές, ἀρθῶμεν, ἁλοίη, ἐδήδοκα, ἐσπεισμένος, βιῶναι, τεθνεώς, giving the chief tenses of each verb.

    (c) Express in Greek :—(a) the gift of the poor woman ; (b) the men in the city ; (c) the guards are standing ; (d) in accordance with the laws.

    What cases are governed by μετέχω, βοηθῶ, αἰτῶ, διδάσκω, χρῶμαι, χαρίζομαι, ἀποστερῶ, καταφρονῶ ?

GREEK.

HIGHER GRADE AND FIRST PAPER FOR HONOURS GRADE.

Wednesday, 17th 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 :—

    Ἐπολιόρκει μὲν δὴ οὕτω τὴν πόλιν. ἐπεὶ δὲ οἱ Κερκυραῖοι ἐκ μὲν τῆς γῆς οὐδὲν ἐλάμβανον διὰ τὸ κρατεῖσθαι κατὰ γῆν, κατὰ θάλατταν δὲ οὐδὲν εἰσήγετο αὐτοῖς διὰ τὸ ναυκρατεῖσθαι, ἐν πολλῇ ἀπορίᾳ ἦσαν · καὶ πέμποντες πρὸς τοὺς Ἀθηναίους βοηθεῖν τε ἐδέοντο, καὶ ἐδίδασκον ὡς μέγα μὲν ἀγαθὸν ἀποβάλοιεν ἄν, εἰ Κερκύρας στερηθεῖεν, τοῖς δὲ πολεμίοις μεγάλην ἂν ἰσχὺν προσβάλοιεν · ἐξ οὐδεμιᾶς γὰρ πόλεως πλὴν γε Ἀθηναίων οὔτε ναῦς οὔτε χρήματα πλείονα ἂν γενέσθαι. ἔτι δὲ κεῖσθαι τὴν Κέρκυραν ἐν καλῷ μὲν πρὸς τὸν Κορινθιακὸν κόλπον, ἐν καλῷ δὲ ὥστε τὴν Λακωνικὴν χώραν βλάπτειν, ἐν καλλίστῳ δὲ πρὸς τὸν εἰς Πελοπόννησον ἀπὸ Σικελίας παράπλουν. ἀκούσαντες δὲ ταῦτα οἱ Ἀθηναῖοι ἐνόμισαν ἰσχυρῶς ἐπι-

μελητέον εἶναι, ἐψηφίσαντο δὲ ἑξήκοντα ναῦς πληροῦν, Τιμόθεον δ᾽ αὐτῶν
στρατηγὸν ἐχειροτόνησαν. ὁ δ᾽ οὐ δυνάμενος αὐτόθεν τὰς ναῦς πληρῶσαι,
ἐπὶ νήσων πλεύσας ἐκεῖθεν ἐπειρᾶτο συμπληροῦν. οἱ δ᾽ Ἀθηναῖοι νομίζοντες
αὐτὸν ἀναλοῦν τὸν τῆς ὥρας εἰς τὸν περίπλουν χρόνον, συγγνώμην οὐκ ἔσχον
αὐτῷ, ἀλλὰ παύσαντες αὐτὸν τῆς στρατηγίας Ἰφικράτην ἀνθαιροῦνται.

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

    (*a*)   Ὣς ὁ γέρων ὤτρυνε πάλαι πολέμων εὖ εἰδώς.
καὶ τὸν μὲν γήθησεν ἰδὼν κρείων Ἀγαμέμνων,
καί μιν φωνήσας ἔπεα πτερόεντα προσηύδα·
   Ὦ γέρον, εἴθ᾽, ὡς θυμὸς ἐνὶ στήθεσσι φίλοισιν,
ὥς τοι γούναθ᾽ ἕποιτο, βίη δέ τοι ἔμπεδος εἴη·
ἀλλά σε γῆρας τείρει ὁμοίιον· ὥς ὄφελέν τις
ἀνδρῶν ἄλλος ἔχειν, σὺ δὲ κουροτέροισι μετεῖναι.
   Τὸν δ᾽ ἠμείβετ᾽ ἔπειτα Γερήνιος ἱππότα Νέστωρ·
Ἀτρεΐδη, μάλα μέν κεν ἐγὼν ἐθέλοιμι καὶ αὐτὸς
ὣς ἔμεν ὡς ὅτε δῖον Ἐρευθαλίωνα κατέκταν.
ἀλλ᾽ οὔπως ἅμα πάντα θεοὶ δόσαν ἀνθρώποισιν·
εἰ τότε κοῦρος ἔα, νῦν αὖτέ με γῆρας ὀπάζει.
ἀλλὰ καὶ ὣς ἱππεῦσι μετέσσομαι, ἠδὲ κελεύσω
βουλῇ καὶ μύθοισι· τὸ γὰρ γέρας ἐστὶ γερόντων.
αἰχμὰς δ᾽ αἰχμάσσουσι νεώτεροι, οἵπερ ἐμεῖο
ὁπλότεροι γεγάασι πεποίθασίν τε βίηφιν.

    (*b*) Κακῶν γὰρ ὄντων μυρίων καθ᾽ Ἑλλάδα,
οὐδὲν κάκιόν ἐστιν ἀθλητῶν γένους.
ἐμεμψάμην δὲ καὶ τὸν Ἑλλήνων νόμον,
οἳ τῶνδ᾽ ἕκατι σύλλογον ποιούμενοι
τιμῶσ᾽ ἀχρείους ἡδονὰς δαιτὸς χάριν.
τίς γὰρ παλαίσας εὖ, τίς ὠκύπους ἀνήρ,
ἢ δίσκον ἄρας, ἢ γνάθον παίσας καλῶς,
πόλει πατρῴᾳ στέφανον ἤρκεσεν λαβών;
πότερα μαχοῦνται πολεμίοισιν ἐν χεροῖν
δίσκους ἔχοντες, ἢ δι᾽ ἀσπίδων ποσὶ
θείνοντες ἐκβαλοῦσι πολεμίους πάτρας;
ἐχρῆν γὰρ ἀνδρῶν τοὺς σοφούς τε κἀγαθοὺς
φύλλοις στέφεσθαι, χὥστις ἡγεῖται πόλει
κάλλιστα, σώφρων καὶ δίκαιος ὢν ἀνήρ,
ὅστις τε μύθοις ἔργ᾽ ἀπαλλάσσει κακά,
μάχας τ᾽ ἀφαιρῶν καὶ στάσεις· τοιαῦτα γὰ
πόλει τε πάσῃ πᾶσί θ᾽ Ἕλλησιν καλά.

        γνάθος, " jaw " ; ἤρκεσεν, " succoured."

III. Translate into Greek :—

    (1) States will never cease from trouble (κακά) until philoso-
        phers become rulers.

    (2) They refuse to go unless some one gives them money for
        what they have already done.

    (3) He took us by the hand and brought us in to his wife and
        children.

(4) The Athenians were perplexed how to defend themselves, having neither ships nor allies.

(5) Socrates said that to die was better than to live, if a man were unjust.

(6) So long as the Lacedaemonians were at war with the Athenians he bade the allies not to send corn to the Piraeus.

(7) If anyone had asked you who you were, you would have told him the truth.

IV. (1) Give (a) 2nd sing. imperat. of καθῆμαι, φημί.

      (b) 1 aor. ind. 3rd sing. of μάχομαι, βούλομαι.

      (c) perf. inf. pass. of διαλλάττω, δείκνυμι.

      (d) 2 aor. opt. 3rd plur. of πυνθάνομαι, κάμνω.

      (e) fut. ind. 2nd sing. of γελῶ, πλέω.

Parse σεσηπώς, ἀπέχρη, ἀφίχθε, ἄνωχθι, ἐξῆσαν, προεῖνται, λελησμένοι, ἠχθέσθησαν, ἐπισπέσθαι, καθεδούμεθα.

(2) Translate, explaining the cases : — (a) πόσου διδάσκει ; (b) τῶν ἐφ' ἡμῶν ἄριστος ; (c) μεῖζον ἢ κατ' ἄνθρωπον ; (d) ἐδίωξαν αὐτὸν φόνου ; (e) παρὰ πάντα τὸν χρόνον.

Express in Greek :—(a) the battle of Marathon ; (b) he went away by night ; (c) he was of the same name as his father ; (d) they do not cease from fighting ; (e) I hope to conquer.

(3) In what way is a prohibition expressed in Greek ? Distinguish (a) ὑπέρ with gen. and acc. ; (b) διά with gen. and acc. ; (c) αἰσχύνω and αἰσχύνομαι ; (d) ἀποδίδωμι and ἀποδίδομαι.

GREEK.

Honours.—Second Paper.

Thursday, 18th June. 2 to 5 p.m.

I. Translate :—

(1) Πολλὰ τοίνυν ἄν τις, ὦ ἄνδρες Ἀθηναῖοι, Φίλιππον εὐδαιμονίσας τῆς τύχης εἰκότως, τοῦτο μάλιστ' ἂν εὐδαιμονίσειεν ἁπάντων, ὃ μὰ τοὺς θεοὺς καὶ τὰς θεὰς οὐκ ἔχω λέγειν ἔγωγε ἄλλον ὅστις εὐτύχηκεν ἐφ' ἡμῶν. τὸ πῶον ; τί, ἐπειδὴ πονηρῶν ἀνθρώπων εἰς τὰ πράγματ' αὐτῷ ἐδέησε, πονηροτέρους εὑρεῖν ἢ ἐβούλετο. πῶς γὰρ οὐχ οὗτοι τοιοῦτοι δικαίως ὑπολῃφθεῖεν ἄν, οἵ γε, ἃ ὑπὲρ αὐτοῦ Φίλιππος τηλικούτων ὄντων αὐτῷ τῶν διαφόρων οὐκ ἐτόλμα ψεύσασθαι, οὐδ' ἔγραψεν οὔτ' εἰς ἐπιστολὴν οὐδεμίαν, οὔτε πρεσβευτὴς οὐδεὶς εἶπε τῶν παρ' ἐκείνου, ἐπὶ ταῦτα μισθώσαντες ἑαυτοὺς ὑμᾶς ἐξηπάτων; καὶ ὁ μὲν Ἀντίπατρος καὶ ὁ Παρμενίων, δεσπότῃ διακονοῦντες καὶ οὐ μέλλοντες ὑμῖν μετὰ ταῦτ' ἐντεύξεσθαι, ὅμως τοῦθ' εὕροντο, μὴ δι' αὐτῶν ὑμᾶς ἐξαπατηθῆναι· οἱ δ' Ἀθηναίων, τῆς ἐλευθερωτάτης πόλεως, πρέσβεις ταχθέντες, ὑμᾶς, οἷς ἀπαντῶντας ἐμβλέπειν, οἷς

συζῆν ἀνάγκη τὸν λοιπὸν βίον, καὶ ἐν οἷς εὐθύνας ἤμελλον δώσειν τῶν πεπραγμένων, τούτους ἐξαπατᾶν ὑπέστησαν. πῶς ἂν ἄνθρωποι κακίους ἢ μᾶλλον ἀπονενοημένοι τούτων γένοιντο ;

(2) [*It has been decreed that all property shall be brought into the common stock. First and Second Citizen converse.*]

AN. A. σὺ δ' οὐ καταθεῖναι διανοεῖ ;   AN. B. φυλάξομαι,
          πρὶν ἂν γ' ἴδω τὸ πλῆθος ὅ τι βουλεύεται.

AN. A. τί γὰρ ἄλλο γ' ἢ φέρειν παρεσκευασμένοι
          τὰ χρήματ' εἰσίν ;   AN. B. ἀλλ' ἰδὼν ἐπειθόμην.
          οἴσειν δοκεῖς τιν' ὅστις αὐτῶν νοῦν ἔχει ;
          οὐ γὰρ πάτριον τοῦτ' ἐστίν, ἀλλὰ λαμβάνειν
          ἡμᾶς μόνον δεῖ νὴ Δία · καὶ γὰρ οἱ θεοί.

AN. A. ὦ δαιμόνι' ἀνδρῶν, ἔα με τῶν προὔργου τι δρᾶν.
          ταυτὶ γάρ ἐστι συνδετέα.   ποῦ μοῦσθ' ἡμᾶς ;

AN. B. ὄντως γὰρ οἴσεις ;   AN. A. ναὶ μὰ Δία, καὶ δὴ μὲν οὖν
          τωδὶ ξυνάπτω τὼ τρίποδε.   AN. B. τῆς μωρίας,
          τὸ μηδὲ περιμείναντα τοὺς ἄλλους ὅ τι
          δράσουσιν, εἶτα τηρικαῦτ' ἤδη—AN. A. τί δρᾶν ;

AN. B. ἐπαναμένειν, ἔπειτα διατρίβειν ἔτι.

AN. A. ἵνα δὴ τί ;   AN. B. σεισμὸς εἰ γένοιτο πολλάκις,
          ἢ πῦρ ἀπότροπον, ἢ διᾴξειεν γαλῆ,
          παύσαιντ' ἂν εἰσφέροντες, ἀμβρόντητε σύ.

AN. A. χαρίεντα γοῦν πάθοιμ' ἄν, εἰ μὴ 'χοιμ' ὅποι
          ταῦτα καταθείην.   AN. B. μὴ γὰρ οὖν λάβοις ὅποι.

II. For Greek Prose :—

His distressed situation he could no longer ascribe to the rigours of destiny, or the malignity of enemies : his own precipitancy and indiscretion must bear the blame of whatever disasters should henceforth befall him. The most faithful of his adherents, between sorrow and indignation, were confounded with reflections on what had happened, and what was likely to follow. Seeing every prospect blasted, faction triumphant, the discontented populace inflamed to a degree of fury, they utterly despaired of success in a cause to whose ruin friends and enemies seemed equally to conspire.

                                                                        HUME.

III. Translate, and comment on the syntax of :—

(1) ἐνόμισε μὴ ἂν γενέσθαι ποτὲ πιστὸν ἄνθρωπον ὅστις ἄλλον μᾶλλον
      φιλήσει τοῦ τῆς φυλακῆς δεομένου.
          What does this represent in *Oratio Recta* ?

(2) μέτρησον εἰσήνης τί μοι, κἂν πέντ' ἔτη.

(3) ὁ γὰρ ἀσκὸς δύο ἄνδρας ἕξει τοῦ μὴ καταδῦναι.

(4) οἱ δὲ σύμμαχοι τεθνᾶσι τῷ δέει τοὺς τοιούτους ἀποστόλους.

(5) ἀλλ' εἴ τι μὴ φέροιμεν ὤτρυνεν φέρειν.

(6) Τυδείδην δ' οὐκ ἂν γνοίης ποτέροισι μετείη.

(7) ἵτ' δ' οὐκ ἔστιν ἐπιστήμη ἡ ἀρετή, σκέψαι ἐάν σοι δοκῶ εἰκότως
      ἀπιστεῖν.

IV. Describe the nature of the confederacy of Delos. What events led to its formation and its dissolution ?

Or,

Give an account of early Greek colonisation.

Or,

What were the forces which made for and against unity in ancient Greece ?

FRENCH.

LOWER GRADE.

Wednesday, 17th June. 10 A.M. to 12.30 P.M.

Candidates must, in all cases, answer Questions 1 ; 2 (or 3) ; 4 and 5 (Section I), and should attempt four questions (NOT MORE) from the other sections.

SECTION I.

1. Translate into English :—

(*a*) Dans mon enfance j'avais au-dessus de mon lit un petit tableau entouré d'un cadre noir que je ne sais quelle servante allemande avait accroché au mur. Il représentait une vieille tour isolée, moisie, délabrée, entourée d'eaux profondes et noires qui la couvraient de vapeurs, et de montagnes qui la couvraient d'ombre. Le ciel de cette tour était morne et plein de nuées hideuses. Le soir, après avoir prié Dieu, et avant de m'endormir, je regardais toujours ce tableau. La nuit je le revoyais dans mes rêves, et je *l'y* revoyais terrible. La tour grandissait, l'eau bouillonnait, un éclair tombait des nuées, le vent sifflait dans les montagnes, et semblait par moments jeter des clameurs. Un jour je demandai à la servante comment s'appelait cette tour. Elle me répondit, en faisant un signe de croix : " La ' Mäusethurm ' " (Tour des Rats).

VICTOR HUGO.

l'y. Parse these two words.

Le Chêne.

(*b*) Un *gland* tombe de l'arbre et roule sur la terre,
L'aigle à la *serre* vide, en quittant les vallons,
S'en saisit en jouant et l'emporte à son *aire*,
Pour aiguiser le bec de ses jeunes aiglons ;
Bientôt du nid désert qu'emporte la tempête
Il roule confondu dans les débris mouvants,
Et sur la roche nue un grain de sable arrête
Celui qui doit un jour rompre l'aile des vents ;

> L'été vient, l'*aquilon* soulève
> La poudre des sillons qui pour lui n'est qu'un jeu !
> Et sur le germe éteint où *couve* encore la *sève*,
>   En laisse retomber un peu !
>   Le printemps de sa tiède ondée
>   L'arrose comme avec la main ;
>   Cette poussière est fécondée
>   Et la vie y circule enfin !
>
> <div align="right">LAMARTINE.</div>

gland, acorn ; *serre,* talon ; *aire,* eyrie ; *aquilon,* north wind ;
couve, is alive (lit. smoulders) ; *sève,* sap.

2. Give the 1st person singular and plural of the indicative present,
preterite, and future of *mener, lancer, ranger, jeter,* and *envoyer ;*
and the two participles of *savoir, prévoir, mourir, naître, plaire.*

<div align="center">*Or,*</div>

3. Give the 3rd person singular and plural of the imperfect indicative
and imperative subjunctive of *venir, voir, vivre, lire, écrire ;* and
the imperative, in full, *affirmative* and *negative,* of *se battre* and
se taire.

4. Give the French adjectives (masculine and feminine) corresponding
to the following nouns : *vertu, vice, sagesse, folie, pitié.*

5. Translate into French :—

> A young servant, having been sent to a jeweller's shop with a
> valuable ring, took it out of its box to admire it while he was
> passing over a plank bridge. Unfortunately he let it fall on the
> muddy bank of the stream. After searching for it without
> success for several hours, he became terrified at the idea of facing
> his master, and ran away from his place, went to sea, and finally
> settled in America, where he made a large fortune. After an
> absence of many years, he returned to England, and bought the
> estate where he had lived as a servant. One day, while walking
> over the plank bridge with a friend, he told him the story of the
> ring. " I could almost swear," said he, thrusting his stick into
> the soft clay, " that this is the very place where the ring dropped."
> When the stick was pulled out from the clay, the lost ring was
> upon the end of it.

<div align="right">(K. in " CHATTERBOX.")</div>

SECTION II.

6. Give all the forms of the French possessive adjectives and pronouns
meaning—*my, mine ; our, ours ;* and add a short phrase showing
the use of each word.

<div align="center">*Or,*</div>

7. Give all the forms of the French demonstrative adjectives and
pronouns meaning "*this* " and "*that one,*" and add a short
phrase showing the use of each word.

8. Translate into French :—

> How did you return home last Tuesday ? We arrived at the
> station in time for the five o'clock train. We were all very sorry
> that your visit had been so short. Wednesday, June 17th, 1896.

9. Translate into English :—

(a) Je compare l'ignorant et le savant à deux hommes placés au milieu d'une campagne unie, dont l'un est assis contre terre et l'autre est debout. Celui qui est assis ne voit que ce qui est autour de lui, jusqu'à une tres-petite distance. Celui qui est debout voit un peu au delà. Mais ce peu qu'il voit au delà a si peu de proportion avec le reste de la vaste étendue de cette campagne, et bien moins encore avec le reste de la terre, qu'il ne peut entrer en aucune comparison, et ne peut être compté que comme pour rien.

(b) Un jour que Mme Geoffrin vit le bon abbé de Saint-Pierre s'installer chez elle pour toute une soirée d'hiver, elle eut un moment d'effroi, et, s'inspirant de la situation désespérée, elle fit si bien qu'elle tira parti du digne abbé, et le rendit amusant. Il en fut tout étonné lui-même, et, comme elle lui faisait compliment de sa bonne conversation en sortant, il répondit : "Madame, je ne suis qu'un instrument dont vous avez bien joué."

Section III.

10. Translate into French :—

(a) The meeting lasted from half-past seven on Monday evening till a quarter to two the following morning, and no decision was arrived at.

(b) The third of April in the last leap year of the 19th century was Good Friday.

11. Give a brief account of the life and of *one* of the works of *one* of the following writers :—Corneille, Descartes, Le Sage, Regnard, Chateaubriand, Lamartine, Mme. de Staël, Mme. de Girardin.

Or,

12. Translate :—English consols at par give a yearly income of two and three-quarters per cent. Joint stock limited liability companies are very numerous in England. Shares and debentures seldom offer the same security. The corn trade and the wool trade deal much more with foreign than with home produce. The coal and iron mines of England are the mainstay of her commercial prosperity.

FRENCH.

Higher Grade and First Paper for Honours Grade.

Wednesday, 17th June. 10 a.m. to 1 p.m.

Candidates must, in all cases, answer the whole of Questions 1 and 2, Section I.; and should attempt six questions (NOT MORE) from the other sections.

Candidates answering questions from Sections III. and IV. must not answer Section V., and *vice versâ*.

Section I.

1. Translate :—

(*a*) O combien d'actions, combien d'exploits célèbres,
Sont demeurés sans gloire au milieu des ténèbres,
Où chacun, seul témoin des grands coups qu'il portait,
Ne pouvait discerner où le sort inclinait !
J'allais de tous côtés encourager les nôtres,
Faire avancer les uns, et soutenir les autres,
Ranger ceux qui venaient, les pousser à leur tour,
Et ne l'ai pu savoir jusques au point du jour.
Mais enfin sa clarté montre notre avantage ;
Le Maure voit sa perte, et perd soudain courage,
Et voyant un renfort qui nous vient secourir,
L'ardeur de vaincre cède à la peur de mourir,
Ils gagnent leurs vaisseaux, ils en coupent les câbles ;
Nous laissent pour adieux des cris épouvantables,
Font retraite en tumulte, et sans considérer
Si leurs rois avec eux peuvent se retirer.

<div align="right">Corneille.</div>

Juin.

(*b*) Les prés ont une odeur d'herbe verte et mouillée,
Un frais soleil pénètre en l'épaisseur des bois,
Toute chose étincelle, et la jeune feuillée
Et les nids palpitants s'éveillent à la fois.

Les cours d'eau diligents aux pentes des collines
Ruissellent, clairs et gais, sur la mousse et le thym,
Ils chantent au milieu des buissons d'aubépines
Avec le vent rieur et l'oiseau du matin.

<div align="right">Leconte de Lisle.</div>

(*c*.) En Bretagne le dur granit qui est partout dans cette pauvre terre, comme les os sous les muscles d'un corps d'athlète, fait des maisons solides et lourdes, qui noircissent à la brume, et dont le soleil lui-même ne peut dérider les visages de pierre. La forêt les accompagne toujours par derrière, comme la crinière coiffe la nuque du lion. Elles sont grandes, souvent solitaires ; leur orgueil n'est jamais puéril ni bavard. On dirait qu'elles regardent en tristesse le large domaine qui les entoure ; elles semblent toutes regretter quelque chose ou quelqu'un.

<div align="right">Paul Féval.</div>

2. Translate into French :—

> The character of the fair Jewess found so much favour in the eyes of some fair readers that the writer was censured, because, when arranging the fates of the characters of the drama, he had not assigned the hand of Wilfred to Rebecca, rather than the less interesting Rowena. But, not to mention that the prejudices of the age rendered such an union almost impossible, the author may, in passing, observe that he thinks a character of a highly virtuous and lofty stamp is degraded rather than exalted by an attempt to reward virtue with temporal prosperity. Such is not the recompense which providence has deemed worthy of suffering merit ; and it is a dangerous and fatal doctrine to teach young persons, the most common readers of romance, that rectitude of conduct and of principle are either naturally allied with, or adequately rewarded by, the gratification of our passions, or attainment of our wishes.

<div align="right">Sir Walter Scott.</div>

Section II.

3. Give the 3rd person singular and plural of the pluperfect subjunctive of *s'arroger, s'aider* ; the 1st person singular and plural of the subjunctive present and imperfect of *conduire, vouloir* ; the 2nd person singular and plural of the conditional present and past of *cueillir, parvenir.*

<div align="center">Or,</div>

4. Give the two participles of *moudre, coudre, résoudre, médire, maudire, repartir, répartir, craindre, paître, boire.*

5. (*a*) When is the verb *être* put in the plural after *ce?* Give two short sentences proving the accuracy of your answer.

    (*b*) When is " *it is* " to be translated by (*a*) *c'est*, (*b*) *il est*, (*c*) *elle est* ? Give three short sentences illustrating your answer.

6. When is " *will* " to be translated (*a*) by the French verb *vouloir* ; (*b*) by the future, (*c*) by the present of the verb to which *will* is an auxiliary ?

> Translate :—Many men will promise what they never intend doing. She will come if you ask her. I will claim my rights, though I know only too well that I shall gain nothing by it.

7. Translate idiomatically :—

    (*a*) Take this letter to the post office and get it registered.

    (*b*) I should like to go with you to Paris, but the trip will cost more than I can afford.

    (*c*) As soon as you see her coming, please send me word upstairs.

    (*d*) Something must have happened to him, for I never knew him to be late.

Section III.

8. " L'altre meitiet avrat Rollanz li ber." (*Chanson de Roland.*) Write this line in modern French, and comment on the differences in accidence and syntax which it illustrates.

Or,

9. Write the following according to the rules of modern French :—
      " Jo ne lerreie, pur tut l'or que Deus fist,
          Pur tut l'aveir ki seit en cest païs
          Que ne li die, se tant ai de leisir
          Que Carlemagnes, li reis poëstëifs,
          Par mei li mandet sun mortel enemi."
                                              Chanson de Roland.

10. Give (*a*) the modern adverbs corresponding to the obsolete forms :
      adès, enqui, anuit, auques, ça jus; (*b*) the modern prepositions
      having replaced *o* (formerly *od*) ; *par sum, fors enmi, as* or *es.*

Or,

11. (*a*) Give the etymological origin and intermediate forms of the
      French articles *le, la, les,* and of their compound forms *au, du,
      aux, des.*

      (*b*) Explain the derivation of *loisir, dos, tiers, noce, joie, malade,
      faible, laitue, huissier.*

Section IV.

12. Give in French prose a brief account (*a*) of one act from a French
      tragedy which you have read ; *or,* (*b*) of one of La Fontaine's
      fables.

13. State what you know of the influence on French literature of one
      of the following writers : Chateaubriand, Victor Hugo, J. J.
      Rousseau, Balzac.

14. Give briefly an account of the origin and constitution of the French
      Academy, and of its functions nowadays.

Section V.

15. Translate :—
          (*a*) Enclosed we send you bills on your town amounting to
              176*l.* 18*s.* 10*d.*, which you will credit to us; we have
              taken due note of your drafts on us.
          (*b*) The Stock Exchange refused a quotation for those gold
              mining shares, and there is no demand for them at any
              price.
          (*c*) A case of samples ; cash business ; the balance sheet ;
              the board of directors ; a shipbroker ; a stockbroker.

16. Translate :—
                      Messrs. Brown & Co., Glasgow.
    Gentlemen,   London, 1st April 1896.
          We beg to hand you enclosed our present price-lists, and
    shall be happy to send you samples and particulars required.   As
    our prices have been reduced to the lowest, our terms are cash.
      Awaiting the favour of your kind orders,
                              We remain,
                                  Gentlemen,
                                  Yours truly,
                                      Johnson & Co.

17. Translate :—

<p style="text-align:right">Le Havre, 3 mars, 1896.</p>

Messieurs,

Nous avons l'honneur de vous informer qu'en réunion des importeurs, les quantités de laines à adjuger à nos prochaines enchères ont été fixées à environ 10,400 balles.

Les affaires ont été très difficiles depuis deux mois, à cause de la baisse des peignées et des blousses. Nos détenteurs comprennent très bien qu'il faut enfin se résoudre à faire les concessions exigées par la situation de l'industrie.

Nos ventes vont fixer les cours auxquels peut opérer la fabrique. Nous vous engageons fortement de venir y assister, et dans le cas où cela ne serait pas possible, à nous confier vos ordres, pour l'exécution desquels nous vous assurons de tous nos soins.

<p style="text-align:center">Recevez, messieurs,
nos salutations empressées,
Félix Fortoul et Cie.</p>

FRENCH.

Honours.—Second Paper.

Tuesday, 23rd June.   10 a.m. to 1 p.m.

Candidates must, in all cases, answer Questions 1 and 2, and should attempt at least four (and not more than six) of the remaining questions.

Section I.

1. Translate :—

(a) "Prosperity is the blessing of the Old Testament, adversity is the blessing of the New, which carrieth the greater benediction and the clearer evidence of God's favour. Yet, even in the Old Testament, if you listen to David's harp you shall hear as many hearse-like airs as carols; and the pencil of the Holy Ghost hath laboured more in describing the afflictions of Job than the felicities of Solomon. Prosperity is not without many fears and distastes; and adversity is not without comforts and hopes. We see in needleworks and embroideries it is more pleasing to have a lively work upon a sad and solemn ground than to have a dark and melancholy work upon a lightsome ground. Judge, therefore, of the pleasure of the heart by the pleasure of the eye. Certainly virtue is like precious odours, most fragrant when they are incensed or crushed; for prosperity doth best discover vice, but adversity doth best discover virtue."

<p style="text-align:right">Bacon.</p>

(b) So have I seen a lark rising from his bed of grass, and soaring upwards, singing as he rises.

<p style="text-align:right">J. Taylor.</p>

(*c*) If you sincerely desire to write nothing but what you clearly know or think, and to say that as clearly and as briefly as you can, style will come as a matter of course.

<div align="right">J. A. FROUDE.</div>

(*d*) There is very great danger of our becoming cold-hearted as life goes on; afflictions which happen to us, cares, disappointments, all tend to blunt our affections and make our feelings callous.

<div align="right">J. H. NEWMAN.</div>

SECTION II.

2. Translate into English :—

(*a*) Je ne me suis point loué au public pour faire des portraits qui ne fussent que vrais et ressemblants, de peur que quelque fois ils ne fussent pas croyables et ne parussent feints et imaginés : me rendant plus difficile, je suis allé plus loin ; j'ai pris un trait d'un côté et un trait d'un autre, et, de ces divers traits qui pouvaient convenir à une même personne, j'en ai fait des peintures vraisemblables, cherchant moins à réjouir les lecteurs par le caractère, ou, comme le disent les mécontents, par la satire de quelqu'un, qu'à leur proposer des défauts à éviter et des modèles à suivre.

<div align="right">LA BRUYÈRE.</div>

(*b*) C'est La Fontaine qui est notre Homère. Tout le monde l'entend ; ce sont nos mots de tous les jours, même nos mots de ménage et de gargote, comme aussi nos mots de salon et de cour. Nos enfants l'apprennent par cœur, comme jadis ceux d'Athènes récitaient Homère ; ils n'entendent pas tout, ni jusqu'au fond, non plus que ceux d'Athènes, mais ils saisissent l'ensemble et surtout l'intérêt ; ce sont de petits contes d'enfants, comme l'Iliade et l'Odyssée, qui sont de grands contes de nourrice. Et cette épopée de la Fontaine est gauloise. Elle est hachée menu, en cent petits actes distincts, gaie et moqueuse, toujours légère, et faite pour des esprits fins, comme les gens de ce pays-ci.

<div align="right">TAINE.</div>

(*c*) Par les flots balancée, une barque légère,
    Hier m'avait porté sur ce vaste vaisseau,
Qui fatiguait le golfe et sa vaine colère
    D'un inébranlable fardeau.
Ses longs mâts dans les cieux montaient en pyramides,
    Comme un serpent ailé, leur flamme au sein des airs
Déroulait ses anneaux rapides,
    Et j'admirais ce noir géant des mers,
Armé d'un triple rang de bronzes homicides,
    Qui sortaient à demi de ces flancs entr'ouverts.

<div align="right">C. DELAVIGNE.</div>

SECTION III.

3. What was the meaning in Old French of the transitive verbs *emparer* and *partir*, now obsolete ? Give some short French sentence illustrating your answer.

4. Give, with a brief note on the use of each, some adverbs of nega-
   tion used in Old French, and account for their being now
   obsolete.

5. Comment on the changes in French syntax shown in writing in
   modern French the following sentences :—

   (*a*) Et comencent la rive a aprochier.
   <div style="text-align: right">VILLEHARDOUIN.</div>

   (*b*) Quant il de celle périllouse terre eschapoit.
   <div style="text-align: right">JOINVILLE.</div>

6. Give the derivation of *glas, glace, glaive, craindre, alors, hurler,
   lire, ici, là, lierre.*

7. Explain what is meant by popular and learned Latin, and give an
   instance of each with the French word derived from it.

Section IV.

8. What were the aims of the French "Romantic" writers in the
   early part of this century? How far have they succeeded in
   realising them? What are the chief works of their leaders?

9. State what you know of Racine's judgment on Pierre Corneille,
   expressed in the French Academy on receiving Thomas Corneille
   as his brother's successor.

10. Analyse *one* of the following dramatic characters, and quote some
    passage from the play :—Harpagon (L'Avare), M. Jourdain (Le
    Bourgeois Gentilhomme), Henriette (Les Femmes Savantes),
    Andromaque, Camille (Horace), Hernani.

11. Give a brief account *in French* of any *one* of the following works :—
    L'Esprit des Lois, Le Contrat Social, Le Joueur, Les Travailleurs
    de la Mer, L'Honneur et l'Argent, Télémaque.

12. "Le style est l'homme même." Comment on this famous saying of
    Buffon.

Section V.

13. Write an Essay in French (not exceeding 40 lines) on *one* of the
    following subjects :—

    (1) Almsgiving.
    (2) Country Life.
    (3) Music as a means of Education.
    (4) The value of Drawing as an art and as an accomplish-
        ment.
    (5) "La faiblesse est plus opposée à la vertu que le vice."
    <div style="text-align: right">LA ROCHEFOUCAULD.</div>

GERMAN.

Lower Grade.

Tuesday, 16th 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 :—

Ein reicher Müller kam die Landstraße daher geritten und hielt
bei einem Wirtshaus an, um sich zu erfrischen. Mehrere Gäste, die im
Freien um einen Tisch herum saßen, unterhielten sich grade davon, daß
ein berüchtigter Räuber, der allgemein der schwarze Peter hieß, in der
Nacht aus dem Gefängnis entsprungen sei. „Ich gäbe zehn Thaler
darum," bemerkte selbstbewußt der Mann zu Roß, „wenn ich den Kerl
einmal zu sehen bekäme." — „Nehmt Euch nur in acht," erwiderte
Einer, „daß er Euch nicht zu früh in den Weg läuft; er muß sich hier
herum versteckt halten." — „Pah," lachte der Müller, „ich komme noch
bei Tage durch den Wald, und überdies hat mein Schimmel zwei Beine
mehr als der Landstreicher (vagabond)." Bei diesen Worten humpelte
ein lahmer Bettler, dem der Wirt ein wenig zu essen gegeben hatte, mit
höflichem Danke davon. Bald darauf ritt auch der Müller weiter.
Am Walde begegneten ihm zwei betrunkene Soldaten, die laut schrieen
und ihn verspotteten. Nach einer Weile sah er den Bettler an der
Straße sitzen; der rief ganz kläglich: „Ach, guter Herr, zwei rohe
Soldaten haben mir eben meine paar Pfennige abgenommen und meine
Krücke dort an den Baum gehängt: habt Mitleid und helft mir!"
Der Müller besann sich einen Augenblick, denn der Baum stand auf
der andern Seite eines Grabens, über den nur ein schmaler Steg führte.
Endlich flegte aber ein gutes Herz; er stieg ab und sagte: „Hier halt
meinen Gaul, derweil ich dir das Ding hole." Kaum war er indes
jenseits des Grabens, als der vermeintliche Lahme sich leicht auf das
Pferd schwang und lustig davon trabte, indem er ihm zurief: „Laßt
Euch das Gehen an meinem Krückstock nicht zu sauer werden, und
wenn Ihr heim kommt, so grüßt die Frau Meisterin recht artig vom
schwarzen Peter!" Als der dicke Müller gegen Mitternacht, von
Schweiß triefend, an der Mühle anlangte, fand er zu seiner Freude das
Pferd an der Hofthür angebunden.

<div align="right">Nach Hebel.</div>

2. Translate into German (taking care to be consistent in using either
"thou" or "you" throughout the letter, and giving the German
of all the proper names) :—

My dear George,—Why did you not come yesterday? We
waited for you the whole afternoon. Did you forget your
promise? William Black and Charles Brown were here; but
Henry Smith could not come. He had to stay (remain) at
home; his uncle and aunt were expected from England. I
think (say, believe), you would have enjoyed yourself. Our

friends had not yet seen our new house, and they liked it very much. We have a beautiful view from our windows, and the garden is really splendid. It is more than twice as large as our old one. Behind the garden wall there is a little wood, through which we can get to the sea in less than a quarter of an hour. From my bedroom I see several islands, and the mountains on the other side of the Firth. Our neighbour, Mr. Hunter, has a pretty boat, which I may use when he does not go out to fish. Is it not very kind of him? We sailed for two hours yesterday, and took a bath from one of the islands. I shall not go away during the holidays. Why should I? I could not find a better place to spend them. I shall ask Mr Hunter to teach me fishing, for we have become great friends. Write soon. Ever yours, JOHN HILL.

SECTION II.

3. Give the nominative and genitive singular and nominative plural, with the definite article, of the German words for *any ten* of these :—head, bed, cock, leg, foot, way, roof, star, table, knife, morning, bottle, battle, door, work.

4. Decline, singular and plural, the German for *his little son, red wine, which woman* ?

5. Give the meaning of and compare—falt, naß, hoch, lang, stolz, nahe, kurz, dunkel, munter, sanft ; and give the German for—" a smaller boy," " this house is (the) largest."

6. Write out—(*a*) the present and imperfect indicative active of tragen and sagen ; (*b*) the perfect indicative active of sein ; (*c*) the future perfect passive of setzen.

7. Give the second person singular present, imperfect, and perfect indicative active of nehmen, werden, können, geben, essen, wollen ; and the second person singular imperfect subjunctive and imperative active of helfen, lesen, sterben, stehlen, thun, wissen.

SECTION III.

8. Give the German names (with the definite article) of the four seasons, and for the words of time—year, month, week, day, night, hour, minute, second.

9. Give four prepositions that govern the dative only, and four that govern the accusative only ; and form two sentences with auf, showing what case it governs.

10. Mention three conjunctions that require the inversion of the subject and predicate ; and three that do not ; and form two examples, one of the former, and one of the latter kind.

11. Mention five poems by Schiller, and give, if possible, the beginning of one or two of them.

12. Mention the titles of as many of Goethe's plays as you can, and state what you know of the plot of one of them.

GERMAN.

Higher Grade and First Paper for Honours Grade.

Tuesday, 16th June.   2 to 5 p.m.

To secure full marks, the passages from and into German should be translated. Eight (and eight only) of the remaining questions (not less than four to be chosen from Section II., and not less than two from Section III.) should be answered. If more are answered, only the first eight will be counted.

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

Section I.

1. Translate into English :—

(a) Vor dem Thor des Städtchens fragte der Knecht den nächtlichen Reiter, wohin er reiten wolle, und auf seine Antwort: „Nach Lichtenstein," schlug er einen Seitenweg ein, der zum Gebirge führte. Der junge Mann ritt schweigend durch die Nacht dahin; er sah nicht rechts noch links, er sah nicht auf nach den Sternen, nicht hinaus in die Weite, seine gesenkten Blicke hafteten am Boden. Nachdem der Wald die Wanderer aufgenommen, wurden die Pfade steiler, und mühsam strebte das Roß bergan unter der Last des Reiters und seiner Rüstung. Die Nachtluft wehte kühler und spielte mit den langen Haaren des Jünglings, er fühlte es nicht. Stunde um Stunde verrann, ohne daß ihm der Weg lang dünkte. Es war Mitternacht, als sie auf der höchsten Höhe ankamen. Sie traten heraus aus dem Wald, und, durch eine weite Kluft von ihnen getrennt, lag auf einem senkrecht aus der nächtlichen Tiefe aufsteigenden Felsen der Lichtenstein. Seine weißen Mauern und zackigen Klippen schimmerten im Mondlicht. Es war als schlummere das Schlößchen, abgeschieden von der Welt, im tiefen Frieden der Einsamkeit. Der Ritter warf einen düstern Blick dorthin und sprang ab. Er band das Pferd an einen Baum und setzte sich auf einen bemoosten Stein, gegenüber von der Burg. Der Knecht stand erwartend, was sich weiter begeben werde, und fragte mehrere Male vergeblich, ob er seines Dienstes jetzt entlassen sei.

„Wie lang' ist's noch bis zum ersten Hahnenschrei?" fragte endlich der stumme Mann auf dem Steine.

„Zwei Stunden, Herr!" war die Antwort des Knechtes.

Der Ritter reichte ihm reichlichen Lohn für sein Geleite und winkte ihm, zu geben. Er zögerte, als scheue er sich, den jungen Mann in diesem unglücklichen Zustande zu verlassen; als aber Jener ungeduldig seinen Wink wiederholte, entfernte er sich still. Nur einmal noch sah er sich um, ehe er in den Wald eintrat. Der schweigende Gast saß noch immer, die Stirne in die Hand gestützt, im Schatten einer Eiche auf dem bemoosten Steine.

<div align="right">Wilhelm Hauff, Lichtenstein.</div>

(b)   Eine Königswahl.

„Zu Aachen sei die Wahl!" so ward's beschlossen,
Und in das Land der Reben unverdrossen
Wogt nun ein Völkerstrom von Tag zu Tag,
Weil keiner gern das Fest versäumen mag.
Da siehst du Reiter rasch vorüberjagen,
Dort drängen Wandrer eilend sich durch Wagen,
Auf Bergen und in Thälern überall,
Auf allen Straßen wogt der Menschenschwall,
Die Stadt vermag die Gäste kaum zu fassen,
Man hilft sich, und man lagert auf den Gassen
Und jubelt, als der Morgensonne Strahl
Verkündet den ersehnten Tag der Wahl.
Schon ist versammelt in den Säulenhallen
Die stolze Schar der mächtigsten Vasallen;
Und Otto naht, Herrn Heinrichs edler Sohn,
Und jauchzend heben sie ihn auf den Thron,
Und jeder schwört: „Ich will Dir Treue halten
Und mit Dir trotzen feindlichen Gewalten!"

                                        J. Sturm.

2. Translate into German :—

Some years ago a touching incident occurred in one of the
streets of Vienna. A blind old beggar used to stand there every
evening at a certain corner, and play upon his violin. Beside
him always sat a large dog who held an old hat in his mouth;
and now and then some compassionate passer-by would throw a
copper into the hat. In this way the old fiddler used to get
enough to live. One night, however, he had played a long time
without a single penny having fallen into the hat. At last the
poor man felt so sad and weary that he left off playing. Even
the dog hung his head as if he knew that he would have to go
to bed without his supper. Suddenly a gentleman stepped up
to the man and said, " You seem to be tired, my good friend,
allow me to relieve you a little." He took the violin from his
hand and tuned it. It was in sooth a poor instrument, but so
beautifully did the stranger play that soon a large crowd gathered
round him; and after a while it began to rain so many silver
and copper coins into the hat that at last the dog could scarcely
hold it. It was the greatest musician in Vienna who had played
for the blind beggar, and he had earned enough money for him
to keep him and his faithful companion for many weeks.

SECTION II.—GRAMMAR.

3. Give the nominative and genitive singular and nominative plural,
with the definite article, of the German words for *any ten* of
these :—sentence, advantage, usage, custom, thread, threat, art,
science, virtue, vice, fault, suburbs, season, stocking, joke.

4. Distinguish between—der Abstand, der Anstand; bereit, bereits; die
Mark, das Mark; die Lasten, die Laster; die Thore, die Thoren;
verlegt, verlegen; holzig, hölzern; verbreiten, verbreitern; abgegessen,
abgegossen.

                                        o 2

5. Give five German nouns (with the definite article and meaning) which, while making their plural in the weak way, take the strong form in the singular ; and five other nouns which may do so optionally.

6. Exemplify the declension of proper names by giving the German for—John's stick ; Louisa's dress ; little Mary's doll ; the deeds of Frederick the Great ; proud Alba's victories ; the inhabitants of the kingdom of Saxony ; the streets of Berlin ; the genius of Martin Luther ; Prince Albert's Monument ; the reign of the Emperor Frederick ; King William's life.

7. Give the second person singular present, imperfect and perfect indicative active of verftoßen, ausessen, abhalten, begreifen, du'rchbrechen ; and the second person singular, imperfect subjunctive and imperative active of entnehmen, vergessen, sich ergeben, wegwerfen durchbre'chen.

8. Give five adjectives and five verbs which govern the genitive ; and form two sentences of each class.

SECTION III.—PHILOLOGY AND WORD-FORMATION.

9. Mention (a) three feminine and three neuter nouns in =niß ; (b) three masculine and three feminine nouns compounded with =mut.

10. Give five adjectives in =haft, and five in =selig, pointing out what difference there is between some of these latter and others in regard to derivation.

11. Form adjectives (with their meanings) from *any ten* of these :— Dorn, Berg, Hund, Zeit, Krieg, Erde, Woche, Nacht, Scherz, Arbeit, Ernst, erfinden, folgen, schwatzen, schweigen.

12. Form abstract nouns (with their meanings) from *any ten* of these :— tapfer, sicher, fest, rot, fern, dunkel, schadenfroh, gehorsam, bange, dumm, jung, gefahrlos, bereдt, edel, arm.

13. Give the German or English *etymological* equivalents of *any ten* of *each* of the following two sets of words (adding, in each case, the exact meaning of the German word) :—

(a) bare, asp, bier, wont, sly, many, beaver, I ween, to wean, crow, sinew, hedge, show, own, goat.

(b) schlimm, Balg, Natter, stolz, strecken, Daumen, heilsam, Rechen, Scheide, wichtig, Leinwand, keck, Kluft, auch, bequem.

SECTION IV.—LITERATURE AND COMMERCIAL CORRESPONDENCE.

14. State what you know of two of these writers :—Walter von der Vogelweide, Konrad von Würzburg, Heinrich von Meißen.

15. Name five writers of the Romantic school, and mention one work of each.

16. Specify three important works, by three different writers of the
    18th century, which may be said to have been epoch-making
    in German Literature; and state in what their importance
    consists.

17. Assign *any twelve* of the following works to their respective authors,
    characterising them in a single word (drama, epic, &c.) :—Das
    Käthchen von Heilbronn. Ekkehardt. Die Abderiten. Die Flegel-
    jahre. Torquato Tasso. Die Karolinger. Uriel Acosta. Laokoon.
    Der stille Heinrich. Des Knaben Wunderhorn. Der Cid. Die
    Piccolomini. Das Narrenschiff. Auf der Höhe. Die verlorene
    Handschrift. Bilder aus der deutschen Vergangenheit. Zopf und
    Schwert. Der Spaziergang.

18. Write, in German, to a firm in Hamburg, offering your services as
    agent at the place where you reside, and giving particulars as
    to your qualifications and experience.

19. Reply to the preceding letter, accepting the offer, and asking for
    information as to what particular class of goods might be likely
    to find a market at that place.

20. Translate into German :—

    In reply to yours of the 30th ult., I beg to say that we have
    just now no vacancy in our house; but, as one of our young men
    thinks of going to South Africa within the next three months,
    it is possible that we shall require some one in his place ; and if
    that should be the case, we may soon have an opportunity of
    offering your young friend a place in our office. I see from
    what you tell me about him that he would be just the kind of
    man we want. I should, however, be glad to see a specimen
    of his handwriting, and you might, perhaps, tell him to write to
    me, in the course of next month, as to whether he still is anxious
    to come to us.

GERMAN.

Honours.—Second Paper.

Tuesday, 23rd June. 2 P.M. to 5 P.M.

To secure full marks, the passages from and into German should be
translated. Eight (and eight only) of the remaining questions
(not less than five to be chosen from Section II.) should be
answered. If more are answered, only the first eight will be
counted.

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

Section I.

1. Translate into English :—

    a. In der Mitte des Dorfes, neben dem Schulzenhof, lag die Pfarre,
    ein über hundert Jahre altes, etwas zurück gebautes Giebelhaus, das an
    Stattlichkeit weit hinter den meisten Bauerhöfen zurückblieb. Es war

das einzige größere Gebäude im Orte, das noch ein Strohbach hatte. Zu verschiedenen Malen war davon die Rede gewesen, dieses der Dorf= gemeinde sowohl um ihres Pastors wie um ihrer selbst willen verächtlich erscheinende Strohdach durch ein Ziegeldach zu ersetzen, der alte Pfarrer aber, der wenigstens in diesem Punkte ein gewisses Stilgefühl besaß, hatte beständig gegen solche Modernisirung Einspruch erhoben: es sei gut so, wie es sei, meinte er. Und darin hatte er vollkommen recht ; es war eben ein Dorfidyll, das durch jede Änderung nur verlieren konnte.   Th. Fontane, Vor dem Sturm.

b. Das Reich befand sich in einer ungeheuern Verwirrung. Was die Kreuzzüge anfänglich Gutes gewirkt hatten, war durch den Kampf zwischen dem Vater und Sohne vernichtet worden. Wo Ruhe herrschte, da ging sie aus Ermattung und Erschöpfung hervor. Der königliche Thron wurde nicht geachtet ; nur Bedrängte suchten ihn, und räuberische Frevler, die ihren Gewaltthaten durch den König den Schein des Rechtes zu geben wünschten. Die Städte aber hatten sich vergrößert und befestigt, und in ihnen wohnte ein frischer Geist, der bald demütig, bald trotzig seinem Ziele, der Freiheit, zustrebte. Die armen Bewohner des Landes endlich, zu dem Gefühl gekommen, daß sie Menschen seien, blickten sehnsuchtsvoll auf die Städte, an deren Schicksal sie ihr eigenes geknüpft sahen.   H. Luden, Geschichte der Deutschen.

c.   Wie uns die Mutter auferzieht zum Leben,
      Erzieht das Leben uns gemach zum Sterben ;
          Wir sollen einst den Scheidekelch, den herben,
      Zu trinken wissen sonder Grau'n und Beben.

      Drum fordert es was es uns reich gegeben
      Allmählich wieder und zerschlägt's in Scherben,
      Der Leib wird siech, wie sich die Locken färben ;
      An tausend Schranken bricht des Geistes Streben.

      Und wie der Pilger, dem auf thau'gen Wegen
      Das Wandern eitel Lust schien in der Frühe,
      Am Abend doch sich sehnt dem Ziel entgegen :
          Verlangt's auch uns zuletzt ans Ziel der Mühe,
      Und alle Rast erscheint uns als ein Segen,
      Ob auch im Schatten sie des Todes blühe.
                          Emanuel Geibel.

2. Translate into German :—

      a. There was no one in the kitchen when Lisbeth entered and threw herself into the chair. She looked round with blank eyes at the dirt and confusion on which the bright afternoon sun shone dismally ; it was all of a piece with the sad confusion of her mind—that confusion which belongs to the first hours of a sudden sorrow, when the poor human soul is like one who has been deposited sleeping among the ruins of a vast city, and wakes up in dreary amazement, not knowing whether it is the growing or the dying day. At another time Lisbeth's first thought would

have been, "Where is Adam?" but the sudden death of her
husband had restored him in those hours to that first place in her
affections which he had held six-and-twenty years ago; she had
forgotten his faults as we forget the sorrows of our departed
childhood, and thought of nothing but the young man's kindness
and the old man's patience. Her eyes continued to wander
blankly until Seth came in and began to remove some of the
scattered things, and clear the small round deal-table, that he
might set out his mother's tea upon it.

GEORGE ELIOT, *Adam Bede.*

b. (1) Had he kept silence he would have been considered a
  wise man.

(2) She spared no pains to make him comfortable.

(3) There is not much love lost between them.

(4) Do you mean to say you have done this on purpose?

(5) He has fallen out of the frying-pan into the fire.

(6) Why do you always beat about the bush?

(7) Would you carry coals to Newcastle?

(8) At Rome one must do as the Romans do.

SECTION II.—PHILOLOGY AND SYNTAX.

3. Mention *ten* nouns formed with the prefix ge=, having either a
   collective sense (*e.g.*, Gemäuer), or the sense of excessive action
   (*e.g.*, Gewimmer); and give the gender and meaning of the
   words.

4. Form, by means of prefixes (not prepositions), derivative verbs
   with a comparative or causative force (*e.g.*, to diminish), from
   the adjectives :—weit, schlecht, niedrig, tief, klein, reich, hart, schön, eng,
   hoch. Add the meaning to each verb.

5. Comment briefly on the forms of *any ten* of these, noting any irregu-
   larity :—Geburtstag, Störenfried, Taugenichts, sagenhaft, wöchentlich,
   tragbar, mittwochs, fürchterlich, ihr Kinderlein, Liebesbrief, Garaus,
   Hoffahrt, Kleinod, das ist allerliebst, stehe da!

6. Give the meanings of, and, if possible, German synonyms (words
   of the same meaning) for *any twelve* of these :—einhellig,
   schrankenlos, Leibeigner, Beruf, Anerbieten, leiblich, hintansetzen, ver=
   legen, Gewogenheit, harren, ruchlos, züchtigen, Ebenmaß, wahnwitzig,
   gescheit, Zögling, zuverlässig, ablehnen.

7. Exemplify the idiomatic use of prepositions by giving the German
   of *twelve* of the following :—on horseback; by dint of know-
   ledge; to die of consumption; upstairs and downstairs; at
   leisure; from to-day; by twos and threes; to be on one's guard;
   to be in time; at any rate; on purpose; notwithstanding his
   promise; on my account; at his expense; according to nature;
   by the way; on the spot; at length.

8. Give the German for the following sets of words (each set to be formed from the same radical word) :—high, height, to heighten ; true, truth, truthful, truthfulness ; brother, brotherly, brother-hood ; Christian, Christianity, Christendom ; to do, deed, doer, active ; rich, riches, to enrich ; to live, life, living (adj.), lively, liveliness.

9. Give two distinct German words, with the definite article, for each of *any ten* of the following English homonyms (words with more than one distinct meaning) :—youth, letter, trunk, waste, ashes, arm, lime, room, play, cross, mail, corn, rent, plane, sound, pitch.

10. State what you understand by *Old High German, Middle High German,* and *Modern High German ;* and specify some of the chief linguistic features of each of these phases of the language, and the principal literary movements of the corresponding periods of literature.

Section III.—Literature.

11. State what you know of the Minnesänger.

12. Give some account of the two Silesian schools, or the Hainbund.

13. Define Herder's place in German literature.

14. Specify the schools, or literary groups, to which the following writers belong, and mention one work of each :—Uhland, Hölty, Rabener, Leisewitz, Brentano, Opitz, Kerner, Gutzkow, Rückert, W. Müller.

15. State what you know of the novelists of the present day.

ARITHMETIC.

Lower Grade.

Monday, 15th June.   10 A.M. to 11.30 A.M.

Candidates are not expected to attempt every question.
All answers sent in should be written out neatly and legibly.
To obtain full marks, *all the steps of the work must be shown,* and such explanation added as is required to indicate the methods adopted.
No MARKS can be given for results without work.

1. By what number must 4766 be multiplied to obtain 2759514 as product ?

2. What sum will remain out of 25 guineas, after paying 8s. 6d. for bread, £2 15s. 3½d. for meat, 19s. 6d. for fish, 8s. 10½d. for vegetables, £1 16s. 8d. for groceries, £1 4s. 6½d. for milk, 14s. 8d. for washing, £3 14s. 6d. for dress, £4 13s. 6d. for wages, and £5 8s. 4d. for rent ?

3. A steam-engine, working steadily day and night, consumes a hundred-weight of coal in $7\frac{1}{2}$ hours. How many tons will be used in 100 days.

4. An army of 145,600 men loses $12\frac{1}{2}$ per cent. of its number through disease, and 15 per cent. of the remainder in battle ; how many men are left ?

5. (1) Show that the numbers 111 and 11111 are prime to each other.

(2) Find the least common multiple of the even numbers from 2 to 20, inclusive.

6. A grain of gold if beaten into gold-leaf will cover $67\frac{1}{2}$ square inches. Find, in yards, the length of the side of a square that can be covered by an ounce Troy of gold-leaf.

Simplify—

$$(1)\ \ \frac{17}{20}+\frac{18}{24}+\frac{10}{25}+\frac{12}{40}\ ;$$

$$(2)\ \ \frac{6\frac{1}{2}-3\frac{1}{4}}{7\frac{1}{3}+1\frac{4}{7}}+\frac{4\frac{1}{3}\text{ of }1\frac{1}{4}}{2\frac{3}{7}\text{ of }3\frac{2}{3}}.$$

8. Express (1) 5 yds. 2 ft. 4 in. as a vulgar fraction of a mile;

(2) £2 17s. 4d. as a decimal fraction of £13 8s. 9d.

9. (1) Multiply ·02475 by ·64, and divide the result by ·000125 ;

(2) Reduce to a single vulgar fraction $\dfrac{\cdot 6\dot{8}\dot{1}\times\cdot 6\dot{1}}{1\cdot 1\dot{8}\div\cdot 3\dot{6}}.$

10. Find the total rental of a town if a tax of 9d. in the pound on rents brings in £2,163 14s. 3d.

11. A rectangular tank is 18 feet long, 14 feet broad, and 10 feet deep. Find the cost of painting the sides and bottom of the inside at 1s. $1\frac{1}{2}d.$ the square yard.

12. At what rate must simple interest be charged in order that £2,375 may increase to £2,826 5s. in four years ?

ALGEBRA.

Lower Grade.

Monday, 15th June. 3 P.M. to 4.30 P.M.

Candidates are not expected to attempt every question.

All answers sent in should be written out fully and carefully.

All the steps of the work must be shown, and any explanation which may be necessary should be added.

All writing and figures should be legible and well arranged.

Attention to these points will secure additional marks.

1. Add together $4(x-2y+3z)$, $-5(y-2z+3x)$, and $6(z-2x+3y)$.

2. From $(x-4)\ (x^3-3x+5)$ take $(x-3)\ (x^2-2x-6)$.

3. If $a=2b$, $b=3c$, find the value of—
$$\frac{b(a+c)}{a(b+c)} - \frac{c(a-b)}{b(b-c)} + \frac{a(a-b+c)}{c(a+b-c)}.$$

4. Simplify—

   (1) $\dfrac{1}{10}\left[15x - 2y + z - 3\{x - 3y - (y - 4x)\} - (2x - z)\right]$;

   (2) $\dfrac{x^2 - x - 6}{x^2 - 4x + 4} \times \dfrac{x^2 - 4}{x^2 - 9} \times \dfrac{x^2 + x - 6}{x^2 + 4x + 4}$;

   (3) $\dfrac{a - \dfrac{b-a}{ab-1}}{a + \dfrac{c-a}{1-ac}} \times \dfrac{\dfrac{1}{a} - \dfrac{c-a}{ac-1}}{\dfrac{1}{a} + \dfrac{b-a}{1-ab}}$.

5. Solve the equations—

   (1) $\dfrac{1}{2}(3x-1) + \dfrac{1}{4}(5x-1) - \dfrac{1}{3}(5x+2) = \dfrac{1}{5}(3x+5)$;

   (2) $\dfrac{\cdot 4}{x} = \cdot 25 - \dfrac{\cdot 65}{x}$;

   (3) $(x+2a)\,(x+b) - (x+a)\,(x+2b) = (a+b)\,(x-b)$.

6. Resolve into factors—
   (1) $x^2 - 3x - 28$;
   (2) $2x^2 - x - 6$;
   (3) $a^3 + a^2b - ab^2 - b^3$;
   (4) $(a+2b-c)^2 - (a-b+2c)^2$.

7. A man's salary was increased by £20, but at the same time income tax was raised from $6d.$ to $8d.$ in the pound, the result being that his *nett* income was only increased by £14 10s. Find his original salary.

8. Simplify—

   (1) $\dfrac{b+1}{(1-a)\,(a-b)} - \dfrac{1+a}{(a-b)\,(1-b)} + \dfrac{(a+2b-1)}{(b-1)\,(1-a)}$;

   (2) $\dfrac{(x^4 + x^3y - x^2y^2 + 3xy^3 - 12y^4)}{x^4 + 2x^3y + x^2y^2 - 16y^4}$.

9. Extract the square root of
$$x^4 + 1 - x(x^2 + 1) + 2\tfrac{1}{4}x^2.$$

10. Prove the identity—
$$(x^3 + y^3 + z^3)\,(x+y+z) - (x^2 + y^2 + z^2)^2$$
$$= yz(y-z)^2 + zx(z-x)^2 + xy(x-y)^2.$$

11. Solve the equations—

   (1) $\begin{cases} x + y + z = 29, \\ x + 2y + 3z = 62, \\ \dfrac{1}{2}x + \dfrac{1}{3}y + \dfrac{1}{4}z = 10 \, ; \end{cases}$

   (2) $(16 - 3x)\,4x = 100 - 9x$.

12. A room 432 square feet in area is to be covered, all except a margin of 2 feet in width all round, by a carpet ; the area of this carpet is 31 square yards 1 square foot. Find the dimensions of the room.

GEOMETRY.

Lower Grade.

Monday, 15th June.   12 noon to 2 p.m.

Candidates are not expected to attempt every question.   All ordinary symbols and contractions are allowed.

Care should be taken to omit no steps of the proofs, and to indicate the previous propositions, etc., on which they depend.

Figures should be accurately drawn, writing legible, and the different steps neatly arranged.

It is not necessary to write out the general enunciations of propositions but the particular enunciations should be given.

Attention to these points will secure additional marks.

1. Define a parallelogram, a rectangle, a square.
   What defect exists in Euclid's definition of a square?   Give a definition free from this defect.

2. If three sides of one triangle be respectively equal to three sides of another triangle, the two triangles shall be equal in every respect.
   A and B are the centres of two circles which intersect in C and D, show that CD is bisected at right angles by AB.

3. If two triangles have two sides of the one respectively equal to two sides of the other, but the contained angles unequal, the base of the triangle which has the greater contained angle shall be greater than the base of the other.

4. Triangles on equal bases and between the same parallels are equal.
   If E and F are the mid-points of the sides CA and AB of the triangle ABC, and BE, CF meet in O, shew that the quadri-lateral $AFOE$ is equal to the triangle OBC.

5. Construct a square on a given straight line.

6. AOB and COD are two intersecting straight lines : find all the points which satisfy the two conditions that their distances from AB are equal to one given straight line, and that their distances from CD are equal to another given straight line.

7. If a straight line be divided into two equal parts, and also into two unequal parts, the rectangle contained by the two unequal parts shall be equal to the difference of the squares on half the line, and on the line between the points of section.
   The length of a line is 62 inches, the rectangle contained by the two parts into which it is divided is 792 square inches ; apply this theorem to find the point of division.

8. Determine the longest and shortest lines which can be drawn to the circumference of a given circle from a given point within the circle.

9. The opposite angles of a quadrilateral inscribed in a circle are supplementary.
   AB, BC are equal arcs of a circle, and P is a point on the arc BC.   Shew that BP bisects the angle contained by AP and CP produced.

10. The angles which a tangent to a circle makes with a chord drawn
    through the point of contact are equal to the angles in the alternate
    segments of the circle.
        Two circles AOB, COD, touch internally or externally in O,
    and AC, BD are double chords drawn through O; show that
    AB is parallel to CD.

ARITHMETIC.

Higher Grade.

Monday, 15th June.   10 A.M. to 11.30 A.M.

Candidates are not expected to attempt every question.
All answers sent in should be written out neatly and legibly.
To obtain full marks, *all the steps of the work must be shown*, and
such explanation added as is required to indicate the methods adopted.
No MARKS can be given for results without work.

1. Write down in figures the number one hundred and eleven thousand
   one hundred and eleven, and resolve it into its component prime
   factors.

2. If a gallon contains 277·29 cubic inches, how many gallons will be
   contained in a rectangular cistern whose length, breadth, and
   depth are 13 feet, 7 feet 6 inches, and 6 feet 7 inches?

3. Find the cost of the paper required for a room 19 feet 9 inches
   long, 16 feet 3 inches broad, and 11 feet high, if the paper be
   2 feet 9 inches broad, and cost 3s. 6d. per piece of 12 yards,
   assuming that one-sixth of the surface of the walls is not to be
   papered.

4. A tradesman's selling prices are 25 per cent. above cost price, but
   he allows his customers 5 per cent. on the amount of their bills.
   What profit per cent. does he make?

5. A Portuguese barrel contains $28\frac{1}{4}$ English gallons. If a French
   cask contain $49\frac{1}{3}$ gallons, find the smallest whole number of
   gallons which will fill an exact number of Portuguese barrels,
   and which will also fill an exact number of French casks.

6. Simplify—

   (1) $\dfrac{\frac{3}{10}+\frac{6}{9}-\frac{1}{2}\ (1\frac{2}{3}-\frac{3}{10})}{2\frac{3}{5}\div 10\frac{2}{3}}\ \times\ \dfrac{779}{1161}\ $ of $\ \dfrac{252}{451}$;

   (2) $4\cdot 359375$ of $8d.-\cdot 6\dot{6}\dot{9}$ of $3s.\ 5\frac{1}{4}d.+\dot{7}1\dot{6}$ of $18s.\ 9d.$

7. Express (1) $\dfrac{15}{41}$ and $\dfrac{26}{41}$ as recurring decimals, and explain why the
   sum of the recurring periods gives a series of nines.
       (2) From these results, or otherwise, obtain the vulgar frac-
   tions which are equivalent to $\cdot 6585\dot{3}$ and $\cdot 4146\dot{3}$.

8. Tramcars run on a certain route, at intervals of 15 minutes, at a
   speed of $7\frac{1}{2}$ miles an hour, and a man walking steadily in the
   same direction is overtaken by a car every 25 minutes: (1)
   how fast does he walk? (2) if he walked at the same rate in the
   opposite direction, how often would he meet a car?

9. A circular bicycle track, 22 feet wide, and a quarter of a mile round, if measured 1 foot from the inner edge, is to be laid out in a square field; what will be the area, in acres, of the smallest suitable field, assuming that the circumference of a circle is $\frac{22}{7}$ of the diameter?

10. A person possessing 8,925*l.* in the Cape of Good Hope 3½ per cents., sells out at 117¼, and with the proceeds buys Russian 5 per cents. at 136¼; find the amount of stock obtained, and the increase of his income, assuming that he pays ¼ per cent. for brokerage in each transaction.

ALGEBRA.

HIGHER GRADE.

Monday, 15th June. 3 P.M. to 4.30 P.M.

Candidates are not expected to attempt every question.
All answers sent in should be written out fully and carefully.
All the steps of the work must be shown, and any explanation which may be necessary should be added.
All writing and figures should be legible and neatly arranged.
Attention to these points will secure additional marks.

1. Simplify—

$$\left(\frac{1}{b}+\frac{1}{c}\right)(b+c-a)+\left(\frac{1}{c}+\frac{1}{a}\right)(c+a-b)+\left(\frac{1}{a}+\frac{1}{b}\right)(a+b-c).$$

2. If x^4+ax^3+bx+1 can be divided exactly by x^2+x+1, show that $a=b=-1$.

3. Resolve into factors—

    (1) $x(x-1)-a(a-1)$;

    (2) $(ac+bd)^2+(bc-ad)^2$;

    (3) x^4+x^2+1.

4. A tailor buys a piece of cloth for a certain sum and sells 2 yards more than one-fourth of the whole at a profit of 25 per cent. He afterwards succeeds in selling the rest at a profit of 75 per cent., and finds he has made a profit of 60 per cent. on the whole transaction. How many yards of cloth did he buy?

5. When are quantities said to be in continued proportion?

    Show that $\sqrt{5}+\sqrt{6}-\sqrt{11}$, $\sqrt{3}+\sqrt{10}-\sqrt{13}$, $\sqrt{3}+\sqrt{10}+\sqrt{13}$, and $\sqrt{5}+\sqrt{6}-\sqrt{11}$ are in proportion, and that $4\sqrt{3}+5\sqrt{2}$, $2+\sqrt{6}$, and $\sqrt{2}$ are in continued proportion.

6. If $\frac{1}{x}+\frac{1}{y}+\frac{1}{a}=0$, show that $\frac{1}{x+2a}+\frac{1}{y+2a}-\frac{1}{a}=0$.

3. Solve the equations—

(1) $\dfrac{5}{x+1} - \dfrac{3}{x-1} = \dfrac{1}{x+7}$;

(2) $\begin{cases} xy + xy^2 = 12, \\ y + xy^2 = 18 \, ; \end{cases}$

(3) $\{(x-2)^2 - x\}^2 - (x-2)^2 = 90 - x$.

8. What is the price of eggs per dozen when 32 fewer in 7s. worth would raise the price 2d. a dozen ?

9. Extract the cube root of—
$x^9 - 6x^6 + 21x^4 - 44x^3 + 63x^2 - 54x + 27$.

10. Prove that when m and n are positive integers and $m > n$,

$$a^m \div a^n = a^{m-n}.$$
Divide $x^{\frac{7}{4}} - 2x^{\frac{5}{4}} - x^{\frac{3}{4}} - 3x^{\frac{1}{4}} + 6x^{-\frac{1}{4}} + 3x^{-\frac{7}{4}}$ by $x^{\frac{3}{4}} - 3x^{-\frac{1}{4}}$.

11. Find the roots α and β of the equation $ax^2 + bx + c = 0$.

Express $\dfrac{\alpha}{\beta} + \dfrac{\beta}{\alpha}$ and $\alpha^3 + \alpha^2\beta + \alpha\beta^2 + \beta^3$ in terms of a, b, and c.

12. Define the Arithmetic, Geometric, and Harmonic, means between two quantities.

There are four numbers, the first three of which are in Arithmetic progression, and the last three in Harmonic progression. Show that the four numbers are in proportion.

GEOMETRY.

Higher Grade.

Monday, 15th June.　12 noon to 2 p.m.

Candidates are not expected to attempt every question.

All ordinary symbols and contractions are allowed.

Care should be taken to omit no steps of the proofs, and to indicate the previous propositions, &c. on which they depend.

Figures should be accurately drawn, writing legible, and the different steps neatly arranged.

Attention to these points will secure additional marks.

1. If two triangles have two sides of the one respectively equal to two sides of the other, and have also the angles equal which are opposite to the greater of the given sides, the triangles shall be equal in every respect ?

If two triangles have two sides respectively equal, and the angles equal which are opposite to the lesser sides, what conclusion is to be drawn respecting the other angles ?

2. Equal triangles on the same base and on the same side of it are between the same parallels.

ABC is a fixed triangle ; find the locus of a point P which moves so that the sum of the triangles PAB, PAC is constant.

3. The square on the sum of two straight lines and the square on their difference are together equal to twice the sum of the squares on the two lines.

4. Draw a tangent to a circle from a given outside point.

A triangle is inscribed in one of two concentric circles and its sides touch the other. Show that the radius of the outer circle is double that of the inner.

5. Inscribe a square in a given circle.

Show that the difference between the square on the side of a regular octagon inscribed in a circle and a square inscribed in the same circle is equal to the rectangle contained by the radius and the side of the inscribed square.

6. If a straight line be drawn parallel to one side of a triangle, it shall cut the other sides, or these sides produced, proportionally.

ABC is a triangle, D is a point in AC such that $AD : DC = 4 : 3$, E is a point in AB such that $AE : EB = 5 : 2$; BD and CE meet in F; show that $BF : FD = 14 : 15$.

7. Similar polygons may be divided into the same number of similar triangles, having the same ratio to one another that the polygons have; and the polygons are to one another in the duplicate ratio of their homologous sides.

Describe a polygon which shall be similar to a given polygon, but shall have half its area.

8. Draw a straight line perpendicular to a given plane from a given point without it.

Find the plane which passes through a given straight line and has the least inclination to a given plane, and state the results in the particular cases when the given line is (1) parallel and (2) perpendicular, to the given plane.

9. If the mid-points of the opposite sides of a quadrilateral be joined by straight lines, these lines will bisect each other.

Each of the sides of a quadrilateral is divided into four equal parts, and the corresponding points of the opposite sides are joined by straight lines. Show that each of these lines is divided into four equal parts.

ELEMENTARY TRIGONOMETRY AND LOGARITHMS.

Higher Grade.

Friday, 19th June.   10 A.M. to 11.30 A.M.

Candidates are not expected to attempt every question. Ordinary contractions may be used.

All answers sent in should be written out fully and carefully, showing all steps of the work.

Figures should be accurately drawn, and writing should be legible and neatly arranged.

Attention to these points will secure additional marks.

1. What is the exact meaning of the statement that π is a measure of two right angles?

     Assuming that $\pi = \dfrac{\cdot 22}{7}$, how many yards of string, $\cdot 02$ of an inch in diameter, will be required to wind round and cover, for a length of 10 inches, the handle of a cricket bat, on an average $\cdot 98$ of an inch in diameter?

2. Define the cosine of an angle, and express the cosine in terms of each of the other trigonometrical ratios.

     If $\cos A = \dfrac{35}{37}$, find the values of each of the other ratios, and explain the double sign in some of your results.

3. Find a formula for all angles which have the same tangent.

     Hence, show that if the angles A and A' have the same tangent, and B and B' have the same tangent, then $A + B$ and $A' + B'$ will have the same tangent.

     Is a similar result true if the word tangent be altered to sine?

4. Assuming the formulæ

$$\sin(A+B) = \sin A \cos B + \cos A \sin B,$$
$$\cos(A+B) = \cos A \cos B - \sin A \sin B,$$

find the values of $\sin 2A$, $\cos 2A$, and $\cos 3A$.

     Hence, from the equation $\cos 3\theta = \sin 2\theta$, obtain the value of $\sin 18°$.

5. Prove the following identities :—

   (1) $\dfrac{\cos A - \cos 3A}{\sin 3A - \sin A} = \tan 2A$;

   (2) $\cos^2 A + \cos^2 B - 1 = \cos(A+B)\cos(A-B)$;

   (3) $\tan\left(\dfrac{\pi}{4} + A\right) + \tan\left(\dfrac{\pi}{4} - A\right) = 2 \sec 2A$.

6. In any triangle prove that

   (1) $\dfrac{\sin A}{a} = \dfrac{\sin B}{b} = \dfrac{\sin C}{c} = \dfrac{1}{2R}$,

where R is the radius of the circumscribing circle ;

   (2) $a = b \cos C + c \cos B$.

7. A square is circumscribed about a circle whose area is an acre. Find, with the aid of a table of logarithms, (1) the area of the square, and (2) the radius of the circle, correct to the nearest square foot and linear foot respectively, assuming $\pi = 3 \cdot 1416$.

8. The top of a mast, viewed from two stations on opposite sides of it, in a horizontal line through its base, and at a distance c from each other, has elevations α and β; find expressions for the height of the mast, and the distances of its base from the stations.

9. Find the angles B and C of a triangle, having given $b = 235$, $c=95$, $A=62°\ 34'$.

ALGEBRA.

Honours Grade.

Monday, 15th June. 3 p.m. to 4.30 p.m.

Candidates are not expected to answer every question, but all the work sent up should be fully and carefully written out. Additional marks will be given for neatness and good style.

1. If $\dfrac{1}{x}+\dfrac{1}{y}+\dfrac{1}{z}=0$, and $\dfrac{1}{x+a}+\dfrac{1}{y+a}+\dfrac{1}{z+a}=\dfrac{3}{a}$,

   prove that

   $$\frac{1}{yz}+\frac{1}{zx}+\frac{1}{xy}+\frac{3}{a^2}=0.$$

2. What is meant by mathematical induction ?
   Prove by induction that
   $$n^2-(n-1)^2+(n-2)^2-\ \cdots\ +(-1)^{n-1}1=1+2+3+\ \cdots\ +n.$$

3. When are four quantities said to be in proportion ?
   If a, b, c, d are unequal, and if
   $$\sqrt{(a^2+b^2)\ (c^2+d^2)}-\sqrt{(a^2+c^2)\ (b^2+d^2)}=(b-c)\ (d-a),$$
   then a, b, c, d are in proportion.

4. Solve the equations, giving all the roots :—
   $$\text{(1)}\quad x^2-y^2=5,$$
   $$y^2+2xy=3\ ;$$
   $$\text{(2)}\quad y+z+yz=\frac{a-c}{b+c},$$
   $$z+x+zx=\frac{b-a}{c+a},$$
   $$x+y+xy=\frac{c-b}{a+b}.$$

5. Prove that, if x is positive, the value of $x+\dfrac{a^2}{x}$ is least when $x=a$.

   In running an express train the cost for wear, tear, and engine power varies as the speed ; the cost for service, interest, &c., varies as the time occupied by the journey. When a train runs from London to Edinburgh at the rate of 30 miles an hour the cost is $75l.$; when it runs at the rate of 40 miles an hour the cost is $65l.$ Find the most economical rate and the least cost of the train.

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6. Prove the formula giving the number of arrangements of n different things r at a time.

Each of a set of cubes has its six faces painted respectively white, black, red, blue, green, and brown, so that no two cubes are alike, and every arrangement of the colours is used. How many cubes form the set?

7. Assuming the binomial theorem for an integral index, prove it for a fractional index.

Prove that

$$(1 - \frac{1}{8} + \frac{1.3}{8.16} - \frac{1.3.5}{8.16.24} + \cdots)(1 + \frac{1}{10} + \frac{1.3}{10.20} + \frac{1.3.5}{10.20.30} + \cdots) = 1$$

8. What are the respective conditions that the equation

$$ax^2 + 2hx + b = 0$$

should have real, equal, or imaginary roots? Prove that if the roots are real and unequal the expression $ax^2 + 2hx + b$ can have both positive and negative values, but if imaginary only the one or the other. What happens if the roots are equal? Illustrate your answers graphically.

9. Prove that the product of two complex numbers is, generally, a third complex number, and find the exceptional case.

If $(a + b\sqrt{-1})(c + d\sqrt{-1}) = U + V\sqrt{-1}$, prove that

$$(a - b\sqrt{-1})(c - d\sqrt{-1}) = U - V\sqrt{-1};$$

and deduce that $(a^2 + b^2)(c^2 + d^2)$ can be shown as the sum of two squares in two ways.

GEOMETRY.

HONOURS GRADE.

Monday, 15th June. 12 noon to 2 P.M.

Candidates are not expected to attempt every question.
All ordinary symbols and contractions are allowed.
Care should be taken to omit no steps of the proofs, figures should be accurately drawn, writing should be legible and work neatly arranged. Attention to these points will secure additional marks.

1. The line AB is divided at C and D so that the rectangles $AC \cdot AB$, $DB \cdot AB$ are each equal to the square on AD. Equal circles with centres A, B, and radii AD, BC, cut in P. Prove that the angles PAB, PBA are each one-fifth of two right angles.

2. A point P is taken so that the sides of a triangle ABC subtend equal angles at it. The lines AP, BP, CP, cut the circles circumscribing the triangles BPC, CPA, APB in Q, R, S respectively. Prove that $AQ = BR = CS$.

3. Show that it is possible to draw through each of two non-coplanar straight lines a single plane parallel to the other, and show that these two planes are parallel. Hence show how to construct the shortest distance between two such straight lines.

4. Explain the convention of signs in dealing with line segments, and prove that if A, B, C, D, be four collinear points then
$$AB \cdot CD + BC \cdot AD + CA \cdot BD = 0.$$

5. What is meant by the centroid of a triangle? G is the centroid of the triangle ABC; O is any point; AQ and QR are respectively equal to, parallel to, and in the same direction as OB, OC; prove that OR lies along OG, and is equal to three times OG in length.

6. Prove that the radius of a circle through the three escribed centres of a triangle is equal to the diameter of the circumscribing circle.

7. When do four points form a Harmonic Range?
   If A, B, C, D be four such points in order, prove that any circle through A and C is cut orthogonally by the circle on BD as diameter.

8. Define the radical axis of two circles, and prove that in general the radical axes of three circles taken two and two are concurrent, stating carefully the special cases that may occur.
   A circle passes through two fixed points, and cuts a given circle; prove that the common chord passes through a fixed point.

9. Prove that in general two circles have two centres of similitude, and state the exception.
   Prove also that two squares with their sides parallel, have, in general, two centres of similitude.

10. Define the polar of a given point with respect to a given circle.
    The radius through a point P, inside a circle, cuts its polar in Q; any line through P cuts the circle in XY; prove that XQ, YQ are equally inclined to PQ.

TRIGONOMETRY AND LOGARITHMS.

Honours Grade.

Friday, 19th June.   10 A.M. to 11.30 A.M.

Candidates need not attempt to answer all the questions, but all the work shown up should be carefully written, and no steps of the proofs should be omitted.

The necessary figures should be accurately drawn.

Attention to these points will secure additional marks.

1. Draw a curve, showing the variation in $\tan \theta$ as θ ranges between zero and 2π radians.
   Hence, or otherwise, show that the equation $\tan \theta = \theta$ has one root between π and $\frac{3\pi}{2}$, one between 2π and $\frac{5\pi}{2}$, one between 3π and $\frac{7\pi}{2}$, and so on.

2. Prove that

$$\cos(n+1) A + \cos(n-1) A = 2 \cos A \cos nA,$$

and hence show that

$$\cos 5A = 16 \cos^5 A - 20 \cos^3 A + 5 \cos A.$$

3. Write down the formula for all the angles that have a given cosine. Find all the angles less than π that satisfy the equation—

$$\cos 5\theta = 0.$$

Assuming the result of Question 2, obtain the values of $\cos \theta$ from the same equation, and compare your two sets of solutions.

4. Assuming that in any triangle

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c},$$

deduce the equality

$$a = b \cos C + c \cos B.$$

If O be a point within a triangle such that

$$\angle ABO = \angle BCO = \angle CAO = \theta,$$

prove that $\tan \theta = \dfrac{2ab \sin C}{a^2 + b^2 + c^2}.$

5. Show that the distance between the centres of the inscribed and circumscribed circles is $\sqrt{(R^2 - 2Rr)}$.
   If $R = 2r$, prove that the triangle is equilateral.

6. What is meant by an inverse function in Trigonometry ?
   If $\cos^{-1}x + \cos^{-1}y + \cos^{-1}z = \pi$, prove that $1 = x^2 + y^2 + z^2 + 2xyz$.

7. A traveller descending a straight road inclined at an angle γ to the horizon observes that the elevation of the summit of a mountain directly in front of him is α; at a distance c further on he observes that the elevation is β; find the height of the mountain above the second place of observation.
   If $\alpha = 20°$, $\beta = 30°$, $\gamma = 10°$, $c = 800$ feet, find the height to an inch.

8. Enunciate and prove Demoivre's theorem for a positive integral index ; and show that, if n be an integer, $\cos n\theta$ and $\sin n\theta$ can each be expressed as a rational homogeneous function of $\cos \theta$ and $\sin \theta$.
   Hence, or otherwise, show that

$$(x^4 - 6x^2y^2 + y^4)^2 + 16(xy^3 - x^3y)^2 = (x^2 + y^2)^4.$$

9. Sum the series

   (1) $\sec \theta \sec 2\theta + \sec 2\theta \sec 3\theta + \ . \ . \ + \sec n\theta \sec (n+1)\theta$;

   (2) $\sin \theta + \sin (\theta + \alpha) + \sin (\theta + 2\alpha) + \ . \ . + \sin (\theta + (n-1)\alpha)$,
   where $n\alpha = 2\pi$, and explain your result by a geometrical illustration.

ELEMENTS OF DYNAMICS.

Additional Mathematical Subject.

Friday, 19th June. 2 p.m. to 3.30 p.m.

Candidates need not attempt to answer all the questions. All the work should be written out fully and, carefully, giving all the steps of the proofs and the detailed work of the calculations. Additional marks will be given for neatness, good style, and carefully drawn figures.

The acceleration due to gravity may be taken as 32 feet per second per second.

1. Define *speed*.

   The hour hand of a clock is 3 inches long, and the minute hand is 5 inches; compare the average speeds of their extremities.

2. A particle is projected vertically upwards with a velocity of 40 feet per second. Find (1) how soon it will reach a height of 16 feet, and (2) the greatest height to which it will rise.

3. Enunciate the proposition known as the Triangle of Forces, and show how it may be deduced from the Triangle of Velocities.

   If a force of 7 units, acting in a given direction, be in equilibrium with forces of 5 and 6 units, give a geometrical construction to find the directions of these forces.

4. Define the centre of gravity of a rigid plane body, and explain an experimental method of finding its position.

   A uniform lamina, of irregular shape, has a triangle ABC drawn upon its surface and it is found that when the lamina is suspended from the middle point of AC, AC is horizontal, and that when it is suspended from the middle point of AB, AB is horizontal; find its centre of gravity, and show that when it is suspended from the mid-point of BC, BC will be horizontal.

5. Describe the common balance.

   A grocer has a balance the lengths of whose arms are in the proportion of 7 to 8. In order to weigh 14 lbs. of flour, he placed a 7-lb. weight first in one pan, and then in the other, and handed the customer both the counterbalancing quantities of flour. Find the gain in weight to the customer.

6. State the laws of statical friction, and define the coefficient of friction.

   A body, placed on a plane which rises 5 feet in 13 feet, measured along the plane, is just about to slip; find the coefficient of friction.

7. Define *density* and *specific gravity*.

   If the specific gravity of copper be 9, find the weight of 6·4 cubic inches of copper, assuming that the weight of a cubic foot of water to be 1000 ounces.

8. State Boyle's Law.

   A bladder contains 40 cubic inches of air when exposed to the pressure of the air; find its volume in cubic inches, correct to three decimal places, when sunk in water to a depth of 100 feet, assuming the height of the water barometer to be 33 feet.

HIGHER DYNAMICS.

ADDITIONAL MATHEMATICAL SUBJECT.

HIGHER GRADE AND HONOURS.

Friday, 19th June.   2 P.M. to 3.30 P.M.

Candidates need not attempt to answer all the questions. All the steps of the proof should be given, and any explanations which may be necessary should be added. Additional marks will be given for neatness, good style and careful figures.

Except in Question 3, the acceleration due to gravity may be taken as 32 feet per second per second.

1. Two coplanar forces of equal magnitude and in given fixed directions act at points A, B of a rigid body; show that however the body is moved in the plane of the forces their resultant passes through a fixed point in the body, and find this point.

2. Define the centre of mass of a body.

     At the vertices of a triangle are placed masses proportional to the opposite sides; show that their centre of mass is that of the inscribed circle.

3. State the third law of motion, and explain its application to Atwood's machine.

     In an Atwood machine, the weights at the beginning of an experiment were 23 ounces and 22 ounces respectively; after two seconds a weight of one ounce was removed from the heavier side, and in the next three seconds the weights moved four feet. What value does this experiment give for " g " ?

4. A train is intended to round a curve of 33 chains radius, at the rate of 45 miles an hour. Prove that there will be no side pressure on either rail if one of them (state which) is raised $3\frac{1}{2}$ inches, their distance apart being 4 feet 8 inches.

     If trains travel at 15 miles an hour above and below the proper speed, find the respective side ·pressures and their directions, due to the engines, weighing 36 tons, as they are rounding the curve.

5. Define Horse-power, Work, Coefficient of Friction.

     The pressure between the driving wheels of an engine and the rails is $12\frac{1}{4}$ tons, the coefficient of friction is ·05; what is the greatest pull the engine can exert on the level? If it exerts this pull in drawing a train 30 miles per hour, what is its horse-power ?

6. Show how to determine the velocities of two spherical balls of mass m, m', travelling in the same direction with velocities u, u', after direct impact; the so-called " coefficient of elasticity" being e, and state the experimental result of which you make use in your answer.

     A ball of mass 7 lbs., moving with a velocity of 13 feet per second, is overtaken by another ball moving with a velocity of 49 feet per second, which, after the impact, is reduced to rest. The coefficient of elasticity being $\frac{3}{4}$, find the mass of the second ball.

7. Prove that the curve of motion of a projectile in a vacuum is a parabola.

A golf ball, projected at an elevation of 30°, falls at a distance of 200 yards ; neglecting the resistance of the air, find its initial velocity, and the distance it would have cleared if the elevation had been 45°.

8. Distinguish between whole pressure and resultant pressure of a liquid on the surface of a solid.

A rectangular tank, 10 feet by 6 feet, and 3 feet deep, is filled with water ; find the whole pressure on the tank and the resultant pressure on each of its sides, assuming that a cubic foot of water weighs a thousand ounces.

Find also the centre of pressure on each side.

9. Define the metacentre of a floating body, and explain the importance of its position.

A long thin test tube floats empty, with one-third of its volume immersed. Show that the least quantity of water that must be poured in to make it float upright will cause it to float with two-thirds its volume immersed.

GEOMETRICAL CONICS.

ADDITIONAL MATHEMATICAL SUBJECT.

HIGHER GRADE AND HONOURS.

Friday, 19th June.   4 P.M. to 5.30 P.M.

Candidates need not attempt to answer all the questions, but all work sent in should be full and careful, and no steps of the proofs, or explanations of the constructions, should be omitted. Figures should be accurately drawn. Attention to these points will secure additional marks. All ordinary symbols and contractions are allowed.

1. In the parabola prove that $PN^2 = 4AS \cdot AN$.

If the ordinate NP be produced to P', so that $NP'^2 = 2NP^2$, show that the locus of P' is a parabola, and find its focus and directrix.

2. Prove that the focal chord which is bisected by a diameter of a parabola, is equal to four times the focal distance of the extremity of that diameter.

Show how to inscribe in a parabola a focal chord of a given length.

3. Draw two tangents OP, OQ to a parabola from an external point O, and show that the angle OPS is equal to the angle QOS.

ABC is a triangle right-angled at A, and S is a point in BC. If points P and Q be taken in AB and AC, so that PSQ is a right angle, show that PQ always touches a fixed parabola, whose focus is S, and find the directrix of this parabola.

4. Prove that in any central conic $CS \cdot CX = CA^2$.

Hence show that any circle which passes through S and X, and the circle which is described on the major axis as diameter, cut each other orthogonally.

5. Prove that in an ellipse $SP : ST = CA : CT$, and show that if the auxiliary circle cut the tangent in Q and Q', CQ and CQ' are parallel to SP and $S'P$.

6. Define a hyperbola and an asymptote, and from your definition prove that the hyperbola has two asymptotes.
    Show that each of the asymptotes may be regarded as a diameter which coincides with its conjugate diameter.

7. A chord PP' of a hyperbola meets the asymptote in Q and Q'; prove that $QP = Q'P'$.
    A and B are fixed points on the curve, P is any other point on the curve, PA and PB meet an asymptote in Q and R; show that QR is of constant length.

8. Show that an oblique section of a circular cylinder in an ellipse, whose foci are the points of contact of spheres that are inscribed in the cylinder, and touch the plane of section.

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ANALYTICAL GEOMETRY.

Additional Mathematical Subject.

Higher Grade and Honours.

Friday, 19th June.   12 noon to 1.30 p.m.

Candidates need not attempt to answer all the questions, but all the work should be very carefully written, and no steps of the proofs should be omitted. The answers should be accompanied by carefully drawn figures. Attention to these points will secure additional marks.
The co-ordinate axes may be assumed to be rectangular throughout.

1. Find the length of the straight line joining the points (a, b), (c, d).
    Prove that the points $(3, 2)$, $(1, 0)$, $(2 - \sqrt{3}, 1 + \sqrt{3})$, are the vertices of an equilateral triangle.

2. Obtain the equation to a straight line in terms of the intercepts a, b which it makes on the axes.
    Find the equation to the straight line which passes through the origin and through the mid-point of the part of the above line intercepted by the axes.

3. Find the tangent of the angle between the lines joining (x, y) to (h_1, k_1), (h_2, k_2).
    Hence find the locus of a point P at which two given segments of a straight line subtend equal angles.

4. Find the perpendicular distance of the point (h, k) from the line $ax + by + c = 0$.
    Hence, or otherwise, obtain the equations to the two lines which bisect the angles formed by the lines $3x + 4y = 12$, and $5x - 12y = 20$.

5. Prove that the equation $ax^2 + 2hxy + by^2 = 0$ represents two straight lines, and find the tangent of the angle between them.

6. Show how to change from one set of rectangular co-ordinates to another set with the same origin.

Transform the equation $x^3 + y^3 = a^3$ to another set of rectangular axes which have revolved in a negative direction through an angle $\frac{\pi}{4}$ from the given axes.

7. Find the equation to the tangent to the circle $x^2 + y^2 = a^2$ at a point (x', y').

Hence find the condition that the line $lx + my = a$ should touch the given circle.

Show that the line $x(1 - t^2) + 2yt = a(1 + t^2)$ is a tangent to the above circle for all values of t, and find the co-ordinates of the point of contact.

BOOK-KEEPING.

Wednesday, 17th June. 2 P.M. to 4.30 P.M.

Charles Mitchell, having purchased the Iron Founding business of J. Strachan & Co., Aberdeen, finds his Assets and Liabilities at 1st January, 1895, to be :—

ASSETS.

	£	s.	d.
Premises - - - - -	1,370	0	0
Manufactured Goods - - -	2,375	0	0
Pig-Iron - - - - -	570	0	0
Sundry Goods (used in manufacturing) -	335	0	0
Goodwill - - - -	350	0	0
Town and County Bank - - -	4,500	0	0
Cash on hand - - - -	50	0	0
	£9,550	0	0

LIABILITIES.

	£	s.	d.
Capital - - - - -	4,550	0	0
J. Strachan & Co. - - - -	5,000	0	0
	£9,550	0	0

He makes the following transactions :—

1895.			£	s.	d.
January	1.	Paid J. Strachan & Co., to account (by cheque)	4,000	0	0
„	2.	Cash lodged in Bank - - - -	30	0	0
„	„	Sold Ramsay & Taylor, manufactured goods, invoiced at - - - - -	690	10	0
„	4.	Sold A. Rutherford, manufactured goods, invoiced at - - - - -	865	12	6
„	20.	Purchased from John Williamson & Co., pig-iron, invoiced at - - - -	320	5	0
„	31.	Purchased from William Crawford, sundry goods, invoiced at - - - -	125	6	8
February 4.		Received from Ramsay & Taylor - -	621	9	0
		Discount allowed them - - - -	69	1	0
„	„	Received from A. Rutherford, to account -	100	0	0
„	„	Above amounts received to-day, lodged in Bank	721	9	0
„	15.	Sold Ramsay & Taylor, manufactured goods, invoiced at - - - - -	422	7	6
„	„	Sold A. Rutherford, manufactured goods, invoiced at - - - - -	270	2	6
„	20.	Purchased from John Williamson & Co., pig-iron, invoiced at - - - -	210	3	0
„	„	Purchased from William Crawford, sundry goods - - - - -	62	7	0
„	27	Paid for repairs to premises (by cheque) -	23	9	6
„	28	Borrowed from A. Kinnaird, bearing interest at 5 per cent. - - - - -	500	0	0
„	„	Same lodged in Bank - - - -	500	0	0
„	„	Paid John Williamson & Co.'s January account (by cheque) - - - - -	288	4	6
		Discount allowed by them - - -	32	0	6
March	1.	Paid J. Strachan & Co. (by cheque) - -	1,008	6	8
„	3.	Paid William Crawford his account (by cheque)	168	18	4
		Discount allowed by him - - -	18	15	4
„	31.	Cheque drawn for cash - - - -	250	0	0
„	„	Paid wages (in cash) - - - -	235	4	0
„	„	Paid Insurance (in cash) - - -	15	15	6

On 31st March, Charles Mitchell shows his goods on hand as follows :—

				£	s.	d.
Manufactured Goods	-	-	-	1,341	3	8
Pig-Iron -	-	-	-	490	3	0
Sundry Goods	-	-	-	320	5	0

Open Ledger Accounts for and enter therein the Assets and Liabilities at 1st January, 1895.

Record the above transactions in a Day-Book, a Cash-Book (columnar one recommended), and an Invoice-Book.

Frame Journal entries for the following :—

March 1. Allow J. Strachan & Co. Interest on £1,000 for 2 months, at 5 per cent. (£8 6s. 8d.).

March 31. Allow for Interest, at 5 per cent., to A. Kinnaird, on £500 for 1 month (£2 1s. 8d).

Write £50 off goodwill.

Post all the entries to Ledger Accounts. Separate Ledger Accounts should be opened for each class of expenditure, viz.: Wages, Insurance, &c.)

Frame a Profit and Loss Account (or a Trading Account and a Profit and Loss Account), and carry the balance to the debit or credit of Charles Mitchell's Capital Account. Then frame a Balance Sheet.

[The Balances (or balancing entries) in the Ledger Accounts should all be filled in and the Accounts closed and ruled off.]

(Candidates are only desired to journalize the entries which are not suitable to enter in the Day, Cash, and Invoice-Books. No marks will be given for the journalizing of entries which should be entered in these books.)

COMMERCIAL ARITHMETIC—First Paper.

Thursday, 18th 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.

Add the *columns* placing the answers in the spaces provided. More importance will be attached to accuracy than to quickness.

Fill this in first { Name of School_____

Name of Pupil_____

£	s.	d.	tons	cwts.	qrs.	lb.	oz.	miles	fur.	poles	yds.	ft.	in.
941,338	16	4½	4	16	3	24	15	742	2	14	3	0	6
216,727	8	4	31	10	2	18	9	516	4	35	2½	0	0
928,156	10	9¾	12	10	3	16	10	3	6	31	4	2	8
4,789	14	11¼	26	3	2	0	8	831	3	20	2	1	10
198,876	18	4	2	4	0	6	14	2	5	17	4½	0	0
759	16	7	8	12	0	15	10	251	1	23	3	2	4
385,624	16	9½	49	16	2	10	8	6	0	24	1	0	8
343,976	14	11	16	13	1	3	9	—	4	36	3½	0	0
93	17	4½	—	14	2	23	12	494	0	38	5	0	4
837,926	0	5	—	—	1	18	14	15	2	0	0	1	9
168,591	15	10¾	62	18	3	9	0	30	6	26	4	1	10
227,197	12	8	31	6	2	16	8	137	7	19	3	2	8
938,946	16	8	82	15	1	5	12	—	7	36	4½	0	0
2,839	19	7	30	13	0	27	13	641	4	0	4	2	3
490,766	14	9¼	—	—	—	25	8	16	4	26	2	2	10
24,635	2	10½	—	16	2	7	14	231	6	39	3	2	2
76,298	10	6	81	3	1	21	2	8	2	2	5	0	7
328,903	2	10	32	10	3	18	15	346	5	37	2½	0	0
18,795	1	6¾	26	4	0	14	6	212	4	25	0	0	10
230,682	15	8	18	10	3	16	15	44	2	16	0	0	5
919,326	9	2	14	15	2	19	4	304	5	2	3	2	11