GEB. 16.

SCOTTISH EDUCATION DEPARTMENT

SCOTTISH
LEAVING CERTIFICATE
EXAMINATION

EXAMINATION PAPERS

1952

SCOTTISH EDUCATION DEPARTMENT—1952

The following is a List of some of the more important Official Publications of the Department. They cannot be purchased from this Office, but may be obtained, either directly from HER MAJESTY'S STATIONERY OFFICE (Scottish Branch), 13A Castle Street, Edinburgh, 2, or through any bookseller. All prices are net, those in brackets include postage.

1. STATUTORY INSTRUMENTS

(a) Primary and Secondary Education

Education (Scotland) Act, 1945 (Appointed Days). S.R. & O., 1945, No. 787, S.30. 1d. (2¼d.).
The Education (Scotland) Act, 1946 (Commencement No. 2) Order, 1951. S.I. 1951, No. 110 (C.I.) S.4. 2d. (3½d.).
The Schools (Scotland) Code, 1950, S.I. 1950. No. 915, S.62. 4d. (5½d.).
The Schools Registration (Scotland) Rules, 1951. S.I. 1951, No. 569, S.29. 4d. (5½d.).
The Pupil's Progress Record (Scotland) Rules, 1951. S.I. 1951, No. 694, S.33. 6d. (7½d.).
The School Leaving Record (Scotland) Rules, 1951. S.I. 1951, No. 896, S.52. 3d. (4½d.).

(b) Further Education

Adult Education (Scotland) Regulations, 1934. S.R. & O., 1934, No. 1343, S.72. 2d. (3½d.).
Code of Regulations for Continuation Classes in Scotland, 1936. S.R. & O., 1936, No. 791, S.28. 2d. (3½d.).
Adult Education (Scotland) Regulations (Amendment), 1940. S.R. & O., 1940, No. 742, S.29. 1d. (2½d.).
Continuation Classes (Scotland) Consolidation Order, 1943, S.R. & O., 1943, No. 1270, S.42. 1d. (2½d.).
Compulsory Further Education (Appointed Day) (No. 1) Order, 1948. S.I. 1948, No. 2010, S.165 1d. (2½d.).
The Central Institutions (Scotland) Recognition (No. 1) Regulations, 1950. S.I. 1950, No. 1757, S.123. 1d. (2½d.).

(c) Bursaries and Scholarships

The Education Authority Bursaries (Scotland) Regulations, 1949. S.I. 1949, No. 1489, S.106. 4d. (5½d.).
The Supplemental Allowances (Scottish Scholars at English Universities) Regulations, 1949. S.I. 1949, No. 818, S.43. 1d. (2½d.).
The Supplemental Allowances (Scottish Scholars at English Universities) (Amendment No. 1) Regulations, 1950. S.I. 1950, No. 466, S.34. 1d. (2½d.).
The Education (Scotland) Fund Bursaries Regulations, 1950. S.I. 1950, No. 1014, S.77. 1d. (2½d.).

(d) Teachers : Training, Salaries and Superannuation

Regulations for the Preliminary Education, Training and Certification of Teachers for Various Grades of Schools, 1931. S.R. & O., 1931, No. 180, S.20. 5d. (6½d.).
Regulations for the Preliminary Education, Training and Certification of Teachers for Various Grades of Schools (Scotland) (Amendment) Minute, 1940. S.R. & O., 1940, No. 1728, S.83. 2d. (3½d.).
Training of Teachers (Scotland) Regulations, 1947. S.R. & O., 1947, No. 128, S.5. 1d. (2½d.).
Training of Teachers (Scotland) Regulations, 1949. S.I. 1949, No. 1909, S.129. 2d. (3½d.).
The Teachers' Salaries (Scotland) Regulations, 1948. S.I. 1948, No. 611, S.43. 6d. (7½d.).
The Teachers' Salaries (Scotland) Provisional Amending Regulations, 1948. S.I. 1948, No. 2290, S.184. 1d. (2½d.).
The Teachers' Salaries (Scotland) Provisional Amending Regulations, 1949. S.I. 1949, No. 1580, S.110. 1d. (2½d.).
The Teachers' Salaries (Scotland) Regulations, 1951. S.I. 1951, No. 460, S.16. 1s. (1s. 2d.).
The Teachers' Salaries (Scotland) (Amendment No. 1) Provisional Regulations, 1951. S.I. 1951, S.58. 2d. (3½d.).
The Teachers' Pensions (National Insurance Modifications) (Scotland) Regulations, 1948. S.I. 1948, No. 944, S.67. 3d. (4½d.).
The Teachers' Superannuation (War Service) (End of Emergency) Order, 1949. S.I. 1949, No. 842. 1d. (2½d.).
The Superannuation (Civil Servants and Teachers) (Scotland) Rules, 1950. S.I. 1950, No. 820, S.55. 3d. (4½d.).
The Superannuation (Teaching and Local Government) (Scotland) Rules, 1951. S.I. 1951, No. 292, S.11. 6d. (7½d.).
The Superannuation (Teaching and Health Education) (Scotland) Rules, 1951. S.I. 1951, No. 1355, S.71. 3d. (4½d.).
The Superannuation Scheme for Teachers (Scotland), 1952, Approval Order, 1952. S.I. 1952, No. 464. 1s. 3d. (1s. 4½d.).
The Superannuation Rules for Teachers (Scotland), 1952. S.I. 1952, No. 567, S.20. 6d. (7½d.).
The Teachers' Pensions (National Service) (Scotland) Rules, 1952. S.I. 1952, No. 518, S.17. 3d. (4½d.).

(e) Grant Regulations

The Adult Education (Scotland) (Residential Institutions) Grant Regulations, 1951. S.I. 1951, No. 740, S.38. 2d. (3½d.).
Education (Scotland) Teachers' Superannuation Grant Regulations, 1928. No. 951, S.49. 1d. (2½d.).
Educational Development, Research and Services (Scotland) Grant Regulations, 1946. S.R. & O., 1946, No. 1267, S.53. 1d. (2½d.).

SCOTTISH EDUCATION DEPARTMENT

SCOTTISH
LEAVING CERTIFICATE
EXAMINATION

EXAMINATION PAPERS
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EXAMINATION PAPERS

APPENDIX

SCOTTISH LEAVING CERTIFICATE EXAMINATION

The Scottish Leaving Certificate Examination is held annually by the Scottish Education Department. In 1952 it commenced on Tuesday, 11th March.

For information as to the purpose and scope of the Examination, and as to the conditions on which pupils (of Scottish schools) may be presented, reference should be made to the Department's circular 30 (1951), dated 12th Dec. 1951. (Price 1s. 3d.; post free 1s. $4\frac{1}{2}d$.)

Note:—Further copies of the Ordnance Survey map extract used in the Higher Geography First Paper may be purchased direct from the Ordnance Survey Office, Leatherhead Road, Chessington, Surrey.

EXAMINATION PAPERS

ENGLISH

Lower Grade—(First Paper—Composition)

Wednesday, 12th March—9.30 a.m. to 10.30 a.m.

The value attached to the question is shown in brackets after the question.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

The title must be copied out accurately, as printed in the paper.

Write a Composition *of about three foolscap pages in length* on any *one* of the following subjects :—

(a) A description of a river *or* a village *or* a historic ruin *or* a factory which you know well.

(b) An account of a difficult or troublesome journey which you have made.

(c) " My ideal school day ".

(d) The attractions and drawbacks of the career of any *one* of the following :—

a musician, an inventor, an explorer, a sportsman or sportswoman, an actor or actress.

(35)

ENGLISH

LOWER GRADE

(SECOND PAPER—INTERPRETATION, LANGUAGE, AND LITERATURE)

Wednesday, 12th March—11.0 A.M. to 1.0 P.M.

All candidates should attempt FOUR questions, namely, questions No. 1 and 2 and any TWO of the others.

The value attached to each question, or to each part of a question, is shown in brackets after the question.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. For several miles beyond Gaza the land, freshened by the rains of the last week, was covered with rich verdure, and thickly jewelled with meadow flowers so bright and fragrant that I began to grow almost uneasy—to fancy that the very desert was receding before me, and that the long-desired
5 adventure of passing its " burning sands " was to end in a mere ride across a field. But as I advanced, the true character of the country began to display itself with sufficient clearness to dispel my apprehensions; and before the close of my first day's journey I had the gratification of finding that I was surrounded on all sides by a tract of real sand, and had nothing at all to complain of, except
10 that there peeped forth at intervals a few isolated blades of grass, and many of those stunted shrubs which are the accustomed food of the camel. Before sunset I came up with an encampment of Arabs, and my tent was pitched among theirs. I was now amongst the true Bedouins. Almost every man of this race closely resembles his brethren ; almost every man has large and finely-formed
15 features, but his face is so thoroughly stripped of flesh, and the white folds from his head-gear fall down by his haggard cheeks so much in the burial fashion, that he looks quite sad and ghastly ; his large dark orbs roll slowly and solemnly over the whites of his deep-set eyes ; his countenance shows painful thought and long suffering—the suffering of one fallen from a high estate. His
20 gait is strangely majestic, and he marches along with his simple blanket, as though he were wearing the purple.

A. W. Kinglake.

Read through the passage printed above and then answer the following questions on it :—

(a) Express in your own words the meaning of each of the following phrases **as they are used in the passage** :—
dispel my apprehensions (line 7) ; *in the burial fashion* (lines 16 and 17) ; *fallen from a high estate* (line 19) ; *wearing the purple* (line 21). (8)

(b) Explain carefully either in single words or in equivalent phrases the meanings of the following words **as they are used in the passage** :—
jewelled (line 2) ; *receding* (line 4) ; *isolated* (line 10) ; *stunted* (line 11) ; *haggard* (line 16) ; *gait* (line 20). (6)

(c) Give a general analysis into clauses of the last sentence.— *His gait . . . the purple.* **(3)**

(d) Form adjectives from *verdure* (line 2), *character* (line 6). **(2)**

(e) What picture of a desert had been in the writer's mind ? Why was he at first disappointed, and how far did the first day's journey satisfy him ? **(6)**

(f) What details contributed to the sad appearance of the Bedouins ? **(5)**

(g) Show that the dwellings and dress of the Bedouins were adapted to life in the desert. **(5)**

(h) At what point should the passage be divided into two paragraphs ? Suggest a title for each paragraph. **(3)**

2. (a) Write down the past tense of the verbs *occur, lead, pay, try.* **(2)**

(b) Rewrite the following passage correctly, with the addition of all the proper marks of punctuation :—

> although it has long been a favourite among childrens books gullivers travels was originally written for adults its author jonathan swift was a great satirist perhaps the greatest in the history of english literature **(5)**

3. Give an account of a scene in any Shakespearian play that presents *one* of the following :—

> A play within a play ; a shipwreck ; a woman disguised as a man ; madness ; fairies ; a murder ; the forming of a conspiracy. **(10)**

4. Mention one or two poems that you have read dealing with one of the following subjects and write an account of any *one* of the poems that you choose :—

> the sea ; birds ; battles ; village life ; the supernatural. **(10)**

5. Describe as vividly and interestingly as you can an incident selected from a novel by any *one* of the following :—

> Scott, Stevenson, Hugh Walpole, Mary Webb, D. K. Broster, Francis Brett Young, Jack London, Rudyard Kipling. **(10)**

6. Write a short appreciation of a humorous character in any book you have read. **(10)**

7. Give an account of any book which has helped to arouse your interest in scientific discovery, *or* in travel, *or* in some trade or profession. **(10)**

ENGLISH

HIGHER GRADE—(FIRST PAPER (*a*)—COMPOSITION)

Wednesday, 12th March—9.30 A.M. to 10.30 A.M.

The value attached to the question is shown in brackets after the question.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

The title must be copied out accurately, as printed in the paper.

Write a composition of *about three pages in length* on any *one* of the following subjects :—

(*a*) The housing shortage.

(*b*) What famous Scotsman or Scotswoman of past ages would you like to have known, and why ?

(*c*) A description of a busy thoroughfare in a town or city *or* a village church *or* a second-hand bookshop *or* a railway station *or* a country lane in springtime.

(*d*) The salient qualities that you would expect to find in a person who is considered to have the gift of leadership *or* to possess good taste *or* to be a real sportsman.

(*e*) A broadcast talk that you would like to give.   **(35)**

ENGLISH

HIGHER GRADE—(FIRST PAPER (*b*) INTERPRETATION AND LANGUAGE)

Wednesday, 12th March—11.0 A.M. to 12.40 P.M.

Answer Questions 1, 2 and 3.

The value attached to each question, or to each part of a question, is shown in brackets after the question.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. There is no species of humour in which the English more excel than in that which consists in caricaturing and giving ludicrous appellations or nicknames.   In this way they have whimsically designated, not merely individuals, but nations ; and, in their fondness for pushing a joke, they have not spared
5 even themselves.   One would think that, in personifying itself, a nation would be apt to picture something grand, heroic, and imposing ; but it is characteristic of the peculiar humour of the English, and of their love for what is blunt, comic, and familiar, that they have embodied their national oddities in the figure of a sturdy, corpulent old fellow, with a three-cornered hat, red waistcoat, leather
10 breeches, and stout oaken cudgel.   Thus they have taken a singular delight in exhibiting their most private foibles in a laughable point of view ; and have been so successful in their delineations that there is scarcely a being in actual existence more absolutely present to the public mind than that eccentric personage to whom we refer as John Bull.   Perhaps the continual contemplation of the
15 character thus drawn of them has contributed to fix it upon the nation, and thus to give reality to what at first may have been painted in a great measure from the imagination.   Men are apt to acquire peculiarities that are continually ascribed to them.   The common orders of English, especially the genuine sons of the soil, seem wonderfully captivated with the *beau idéal* which they have
20 formed of John Bull, and endeavour to act up to the broad caricature that is

perpetually before their eyes. If one of them should be a little uncouth in speech, and apt to utter impertinent truths, he confesses that he is a real John Bull and always speaks his mind. If he betrays a coarseness of taste, and an insensibility to foreign refinements, he thanks Heaven for his ignorance—he is a
25 plain John Bull, and has no relish for frippery and nicknacks. His very proneness to be gulled by strangers, and to pay extravagantly for absurdities, is excused under the plea of munificence—for John is always more generous than wise. Thus, under the name of John Bull, he will benefit himself by arguing every fault into a merit, and will frankly convict himself of being the honestest
30 fellow in existence.

Washington Irving (slightly adapted).

Read through the passage printed above, and then answer the following questions on it :—

1. (*a*) Express in your own words the meaning of the following phrases as they are used in the passage :—

> *have whimsically designated* (line 3) ; *have embodied their national oddities* (line 8) ; *more absolutely present to the public mind* (line 13) ; *no relish for frippery and nicknacks* (line 25). **(8)**

(*b*) Give the meaning of the following words as they are used in the passage :—

> *imposing* (line 6) ; *foibles* (line 11) ; *uncouth* (line 21) ; *munificence* (line 27) ;

and find a single word to express the idea conveyed by each of these phrases :—

> *a person insensible to refinement* (lines 23–24) ; *a person prone to be gulled* (lines 25–26). **(6)**

(*c*) (i) State the kind and relation of each of the following clauses :—

> *that they have embodied . . . cudgel* (lines 8–10) ;
> *that there is scarcely . . . public mind* (lines 12–13) ;
> *what at first . . . imagination* (lines 16–17) ;
> *that he is a real John Bull* (lines 22–23).

(ii) Write down the past participles of :—

> *excel, speak, refer, benefit.* **(10)**

(*d*) Into how many sections does the passage naturally fall ? Indicate where the divisions come by giving the first two or three words of each section. **(3)**

(*e*) Express in your own words, as clearly and tersely as possible, the idea conveyed in lines 14–17, " *Perhaps the continual . . . imagination* ". **(4)**

(*f*) Make a summary of the passage in two paragraphs, explaining in the first how the conception of John Bull originally arose, and giving in the second a description of this character. **(14)**

2. (*a*) Combine the following statements as neatly as you can into a complex sentence :—

The traveller emerged from the devious path.
The path led through a thicket.
He found himself on a flat ledge of rock.
The ledge projected over one side of a precipice.
A mountain stream fell steeply down the precipice.
The stream was swallowed up by a black, yawning gulf. **(6)**

(*b*) Explain **so as to bring out their full meaning** any *five* of the following phrases :—

> *a forlorn hope ; conspicuous by his absence ; cutting the Gordian Knot ; the child is father of the man ; a charitable conclusion ; a congenital idiot ; castles in the air ; lynch law.* **(10)**

3. Select any *four* of the following passages, and name the figure of speech contained in each of them.

(*a*) My life has crept so long on a broken wing.

(*b*) Or stain her honour or her new brocade,
Or lose her heart or necklace at a ball.

(*c*) There were gentlemen and there were seamen in the navy of Charles the Second.   But the seamen were not gentlemen, and the gentlemen were not seamen.

(*d*) . . . altar, sword, and pen,
Fireside, the heroic wealth of hall and bower
Have forfeited their ancient English dower
Of inward happiness.

(*e*) Close by the regal chair
Fell Thirst and Famine scowl
A baleful smile upon their baffled Guest.

(*f*) Nor dim nor red, like God's own head,
The glorious sun uprist.   **(4)**

ENGLISH

Higher Grade—(Second Paper—Literature)

Wednesday, 12th March—2.0 P.M. to 3.30 P.M.

All candidates should attempt THREE questions, namely, question No. 1 and ANY TWO of the others.

The value attached to each question is shown in brackets after the question.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

> **Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.**

All candidates should attempt THREE *questions, namely, question No. 1 and ANY TWO of the others.*

1. (*a*) By reference to their words and actions bring out as clearly as you can the contrast between the two Shakespearian characters that form any *one* of the following pairs :—

> Richard II and Henry Bolingbroke ; Rosalind and Celia ; Olivia and Viola ; Brutus and Cassius ; Macbeth and Lady Macbeth ; Queen Gertrude and Ophelia ; Goneril and Regan ; Ariel and Caliban ; Leontes and Polixenes.

Or

(b) What is meant by a soliloquy ? Choose a soliloquy from any Shakespearian play that you have studied, explain the circumstances that evoked the utterance, and give the substance of the speaker's remarks, illustrating, where appropriate, by quotation.

Or

(c) " I am a man more sinned against than sinning ". Choose any *one* of Shakespeare's tragic heroes and say to what extent you consider that his sufferings were undeserved. **(20)**

2. (a) " Chaucer is never completely hostile to any of his creatures ". From your knowledge of *The Prologue* show how Chaucer always finds some good to say of even his least attractive characters.

Or

(b) Give a detailed account of an incident from any *one* of *The Canterbury Tales* that has specially appealed to you. Mention some of the devices that Chaucer uses to catch and maintain your interest. [*N.B.—The Prologue* is not to be taken as one of *The Canterbury Tales*.] **(15)**

3. Select any *one* of the following works, give the author's name and say when he lived, and then give a short account of the work selected :—

> *The Pilgrim's Progress, The Spectator, Journal of a Tour to the Hebrides, Annals of the Parish, Reflections on the Revolution in France, Natural History of Selborne, Essay on Milton, Heroes and Hero Worship, Eothen, Eminent Victorians, Laughter in the Next Room.* **(15)**

4. Illustrate from your reading of Milton his delight in the sights and sounds of the countryside. **(15)**

5. " Scott's heroes and heroines are, with some striking exceptions, less interesting and more conventional than the other characters, which at their best are creations of genius." Discuss this statement with reference to any *one* of *The Waverley Novels* which you have studied. **(15)**

6. What do you find interesting and enjoyable about any *one* of the following :—Burns's songs ; Wordsworth's sonnets ; Keats's odes ; Tennyson's classical poems ? **(15)**

7. Select from the Bible two passages (one from the Old Testament and the other from the New Testament) with which you are familiar. Write a short appreciation of the passages, mentioning the features in them that you have found specially impressive. **(15)**

8. Give an account of any *one* of the following poems under the headings of (a) theme, (b) style, (c) versification :—

> *Prothalamion, The Rape of the Lock, The Bard, Michael, The Ancient Mariner, My Last Duchess, The Scholar Gipsy, The Blessed Damozel, The Hound of Heaven, The Ballad of the White Horse.* **(15)**

9. Write a brief character sketch of any *one* of the following, giving the title of the book (or books) in which the character appears and the name of the author :—

Mr. Murdstone, Mr. Collins, Becky Sharp, Sarah Gamp, Heathcliff, Giles Winterbòrne, Kipps, Long John Silver, Hercule Poirot. **(15)**

10. What prose book that is not included in your school syllabus would you like to study ?   Give reasons for your choice.   **(15)**

HISTORY

LOWER GRADE

Thursday, 13th March—9.30 A.M to 12 NOON

All candidates must attempt FIVE questions, viz., Section 1 and FOUR other questions selected from any part or parts of the paper.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION 1 *(to be attempted by all candidates)*   *Marks*
(See separate sheet provided for this section.)   20

SECTION 2 (55 B.C. *to* A.D. 1714)

1. How do you account for the power of the barons in the reign of Stephen ?   5

What steps were taken by Henry II to increase the royal power at their expense ?   15

2. Write notes on *two* of the following :—Roman roads in Britain, the main steps in the unification of Scotland, life in a medieval monastery, the Crusades, John Balliol, Henry V.   20

3. Why is the reign of James IV of importance in the history of Scotland ?   20

4. Describe the main voyages of discovery undertaken in the fifteenth century and the first half of the sixteenth century.   20

5. Describe Elizabeth's religious settlement and explain her treatment of Catholics and Puritans.   20

6. Give an account of the disagreements between Charles I and Parliament in the years 1625–1629.   20

Marks

7. Describe the part played by the Scots in British affairs from the signing of the National Covenant (1638) to the execution of Charles I (1649).   20

8. What features in English government and religion were restored in 1660 and the following years till the fall of Clarendon ?   20

9. Give an account of the foreign policy of William III, explaining his objects.   20

SECTION 3 (1714 *to the present day*)

10. In what circumstances did European trading companies become powerful in India in the first half of the eighteenth century ?   5

Outline the main events in the struggle between the British and the French in India up to the Treaty of Paris (1763).   15

11. Give an account of the agrarian revolution *either* in England *or* in Scotland.   20

12. How did the younger Pitt deal with the problems that faced him as prime minister before the outbreak of the French war ?   15

Do you consider that what he achieved at that time constitutes his chief claim to fame ?   5

13. " A period of reform."   Is this a fair description of the period 1833–1841 in domestic affairs ?   20

14. What were the causes of dispute between Britain and Russia that led to the Crimean War ?   15

How far did Britain gain her ends by the Peace of Paris ?   5

15. Describe the main reforms (excluding measures relating to Ireland) carried out during the ministries of Gladstone.   20

16. What were the developments in international affairs that led Britain to abandon her policy of " splendid isolation " at the beginning of the present century ?   20

17. Write notes on *two* of the following :—Walpole's Excise Bill, the American Declaration of Independence, the Peninsular War, the Durham Report, the Great Exhibition of 1851, Cecil Rhodes, the Parliament Act of 1911, Woodrow Wilson.   20

18. (*a*) Describe and account for the part played by the United States of America in world affairs since 1945.

or (*b*) Outline the principal domestic measures passed by the British parliament since the conclusion of hostilities in 1945.

or (*c*) What evidence is there of a revival of national sentiment in Scotland during the present century ?   20

HISTORY

HIGHER GRADE

(FIRST PAPER—BRITISH HISTORY)

Thursday, 13th March—9.30 A.M. to 12 NOON

All candidates must attempt FIVE questions, viz., Section I and FOUR questions selected from any part or parts of the paper.

20 *marks are assigned to each question.*

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION 1 (*to be attempted by all candidates*)
(See separate sheet provided for this section.)

SECTION 2 (55 B.C. *to* A.D. 1485)

1. Show in what parts of Britain the Angles, Saxons and Jutes formed their early kingdoms and estimate the importance of their coming for British history.

2. For what reasons is the reign of Henry I of importance in English history ?

3. Trace the development of the English parliament in its composition and its powers in the thirteenth and fourteenth centuries.

4. Why were the English successful against France in the reign of Henry V but unsuccessful in that of Henry VI ?

5. Write notes on *two* of the following :—St. Columba, Alfred the Great, David I, Scottish medieval agriculture, the Lollards, the Merchant Adventurers.

SECTION 3 (1485 *to* 1763)

6. Do you consider that Henry VII or Henry VIII did the more for the good of England ?

7. For what reasons is the reign of Elizabeth notable in the history of maritime enterprise ?

8. Estimate the importance of religious issues in comparison with the other causes of the Civil War.

9. To what extent can the foreign policy of Charles II be defended as being in the best interests of England ?

10. Why were the parliaments of England and Scotland united ? For what reasons was the Union unpopular at first in Scotland ?

11. On what grounds may Walpole be called a great commercial statesman ?

Section 4 (1763 *to* 1914)

12. How far was the British government to blame for the loss of the American colonies ?

13. " The pilot that weathered the storm." What contribution was made by the younger Pitt in the war against France ?

14. To what extent were the years 1822–1830 a period of reform ?

15. How far was the Chartist movement due to political, and how far to economic, causes ?

16. Was Disraeli more successful in his foreign, or in his domestic, policy ?

17. Examine the view that the discovery of gold was the main factor in bringing about the South African War of 1899–1902.

18. Write notes on *two* of the following :—Adam Smith, William Wilberforce, Lord Castlereagh, the British North America Act (1867), Gladstone's Home Rule Bills, Keir Hardie.

HISTORY

Higher Grade

(Second Paper—European History)

Thursday, 13th March—1.30 P.M. to 4.0 P.M.

All candidates must attempt FIVE questions, viz., Section 1 and FOUR other questions selected from any part or parts of the paper.

20 *marks are assigned to each question.*

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION 1 (*to be attempted by all candidates*)

(See separate sheet provided for this section.)

SECTION 2 (*Greek and Roman History to* A.D. 410.)

1. Explain and compare the Athenian and Spartan systems of government on the eve of the Peloponnesian War.

2. Trace the steps by which Philip of Macedon became the master of Greece, and explain the ease with which he did so.

3. What were the social and political objects of the Gracchi ? What results had their efforts ?

4. Trace briefly the growth of the Roman Empire between the death of Augustus and that of Trajan.

5. Write notes on *two* of the following :—Solon, the Persian invasion of Greece in 490 B.C., Dionysius of Syracuse, Cato the Censor, Sulla, the Second Triumvirate.

SECTION 3 (*Medieval History*, 410 *to* 1453)

6. Account for the rise of Continental feudalism and show what were its main features.

7. What services did Philip II (Augustus) render to France ?

8. Do you agree with the view that Frederick II was the last of the great Holy Roman Emperors ?

9. Explain the causes and effects of the Great Schism of the Papacy (1378–1414).

10. Write notes on *two* of the following :—Charlemagne, the First Crusade, the Franciscan Friars, the Lombard League, the Sicilian Vespers, the Hussites.

SECTION 4 (*Modern History (A)*, 1453 *to* 1763)

11. On what grounds may Charles VIII's invasion of Italy be said to mark the beginning of modern Europe ?

12. Describe the origins and account for the success of the Reformation movement in Germany.

13. What problems faced Henry IV of France on his accession, and how far did he succeed in solving them ?

14. Why is the Peace of Westphalia an important landmark in the history of Europe ?

15. What do you understand by the Diplomatic Revolution of 1756 ? How did it come about ?

SECTION 5 (*Modern History* (*B*), 1763 *to* 1914)

16. " A ruler of lofty ideals who died a complete failure." Discuss this estimate of Emperor Joseph II.

17. Do you consider that Napoleon was greater as a general or as a constructive statesman at home ?

18. Compare the methods of Bismarck and Cavour in the unification of Germany and Italy.

19. Why were the Balkans the storm centre of Europe during the years 1908–1914 ?

20. Write notes on *two* of the following :—Catherine II of Russia, the French Directory, the Congress of Verona, the Peace of Paris (1856), Léon Gambetta, the Algeciras Conference.

GEOGRAPHY

LOWER GRADE

Friday, 14th March—9.30 A.M. to 12 NOON

Candidates should attempt SEVEN questions, viz., the three questions of Section A, together with four other questions (from Sections B and C), of which ONE but not more than TWO must be from Section B, the remainder being from Section C.

Candidates should read the questions carefully. The answers should be clearly expressed and entirely relevant.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION A

The whole of this Section should be attempted.

Marks

1. On the accompanying map of the British Isles :—

(*a*) Print the following over appropriate areas :—
The Minch ; Dogger Bank.   1

(*b*) Mark, distinguishing each, a herring port, a port noted for long-range trawlers, an area important for pilchards, and an area important for oysters. Name the ports.   3

Marks

(c) Mark and name, printing after each the letter given in brackets :—

      (i) An iron smelting centre in England (S) ;

      (ii) a packet port in Ireland (P) ;

      (iii) a jam manufacturing centre in Scotland (J) ; and

      (iv) a copper refining centre in Wales (C).   4

(d) Print " over 40° F." or " under 40° F." beside each of the following according to whether its average January temperature is above or below 40° F. :—

      Penzance ; Liverpool ; Lough Neagh.   3

(e) Beside the coast of S.W. Ireland and the coast of N.W. Scotland name the type of coast of which each is an example.   1

                                                        (12)

2. On the accompanying map of the world :—

(a) Shade thus, ////, *two* areas north of the Equator and *two* areas south of the Equator (each area in a separate continent) noted for the production of wheat. Beside each, name the month or months (not season) of harvest.   4

(b) Name the capital cities marked A, B, C, and D, the rivers marked E, F, G, and H, and the areas of sea marked J, K, L, and M.   3

(c) Beside each of the *three* stippled areas :—

      (i) Name its season of maximum rainfall and mark (with arrows to show direction) its rain-bearing winds.

      (ii) Indicate clearly which of the three areas is most densely peopled.   4

(d) Draw a continuous line across the map to mark the latitude (approximate) at which the sun is overhead *today*.   1

(e) Mark and name the town which is due east of 30° N. 120° W. and also due south of 60° N. 90° W.   1

                                                        (13)

3. Examine the contour map on page 4 of the map sheet and answer the following questions :—

(a) Describe briefly (not more than 12–15 lines) and broadly the relief of the area.   8

(b) Name the features marked A, B, C, and D.   2

(c) Account for the position and importance of X, the principal town and port of the area.   5

                                                        (15)

SECTIONS B AND C

Candidates should attempt FOUR *questions from Sections B and C. Of these* ONE BUT NOT MORE THAN TWO *must be from Section B, the remainder being from Section C.*

SECTION B   *Marks*

4. (*a*) State the main types of forest found throughout the world.

(*b*) Select one of these, describe its distribution, and outline its economic importance, mentioning the main areas of development.   (15)

5. (*a*) What is irrigation ?

(*b*) Name *three* different types of irrigation.   5

(*c*) For *one* fairly extensive area of irrigation describe the method used and relate it to the agricultural activities of the inhabitants.   10
(15)

6. (*a*) State the difference between :—

      (i) the revolution and the rotation of the earth ; and   4

      (ii) the two solstices.   4

(*b*) Briefly show the effects of the revolution and the rotation of the earth and the solstices on the activities of men.   7
(15)

7. (*a*) Name *three* of the principal agents of erosion.   3

(*b*) Choose *one* of these and describe some of the typical land-forms produced by it.   12
(15)

SECTION C

British Isles

8. Attempt **EITHER** (*a*) **OR** (*b*) :—

(*a*) Give an explanatory account of the agriculture of Scotland under the headings of (i) cereals, (ii) root crops, and (iii) hay and grass.

(15)

    OR

(*b*) Select *two* of the following pairs of towns, and for each pair selected account for the differences in trade and in development :—

      (i) Oban and Inverness ;

      (ii) Glasgow and Dundee ;

      (iii) Greenock and Leith ;

      (iv) Ayr and Aberdeen ;

      (v) Galashiels and Pitlochry ;

      (vi) Elgin and Dumfries.

(15)

Marks

9. Draw a map or a series of maps of *one* of the major industrial areas of *either* England and Wales *or* Ireland to show the main activities of its inhabitants, the foodstuffs and raw materials imported into the area, its sources of power, and its communications.

(15)

Europe

10. By referring to well-chosen examples show to what extent the position and the development of the major ports of the Mediterranean are due to relief.

(15)

11. Describe the conditions which make *two* of the following areas popular holiday resorts for British people :—

> Denmark ;   Holland ;   Peninsular Italy ;   Austria ;
> Provence ;   Brittany.

(15)

The Rest of the World

12. Write a geographical description of *one* of the following :—

(a) The New England States ;

(b) The Cotton Belt of U.S.A. ;

(c) The Laurentian Shield ;

(d) British Columbia.

(15)

13. After examining the following facts, write notes on the differences in climate of Portland, Omaha, and New York. (Rainfall is given in inches and temperature in degrees Fahrenheit.)

		Portland (Oregon).	Omaha.	New York.
Mean monthly temperature.	January	39	21·5	30·6
	July	67	77	73·5
Annual rainfall		43·8	28·9	42·1
Season of maximum rainfall		Winter	Summer	Slight maximum in late summer and early autumn

(15)

Marks

14. Describe the position and importance of *three* of the following towns :—

      Colombo ; Hong Kong ; Novo Sibirsk ; Singapore ; Damascus ; Harbin ; Delhi ; Vladivostok.

                                            (15)

15. Vessels call at Brisbane, Sydney, Melbourne, and Perth to collect goods for Great Britain.

   (*a*) For each port name the commodities which might be loaded ;   8
      and

   (*b*) Give a brief geographical account of the hinterland of *one* of
      these ports.   7
                                       (15)

16. (*a*) Draw a map of South America and on it locate and name the main areas of mining, identifying the minerals.   10

   (*b*) Describe briefly the part played by *one* of these minerals in world trade.   5
                                       (15)

17. Attempt **EITHER** (*a*) **OR** (*b*).

   (*a*) Amplify and discuss *one* of the following :—

     (i) In Africa the rain follows the sun.

     (ii) The Sahara has been a greater barrier to the development
        of Africa than the dense equatorial forests.

                                       (15)

    OR

   (*b*) Show that the exploration of Africa has been associated chiefly with three great rivers—the Nile, the Niger, and the Zambezi.

                                         (15)

GEOGRAPHY

HIGHER GRADE—(FIRST PAPER)

Friday, 14th March—9.30 A.M. to 12 NOON

Candidates should attempt FIVE questions, viz., the two questions of Section A, together with any three questions taken from Section B.

Candidates should read the questions carefully. The answers should be clearly expressed and entirely relevant.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION A

The two questions of this Section should be attempted.

Marks

1. Part of the Ordnance Survey map of England is provided. After studying the map, answer the following questions :—

(*a*) A line following the 1,000 foot contour divides this area into two different types of country. Contrast these two areas under the headings of relief and drainage. (Not more than 15–20 lines.)   14

(*b*) Account for the route of the first class road (A.686) from Melmerby (615374) to 688430. Compare its route with that of the Roman road from 646330 to 674420.   8

(*c*) What evidence does the map present of land use and occupation, past and present, in land above 1,000 feet?   6

(*d*) Account for the distribution of villages in land below 1,000 feet and classify them into three groups according to site.   8

(36)

2. On the accompanying map of part of Europe :—

(*a*) Mark (if necessary) and name the following :—
    Rivers : Garonne ; Sava ; Elbe ;
    Mountains : Jura ; Carpathians ; Harz ;
    Islands : Majorca ; The Faroes ; Gottland ; and
    Towns : Galatz ; Budapest ; Seville.   6

(*b*) Draw and name the isotherms of 32° F. for January and 70° F. for July, both reduced to sea level.   3

(*c*) Subdivide the eastern edge of the map to show the latitudinal zoning of vegetation. Name the various types.   4

(*d*) Mark thus, **X**, *three* areas, each in different countries, noted for iron mining.   1½

(*e*) Print port, champagne, and hock over areas noted for their production.   1½

(16)

Section B

Three questions should be attempted from this Section.

Marks

3. (a) Name three distinct types of lakes and give one good example of each. $4\frac{1}{2}$

(b) Describe how lakes, past and present, may help or hinder the activities of men.   Refer to actual examples. $11\frac{1}{2}$

(16)

4. (a) What is meant by the scale of a map ?   2

(b) Name the different methods employed to show the scale of a map.   3

(c) (i) What width does a line 1/100-inch thick on a map represent on maps of the following scales :—

    (1) 1/63,360, (2) 1 cm. to 1 km., and (3) 25·344 inches to one mile.

(ii) What fraction in area of the land portrayed is one square inch on maps of the following scales :—

    (1) 1 : 50,000 and (2) 6 inches to 1 mile ?   11

(16)

5. " The higher the civilization, the less the influence of environment."

By referring to the modes of life and activities of *two* peoples, the one primitive, the other highly civilized, show how far this statement is true.

(16)

6. (a) What conditions usually determine (i) a good harbour, and (ii) a good hinterland ?   5

(b) Select two large ports (only *one* may be in the British Isles) and show how far they satisfy (a) (i) and (a) (ii).   11

(16)

7. " Religion and the pursuit of wealth promoted the great discoveries of the fifteenth and sixteenth centuries, but geography controlled them."

Amplify and discuss.

(16)

8. After examining the following statistics for stations in approximately the same latitudes on the eastern and western sides of the North Atlantic :—

   (i) State briefly the general differences in temperature between the eastern and western coastlands of the North Atlantic ; and   8

   (ii) Select *two* of the pairs, *one* to the north and *one* to the south of 30° N., and account for the differences between east and west within each.   8

WEST.				EAST.			
Station.	Coldest Month.	Mean Annual Temperature.	Range.	Range.	Mean Annual Temperature.	Coldest Month.	Station.
	°F.	°F.	°F.	°F.	°F.	°F.	
Nain 56° 25′ N.	−7·1	22·6	54	19·4	47·3	38·6	Glasgow 55° 51′ N.
New York 41° 6′ N.	30·5	51·8	43·0	18	58	47	Oporto 41° 7′ N.
Belize 17° 29′ N.	73·6	79·3	9	16·2	74·8	66·2	Dakar 14° 39′ N.
Georgetown 6° 46′ N.	79·3	80·6	2·9	4·5	80·7	77·9	Freetown 8° 29′ N.

(16)

9. " Maize and the potato were originally native to the New World."

Compare and contrast the present world distribution and use of these crops with this statement.

(16)

GEOGRAPHY

HIGHER GRADE—(SECOND PAPER)

Friday, 14th March—1.30 P.M. to 4 P.M.

Candidates should attempt FIVE questions, viz., ONE question from EACH of the Sections A, B, C and D, and a fifth from any Section.

Candidates should read the questions carefully. The answers should be clearly expressed and entirely relevant.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION A

Marks

1. Using sketch-maps alone indicate the relief, climate, and occupations of *one* of the following areas :—

 (*a*) The Thames Basin ;

 (*b*) Yorkshire ;

 (*c*) The Southern Uplands ;

 (*d*) The Central Lowlands of Scotland ;

 (*e*) The Highlands of Scotland.

Do not use *more than three* sketch-maps   (20)

2. Give an explanatory account of the land utilization and the distribution of settlement which a traveller following the most direct rail route would see on *one* of the following journeys :—

 (*a*) Perth to Inverness ;

 (*b*) Edinburgh to Carlisle ;

 (*c*) Glasgow to Aberdeen ;

 (*d*) Liverpool to Hull ;

 (*e*) Bristol to London ;

 (*f*) Dublin to Limerick.   (20)

3. Write a geographical description of *one* of the following industries of the British Isles :—

 (*a*) Shipbuilding ;

 (*b*) Woollen manufacturing ;

 (*c*) Tourism ;

 (*d*) Brewing ;

 (*e*) Linen manufacturing.   (20)

SECTION B

4. Show to what extent the natural vegetation of Europe is controlled by climate and indicate how far men have modified its distribution.   (20)

5. Account for the densely peopled zone of Europe stretching from Calais through Lille, Liége, Cologne, Hanover, Leipzig, Cracow and Lwow to the Dnieper.   (20)

6. Write a geographical description of *one* of the following areas :—

   (*a*) Austria ;

   (*b*) Poland ;

   (*c*) Basin of the River Ebro ;

   (*d*) Provence ;

   (*e*) Greece ;

   (*f*) North German Plain, west of the River Elbe.   (20)

SECTION C

7. Write notes on the position and importance of *two* of the following pairs of towns and for each pair indicate briefly the main similarities and/or differences in their positions :—

   (*a*) St. Louis (Missouri) and Hankow ;

   (*b*) Winnipeg and Singapore ;

   (*c*) Salt Lake City and Tashkent ;

   (*d*) San Francisco and Bombay ;

   (*e*) Duluth and Irkutsk.   (20)

8. " North America is favoured in its inland waterways but is hampered by its mountain ranges."

   Amplify and discuss.   (20)

9. Study the accompanying maps of Formosa and using the information provided show how far the agriculture of the island is controlled by physical geography.   (20)

SECTION D

10. (*a*) Write an explanatory account of the distribution of rainfall in Australia (i) during January, and (ii) during July.   10

   (*b*) Relate the density distribution of population to annual rainfall.   5

   (*c*) Enumerate any other factors controlling the distribution of population in Australia.   Discuss one of these briefly.   5

                       (20)

11. Show that South America and Africa resemble each other in several respects, but that they differ in the distribution of their inhabitants.   (20)

12. " Minerals and refrigeration have developed the southern hemisphere."

   Expand this statement and discuss its truth.   (20)

ARITHMETIC

Tuesday, 11th March—9.30 A.M. to 10.45 A.M.

Only FIVE questions should be answered.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

All the working must be legible and shown in its proper position in the answer, and, when necessary, the different steps should be clearly indicated.

20 *marks are assigned to each question.*

Marks will be deducted for careless or badly arranged work.

1. Find the total cost of the following :—

       2 dozen pairs sheets at 41s. 10d. per pair ;
       2 dozen pairs blankets at 86s. 5d. each blanket ;
       6 dozen towels at 17s. 4d. each.

If the bill is subject to $2\frac{1}{2}$ per cent. discount, how much is actually paid ?

2. Bus fares are calculated at the rate of $0 \cdot 875d$. per mile.
   (i) What is the fare for a journey of 88 miles ?
   (ii) For what distance is the fare 11s. 8d. ?
   (iii) By how much has the fare in (ii) been increased since the rate was $0 \cdot 825d$. per mile ?

3. During the period Saturday, 1st December, 1951, to Friday, 29th February, 1952, inclusive, a workman received a net total of £62 8s. in wages, income tax and insurance contributions having been deducted. He did not work on Saturdays or Sundays or on Tuesday, 1st January. Find the average amount he received per working day.

If 5s. 1d. per week was deducted from his wages for insurance, and an average of 9s. per week for income tax, what were his gross earnings for the period ?

4. The floor of a room, 17 ft. by 13 ft. 9 in., is to have a border of oak flooring 3 ft. wide. The oak for the border is supplied in lengths $2\frac{1}{4}$ in. wide, and the wood for the rest of the floor in lengths $3\frac{5}{8}$ in. wide. Find to the nearest foot the total lengths of the two kinds of wood to be ordered, allowing an addition of 10 per cent. for wastage in each case.

5. A gas fire burns 1 cubic foot of gas in 66 seconds. If 1,000 cubic feet of gas give $4 \cdot 5$ therms, and the charge is $11 \cdot 55d$. per therm, find to the nearest farthing the cost per hour of burning the gas fire.

6. A and B invest £120 and £175 respectively in National Savings Certificates on the same date. Seven years later A's holding was worth £130 10s. What was the value of B's holding at that time ?

After ten years B's holding was worth £201 5s. What rate per cent. per annum of Simple Interest does this represent ?

7. Find to the nearest lb. the weight of a hollow copper sphere if the external diameter is 6 in. and the copper is 1 in. thick. Copper weighs 520 lb. per cubic foot. (Take $\pi = \dfrac{22}{7}$.)

8. A merry-go-round has two circles of horses, one 16 ft. from the centre, the other 20 ft. If the merry-go-round rotates 14 times per minute, express the speeds of the horses in miles per hour. (Take $\pi = \dfrac{22}{7}$.)

9. On leaving Britain a man changes £100 into French francs. He spends 42,000 francs in France, and changes the rest into Swiss francs. He spends 490 francs in Switzerland, and changes what remains of his money back into sterling. How much does he receive? (Neglect the fraction of a penny.)

£1 = 980 French francs; 1 Swiss franc = 80 French francs;
£1 = 12·25 Swiss francs.

10. The rates on a house, the assessed rental of which is £60, are charged at 15s. 2½d. in the £ for the period 15th May, 1950 to 14th May, 1951, both days inclusive. The house was sold, and the purchaser paid his share of the rates from and including 1st February, 1951. How much did the purchaser pay?

MATHEMATICS

LOWER GRADE—(FIRST PAPER)

Monday, 17th March—9.30 A.M. to 11.30 A.M.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

All the figures should be neatly drawn, and, where it is necessary to turn over a page during the answer to a question, a rough copy of the figure MUST *be drawn on the fresh page. All the steps of the proofs must be given, and it should be clearly shown on what assumptions the demonstrations are based. Where geometrical references are necessary, care should be taken to ensure that such references are clear and intelligible; text-book reference numbers should* NOT *be used.*

The value attached to each question or part of a question is shown in the margin.

Marks will be deducted for careless or badly arranged work.

SECTION I

All the questions in this Section should be attempted.

Marks

1. Prove that an angle at the centre of a circle is double any angle at the circumference subtended by the same arc.

12

2. Prove that, if two triangles are equiangular, their corresponding sides are proportional.   12

3. Prove the formula $\triangle = \frac{1}{2}bc \sin A$ for the area of a triangle ABC, considering only the case in which the triangle is acute-angled.   6

Show that the area of a regular twelve-sided polygon inscribed in a circle of radius r is $3r^2$.   3

4. (*In this question figures need not be reproduced. Except in (iii) references to theorems are not required.*)
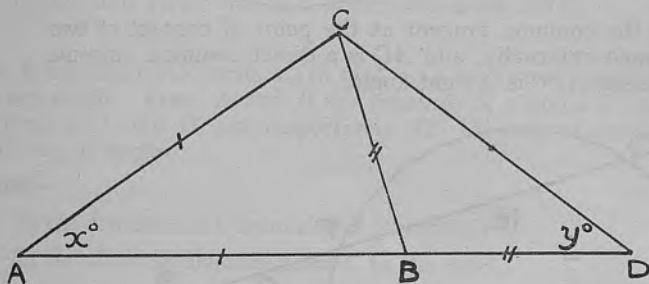
(i) In the triangle ABC, $AB = AC$; in the triangle BCD, $BC = BD$. Angle $BAC = x^\circ$, angle $CDB = y^\circ$. Write down a relation between x and y.   4
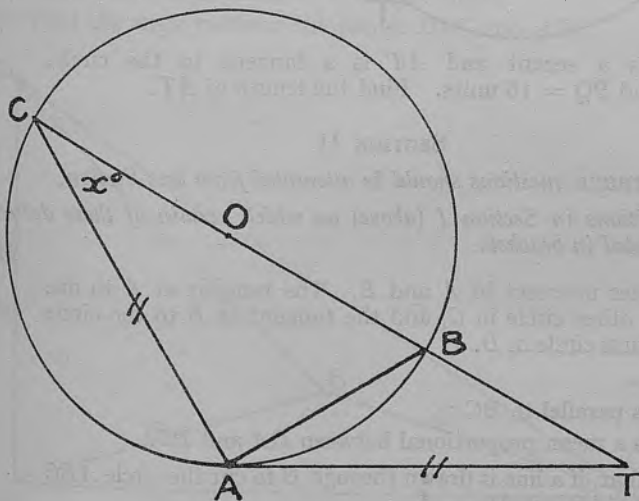
(ii) TA is a tangent and TBC a secant passing through O, the centre of the circle; $AC = AT$. Angle $ACT = x^\circ$. Find x.   4
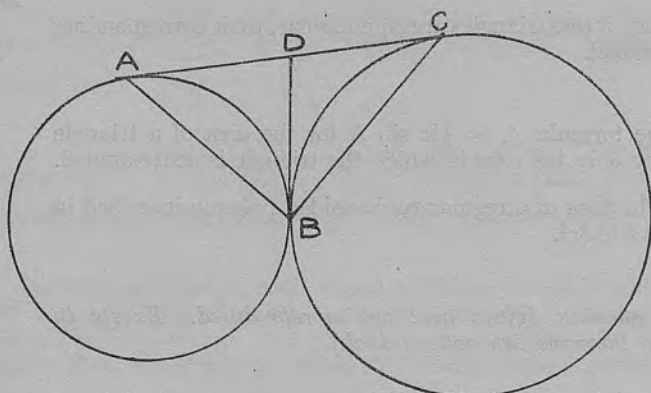
(iii) *BD* is the common tangent at the point of contact of two circles which touch externally, and *AC* is a direct common tangent. Prove that the angle *ABC* is a right angle. 4
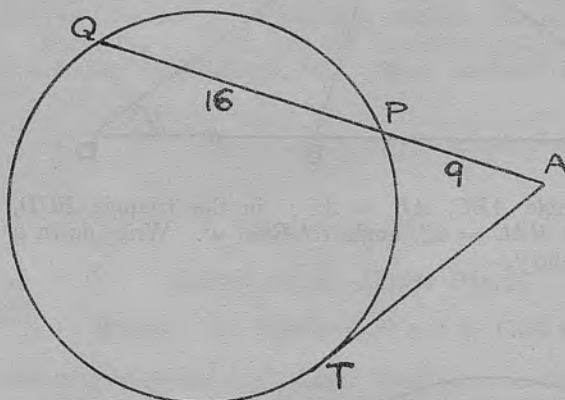
(iv) *APQ* is a secant and *AT* is a tangent to the circle. AP = 9 units and PQ = 16 units. Find the length of *AT*. 4

Section II

Only THREE *questions should be attempted from this Section.*

The propositions in Section I (above) on which certain of these deductions depend are indicated in brackets.

Marks

5. Two circles intersect in *A* and *B*. The tangent at *A* to one circle meets the other circle in *C*, and the tangent at *B* to the circle *ABC* meets the first circle in *D*. 1

Prove that—

(i) *DA* is parallel to *BC ;* 5
(ii) *AB* is a mean proportional between *DA* and *BC*. 5

Prove also that, if a line is drawn through *B* to cut the circle *ABC* in *L* and the circle *ABD* in *M*,

$$\frac{AB}{AL} = \frac{AD}{AM}.$$ (Section I, 2) 6

6. From a point P outside a circle secants PAB and PCD are drawn. The line through A parallel to BD cuts PD at E ; the line through B parallel to AC cuts PD, produced if necessary, at F.   2

Prove that—

(i) the points A, B, E, and F are concyclic ;   7

(ii) the tangent from P to the circle passing through A, B, E, and F is equal in length to the tangent from P to the given circle.   8

7. Show that the triangle ABC with sides $AB = 24$ cm., $BC = 15$ cm. and $AC = 21$ cm. is acute-angled, and find the length of the projection of AB on BC.   8

If CB is produced to E so that $BE = 40$ cm., find the exact length of AE, and verify that AB bisects the angle EAC.   9

8. B is a point 345 yards north of A on a level road running due north and south. From A and B the bearings of a house C, on the same level as A and B, are respectively $32°$ $14'$ east of north and $46°$ $17'$ east of north.

Find—

(i) the distances of C from A and B respectively ;   12

(ii) the shortest distance from C to the road.   5

9. The accompanying diagram represents a three-dimensional figure in which the triangle ABC is right-angled at B, and AB and BC are respectively 15 inches and 8 inches in length. AD is 20 inches in length and is perpendicular to the plane ABC.

(i) Find the lengths of AC and BD.   6
(ii) Prove that the angle DBC is a right angle.   6
(iii) Find the angle between the planes DBC and ABC.   5
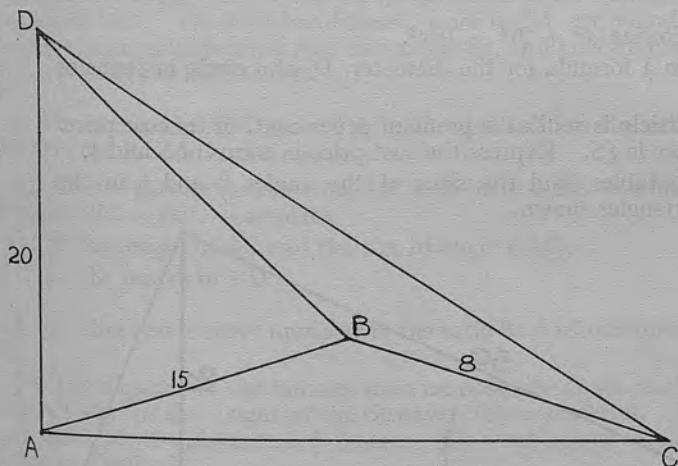
MATHEMATICS

LOWER GRADE—(SECOND PAPER)

Monday, 17th March—1 P.M. to 3.30 P.M.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

Square-ruled paper and four-place logarithmic tables are provided.

All the working must be legible and shown in its proper position in the answer, and the different steps should be clearly indicated.

The value attached to each question or part of a question is shown in the margin.

Marks will be deducted for careless or badly arranged work.

SECTION I

All the questions in this Section should be attempted.

Marks

1. Using logarithms

(i) evaluate $\dfrac{5\cdot783 \times 0\cdot184}{0\cdot0923}$;   5

(ii) find, to three significant figures, the value of T from the

formula $T = \dfrac{\sqrt{\left(\dfrac{L}{S}\right)^2 - 1}}{\pi(D - d)}$, when $L = 500$, $S = 20$, $D = 3, d = 0\cdot0193, \pi = 3\cdot142$.   8

2. (i) Solve the equation $2x^2 - 3x - 3 = 0$, correct to two decimal places.   7

(ii) The resistance to the motion of a train, R pounds per ton of the weight, is given by the formula $R = a + bv^2$, where a and b are constants, and v is the speed of the train in miles per hour. If $R = 5$ when $v = 25$, and $R = 7\cdot4$ when $v = 35$, find a and b.   6

3. (i) Factorize $(x^2 + 3)^2 - 16x^2$.   3

(ii) Obtain a formula for the diameter, D, of a circle in terms of its area, A.   3

(iii) An article is sold at a profit of p per cent. of its cost price. The selling price is £S. Express the cost price in terms of S and p.   3

(iv) Using tables, find the sizes of the angles θ and ϕ in the right-angled triangles shown.   4
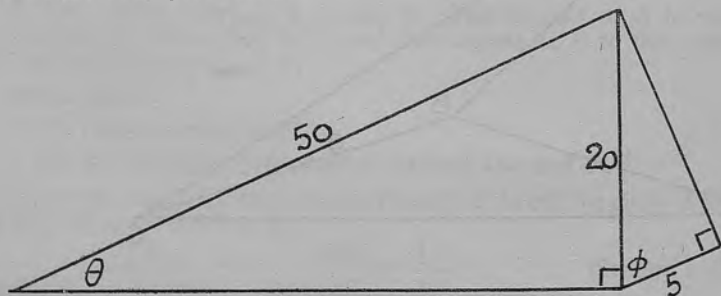
4. (i) The angle A of triangle ABC is such that $3 \tan^2 A = 1$; find A.   4

(ii) Simplify $\sin(180° - A)\cos(90° - A) - \cos(180° - A)\sin(90° - A)$.   4

(iii) A chord subtends an angle of 50° at the centre of a circle of radius 8 inches ; calculate the length of the chord.   5

Section II

Only THREE *questions should be attempted from this Section.*

5. A cylindrical tube which has length l and external radius r is made of glass of thickness t.   Show that V, the volume of the glass forming the tube, is given by the formula

$$V = \pi l t\,(2r - t).$$ 7

If the tube has a length of 35 inches, an external radius of half an inch, and a weight of 396 grams, and if the glass of which it is made weighs 40 grams per cubic inch, find the thickness of the glass. (Take $\pi = \frac{22}{7}$.)   9

6. The maximum amount of a certain substance, w grams, that dissolved in 100 grams of water at temperature t degrees Centigrade was found to be as shown in the following table :—

t ..	5	15	25	35	45	55
w ..	75	82	90	99	106	115

Choosing suitable scales, plot w against t and draw what you consider to be the best-fitting straight line graph.   6

Assuming that for this range of temperatures the relationship between w and t is of the form $w = at + b$, where a and b are constants, use your graph to find the values of a and b.   6

From your graph read off the value of w when t is 52, and the value of t when w is 100.   4

7. A housekeeper sent 17s. 6d. for the purchase of a certain number of pounds of fruit.   The fruit had fallen in price by 2d. per pound, and she received two pounds more than she expected, and also 2d. change. Find the price of the fruit at first.   16

8. For a triangle ABC *state* a formula which shows the relation connecting cos B and the sides a, b, c.   1

ABCD is a parallelogram, with AB = 5 inches, BC = 8 inches, and angle ABC = 60°.   Calculate

    (i) the length of AC and the size of angle BAC ;   10
    (ii) the length of BD.   5

9. (i) Find two positive numbers in the ratio 8 : 5 whose difference is 63.   6

(ii) The distance of the horizon from an observer at sea varies as the square root of the height of the observer above sea-level.   For a height of 16 feet the distance is 5·3 miles ; for what height would the distance be 6 miles ?   10

MATHEMATICS

Higher Grade—(First Paper)

Monday, 17th March—9.30 a.m. to 11.30 a.m.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

All the figures should be neatly drawn, and, where it is necessary to turn over a page during the answer to a question, a rough copy of the figure must be drawn on the fresh page. All the steps of the proofs must be given, and it should be clearly shown on what assumptions the demonstrations are based. Where geometrical references are necessary, care should be taken to ensure that such references are clear and intelligible; text-book reference numbers should not be used.

The value attached to each question or part of a question is shown in the margin.

Marks will be deducted for careless or badly arranged work.

Section I

All the questions in this Section should be attempted.

Marks

1. Prove that the opposite angles of a cyclic quadrilateral are supplementary.

State the converse theorem.   12

2. Prove that the areas of similar triangles are proportional to the squares on corresponding sides.   12

3. Prove the formula $a^2 = b^2 + c^2 - 2bc \cos A$ for a triangle ABC in which the angle A is obtuse.

(If an extension of the theorem of Pythagoras is used, it must first be proved.)   11

4. Prove that, if the point (x, y) divides the straight line joining the points (x_1, y_1) and (x_2, y_2) in the ratio $m : n$,

$$x = \frac{mx_2 + nx_1}{m + n}, \qquad y = \frac{m y_2 + n y_1}{m + n}.$$ 6

A is the point $(-2, 0)$, B $(5, 0)$, C $(2, 6)$. P is the mid-point of AC and Q divides BC in the ratio $1 : 2$. Find the co-ordinates of P and Q.

If R is the point in which PQ and AB meet when produced, find the ratio AR : RB.   8

Section II

Only three *questions should be attempted from this Section.*
The propositions in Section I (above) on which certain of these deductions depend are indicated in brackets.

5. DBA is an isosceles triangle, right-angled at A. P is a point within the triangle DBA, and RPA is a second isosceles triangle, right-angled at A and such that P and R are on opposite sides of AD.

Marks

Prove that angle BPA = angle DRA.   5

BP is produced to meet DR at S.   Prove that BS is perpendicular to DR.   (Section I, 1)   5

Squares ABCD and APQR are completed.   Prove that angle BSC is 45°, and hence or otherwise prove that C, S, and Q are collinear.   7

6. AB and CD are parallel chords of a circle.   The tangent at A meets DC produced in Z.   AD and BC intersect in X.

Prove that triangles ABC and CAZ are equiangular.   4

If, further, the tangent at C meets AZ in Y, prove that the triangles AXC and CYZ are similar, and hence or otherwise prove that XY is parallel to DC.   7
          6

7. The accompanying diagram represents a triangle ABC with AB = AC, and AX perpendicular to the plane of the triangle ABC. Prove that the triangle XBC is isosceles.   5

Y is the mid-point of BC ; AY = 8, BC = 24, and XC = 37.   Find the angle between the planes XBC and ABC.   6

YA is produced its own length to Z.   Calculate the cosine of the angle ZCX.   6

Marks

8. Prove that the locus of a point which moves so that its distance from the point $(-9, 0)$ is three times its distance from the point $(-1, 0)$ is the circle whose equation is $x^2 + y^2 = 9$. 9

Find the gradients of the two lines through the point $(0, -5)$ which touch this circle, and find also the co-ordinates of the points of contact. 8

9. AB is a diameter of a circle, centre O, and BC is a tangent. BD is perpendicular to OC, meeting it at D. If the radius of the circle is r and the angle BOC is θ, prove that

(i) $AD^2 = r^2 (1 + 3 \cos^2\theta)$;   (Section I, 3)   6

(ii) $\dfrac{CA}{AD} = \sec \theta$. 5

Deduce that AE bisects the angle CAD, where E is the point in which OC intersects the circle. 6

MATHEMATICS

HIGHER GRADE—(SECOND PAPER)

Monday, 17th March—1.0 P.M. to 3.30 P.M.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

Square-ruled paper and four-place logarithmic tables are provided.

All the working must be legible and shown in its proper position in the answer, and the different steps should be clearly indicated.

The value attached to each question or part of a question is shown in the margin.

Marks will be deducted for careless or badly arranged work.

SECTION I

All the questions in this Section should be attempted.

Marks

1. (i) Find the value of p for which the expression
$$2x^4 + 9x^3 + 5x^2 + 3x + p$$
is divisible by $x + 4$, and show by means of the Remainder Theorem   3
that when p has this value, the expression is divisible by $2x - 1$.   3

(ii) Solve the equation
$$\frac{1 + x^2}{x} = \frac{1 + m^2}{m}.$$
5

2. (i) Find the sides of a right-angled triangle, given that the perimeter is six times the shortest side and that the hypotenuse is 16 inches longer than the shortest side.   7

(ii) The ratio of the roots of the equation $x^2 + px + 1 = 0$ is $9:1$. Find p.   5

3. (i) Stating clearly any assumption made, derive a meaning for $a^{\frac{3}{4}}$.   2

If $a = 27b^{\frac{2}{3}} c^{-\frac{4}{3}}$, express b in terms of a and c.   3

Find b when $a = c = 3$.   3

(ii) A sum of money is invested for n complete years at 4 per cent. per annum Compound Interest, convertible yearly.   Find the smallest value of n such that the sum of money will at least double itself.   5

4. The graph of $y = \sin x° + \dfrac{x}{60} \cos x°$ from $x = 0$ to $x = 180$ is

shown on the accompanying sheet.   Determine within the given range

(a) the maximum value of the function $\sin x° + \dfrac{x}{60} \cos x°$;   1

(b) the range of values of x for which the function decreases as   2
    x increases ;

(c) the value of x for which $\sin x° + \dfrac{x}{60} \cos x° + 0·8 = 0$;   2

(d) the range of values of a for which the equation

$$\sin x° + \frac{x}{60} \cos x° = a$$

has two roots.   2

By drawing an appropriate straight line find the solutions of the equation $60 \sin x° = x (1 - \cos x°)$ in the range $x = 0$ to $x = 180$.   4

5. (i) With the usual notation for the sides and angles of triangle ABC, prove, assuming the formula for cos A in terms of the sides of the triangle, that

$$\cos \frac{A}{2} = \sqrt{\frac{s (s - a)}{bc}},$$

where $a + b + c = 2s$.   5

(ii) ABCD is a quadrilateral with angle A = 90° and sides AB, BC, CD, and DA respectively 3·5, 17·5, 18·2, and 12·0 in. in length. Calculate the size of the angle C.   8

6. (i) Find, from first principles, the derivative of $x^2 + 3x$ with respect to x.   4

(ii) Differentiate $4x^3 + \dfrac{3}{x}$ with respect to x.   2

(iii) Find the area enclosed between the parabola $y = (x + 1) (2 - x)$ 6
and the x-axis.

SECTION II

Marks

Only TWO *questions should be attempted from this Section.*

7. The load, L, which a square pillar of side a and height h can support without giving way is proportional to the fourth power of a and inversely proportional to the square of h.

   (i) If one pillar has double the side and one and a half times the height of another, show that the loads which they can support are in the ratio of 64 : 9.   4

   (ii) Show that, for pillars of constant volume, L is inversely proportional to the fourth power of h.   5

   (iii) A pillar of side 2 feet is subdivided into 4 pillars of side 1 foot. Find the ratio of the total load which could be supported by the 4 pillars to the load which could be supported by the single pillar.   5

8. (i) Establish a formula for the sum of the first n terms of a geometrical progression of which a is the first term and r is the common ratio.   3

(ii) The first term of a geometrical progression exceeds the second term by $\frac{5}{4}$. The first term is also 5 times the common ratio. Find the sum to infinity of the progression.   5

(iii) x, y, 4 are in geometrical progression and x, $\frac{5y}{4}$, 4 are in arithmetical progression. Find the values of x and y.   6

9. (i) (*a*) Assuming the formulae for sin $(A + B)$ and cos $(A + B)$, establish the formula for tan $(A + B)$ in terms of tan A and tan B.   3

     (*b*) An acute angle whose tangent is 2 is divided into two parts so that the tangent of one part is three times the tangent of the other. Calculate the size of each part in degrees.   5

(ii) Solve the following equation for values of x in the range 0° to 360°.

$$\cos x - \sin 4x - \cos 3x = 0.$$ 6

10. An open rectangular container of height h has a square base of side l. Find, in terms of h and l, expressions for the volume, V, and the surface area, S, of the container, and show that

$$V = \frac{l}{4}(S - l^2).$$ 6

If the surface area is given as 12 square feet, show that the maximum volume of the container is 4 cubic feet.   8

ELEMENTARY   ANALYSIS
ADDITIONAL MATHEMATICAL SUBJECT
(Higher Grade)

Wednesday, 19th March—9.15 A.M. to 11.45 A.M.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

Not more than **FOUR** questions should be attempted from Section I, and not more than **TWO** questions from Section II.

Square-ruled paper and four-place logarithmic tables are provided.

The value attached to each question or part of a question is shown in the margin.

Marks will be deducted for careless or badly arranged work.

SECTION I

Not more than FOUR *questions should be attempted from this Section.*

1. (i) Prove that   *Marks*

$$\frac{\sin 5\theta - 2 \sin 3\theta + \sin \theta}{\cos 5\theta - \cos \theta} = \tan \theta$$

and deduce that $\sin 18°$ is a root of the equation

$$8x^3 - 4x + 1 = 0.$$ 7

(ii) If $(p + 1) \tan x = (p - 1) \tan (x + \alpha)$,

prove that $\sin (2x + \alpha) = p \sin \alpha$,

and state the limits within which p must lie when α is given.

Find the values of x in the range $0°$ to $360°$ which satisfy the given equation when $\alpha = 60°$ and $p = \frac{1}{3} \sqrt{3}$.   8

2. (i) Solve the equation

$$2\sqrt{(3x - 2)} - 3\sqrt{(2x - 3)} - 1 = 0,$$

where the positive values of the square roots are taken.   6

(ii) Express as a product of factors the determinant

$$\begin{vmatrix} a^2, & (b + c)^2, & bc \\ b^2, & (c + a)^2, & ca \\ c^2, & (a + b)^2, & ab \end{vmatrix}.$$ 9

3. (i) Prove that the sum of the series

$$1^2 + 2^2 + 3^2 + \ldots + n^2$$

is $\frac{1}{6} n (n + 1)(2n + 1)$ and deduce, or otherwise find, the sum of the series

$$1^2 - 2^2 + 3^2 - 4^2 + \ldots + (2n - 1)^2 - (2n)^2.$$ 8

(ii) Determine whether or not the following series are convergent :—

$$(a) \quad \frac{1}{\sqrt{(1.2)}} + \frac{1}{\sqrt{(2.3)}} + \frac{1}{\sqrt{(3.4)}} + \ldots ,$$

$$(b) \quad \frac{3}{1.3.5} + \frac{4}{3.5.7} + \frac{5}{5.7.9} + \ldots .$$ 7

4. Assuming that $\underset{\theta \to 0}{\mathrm{Lt}}\left(\dfrac{\sin \theta}{\theta}\right) = 1$, prove from first principles that

$$\frac{d}{dx}(\cos x) = -\sin x. \qquad\qquad 5$$

Differentiate with respect to x

$$\text{(i) } \frac{x}{(x+1)^2}; \qquad \text{(ii) } e^x \log ax. \qquad 6$$

Show that

$$\frac{d}{dx}\sin^{-1}\left(\frac{3 + 5\cos x}{5 + 3\cos x}\right) = -\frac{4}{5 + 3\cos x}. \qquad 4$$

5. A function $f(x)$ is such that $\dfrac{df}{dx} = (x - a)\ \mathrm{F}(x)$, and $\mathrm{F}(a) > 0$.

Prove, by discussing the sign of $\dfrac{df}{dx}$ for values of x in the neighbourhood of $x = a$, that $f(x)$ has a minimum turning value when $x = a$. 6

Prove that, of all isosceles triangles with a constant perimeter, the triangle whose area is greatest is equilateral. 9

Section II

Not more than TWO *questions should be attempted from this Section.*

6. (i) Express

$$\mathrm{E} \equiv \frac{x}{(1 - x)(2 - x)^2}$$

in partial fractions.

Assuming that E can be expressed as a series of the form

$$a_0 + a_1 x + a_2 x^2 + \ldots + a_r x^r + \ldots,$$

find the first three terms, the value of a_r, and the range of values of x for which the expansion is valid. 14

(ii) Find the first 6 terms in the expansion of $\log_e (1 + x + x^2)$ as a power series in x. For what range of values of x is the expansion valid ? 6

7. State and prove Demoivre's theorem for a positive integral index. 5

Simplify the expression

$$[\cos \alpha + \cos \beta + i\,(\sin \alpha + \sin \beta)]^2 + [\cos \alpha - \cos \beta + i\,(\sin \alpha - \sin \beta)]^2,$$

and state its modulus and amplitude. 6

Establish the identity

$$x^5 + 1 \equiv (x + 1)\left(x^2 - 2x \cos\frac{\pi}{5} + 1\right)\left(x^2 - 2x \cos\frac{3\pi}{5} + 1\right),$$

and deduce that

$$\sin\frac{\pi}{10}\cdot\sin\frac{3\pi}{10} = \frac{1}{4}. \qquad 9$$

8. Integrate with respect to x the following functions of x:—   *Marks*

     (i) $\tan x \sec^2 x$,   (ii) $\dfrac{1}{x^2} \log_e x$.   3, 4

Evaluate   (i) $\displaystyle\int_{\frac{1}{2}}^{2} \dfrac{dx}{x + x^3}$,   (ii) $\displaystyle\int_{0}^{1} x \tan^{-1} x \, dx$.   7, 6

9. Sketch the graph of the curve
$$y^2 = x^2 (2 - x^2)$$
paying attention to the turning points and to the gradients at the origin and at the points $(\pm \sqrt{2},\ 0)$.   12

Find (i) the area enclosed by the curve on the positive side of the y-axis, and (ii) the volume generated by the revolution of this part of the curve about the x-axis.   8

DYNAMICS

ADDITIONAL MATHEMATICAL SUBJECT
(Higher Grade)

Tuesday, 25th March—1.30 P.M. to 3.30 P.M.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

Candidates should, where necessary, illustrate their solutions by suitable diagrams.

Square-ruled paper and four-place logarithmic tables are provided.

The value attached to each question or part of a question is shown in the margin.

In the answers to arithmetical examples units must be stated.

$$g = 32 \ ft./sec.^2$$

Marks will be deducted for careless or badly arranged work.

SECTION I

All the questions in this Section should be attempted.   *Marks*

1. A particle with initial velocity u feet per second moves for t seconds with acceleration $4a$ feet per second per second, and then for a further t seconds with acceleration $2a$ feet per second per second. A second particle with the same initial velocity u feet per second moves for $2t$ seconds with acceleration $3a$ feet per second per second. Show that   5
the final velocities of the particles are the same and find which particle travels the greater distance and by how much.   6

Sketch a speed-time diagram representing, with reference to the same axes, the motion of each particle and indicate the area which represents the difference in the distances travelled.   4

2. Define *potential energy, kinetic energy,* and *horse-power*.   3

Water is drawn from a supply 16 feet below the level of a pump and is delivered at a rate of 4 gallons per second through a pipe whose open end is 16 feet above the level of the pump. If the pump is driven by a motor working at 4 horse-power and the efficiency of the system is 60 per cent., find the speed at which the water issues from the pipe.   12

(1 gallon of water weighs 10 lb.)

3. State the Principle of Flotation.   2

A tank with vertical sides is partly filled with a liquid of density $1\cdot2$ gm. per c.c. When a block of wood of mass 12 gm. is floated in the tank the level of the liquid rises by $0\cdot8$ cm. Find the area of the cross-section of the tank.   4

1 c.c. of a metal of density $2\cdot7$ gm. per c.c. is placed on the wood ; find by how much the level of the liquid in the tank rises.   4

The metal slips off the wood and sinks, leaving the wood floating ; find by how much the level of the liquid in the tank falls.   5

4. Prove that the centre of gravity of a uniform triangular lamina is at the intersection of the medians.   4

In the accompanying figure, A,B,C, and D are the vertices of a rectangle such that AB=12 cm. and BC=14 cm. ; O is the point of intersection of the diagonals ; BEC and AFD are semicircles on BC and AD respectively as diameters.

Assuming that the lamina ABECODF is uniform, find the position of its centre of gravity.   7

The lamina is suspended by a string attached at the point O ; when a mass of m gm. is suspended from C and an equal mass from D the plane of the lamina is horizontal. Find, in terms of m, the mass of the lamina.   4

$$\left(\text{Take } \pi = \frac{22}{7}.\right)$$
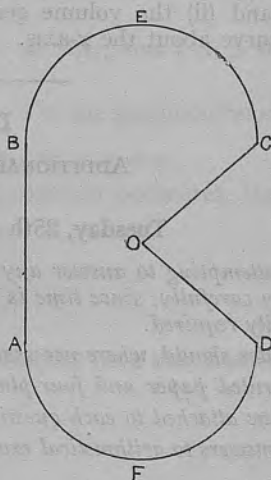
SECTION II

Only TWO *questions should be attempted from this Section.*

5. State the conditions for the equilibrium of a body acted on by three non-parallel co-planar forces.   3

The figure represents a wheel of mass M resting on a rough plane inclined at an angle θ to the horizontal. The wheel is held in equilibrium by a light cord which is partly horizontal and partly wrapped round the circumference of the wheel, one end being attached to the rim of the wheel.

If the cord exerts a force P, prove that $P = Mg\tan\dfrac{\theta}{2}$.   9

Show also that the coefficient of friction between the wheel and the plane must exceed $\tan\dfrac{\theta}{2}$ to prevent the wheel from slipping on the plane.   8

Marks
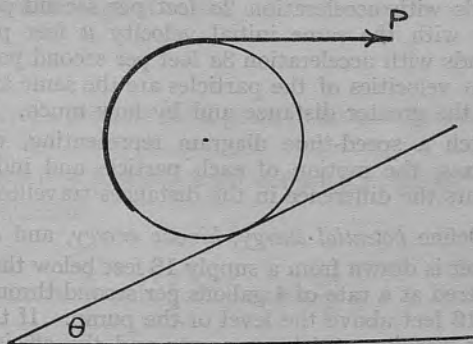
6. State Boyle's Law.   2

(i) A cylindrical tube of uniform cross-section of area 1 sq. cm. was used for a mercury barometer. When the height of the mercury in the barometer was 30 cm. there were 7 cm. of unoccupied tube above the mercury. If 1 c.c. of air at atmospheric pressure is introduced into the tube, find by how much the level of the mercury will fall.   6

(ii) A closed cylinder of height $2l$ is placed upright and is half full of water and half of air at atmospheric pressure at a time when the height of the water barometer is h. Without letting any air escape, water is pumped into the cylinder until the pressure on the base is double its original value. Show that the depth of the water in the cylinder is increased by

$$h + l - \sqrt{h(h+l)}.$$ 12

7. Explain what is meant by the terms *resultant velocity, relative velocity*.   2

(i) An endless belt is tightly stretched over two rotating pulleys of different diameters. Show that, if P is any point on the one straight section of the belt and Q any point on the other straight section, the velocity of P relative to Q is parallel to the line of centres, and is in magnitude $2v \cos \dfrac{\theta}{2}$, where v is the speed of the belt and θ is the angle between the straight sections of belt.   6

(ii) A ship A is sailing due south at 10 miles per hour and from it a second ship B appears due east. If the velocity of B relative to A is 16 miles per hour in a direction 60° West of North, find

(a) the velocity of B ;
(b) by how many miles A is further south than B after one hour's sailing.   12

8. State Newton's Second Law.   1

(i) Two masses P and Q (P > Q) are connected by an inelastic string passing over a smooth fixed peg. Find the acceleration of the masses and show that it is dependent only on the ratio of the masses and not on their absolute values.

If the acceleration of the masses is 4 feet per second per second, find the ratio of the masses.   7

(ii) Two equal masses, each of M lb., are connected as shown on the accompanying diagram. Assuming that the accelerations of the masses are constant, prove that the acceleration of one mass is double that of the other, and find

(a) the acceleration of the mass connected to the end of the string,
(b) the tension in the string.

(You may assume that the pulleys are smooth and weightless.)   12
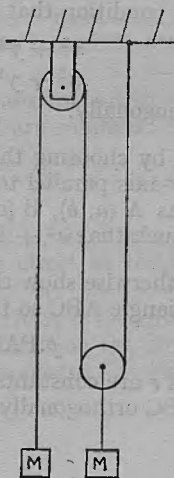
GEOMETRY

ADDITIONAL MATHEMATICAL SUBJECT

(Higher Grade)

Wednesday, 26th March—1.0 P.M. to 3.0 P.M.

Before attempting to answer any question, candidates should read the whole of it very carefully, since time is often lost through misapprehension as to what is really required.

Not more than FIVE questions should be attempted, of which TWO should be chosen from Section I, TWO from Section II, and a FIFTH from EITHER Section.

Where geometrical references are necessary in written proofs, care should be taken to ensure that such references are clear and intelligible.   Text-book reference numbers, apart from those of Euclid, should NOT be used.

Square-ruled paper is provided.

The value attached to each question or part of a question is shown in the margin.

Marks will be deducted for careless or badly arranged work.

SECTION I   *Marks*

1. Show that, for all values of m, the equation
$$mx^2 + (m^2 - 1)xy - my^2 - 5(m - 1)x + 5(m + 1)y - 25 = 0$$
represents a pair of straight lines and that these lines together with the pair represented by the equation
$$mx^2 + (m^2 - 1)xy - my^2 = 0$$
enclose a square.   10

The square defined by a particular value of m is such that the line $x - 3y = 0$ is a tangent to the circle circumscribing the square ; find the value of m and the equation of the circle.   10

2. Find the condition that the circles
$$x^2 + y^2 + 2g_1x + 2f_1y + c_1 = 0$$
and
$$x^2 + y^2 + 2g_2x + 2f_2y + c_2 = 0$$
should cut orthogonally.   5

Show that, by choosing the origin at the circumcentre of a triangle ABC and the x-axis parallel to BC, the co-ordinates of the vertices may be expressed as A (a, b), B (c, d), and C $(-c, d)$, where a, b, c, and d are constants such that $a^2 + b^2 = c^2 + d^2$.   3

Hence or otherwise show that the locus of a point P which moves in the plane of triangle ABC so that
$$p.\text{PA}^2 + q.\text{PB}^2 + r.\text{PC}^2 = 0,$$
where p, q, and r are constants, is a circle which cuts the circumcircle of the triangle ABC orthogonally.   12

3. Assuming the equation of the tangent, prove that the equation of the normal to the parabola $y^2 = 4ax$ at the point $(at^2, 2at)$ is

$$y + tx = 2at + at^3,$$

and show that the normal meets the parabola again at the point whose parameter is $-t - \dfrac{2}{t}$.

8

The normal at a point P on a parabola whose vertex is A meets the parabola again in Q. Through R, the mid-point of PQ, RT is drawn parallel to the axis of the parabola to meet PA produced in T. Prove that T lies on the directrix of the parabola.

12

4. M and N are variable points on the circles with centres at the origin O and radii $2m$ and $2n$ respectively $(m > n)$ such that the angle MON is bisected by the x-axis. If $\angle xOM = \theta$, prove that the co-ordinates of P, the mid-point of MN, are $[(m + n) \cos \theta, (m - n) \sin \theta]$. Show that the locus of P as θ varies is an ellipse and that the diameter which is parallel to the tangent at P is equal in length to MN.

20

5. Prove that the equation of the tangent at the point P (x_1, y_1) on the rectangular hyperbola $xy = c^2$ is $\dfrac{x}{x_1} + \dfrac{y}{y_1} = 2$.

6

P and Q are points on the rectangular hyperbola $xy = c^2$ such that the tangent at P meets the y-axis at N, and the line through N parallel to the x-axis meets the hyperbola at Q. Prove that, if the tangent at Q meets the x-axis at M, PQ is parallel to MN, and show that, if PN and QM meet at L,

$$\frac{PL}{LN} = \frac{QL}{LM} = \frac{1}{2}.$$

14

Section II

6. Prove that, if O is a point within a triangle ABC, and AO, BO, and CO meet BC, CA, and AB at D, E, and F respectively,

$$\frac{BD}{DC} \cdot \frac{CE}{EA} \cdot \frac{AF}{FB} = +1.$$

State the converse of this theorem.

8

Three non-intersecting circles have centres L, M, and N respectively. The transverse common tangents of circles M and N meet at X, those of circles N and L meet at Y, and those of circles L and M meet at Z. Prove that LX, MY, and NZ are concurrent.

Show further that, if the corresponding pairs of direct common tangents meet at P, Q, and R, then P, Q, and R are collinear.

12

7. Define *inverse points*, and prove that the inverse of a straight line is a circle through the centre of inversion.

7

If LM is a chord of a given circle with centre O, show in a diagram the inverse of the chord LM, taking the given circle as the circle of inversion.

3

A is a point on a given circle, and with centre A a second circle is drawn to cut the first at B and C. From a point P on the circle ABC tangents PQ and PR are drawn to the circle with centre A. Prove that BC bisects QR.

10

Marks

8. Prove that if any secant of a circle is drawn through a point P it is divided harmonically by P, the polar of P, and the circle.   7

Chórds AB and CD of a given circle intersect at P. The tangents at A and B to the circle meet at Q ; the tangents at C and D meet at R, and meet PQ at L and M.

Prove that (i) RQ is the polar of P,   6

(ii) (PQ, LM) is a harmonic range.   7

9. ABCD is a tetrahedron such that AD = BC and angle BAD = angle ABC.

Prove that (i) BD = AC,   6

(ii) angle ADC = angle BCD,   6

(iii) the line joining the mid-points of AB and CD is perpendicular to AB and to CD.   8

LATIN

LOWER GRADE

Monday, 24th March—9.15 A.M. to 11.45 A.M.

The value attached to each question or part of a question is shown in the margin.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate into English :—   *Marks*

Either (*a*) **or** (*b*).

(*a*) *The Bituriges accept a proposal by Vercingetorix that they should carry out a " scorched earth " policy, but obtain permission to preserve Avaricum.*

Omnium consensu hac sententia probata, uno die plus viginti urbes Biturigum incenduntur. hoc idem fit in reliquis civitatibus ; in omnibus partibus incendia conspiciuntur ; quae etsi magno cum dolore omnes ferebant, se tamen consolabantur quod se amissa celeriter reciperaturos confidebant. deliberatur de Avarico in communi concilio, utrum incendi an defendi placeret. Bituriges ad pedes Gallorum procumbunt, ne pulcherrimam prope totius Galliae urbem, quae praesidio et ornamento sit civitati, suis manibus succendere cogerentur. facile se loci natura eam defensuros dicunt, quod prope ex omnibus partibus flumine et palude circumdata unum et perangustum aditum habeat. datur petentibus venia,[1] dissuadente primo Vercingetorige, postea precibus Biturigum concedente. defensores oppido idonei deliguntur.   26

[1] venia = permission.

(b) *The Sabine women, whom the Romans had taken by force as their wives, appear on the field of battle with their children in their arms and reconcile their husbands and their fathers.*

Consilium accipiunt ; parent crinemque resolvunt,
　maestaque funerea corpora veste tegunt.
iam steterant acies ferro mortique paratae ;
　iam lituus [1] pugnae signa daturus erat ;
cum raptae veniunt inter patresque virosque,
　inque sinu natos, pignora[2] cara ferunt.
et, quasi sentirent, blando clamore nepotes
　tendebant ad avos bracchia parva suos.
tela viris animique cadunt, gladiisque remotis
　dant soceri generis accipiuntque manus ;
laudatasque tenent natas, scutoque nepotem
　fert avus ; hic scuti dulcior usus erat.　　　　　26

　　[1] lituus = trumpet.
　　[2] pignus = pledge (of love).

2. *On receipt of a signal from a detached force in the rear of the enemy's camp the consul attacks. After a hard struggle the Romans gain the victory.*

Interim die tertio, cum montem quem petierat tribunus se cepisse ac tenere fumo significaret, tum vero trifariam[1] divisis copiis consul valle media cum militum robore procedit, cornua dextra laevaque admovet castris. celeriter hostes obviam eunt et, dum aviditate certaminis provecti extra munitiones pugnant, multo superior est Romanus miles et virtute et scientia et genere armorum. postquam multis vulneratis interfectisque receperunt se hostes in loca aut munimento aut natura tuta, verterat[2] periculum in Romanos temere in loca iniqua progressos. neque impunita temeritate inde se recepissent, nisi clamor primum ab tergo auditus, deinde pugna etiam coepta trepidos repentino terrore hostes fecissent. pars in fugam effusi sunt : pars, cum substitissent, magis quia locus fugae deerat quam quod animi satis esset ad pugnam, a Romanis et a fronte et a tergo circumventi sunt.　　　　　36

　　[1] trifariam = in three parts.
　　[2] verterat is intransitive.

3. Translate into Latin :—

　(1) He became so poor that his children often lacked food.　　3

　(2) We had feared that you would forget us after so many years.　　3

　(3) In order to have more water, he marched near the river.　　3

　(4) When will you weary of the folly which harms only yourselves ?　　3

　(5) If we do not avenge our leader, you and I will be hateful to the citizens.　　4

　(6) On my arrival at Corinth, I promised that the robbers would be driven from this district.　　4

Marks

4. (*a*) Give the nominative singular masculine of the future participle of veto, tondeo, augeo, queror, colo, arcesso.   3

(*b*) Give the other degrees of comparison of acrius, dubius, cautissime.   3

(*c*) Give the English for the following Latin words and phrases :—

verbatim, agenda, pro bono publico, exempli gratia.   2

5. (*a*) (i) State in a sentence what religious duty the consul was expected to carry out before engaging in battle.

(ii) Give the Latin words for the following parts of a Roman camp :—the general's quarters, the main street, the two main features of the fortifications.

(iii) Give the Latin words for two items in the offensive or defensive equipment of a Roman legionary, excluding the sword and the shield.   4

(*b*) Give the name of the god of the underworld.

Give the name of the magistrate who managed the state finances at Rome.

Give the name of the battle in which Caesar overthrew Pompey.

Give the name of the tribe who in Caesar's time inhabited Switzerland.

Give the name of the garment which was the feminine equivalent for the tunica.

Put the following events in chronological order, placing the earliest first :—the conspiracy of Catiline, the invasion of Britain by Claudius, the destruction of Carthage.   3

(*c*) In about fifty or sixty words describe a Roman book and tell how it was handled in reading *or* give an account of the career of Gaius Marius or Julius Agricola.   3

LATIN

Higher Grade—(First Paper)

Monday, 24th March—9.15 a.m. to 11.45 a.m.

The value attached to each question or part of a question is shown in the margin.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

Translate into English :— *Marks*

1. *Apollonius of Panhormus, because he could not bribe Verres, was imprisoned on the ground that he had in his household a slave who fomented revolt among his fellows.*

Quid ? de Apollonio praeteriri potest ? quem, ut Panhormum venit C. Verres, ad se vocari iussit concursu magno frequentiaque civium. homines statim loqui : "mirabar quod Apollonius, homo pecuniosus, tam diu ab isto maneret integer : profecto homo dives repente a Verre non sine causa citatur." exspectatio summa omnium quidnam id esset, cum exanimatus subito ipse accurrit cum adulescente filio. nominat Verres servum, quem magistrum pecoris esse diceret : eum dicit coniurasse et familias concitasse,— is omnino servus in familia non erat,— eum statim exhiberi iubet. Apollonius adfirmare se omnino nomine illo servum habere neminem ; iste hominem in carcerem conici iubet. clamare ille, cum raperetur, nihil se miserum fecisse, pecuniam numeratam[1] in praesentia non habere. haec cum maxime summa hominum frequentia testificaretur, ut quivis intellegere posset eum, quod pecuniam non dedisset, idcirco illa tam acerba iniuria adfici, in vincla coniectus est. 45

[1] pecunia numerata = ready money, cash.

2. *Venus prompts Aeneas to make a surprise attack on the city of Latinus and to destroy it utterly.*

Hic mentem Aeneae genetrix pulcherrima misit,
iret ut ad muros urbique adverteret agmen
ocius et subita turbaret clade Latinos.
ille, ut vestigans diversa per agmina Turnum
huc atque huc acies[1] circumtulit, aspicit urbem
immunem tanti belli atque impune quietam.
continuo pugnae accendit maioris imago ;
Mnesthea Sergestumque vocat fortemque Serestum
ductores, tumulumque capit qua cetera Teucrum
concurrit legio, nec scuta aut spicula densi
deponunt. celso medius stans aggere fatur :
"ne qua meis esto dictis mora ; Iuppiter hac stat ;
neu quis ob inceptum subitum mihi segnior ito.
urbem hodie, causam belli, regna ipsa Latini,
ni frenum accipere et victi parere fatentur,
eruam, et aequa solo fumantia culmina ponam." 37

[1] acies = eyes.

Scan the line beginning neu quis, and the next two lines, marking the principal caesura in each. 3

3. *The people of Tusculum avert war with the Romans by a show of peaceful activity.*

Nec fuit cum Tusculanis bellum : pace constanti vim Romanam arcuerunt quam armis non poterant. intrantibus fines Romanis non demigratum ex propinquis itineri locis, non cultus agrorum intermissus ; patentibus portis urbis togati obviam frequentes imperatoribus processere. Camillus, eademne forma pacis quae in agris ostentaretur etiam intra moenia esset scire cupiens,

Marks

urbem ingressus est. ibi patentes ianuas et tabernis apertis
proposita omnia in medio vidit intentosque artifices suo quemque
operi et ludos litterarum strepere discentium vocibus ac repletas
vias puerorum mulierumque huc atque illuc euntium. omnia
circumspiciebat inquirens oculis ubi bellum esset. victus igitur
patientia hostium senatum eorum vocari iussit. " soli adhuc,"
inquit, " Tusculani, vera arma verasque vires invenistis quibus
ab ira Romanorum vestra tutaremini. ite Romam ad senatum ;
aestimabunt patres utrum plus poenae an veniae meriti sitis."   35

LATIN

HIGHER GRADE—(SECOND PAPER)

Monday, 24th March—1.0 P.M. to 3.0 P.M.

The value attached to each question or part of a question is shown in the margin.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh
page. Write legibly and neatly, and leave a space of about half an inch
between the lines.

Marks will be deducted for writing that is difficult to read.

1. Translate into Latin :—   *Marks*

Landing that summer in a lonely place on the coast of Pontus,
Demetrius announced that he had come to fight for the two kingdoms
which his ancestors had held. Although some of the leading men
thought the enterprise fraught with great danger, so many of the tribes
joined him that he soon had an army of some five thousand men. A
rapid march through the mountain passes enabled him to evade the
royal forces, which were advancing to meet him, and to secure possession
of the greatest city in the country. Soon afterwards a battle took place
in which his men attacked the enemy so fiercely with their long swords
that the king's soldiers, utterly terrified, took refuge in flight. Fired
by this victory, Demetrius believed that, if he invaded Bithynia, he
would meet with equal success. Had he been able to persuade the
inhabitants of that kingdom to take up arms, he might have driven the
king into exile. But his soldiers began to desert him, and he was forced
to retreat into the mountains whence he had come.   50

2. Translate into Latin :—

    (1) Relying on this band of young men he formed a plan for
        destroying the State.   3

    (2) Provided you are informed how many men will arrive here, you
        will be able to procure arms for all.   4

    (3) We were disgusted with our neighbours, not because they were
        silly, but because we thought them wicked.   4

    (4) There were some who believed that it was of much less account
        to lose their freedom than their lives.   4

    (5) Whether he is acquitted or condemned, Clodius will behave as
        if he were entirely innocent.   4

    (6) While I was opening the gate this morning, a priest told me
        not to enter the temple.   4

Marks

3. (a) Give the first supine of divello, texo, elicio, ardeo, crepo, findo.
   (b) Give the genitive singular of totus, praeceps, and the dative
       singular of origo, vertex.
   (c) Give the Latin for :—on 28th September, for a longer time,
       scarcely anyone, a girl seventeen years old.   7

GREEK

LOWER GRADE

Friday, 21st March—9.15 A.M. to 11.45 A.M.

*The value attached to each question or part of a question is shown in the
margin*

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh
page. Write legibly and neatly, and leave a space of about half an inch
between the lines.
Marks will be deducted for bad spelling and bad punctuation, and for
writing that is difficult to read.

1. Translate into English :—   *Marks*

(a) *Cimon, sent to make war on the Persians in Cyprus, defeats them by sea
and in a land battle on the coast of Phoenicia.*

Μετὰ δὲ ταῦτα Ἀθηναῖοι ἐβουλεύσαντο πάλιν πολεμεῖν
τοῖς Πέρσαις, καὶ στρατηγὸν ἑλόμενοι Κίμωνα τὸν Μιλτιάδου
ἐκέλευσαν πλεῖν ἐπὶ Κύπρον. κατ' ἐκείνους δὲ τοὺς χρόνους
τῶν Περσικῶν δυνάμεων ἐστρατήγουν Ἀρτάβαζος καὶ
Μεγάβυζος. καὶ Ἀρτάβαζος μὲν τοῦ ναυτικοῦ τὴν
ἡγεμονίαν ἔχων ἐν τῇ Κύπρῳ διέτριβεν, Μεγάβυζος δὲ ἐν
Κιλικίᾳ ἐστρατοπέδευε, πεζὰς ἔχων δυνάμεις. ὁ δὲ Κίμων
καταπλεύσας εἰς τὴν Κύπρον πόλεις μὲν ἐξεπολιόρκησε δύο·
μετὰ δὲ ταῦτα, ἐκ Κιλικίας καὶ Φοινίκης ἐπιπλεόντων τῶν
πολεμίων, ἐπαναχθεὶς καὶ ναυμαχήσας πολλὰς μὲν τῶν νεῶν
κατέδυσεν, τὰς δὲ λοιπὰς μέχρι τῆς Φοινίκης ἐδίωξεν.
οἱ μὲν οὖν Πέρσαι κατέφυγον εἰς τὴν γῆν· οἱ δὲ Ἀθηναῖοι
προσπλεύσαντες καὶ τοὺς στρατιώτας ἐκβιβάσαντες συνῆψαν
μάχην, καθ' ἣν Ἀναξικράτης μὲν ὁ ἕτερος τῶν στρατηγῶν
καλῶς ἀγωνισάμενος ἀπέθανε, οἱ δὲ ἄλλοι κρατήσαντες τῇ
μάχῃ καὶ πολλοὺς ἀποκτείναντες ἐπανῆλθον εἰς τὰς ναῦς.
μετὰ δὲ ταῦτα Ἀθηναῖοι πάλιν ἀπέπλευσαν εἰς τὴν Κύπρον.

34

Marks

(b) *The jealousy of the Persians in secluding their women from the eyes of strangers enables Themistocles to escape from his enemies.*

Ὁ δὲ Θεμιστοκλῆς, ἐπεὶ κατέπλευσεν εἰς Κύμην καὶ πολλοὺς ἤσθετο βουλομένους αὐτὸν λαβεῖν, μάλιστα δὲ Ἐργοτέλη καὶ Πυθόδωρον, ἔφυγεν εἰς Αἰγάς, ὑπὸ πάντων ἀγνοούμενος πλὴν τοῦ φίλου Νικογένους. παρὰ τούτῳ κρυπτόμενος ἡμέρας ὀλίγας διέτριψεν. εἶτα λάθρᾳ ἐκπέμπεται ἐκ τῆς πόλεως ὑπὸ τοῦ Νικογένους μηχανησαμένου τι τοιοῦτον. τοῦ βαρβαρικοῦ γένους τὸ πολὺ καὶ μάλιστα τὸ Περσικὸν περὶ τὰς γυναῖκας ἄγριον φύσει καὶ ζηλότυπόν ἐστιν. φυλάττουσι γὰρ αὐτὰς ἰσχυρῶς, ὥστε ὑπὸ μηδενὸς ὁρᾶσθαι τῶν ἐκτός, ἀλλ᾽ οἴκοι μὲν διαιτᾶσθαι[1] κατακεκλεισμένας, ἐν δὲ ταῖς ὁδοιπορίαις ὑπὸ σκηνὰς ἐπὶ τῶν ἁμαξῶν πορεύεσθαι. τοιαύτης παρασκευασθείσης ἁμάξης ὁ Θεμιστοκλῆς ἐκομίζετο, τῶν περὶ αὐτὸν ἀεὶ τοῖς ἐν ὁδῷ ἐντυγχάνουσι λεγόντων ὅτι γυναῖκα Ἑλληνικὴν ἄγουσιν ἀπ᾽ Ἰωνίας πρὸς βασιλέα.

[1] διαιτᾶσθαι = live, dwell.   27

2. Translate into Greek :—

    (1) If the Athenians had marched more quickly, they would have captured the city.   3

    (2) Did you ask the boy where he was carrying the wine ?   3

    (3) The king said that he himself would go forth to defend the citizens.   3

    (4) You and Nicias have fought so well that all your friends praise you.   3

    (5) The soldiers will be afraid that the enemy will attack the camp in the absence of their general.   4

    (6) Would that we had burned the houses as soon as the Persian fleet entered the harbour!   4

3. (a) Give the nominative singular masculine of the aorist participle active of γιγνώσκω, μανθάνω, στέλλω, πίπτω, ἐπαινῶ, λαμβάνω.   3

    (b) Give the genitive singular of δόξα, πατρίς, μήτηρ, ἄστυ, Ζεύς, ναῦς.   3

    (c) Give the Greek for:—tomorrow, on these conditions, at the beginning of spring, to condemn the woman to death.   2

Marks

4. (*a*) Miltiades and Themistocles are mentioned in the passages set for translation in question 1. Tell, in two sentences for each, what you know about them, apart from what is related in these passages.   4

(*b*) Give the name of a famous Athenian philosopher.

Give the name of a famous Spartan law-giver.

Give the name of the Persian king who invaded Greece in 480 B.C.

Give the name of the chief city of Boeotia.

Give the name of the battle in which the Athenians were finally defeated in the Peloponnesian War.

Give the name of the Macedonian king who conquered the Persian empire.

Give the name of the Greek corn-goddess.

Give the name of the chief oracle of Apollo in Greece.   4

(*c*) In about fifty or sixty words tell what you know about the Athenian siege of Syracuse *or* the organization of the Spartan state.   3

GREEK

HIGHER GRADE—(FIRST PAPER)

Friday, 21st March—9.15 A.M. to 11.45 A.M.

The value attached to each question or part of a question is shown in the margin.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

Translate into English :—   *Marks*

1. *The Athenian force in Egypt, making its last stand on the island of Prosopitis in the Nile, is destroyed by Megabyzus.*

Οἱ δ᾽ ἐν τῇ Αἰγύπτῳ Ἀθηναῖοι καὶ οἱ ξύμμαχοι ἐπέμενον, καὶ αὐτοῖς πολλαὶ ἰδέαι πολέμων κατέστησαν. τὸ μὲν γὰρ πρῶτον ἐκράτουν τῆς Αἰγύπτου οἱ Ἀθηναῖοι, καὶ βασιλεὺς πέμπει ἐς Λακεδαίμονα Μεγάβαζον ἄνδρα Πέρσην χρήματα ἔχοντα, ὅπως ἐς τὴν Ἀττικὴν ἐσβαλεῖν πεισθέντων τῶν Πελοποννησίων ἀπ᾽ Αἰγύπτου ἀπαγάγοι Ἀθηναίους. ὡς δὲ αὐτῷ οὐ προυχώρει καὶ τὰ χρήματα ἄλλως ἀνηλοῦτο, ὁ μὲν Μεγάβαζος καὶ τὰ λοιπὰ τῶν χρημάτων πάλιν ἐς τὴν Ἀσίαν ἀνεκομίσθη, Μεγάβυζον δὲ τὸν Ζωπύρου πέμπει ἄνδρα

Πέρσην μετὰ στρατιᾶς πολλῆς· ὃς ἀφικόμενος κατὰ γῆν
τούς τε Αἰγυπτίους καὶ τοὺς ξυμμάχους μάχῃ ἐκράτησε,
καὶ ἐκ τῆς Μέμφιδος ἐξήλασε τοὺς Ἕλληνας, καὶ τέλος
ἐς Προσωπίτιδα τὴν νῆσον κατέκλησε, καὶ ἐπολιόρκει ἐν
αὐτῇ ἐνιαυτὸν καὶ ἐξ μῆνας, μέχρι οὗ ξηράνας τὴν
διώρυχα[1] καὶ παρατρέψας ἄλλῃ τὸ ὕδωρ τάς τε ναῦς ἐπὶ
τοῦ ξηροῦ[2] ἐποίησε καὶ τῆς νήσου τὰ πολλὰ ἤπειρον, καὶ
διαβὰς εἷλε τὴν νῆσον πεζῇ. οὕτω τὰ τῶν Ἑλλήνων
πράγματα ἐφθάρη· καὶ ὀλίγοι ἀπὸ πολλῶν πορευόμενοι
διὰ τῆς Λιβύης ἐς Κυρήνην ἐσώθησαν, οἱ δὲ πλεῖστοι
ἀπώλοντο.

[1] διῶρυξ = a canal.

[2] ἐπὶ τοῦ ξηροῦ = high and dry.   45

2. *The speaker recalls how Philip made unofficial overtures for peace
through the Euboeans, then through Ctesiphon, who had been sent to
Macedonia to negotiate for the recovery of the ransom paid for a captured
Athenian.*

῞Απαντας γὰρ ὑμᾶς οἶμαι τοῦτό γε μνημονεύειν, ὅτι οἱ
πρέσβεις οἱ τῶν Εὐβοέων, ἐπειδὴ περὶ τῆς πρὸς αὐτοὺς
εἰρήνης τῷ δήμῳ διελέχθησαν, εἶπον ὅτι καὶ Φίλιππος
αὐτοὺς κελεύσειεν ὑμῖν ἀπαγγεῖλαι ὅτι βούλεται διαλύσασθαι
πρὸς ὑμᾶς καὶ εἰρήνην ἄγειν. οὐ πολλῷ δ' ὕστερον χρόνῳ
Φρύνων ἑάλω ὑπὸ λῃστῶν ἐν ταῖς σπονδαῖς ταῖς
Ὀλυμπιακαῖς, ὡς αὐτὸς ᾐτιᾶτο. ἐπειδὴ δ' ἐπανῆλθε δεῦρο
λυτρωθείς, ἐδεῖτο ὑμῶν πρεσβευτὴν ὑπὲρ αὐτοῦ πρὸς
Φίλιππον πέμψαι, ἵνα, εἴ πως δύναιτο, ἀπολάβοι τὰ λύτρα.
πεισθέντες δ' ὑμεῖς ἐπέμψατε ὑπὲρ αὐτοῦ Κτησιφῶντα
πρεσβευτήν. ἐπειδὴ δὲ ἐπανῆκε δεῦρο ἀπὸ τῆς πρεσβείας
ὁ Κτησιφῶν, ἀπήγγειλε πρὸς ὑμᾶς ὑπὲρ ὧν ἐπέμφθη,
καὶ πρὸς τούτοις ὅτι φαίη Φίλιππος ἄκων μὲν πολεμῆσαι
πρὸς ὑμᾶς, βούλεσθαι δὲ καὶ νῦν ἀπαλλαγῆναι τοῦ πολέμου.
εἰπόντος δὲ ταῦτα τοῦ Κτησιφῶντος, καὶ τοῦ δήμου σφόδρα
ἐπαινέσαντος αὐτόν, ἀντειπόντος δ' οὐδενός, ἐνταῦθα ἤδη
γράφει ψήφισμα Φιλοκράτης, καὶ ὁ δῆμος ἅπας ὁμογνωμονῶν
ἐχειροτόνησεν ἐξεῖναι Φιλίππῳ δεῦρο κήρυκα καὶ πρέσβεις
πέμπειν ὑπὲρ εἰρήνης.   40

3. **Either** (a) or (b).   *Marks*

  (a) *Patroclus comes to Achilles in tears. Achilles asks him if he has heard some bad news from Phthia.*

       Ὣς οἱ μὲν περὶ νηὸς ἐϋσσέλμοιο μάχοντο·
       Πάτροκλος δ' Ἀχιλῆϊ παρίστατο, ποιμένι λαῶν,
       δάκρυα θερμὰ χέων ὥς τε κρήνη μελάνυδρος.
       τὸν δὲ ἰδὼν ᾤκτειρε ποδάρκης δῖος Ἀχιλλεύς,
       καί μιν φωνήσας ἔπεα πτερόεντα προσηύδα·
       " τίπτε δεδάκρυσαι, Πατρόκλεες, ἠΰτε κούρη
       νηπίη, ἥ θ' ἅμα μητρὶ θέουσ' ἀνελέσθαι ἀνώγει,
       εἱανοῦ[1] ἁπτομένη, καί τ' ἐσσυμένην κατερύκει,
       δακρυόεσσα δέ μιν ποτιδέρκεται, ὄφρ' ἀνέληται·
       τῇ ἴκελος, Πάτροκλε, τέρεν κατὰ δάκρυον εἴβεις.
       ἠέ τιν' ἀγγελίην Φθίης ἐξ ἔκλυες οἶος;
       ζώειν μὰν ἔτι φασὶ Μενοίτιον, Ἄκτορος υἱόν,
       ζώει δ' Αἰακίδης Πηλεὺς μετὰ Μυρμιδόνεσσι,
       τῶν κε μάλ' ἀμφοτέρων ἀκαχοίμεθα τεθνηώτων.
       ἦε σύ γ' Ἀργείων ὀλοφύρεαι, ὡς ὀλέκονται;
       ἐξαύδα, μὴ κεῦθε νόῳ, ἵνα εἴδομεν ἄμφω."

                [1] εἱανός = a robe.   37

Scan the line beginning καί μιν and the next two lines, marking the principal caesura in each.   3

  (b) *Theseus is enraged against his son Hippolytus, whom he believes to be responsible for the death of his wife. Hippolytus enters unaware of what has happened.*

  XO. καὶ μὴν ὅδ' αὐτὸς παῖς σὸς ἐς καιρὸν πάρα,
       Ἱππόλυτος· ὀργῆς δ' ἐξανεὶς κακῆς, ἄναξ
       Θησεῦ, τὸ λῷστον σοῖσι βούλευσαι δόμοις.

  IΠ. κραυγῆς ἀκούσας σῆς ἀφικόμην, πάτερ,
       σπουδῇ· τὸ μέντοι πρᾶγμ' ἐφ' ᾧτινι στένεις
       οὐκ οἶδα, βουλοίμην δ' ἂν ἐκ σέθεν κλύειν.
       ἔα, τί χρῆμα; σὴν δάμαρθ' ὁρῶ, πάτερ,
       νεκρόν· μεγίστου θαύματος τόδ' ἄξιον·
       ἣν ἀρτίως ἔλειπον, ἣ φάος τόδε

Marks

οὔπω χρόνον παλαιὸν εἰσεδέρκετο.
τί χρῆμα πάσχει; τῷ τρόπῳ διόλλυται;
πάτερ, πυθέσθαι βούλομαι σέθεν πάρα.
ἡ γὰρ ποθοῦσα πάντα καρδία κλύειν
κἂν τοῖς κακοῖσι λίχνος[1] οὖσ᾿ ἁλίσκεται.
οὐ μὴν φίλους γε κἄτι μᾶλλον ἢ φίλους
κρύπτειν δίκαιον σάς, πάτερ, δυσπραξίας.

[1] λίχνος = inquisitive.   37

Scan the line beginning καὶ μήν, and the next two lines, marking the principal caesura in each.   3

GREEK

HIGHER GRADE—(SECOND PAPER)

Friday, 21st March—1.0 P.M. to 3.0 P.M.

The value attached to each question or part of a question is shown in the margin.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for writing that is difficult to read.

1. Translate into Greek :—   *Marks*

When Seleucus saw that his army was being defeated and that he himself was in danger, he fled with a few companions. Fearing lest he should be pursued, he threw away his royal diadem[1], and rode away at full speed, in the hope of escaping recognition by the inhabitants as he passed through the enemy's country. In the evening he saw a house near the road and sent one of his companions to ask for bread and water ; for he had eaten nothing all day and was now very weak. The master of the house, who happened to be at home, not only gave what was asked, but, wishing to treat the strangers well, went down to the road to invite them into his house. There he recognized the king, and suspecting nothing cried out " Hail, O King Seleucus." Seleucus thereupon seized his right hand, as if to thank him, and at the same time ordered his companions to cut him down on the spot.   48

[1] diadem = διάδημα (n.)

2. Translate into Greek :—   *Marks*

   (1) Whenever the philosopher met his friends, he used to ask them
       why they sought wealth rather than wisdom.   4

   (2) Although you have a large army, you will be unable to prevent
       them from invading your country.   4

   (3) The doctors thought that they would be put to death, if the
       king died of the disease.   4

   (4) When he saw the Spartans drawn up on the hill, our general was
       at a loss what to do.   4

   (5) I knew that his fleet was too weak to overcome so many ships in
       a sea battle.   4

3. (a) Give the nominative singular masculine of the perfect participle
       active of ἀκούω, γιγνώσκω, καλῶ, πλέω, τυγχάνω.

   (b) Give the aorist infinitive active of στέλλω, τέμνω and the
       aorist infinitive of δύναμαι, ἥδομαι, ἐπιλανθάνομαι.

   (c) Give the genitive singular of κέρας, πειθώ, γάλα, ὄρνις.   7

HEBREW

HIGHER GRADE—(FIRST PAPER)

Tuesday, 25th March—9.30 A.M. to 12 NOON

The value attached to each question or part of a question is shown in the margin.

.N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh
    page. Write legibly and neatly, and leave a space of about half an inch
    between the lines.

    Marks will be deducted for bad spelling and bad punctuation, and for
    writing that is difficult to read.

    Answers in Hebrew must be written in the square character.

1. Translate into English any TWO of the following passages (*a*), (*b*), and (*c*).

(*a*)

וַיִּקְצְפוּ הַשָּׂרִים עַל־יִרְמְיָהוּ וְהִכּוּ אֹתוֹ וְנָתְנוּ אוֹתוֹ בֵּית הָאֵסוּר
בֵּית יְהוֹנָתָן הַסֹּפֵר כִּי־אוֹתוֹ עָשׂוּ לְבֵית־הַכֶּלֶא: כִּי בָא יִרְמְיָהוּ
אֶל־בֵּית הַבּוֹר וְאֶל־הַחֲנֻיוֹת וַיֵּשֶׁב שָׁם יִרְמְיָהוּ יָמִים רַבִּים: וַיִּשְׁלַח
הַמֶּלֶךְ צִדְקִיָּהוּ וַיִּשְׁאָלֵהוּ הַמֶּלֶךְ בְּבֵיתוֹ בַּסֵּתֶר וַיֹּאמֶר הֲיֵשׁ דָּבָר מֵאֵת
יהוה וַיֹּאמֶר יִרְמְיָהוּ יֵשׁ וַיֹּאמֶר בְּיַד מֶלֶךְ בָּבֶל תִּנָּתֵן: וַתֹּאמֶר יִרְמְיָהוּ
אֶל־הַמֶּלֶךְ צִדְקִיָּהוּ מֶה חָטָאתִי לְךָ וְלַעֲבָדֶיךָ וְלָעָם הַזֶּה כִּי נְתַתֶּם
אוֹתִי אֶל־בֵּית הַכֶּלֶא: וְאַיֵּה נְבִיאֵיכֶם אֲשֶׁר נִבְּאוּ לָכֶם לֵאמֹר לֹא
יָבֹא מֶלֶךְ בָּבֶל עֲלֵיכֶם וְעַל־הָאָרֶץ הַזֹּאת: וְעַתָּה שְׁמַע־נָא אֲדֹנִי
הַמֶּלֶךְ תִּפָּל־נָא תְחִנָּתִי לְפָנֶיךָ וְאַל־תְּשִׁבֵנִי בֵּית יְהוֹנָתָן הַסֹּפֵר וְלֹא
אָמוּת שָׁם: וַיְצַוֶּה הַמֶּלֶךְ צִדְקִיָּהוּ וַיַּפְקִדוּ אֶת־יִרְמְיָהוּ בַּחֲצַר הַמַּטָּרָה
וְנָתֹן לוֹ כִכַּר־לֶחֶם לַיּוֹם מִחוּץ הָאֹפִים עַד תֹּם כָּל־הַלֶּחֶם מִן־הָעִיר:

(*Jeremiah xxxvii, 15–21*)   29

(*b*)

וּמָתוֹק הָאוֹר וְטוֹב לַעֵינַיִם לִרְאוֹת אֶת־הַשָּׁמֶשׁ:
כִּי אִם־שָׁנִים הַרְבֵּה יִחְיֶה הָאָדָם בְּכֻלָּם יִשְׂמָח
וְיִזְכֹּר אֶת־יְמֵי הַחֹשֶׁךְ כִּי הַרְבֵּה יִהְיוּ כָּל־שֶׁבָּא הָבֶל:
שְׂמַח בָּחוּר בְּיַלְדוּתֶיךָ וִיטִיבְךָ לִבְּךָ בִּימֵי בְחוּרוֹתֶיךָ
וְהַלֵּךְ בְּדַרְכֵי לִבְּךָ וּבְמַרְאֵי עֵינֶיךָ
וְדַע כִּי עַל־כָּל־אֵלֶּה יְבִיאֲךָ הָאֱלֹהִים בְּמִשְׁפָּט
וְהָסֵר כַּעַס מִלִּבֶּךָ וְהַעֲבֵר רָעָה מִבְּשָׂרֶךָ
כִּי־הַיַּלְדוּת וְהַשַּׁחֲרוּת הָבֶל:
זְכֹר אֶת בּוֹרְאֶיךָ בִּימֵי בְּחוּרוֹתֶיךָ
עַד אֲשֶׁר לֹא יָבֹאוּ יְמֵי הָרָעָה
וְהִגִּיעוּ שָׁנִים אֲשֶׁר תֹּאמַר אֵין־לִי בָהֶם חֵפֶץ:
עַד אֲשֶׁר לֹא תֶחְשַׁךְ הַשֶּׁמֶשׁ וְהָאוֹר
וְהַיָּרֵחַ וְהַכּוֹכָבִים
וְשָׁבוּ הֶעָבִים אַחַר הַגָּשֶׁם:

Ecclesiastes (Qoheleth) xi, 7–xii, 2.   29

Marks

(c)

אֲדֹנָי לֹא קְרָאַנִי לִתְרוּעַת מִלְחָמָה,

גַּם רֵיחַ מִלְחָמָה מְאֹד יְחִתֵּנִי;

אֻלְפַת כִּי אֶשְׁמַע קוֹל הַצֹּצְרָה בְּרָמָה –

וְכִנּוֹר נָחֱרַב – לַכִּנּוֹר הִנֵּנִי.

אַךְ אַשְׁרֵי הַנִּבּוֹר הַחַי עַל־תַּרְבְּהוּ,

שֶׁיִּשְׁלַח אֶת־יָדוֹ לְהַלְמוּת עֲמֵלִים;

וְאוֹי לוֹ לַמְּשׁוֹרֵר שֶׁחָלַל לְבֵהוּ,

הַשָּׁר אֶת־שָׁרוֹתָיו עַל לִבּוֹת עֲרֵלִים

כִּי מַה־שִּׁיר יִשְׂרָאֵל בַּגּוֹלָה – צִיץ יָבֵשׁ,

צִיץ עָלְפָה, שֶׁטַּל אוֹר אֶת־עָלָיו לֹא יַרְטֵב,

זֶרַע גַּד אֲשֶׁר נָפַל אֶל־דְּכֶשׁ (1) וְעָבֵשׁ,

פְּקָעָה (2) שֶׁשָּׁלְפָה וְיָבְשָׁה (3) בַּמַּרְתֵּף.

¹ עבש = to be shrivelled　² פְּקָעָה = onion　³ מַרְתֵּף = cellar

Bialik, שִׁיר יִשְׂרָאֵל

29

2. Point and translate :—

(a) ויכל דויד מהעלות העולה ויברך את־העם בשם האלהים:

(b) ויאמר אל־נערו עלה־נא הבט דרך ים ויעל ויבט:

(c) ויצאו הגבורים להלחם ויכם יהוה מכה גדולה ביום ההוא:

(d) ותאמר לו אשתו הלא צוית את־האיש לתת לך את־כרמו בכסף:

28

3. Write—   *Mark*

   (*a*) the 2nd plural masculine imperfect Qal of

   <div dir="rtl">ירד ,נגש ,אסף ,אמר ,עזב</div>   5

   (*b*) the 3rd singular masculine perfect, 3rd singular masculine imperfect,
   singular masculine imperative, infinitive construct and singular
   masculine participle of

   the Qal of לקח

   the Hiphil of נצל

   the Niphal of עשה

   the Piel of גרשׁ   20

   (*c*) the construct plural of

   <div dir="rtl">זָקֵן ,עַוֵּר ,עיר ,אִשָּׁה ,אִישׁ</div>   5

   (*d*) How does Hebrew express (i) the reflexive, (ii) the reciprocal of
   an action ?   4

                                                                       34

HEBREW

Higher Grade—(Second Paper)

Tuesday, 25th March—1.30 P.M. to 3.30 P.M.

The value attached to each question is shown in the margin.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh
page. Write legibly and neatly, and leave a space of about half an inch
between the lines.

Marks will be deducted for writing that is difficult to read.
Answers must be written in the square character.

1. Render into pointed Biblical Hebrew :—

   And the word of the Lord came to the prophet saying, Arise and go
down to the king, who dwells in Samaria and speak my word in his ears.
Then the prophet harkened unto the word of the Lord and went down
to meet the king. When the king saw him, he said. "Hast thou found me,
O mine enemy?" Then the prophet replied, saying, "I have found
thee. Because thou hast slain a man and taken his vineyard, I shall slay
thee too by the hand of thine enemies and thy wicked queen shall die
by violence in the city where thou didst slay Naboth." And the prophet
went forth from the city and returned to his own place.   60

2. Render into pointed Biblical Hebrew :—   *Marks*

    (*a*) In the days of the Judges each man did that which was right in his own eyes.

    (*b*) And the Lord again smote his people by the hand of their adversaries.

    (*c*) Give me hearing ears and hands which shed not blood that I be not as the Philistines.

    (*d*) And the king caused his people to cross over the river and to ascend the mountains which they saw before them.   20

FRENCH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 18th March—9.15 A.M. to 9.45 A.M.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

    (i) The passage will be read *twice*, with an interval of three minutes between the readings.

(ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden.* Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates :—(Maximum time of reading—four minutes)

Enfin Jean arriva devant la demeure de ses parents. Sous la neige et dans la brume le misérable logis paraissait bien plus pauvre encore. Une très faible lumière en sortait par l'unique fenêtre, à travers les étroits carreaux, dont deux sur six étaient en papier. De l'intérieur le vieux chien de berger lança deux ou trois abois ; mais bientôt, reconnaissant le visiteur, il se mit à gratter sous la porte, en poussant de petits cris de joie. Et Jean, pressant le loquet, entra en disant : " Bonsoir à tous ! "

Le chien, le premier, l'accueillit, lui plantant ses deux pattes sur la poitrine et lui passant sa langue sur la figure. Puis ce fut au tour de la mère, qui, en hâte, avait posé son écuelle à demi pleine. Enfin, le père qui, assis à la grande table de chêne, coupait les tranches de pain noir dans son assiette, se dressa pour embrasser aussi son garçon.

— " Pauvre petit ! " s'exclamait la mère. " Quelle surprise tu nous fais ! Est-ce un temps à voyager avec ce froid et cette neige ? "

— " Mais oui, maman, une veille de Noël. A mon âge un peu de froid n'est pas pour faire peur."

— " Tu es un brave garçon," dit la mère. " Mais il est déjà sept heures et tu as dû quitter le moulin là-bas avant midi. Tu as sûrement faim. Il reste encore un peu de soupe. J'ai des œufs et je ferai griller des châtaignes comme dessert."

— " Parfait ! " s'écria Jean.

Quand les œufs furent cuits et les châtaignes grillées, la mère vint s'asseoir au bout de la table, entre le père et le fils, et tous les trois, les fronts inclinés l'un vers l'autre, les coudes se touchant presque, unis, heureux dans leur pauvreté, causèrent longtemps.

Enfin Jean dit : " Le meunier vient de me payer mes gages, et quelques petits travaux que j'ai faits pour les fermiers des environs m'ont aussi rapporté un peu d'argent."

Et le brave garçon tira de sa poche quelques pièces d'argent et les glissa dans le tablier de sa mère.

FRENCH

Lower Grade—(Paper (a))

AURAL COMPREHENSION TEST

Tuesday, 18th March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the special sheet provided.

QUESTIONS   *Marks*

1. What outward signs showed that the house was inhabited by poor folk ?   2

2. Describe and explain the behaviour of the dog.   3

3. On what day did Jean come home ? Why was his mother surprised to see him ?   1

4. How did his mother know that he must be hungry ?   1

5. What did she give him to eat ?   2

6. Describe the attitude of the family as they sat at table. What feelings are portrayed in this scene ?   3

7. What present had Jean brought for his mother ? How had he procured it ? In what way did he give it to her ?   3
                                                                       ───
                                                                        15

FRENCH

Lower Grade—(Paper (b))

Tuesday, 18th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

Amateur Theatricals.

Je découvris un beau jour, dans d'immenses boîtes cachées par de vieux rideaux déchirés, dans un coin du grenier, d'anciens habits aux ornements rouges, aux boutons dorés, des casques, des épées, et de vieux instruments de musique. Tout un tas d'objets qui étaient restés là, complètement oubliés, depuis des siècles.

C'étaient sans doute les uniformes de la très ancienne compagnie des pompiers[1] du village et d'une société de musique d'autrefois. Ah ! quelle richesse ! J'allais pouvoir me déguiser ! Combien de fois pourrais-je, grâce à ce trésor, changer de personnalité, jouer des rôles magnifiques. Car je ne me contenterais pas d'être pompier . . . je ferais beaucoup mieux.

[1] le pompier = the fireman

D'abord je rassemblai toute la troupe de mes camarades habituels, garçons et filles, et je leur expliquai mes projets. Ils les reçurent avec enthousiasme. Mon grenier fut vite transformé en théâtre. Avec les vieux rideaux nous fîmes des décors ; les boîtes servirent de sièges pour le public. Puis nous commençâmes à jouer.

Habillés des habits de pompiers, casque en tête, épée au côté, portant chacun un instrument de musique, nous fîmes plusieurs fois le circuit : grenier, escalier, vestibule, jardin, en faisant un bruit infernal. Puis, soufflant dans nos trompettes, battant du tambour, nous sortions aussi dans la rue pour faire à nos voisins l'annonce de nos représentations. De temps en temps l'on s'arrêtait pour permettre au chef de la troupe — c'était moi, naturellement — de faire une proclamation d'une voix forte. Puis nous remontions à notre théâtre.

Nos pièces ? Ce ne furent d'abord que des scènes jouées sans paroles— combats, duels, processions. Mais bientôt, trouvant tout cela trop primitif, nous nous mîmes à transformer en pièces de théâtre quelques-unes de nos histoires favorites. Nous y réussîmes si bien que tous nos voisins, venus sur notre invitation, se déclarèrent ravis.   (35)

2. Read the passage below, then answer the questions which follow it.

N.B.—The passage is NOT to be translated.

Nous autres, campeurs . . .

Je me rappelle avoir, avant guerre, passé dans les solitudes canadiennes des années d'extrême pauvreté. Et cependant je me sentais riche.

Ceux qui me connaissaient — ou qui croyaient me connaître — haussaient certainement les épaules en parlant de moi. A leurs yeux, j'étais un fou.
5 Comment m'auraient-ils compris ? Leur âme était dans leur bourse. Ils y entassaient des dollars. Leur rêve était de produire plus de grains, pour élever encore plus de bestiaux, ce qui leur permettrait de produire encore plus de grains, pour élever encore plus de bestiaux, et ainsi de suite. Ils ne sentaient pas combien une telle vie était vaine, mais moi je le sentais. Je savais bien
10 qu'ils me méprisaient, mais moi je les méprisais à mon tour. Moi aussi, je cherchais la richesse. Mais pour eux et pour moi, le mot " richesse " avait deux sens bien différents.

— " Demain, me disais-je, je camperai au Rocher du Loup. Ma petite tente sera à l'abri de ce gros chêne à demi déraciné, mais qui tient encore bon.
15 J'aurai pêché quelque beau poisson, je l'aurai fait rôtir sur la braise. Ayant dîné, je surveillerai mes effets qui sèchent auprès de mon petit feu de bivouac tout en fumant ma pipe. J'entendrai le murmure du torrent, le bruit du vent, les branches légèrement agitées par les animaux dans leurs mystérieuses courses nocturnes."
20 Aujourd'hui encore j'ai le regret de ce pays et de cette époque. J'avoue que je crains les bruits de la vie moderne. Je continue à détester la T.S.F., les films sonores, et les fêtes populaires : ce sont de pauvres divertissements. Mais notre France est pleine d'endroits charmants où des gens qui se contentent d'une toile de tente et d'une couverture possèdent véritablement les plus
25 grandes richesses du monde.

Que sommes-nous, nous autres campeurs ? De vrais hommes, ceux du plein air. L'automobile, si nous nous en servons, n'est plus pour nous que ce qu'elle devrait être pour tout le monde : une servante. Nous abandonnons

volontiers la route pour suivre le torrent.   Au champ cultivé, nous préférons
30 la clairière.   Et pour nous la civilisation moderne est tellement superficielle que
nous oublions bien vite ses " bienfaits."

Le grand air est encore le meilleur moyen d'éliminer les poisons qu'on
respire dans les grandes villes.   Nos muscles se durcissent, notre peau se hâle,
nos poumons s'élargissent.   Nous comprenons mieux ce dont nous sommes
35 capables.   Nous apprenons aussi à estimer les choses qui sont essentielles à
notre bonheur et à mépriser celles qui ne le sont pas.   C'est à dire que nous
devenons plus intelligents.

<div align="center">QUESTIONS</div>   *Marks*

A.—Answer in English :—

(1) " Aujourd'hui encore j'ai le regret de ce pays et de cette époque."
(line 20)

    (a) To what country and to what period of time does the author
        refer ?

    (b) Explain the meaning of the sentence and say why the author
        feels as he does.   3

(2) " Ceux qui me connaissaient — ou croyaient me connaître —
haussaient certainement les épaules en parlant de moi." (lines 3 and 4)

    (a) To what persons does the author refer ?

    (b) How do the author and these persons regard each other ?
        How does the text make this clear ?

    (c) Describe the fundamental difference of outlook which
        divided them and show how it was evident in their ways
        of life.   Quote the sentence which sums up this difference.   9

(3) (a) With what kind of people does the author identify himself ?
    (b) What claim does he make for them ?
    (c) Detail the arguments by which he supports this claim.   6

(4) Show how the author regards the achievements of modern
civilization.   4
                                                                   ‾‾‾‾
                                                                        22
                                                                   ‾‾‾‾

B.—Answer in French :—

(1) Qu'est-ce que c'est qu'un dollar ?   Quels sont les pays du
    dollar ?   2

(2) A quoi sert un feu de bivouac ?   2

(3) Pourquoi le campeur porte-t-il une toile de tente avec lui ?   2

(4) Pourquoi l'air des grandes villes contient-il tant de poisons ?   2
                                                                   ‾‾‾‾
                                                                         8
                                                                   ‾‾‾‾
                                                                      (30)

3. Write, in French, a continuous story based on the following summary :—
    **Your story should be written in the past tense, and should be from one half
to three quarters the length of your answer to Question 1.**

On attend les invités à dîner—la mère a tout préparé—la table est mise—
la salle à manger vide—le chien entre—saute sur la table—renverse un verre—
on accourt au bruit—catastrophe évitée.   (20)

FRENCH

HIGHER GRADE—(FIRST PAPER)

Tuesday, 18th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh
   page. Write legibly and neatly, and leave a space of about half an inch
   between the lines.
   Marks will be deducted for bad spelling and bad punctuation, and for
   writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

Une nuit à la belle étoile.

J'ai fait un matelas de mousse et de feuilles sèches sur lequel je suis étendu.
J'ai enlevé mes lourdes chaussures cloutées ; je me suis enveloppé de mon
manteau et j'ai rabattu sur ma figure ma casquette.

La lune s'est couchée. Mes chiens sont endormis au pied de l'arbre auquel
j'ai suspendu le lièvre et les perdreaux tués dans la journée.

Croyez-vous que je dormirai ? Non ! Pour la première fois de ma vie, je
prends conscience que la nuit n'est point silencieuse. Ce froissement de feuilles
au-dessus de ma tête est produit par un oiseau qui s'agite dans son sommeil.
Très loin, du côté où commencent les champs et les fermes, un renard glapit.
Les chiens se réveillent, grondent un peu, se retournent et se rendorment.

Comme les sons portent loin ! Je suis à bonne distance de la route qui
serpente à travers les gorges pour joindre les pays d'en bas à ceux d'en haut.
Pourtant j'entends grincer les roues d'une charrette qui fait, de nuit, une
vingtaine de kilomètres pour arriver à temps au marché.

Je ne suis pas encore habitué à me trouver seul dans l'immensité de la
montagne et peut-être suis-je un peu troublé par l'idée de dangers tout à fait
improbables . . . Puis, tout à coup, le premier chant du coq déchire la nuit.
Bien avant les gens de la plaine, je verrai doucement arriver le petit jour, bleu,
vert, rouge et blanc.   (30)

2. Carefully read the passage below, then answer the questions which follow it.

N.B.—The passage is NOT to be translated.

Bords de la Seine à la nuit tombante.

Le jour finissait. Le fleuve très lourd, très haut et jaune de toutes les pluies
tombées, se heurtait pesamment aux arches des ponts où luisaient de gros
anneaux de fer. Le vent soufflait, promenant les derniers rayons du couchant.
Tout s'animait de la hâte où meurent nos journées de Paris, si pressées et si
5 pleines. Les femmes sortaient des lavoirs, chargées de paquets de linge mouillé.
Des pêcheurs à la ligne remontaient, avec leurs cannes à pêche, leurs paniers,
frôlant des chevaux qu'on ramenait de l'abreuvoir. Les ouvriers attendaient
à la porte de ces petits bureaux où l'on solde leur paye. Toute une population
riveraine, des mariniers, des débardeurs[1] avec leurs dos voûtés, circulait sur
10 le bord, mêlée à une autre race, furtive et redoutable, rôdeurs de rivière, qui
ne sortent que la nuit.

[1] un débardeur = un homme qui décharge un bateau.

A chaque pas, la physionomie de la berge changeait. Ici, elle était noire et de longues planches flexibles la reliaient à d'énormes bateaux de charbon. Plus loin, on glissait sur des pelures de fruits : un goût frais de verger se mêlait
15 à l'odeur de la boue, et sur de nombreuses barques amarrées, des amoncellements de pommes gardaient l'éclat de leurs couleurs campagnardes. Tout à coup, on avait l'impression d'un port de mer, c'était un encombrement de marchandises de toutes sortes, de bateaux à vapeur aux tuyaux courts, vides de fumée. Cela sentait bon le goudron, l'huile, le voyage. Ensuite, l'espace se resserrant,
20 un bouquet de grands arbres baignait dans l'eau de vieilles racines et l'on pouvait se croire à vingt lieues de Paris ou à trois siècles en arrière.

Vue du bord du fleuve, la ville prenait une physionomie particulière. Les maisons paraissaient plus hautes de toute la profondeur de leur reflet, les passants plus nombreux, resserrés par la distance, et l'on voyait des rangées de
25 têtes appuyées aux parapets des quais ou des ponts sur des coudes paresseusement étalés. On eût dit que, de tous les coins de Paris, les oisifs, les ennuyés, les désespérés, apportaient leur contemplation muette à cette eau changeante comme un rêve. Quel est donc le problème qu'elle roule, cette eau vivante pour que tant de malheureux la regardent, avec des poses si découragées,
30 stupides, ou tentées ?

QUESTIONS

N.B.—Answer all questions in English, except where you are clearly told to do otherwise.

Marks

1. What is the theme of the first paragraph ? Which sentence summarizes this theme ? Show how the various persons and activities mentioned in the first paragraph illustrate this theme.   9

2. " A chaque pas, la physionomie de la berge changeait." (line 12)

In this sentence the author sums up the dominant impression which he receives as he walks along the river bank. Show how he endeavours to convey the same impression to the reader. (Illustrate your answer by reference to the text.)   8

3. The various things and people mentioned in paragraph 3 have an unusual appearance. In what ways and why ?   4

4. " Les oisifs, les ennuyés, les désespérés . . . " (lines 26 and 27)

With which adjective in the last sentence of the passage would you link each of these groups of people ? Give your reasons.

What does the author feel is common to all these people ? What question does the sight of them raise in his mind ?   5

5. (N.B.—Answer the following questions *in French*) :—

  (*a*) Pourquoi y avait-il de gros anneaux de fer aux arches des ponts ? (lines 2 and 3)

  (*b*) Expliquez ces mots : " nos journées si pressées et si pleines ". (lines 4 and 5)   4

   ——
   (30)

3. Translate carefully, with due attention to English form and expression :—

L'instituteur

Il y a des parents qui reprochent à l'instituteur d'éclipser leur propre autorité. Ils sont fiers, assurément, de la science de leur enfant, mais ils trouvent un peu déconcertant qu'un étranger soit devenu le centre de son univers.

Cet univers ? Le voici. C'est une petite salle avec un tableau noir où l'on distingue encore les contours crayeux d'une ligne d'écriture et d'une soustraction compliquée. Aux murs, des cartes de géographie vous contemplent. Et derrière les livres, les encriers, les plumiers, trente têtes brunes, blondes et rousses s'initient aux mystères de l'arithmétique. Trente plumes malhabiles tracent péniblement ces mots : " Deux trains partent en sens inverse . . . " Un silence religieux plane sur l'assemblée, car sur une estrade trône majestueusement l'instituteur.

Sa puissance est sans bornes. Semblable aux dieux anciens, il peut lancer des foudres : la mauvaise note qui fait soupirer, le zéro qui fait rougir, la retenue qui fait pleurer. Mais c'est à contre-cœur qu'il recourt aux méthodes extrêmes. Mieux vaut inspirer le respect que la crainte. C'est un despote, mais un despote éclairé, qui se rend bien compte qu'en éduquant la jeunesse de France, il tient entre les mains l'avenir du pays. (25)

FRENCH

Higher Grade—(Second Paper (a))

AURAL COMPREHENSION TEST

Tuesday, 18th March—1.30 p.m. to 2.0 p.m.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates" given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

   (i) The passage will be read *twice*, with an interval of three minutes between the readings.

   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates :—(Maximum time of reading—four minutes).

Après avoir satisfait aux curiosités de la douane, Henri reprit le train pour Paris. Une heure avant l'arrivée du train, Henri était prêt à descendre. Il avait mis son manteau et s'était boutonné jusqu'au cou par crainte des voleurs, dont on lui avait dit que Paris était plein. Il avait descendu sa valise du filet. Il s'était levé et rassis vingt fois. Vingt fois il avait sorti sa montre, l'avait secouée un peu, et l'avait remise dans sa poche.

Enfin on approchait véritablement de Paris, mais juste avant d'entrer en gare, le train s'arrêta en pleine nuit. Henri s'écrasait la figure contre les vitres, et tâchait vainement de voir. Il se retournait vers ses compagnons de voyage pour leur demander où l'on était. Mais ils sommeillaient tous ; aucun ne faisait un mouvement pour s'expliquer l'arrêt. Henri finit par s'asseoir, découragé, sur sa valise, et il était sur le point de s'endormir, lui aussi, quand il fut réveillé par le bruit des portières qu'on ouvrait . . .Paris ! . . .Ses voisins descendaient.

Il se dirigea vers la sortie, repoussant les facteurs qui s'offraient à porter son bagage. Soupçonneux comme un paysan, il pensait que chacun voulait le voler. Il avait chargé sur son épaule sa précieuse valise, et il allait son chemin, sans se soucier des injures des gens qu'il bousculait en passant. Enfin il se trouva dehors sur le pavé de Paris.

La première chose était de chercher une chambre. Ce n'étaient pas les hôtels qui manquaient ; ils entouraient la gare de tous côtés ; leurs noms flamboyaient en lettres de gaz. Henri chercha le moins brillant, mais aucun ne lui semblait assez humble pour sa bourse. Enfin, dans une rue de côté, il vit une sale petite auberge et s'y dirigea. Un gros homme, en bras de chemise, fumait la pipe à une table ; il accourut en voyant entrer Henri et le conduisit par un escalier étroit à une pièce sans air pour laquelle il lui demanda un bon prix. Henri, ignorant les conditions de la vie à Paris, l'épaule cassée par sa valise, accepta tout ; il avait hâte d'être seul.

FRENCH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 18th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the special sheet provided.

QUESTIONS

Marks

1. In what ways did Henri show his impatience to reach Paris ? 3

2. What occurred to puzzle Henri shortly before the train reached Paris?
   What efforts did he make to discover what had happened?
   Why were they unsuccessful ? 3

3. Why did the arrival of the train in Paris take him unawares ? 1

4. What did he fear might happen to him in Paris ?
   How did his actions before and after his arrival reflect this fear ?
   What had caused his anxiety ? 2

5. Why would most travellers have had little difficulty in finding a hotel ? Why did Henri find it difficult ? 2

6. Where did he finally find a room ?
   What were the disadvantages of the accommodation offered ?
   Why did he nevertheless accept it ? 4

   ——
   15
   ——

FRENCH

HIGHER GRADE—(SECOND PAPER (b))

Tuesday, 18th March—2.15 P.M. to 4.0 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for writing that is difficult to read.

1. Translate into French :—

   David's thoughts were interrupted by a cry, coming from the neighbouring street. He started to run in the direction of the cry. A man was holding a girl by the arm and was trying to steal her bag from her. She had never stopped screaming, and heads were beginning to appear at open windows. Soon a policeman's whistle was heard. The man had meantime succeeded in taking the bag and had made off. David ran after him, but suddenly he slipped and fell. For a moment he could not get up.

A hand seized him by the collar—a policeman's hand. "Fool!" cried David. "You've let him escape!" "Who are you then?" asked the policeman in surprise. Without answering, David got up slowly and looked for the girl. She seemed to have disappeared, but a moment later he caught sight of her on the other side of the street with a second policeman, a sergeant.[1] "Two of you!" exclaimed David scornfully. "Could you not have caught him?" The policeman led David towards the others. "Well?" the sergeant asked. "I think I've made a mistake," said the policeman. "I don't believe this man is the thief."

"Would you come with us to the station[2]?" suggested the sergeant.

"Gladly," replied David.

"You will have to come too," the sergeant added, turning to the girl.

She didn't move. "Let me go home!" she begged.

"But there won't be any difficulty," went on the sergeant, and he explained everything to her in so patient a manner that David was surprised.

> [1] the sergeant = le brigadier.
>
> [2] the (police) station = le commissariat (de police).

(**50**)

2. Write, in French, a composition on *one* of the following subjects :—

    (a) *L'introduction de la télévision en Écosse.*

        Quels en seront, à votre avis, les avantages et les désavantages ? Quelles sortes de programmes devrait-on présenter sur l'écran ? Voudriez-vous posséder vous-même un appareil ? Pourquoi ? etc.

    (b) *Moi-même dans dix ans.*

        Faites un portrait de vous-même tel(le) que vous le serez dans dix ans. (Apparence, emploi, intérêts, etc.) (**25**)

GERMAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Thursday, 20th March—9.15 A.M. to 9.45 A.M.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the "Instructions to Candidates" given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes

during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

   (i) The passage will be read *twice*, with an interval of three minutes between the readings.

   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings, is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates :—

(Maximum time of reading—four minutes).

Einmal lebte an der deutsch-holländischen Grenze ein Schmuggler, den die Polizei längst umsonst suchte, denn er verkleidete sich manchmal zum Beispiel als Bauer, manchmal als Bettelmann, manchmal als Jäger und so weiter. Eines Tages wollte dieser Schmuggler, der Wilhelm Schmidt hieß, Kaffee und Schokolade über die Grenze führen. Er hatte einen Wagen mit doppeltem Boden, in dem Kaffee und Schokolade lagen. Auf dem Wagen saß Wilhelm, als alte Frau verkleidet, neben ihm sein Freund Karl. Sie sahen wie Bauersleute aus, die aus Holland herüberkamen, um ihren Verwandten ein fettes Schwein zu bringen. Das Tier lag im Wagen auf Stroh und schlief.

Beim Zollamt hielten sie wie die andern Leute und ließen das Schwein verzollen. Als sie fertig waren, zündete Karl seine Pfeife an und sagte: „So ein Tier sieht man nicht alle Tage, nicht wahr, Herr Wachtmeister? Meine Frau hat es aufs Beste gepflegt; es soll zur Hochzeit ihrer Schwester Braten und Würste geben."

Der Zollbeamte sah die Frau von Karl ziemlich genau an, kam näher an sie heran, ging um sie herum. Dann sagte er: „Sie haben sich aber Ihr Haar schlecht gemacht. So können Sie doch nicht zur Hochzeit Ihrer Schwester gehen. Die Haare hängen Ihnen ja überall aus dem Kopftuch."

„Meine Frau hat ihren Spiegel gebrochen, Herr Wacht= meister," sagte Karl lächelnd.

„Kommen Sie also ins Zollhaus," sagte der Beamte, „ich leihe Ihnen einen Spiegel."

Die Frau lachte, und Karl sagte: „Das können wir nicht, Herr Wachtmeister. Wir müssen schon um Mittag bei der Schwester sein. Meine Frau kann sich das Haar nachher im Wald machen, beim Fahren; wir verlieren also keine Zeit."

Da sprang der Beamte auf den Wagen, riß dem Schmuggler das Kopftuch herunter, und hielt ihn fest. Zur gleichen Zeit setzte er seine Pfeife an den Mund und blies darauf ein lautes Signal. Sogleich kamen einige Beamten aus dem Hause gelaufen und führten den Schmuggler ins Gefängnis fort.

GERMAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Thursday, 20th March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the special sheet provided.

QUESTIONS	*Marks*
1. Describe the means by which this smuggler had so long succeeded in getting goods across the frontier without detection.	2
2. Who was Karl? What story did he tell the customs officer about their journey?	3

3. Why did Karl do all the talking ?   2

4. Why do you think the customs officer was anxious that Karl's wife should go into the office ?   What gave him the opportunity of suggesting that she should do so ?   4

5. What did Karl say to this suggestion ?   In what way did his earlier behaviour seem inconsistent with this answer ?   2

6. Describe the arrest of Wilhelm Schmidt.   2

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GERMAN

Lower Grade—(Paper (b))

Thursday, 20th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—(1) Begin the answer (or fair copy of an answer) to each question on a fresh page.   Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

(2) The use of German script is optional.

1. Translate carefully, with due regard to English form and expression :—

A Young Artist Hopes to Sell her First Picture.

Endlich stand das Bild in der Kunsthandlung.   Die Händler hatten dafür einige Hoffnung auf einen Verkauf geäußert, ja sogar versprochen, das Bild an zwei Nachmittagen ins Schaufenster zu stellen.   Das mußte Hilde mit eigenen Augen sehen — die erste Erfüllung ihres Künstlertraumes.   Wenn ihr Vater bei ihr auf Besuch wäre!   Die Freude in seinem Antlitz wollte sie sehen, seine Stimme hören und in seinen Worten neue größere Hoffnungen für ihre Arbeit finden.

Da stand das Porträt der kleinen Gertrud mitten unter andern Bildern im Schaufenster.   Bei diesem Anblick funkelten ihr die Augen vor Freude und Stolz.   Zwar eilten die Menschen meist achtlos daran vorbei, mit ganz andern Gedanken beschäftigt.   Es gab aber doch auch einzelne, die schweigend die kleine Ausstellung ansahen oder ins Geschäft traten.

Ein Herr und eine Dame kamen herzu und besichtigten das Bild mit lebhafter Neugier.

„Hilde Rebstein — ein Name, dem man noch nicht begegnet ist!" sagte die junge Frau zu ihrem Begleiter. „Die Kleine auf dem Bild ist reizend," antwortete der Herr. „Wollen wir mal im Laden nachfragen?" Hilde, die tief in ihren Mantel gehüllt auf ein anderes Gemälde blickte, hoffte schon.

Da erwiderte aber die Dame kühl: „Nein, das Werk einer Unbekannten hat kein Interesse für mich. Unsere Besucher fragen immer nach dem Künstler, und von dieser Künstlerin wissen wir ja gar nichts. Man hält sich besser an gute Namen, selbst wenn man sie etwas teurer bezahlt!"

„Na, fragen wir mal!" sagte der Mann, und nun trat das Paar doch in die Handlung.

Hilde hätte gern gewartet, um zu wissen, ob das Paar ihr Bild kaufen würde. Sie durfte aber nicht länger stehenbleiben.

(35)

2. Read the passage below, then answer the questions which follow it.

N.B.—The passage is NOT to be translated.

Heinrich ging nun oft ins Theater, wo er den Ort zu finden glaubte, wo seine innere Welt am meisten Wirklichkeit gewann.

Er besuchte in den Wintermonaten eine Abendschule, und in der Klasse saß neben Heinrich ein Schüler, der ein paar Jahre älter war als er. Dieser arbeitete schon bei einem Tischlermeister in der Stadt und ersparte in den Sommermonaten Geld genug, um im Winter die Abendschule besuchen zu können. Mit diesem Schüler, der Fritz Wegner hieß und immer Geld in der Tasche hatte, freundete sich Heinrich an. Wenn sie abends gemeinsam durch die Straßen gingen, erzählte Heinrich von seinen Lieblingsdichtern und redete eifrig vom Theater. Auf diese Weise gewann er allmählich einen gewissen Einfluß auf den Charakter des älteren Kameraden. Die erste Wirkung war, daß Fritz unruhig und unzufrieden wurde, daß er zu lesen begann, daß er Bücher kaufte, und daß er schnell Geschmack am Theater fand und sogar seine frühere Sparsamkeit für diese neue Unterhaltung aufgab. Oft geschah es, daß er für Heinrich, der vom Vater an Geld nur das allernotwendigste erhielt, die Eintrittskarten bezahlte.

Um nun aber Zeit für den Theaterbesuch zu gewinnen, mußte der Abendunterricht versäumt werden. Infolgedessen mußten die Kameraden in der Schule Entschuldigungen erfinden und zu Hause viel Heimlichkeit treiben, vor allem wenn das Theater spät aus war. Für Fritz war das nicht so wichtig, denn er lebte von eigenem Gelde und war darum ziemlich frei. Heinrich dagegen fürchtete immer, im Theater bemerkt zu werden. Um so süßer schmeckten jedoch die verbotenen Früchte.

Für Heinrich waren die Schauspieler Helden, und große Charaktere. Er bemühte sich, seinem Freunde zu erklären, sie müßten edle Menschen sein, da sie täglich auf der Bühne soviel Edles und Gutes zu sprechen hätten. Fritz ließ sich aber nicht völlig davon überzeugen.

Für Heinrich war jeder Theaterabend ein großes Ereignis. Der Kampf der Helden gegen eine Welt von Widerstand war ihm ein Gleichnis seines eignen kleinen Kampfes. Auf der Straße wurde er selbst zum Schauspieler: er deklamierte und sang die schönsten Stellen der großen Dichtungen, leise, wenn Menschen in der Nähe waren, laut, wenn es einsam war, oder wenn ein vorüberfahrender Wagen die Stimme übertönte. Dabei geriet er in ein immer schnelleres Gehen, er gestikulierte und ermüdete sich, bis er fast ohne Atem aufhören mußte. Und in ihm wuchs unwiderstehlich die Begierde, Dichter zu werden.

QUESTIONS

A.—Answer in English :—   *Marks*

   1. Explain how the friendship between Heinrich and Fritz developed.   2

   2. What changes took place in Fritz's character as a result of this friendship ?   How were these changes reflected in his actions ?   5

   3. For what reasons was Heinrich so strongly attracted by the theatre ?   4

   4. Why was it difficult for Heinrich to go regularly to the theatre ? Explain why Fritz was only partly affected by these difficulties. What effect did these difficulties have on their enjoyment of the plays ? How do you know ?   6

   5. In what respect did Fritz show himself less impressionable than Heinrich ?   1

   6. What effect did each visit to the theatre have on Heinrich's emotions ?   How did his behaviour in the street reveal this effect ?   4
                                                           ——
                                                           22

B.—Answer in German :—

1. Warum konnte Fritz nur abends in die Schule gehen?   2

2. Was ist eine Eintrittskarte?   2

3. Warum fürchtete Heinrich, im Theater bemerkt zu werden?   2

4. Warum sprach Heinrich leise, wenn Menschen in der Nähe waren?   2

—

8

—

(30)

3. Write, in German, a continuous story based on the following summary :—

Your story should be written in the past tense and should be from one half to three quarters the length of your answer to question 1.

Mann allein im Hause — hat Zahnweh — kann nicht schlafen — steht auf — geht aus einem Zimmer in das andere — Vorübergehender sieht Lichter — ruft die Polizei an — Erklärungen.

(20)

GERMAN

HIGHER GRADE—(FIRST PAPER)

Thursday, 20th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

(a)   *Hero worship*

Tintins Welt begann beim Haus und endete an der Mauer Der Garten, der dazwischen lag, war ihm unübersehbar groß, und die vier Stufen vor der Eingangstür, die Tintin überwand, indem er sich rückwärts und unter Ächzen hinabließ, waren etwas unmeßbar Hohes. Später, als er fünf Jahre alt wurde, schrumpften sie zwar ein, und schließlich konnte er in zwei Sätzen

hinunterspringen. Aber die Pappel, die vor dem Fenster wuchs, die blieb immer gleich groß, und ihre Spitze steckte mitten im Himmel. Auch Herr Fabian verlor nichts von seinem würdevollen Ansehen, mochte er nun im Garten graben, oder mochte er die geheimnisvollen und aufregenden Dinge im Laboratorium in Ordnung bringen. Daß der Professor häufig hinter Fabian herbrüllte: „Fabian, du bist ein Dummkopf!", das änderte nichts an dem neigungsvollen Respekt, mit welchem Tintin dem Diener anhing. Herr Fabian hatte alles: er hatte Äpfel, Bindfaden, und alle Arten von Werkzeug. Er hatte ein altes Mikroskop, durch das man jederzeit schauen durfte, und nicht nur, wie bei den andern, zu Ausnahmegelegenheiten. Er hatte ein kleines Fläschchen, in dem ein Schiffchen unter vollen Segeln auf einem blauen Meer schwamm. Und nicht zu vergessen: Herr Fabian war es gewesen, der Tintin mit dem Kaninchen Petermann, mit diesem fellweichen, schnüffelnden, über alles geliebten Tierlein beschenkt hatte. Herr Fabian kam dicht hinter dem lieben Gott.

<div align="right">(30)</div>

(b)   *Midsummer*

Auf halbem Wege nach jenem Dorfe, dessen Kirchturmspitze er eben von einem Berge aus gesehen hatte, legte sich Franz nahe einer alleinstehenden Birke in das blumenreiche Gras. Sein Kopf ruhte auf den zusammengefalteten Händen. Eine Locke seines trotzigen Haares war auf seine Stirn gefallen. Ein bunter Schmetterling umflatterte den neben ihm liegenden Hut.

Nach der Stadt hinüber wogten die reichen Ährenfelder; weiter hinunter, dem Dorfe zu, am Ende einer sich sanft neigenden Wiese und nicht weit von einem kleinen Tannenwalde schimmerten auf einem Teiche weiße Wasserrosen in seltener Pracht.

Sein Blick fiel auf ein kleines Haus, dessen Fensterscheiben von der sinkenden Sonne beleuchtet waren. Die Eingangstür selbst war von kleinen Bäumen und blühendem Gesträuch verdeckt.

Er lag lange in seligem Träumen, und wenn der Ton der Stadtglocken leise zu ihm herüberdrang, dachte er nicht an die lärmenden Dohlen[1], die den Kirchturm am Markte seiner

Vaterstadt umflogen, sondern das Gefühl der Freiheit stieg mit immer fröhlicherer Kraft in ihm auf. Doppelt schön klang ihm das Jauchzen der Lerchen, bis er schließlich ganz in den blühenden Sommer versunken war und die volle Schönheit der Welt durch seine junge Seele zog.

<div align="center">(1)die Dohlen—the jackdaws.</div>

<div align="right">(25)</div>

2. Carefully read the poem given below, then answer the questions which follow it.

N.B.—The poem is NOT to be translated.

1. Der Himmel kreist, dir schwankt das Land,
   vom Schnellzug hin und her geschüttelt
   sauft Ackerrand um Ackerrand,
   ein Frösteln hat dich wachgerüttelt:
   　　die Morgensonne kommt.

2. Mühsam entfliegt dem Nebelzelt
   ein Krähnvolk, herbstlich abgemagert,
   indeß sich dick aufs Düngerfeld
   der Frührauch der Fabriken lagert;
   　　die Morgensonne kommt.

3. Schwarz schiebt sich durch den grauen Flor(1)
   ein langer Zug von Schlackenbergen(2),
   Schornstein an Schornstein schnellt empor,
   schreckhafte Hüter neben Särgen;
   　　die Morgensonne kommt.

4. Vom Horizont her nahn mit Hast
   und einen sich zwei Straßendämme,
   von Apfelbäumen eingefaßt,
   schon blaß beglänzt die knorrigen Stämme;
   　　die Morgensonne kommt.

5. Rasch folgt zum andern Himmelssaum
   dein Blick den fruchtberaubten Zweigen,
   und plötzlich siehst du Baum an Baum
   sein brandrot glühendes Laub dir zeigen:
   　　der Tag ist da!

(1)Flor—Schleier.
(2)Schlackenbergen—slag heaps above the mines.

QUESTIONS

Notes to candidates :—

(*a*) Answer all the questions in English, except where you are clearly told to do otherwise.

(*b*) Arabic numerals refer to verses, Roman numerals to lines. Thus " 4/(ii) " means " verse 4, line (ii)."

Marks

1. Where was the author at the time of his awakening and what were his sensations at that moment ?   2

2. (*a*) What is noteworthy about the method by which the author conveys the impression of movement throughout the poem ? Show how this method is used with striking effect in verse 4.   4

(*b*) The following verbs in the poem indicate movement of some kind. What particular type of movement does each denote and in what way does each contribute to the picture with which it is connected ?

> (i) läuft (1/(iii)).
> (ii) schiebt sich (3/(i)).
> (iii) schnellt empor (3/(iii)).   6

3. What emotion do the chimney stacks evoke in the author ? Say what thoughts and pictures underly this emotion.   2

4. „ Der Tag ist da ! " (5/(v)).

Describe what occurred to bring forth this exclamation. What signs had the author already discerned of the approach of dawn ? What effect is produced by the repetition of „ Die Morgensonne kommt " ?   7

5. What was the season of the year ? Quote the words and phrases which contribute to the general picture of the season. Say, giving your reasons, whether you think that „ sein brandrot glühendes Laub " should be included in this category.   5

6. (N.B.—These questions are to be answered *in German.*)

> (*a*) Warum waren die Krähen abgemagert ? (2/(ii))
> (*b*) Was ist eine von Apfelbäumen eingefaßte Straße ? (4/(iii))   4

                                                (30)

GERMAN

Higher Grade—(Second Paper (a))

AURAL COMPREHENSION TEST

Thursday, 20th March—1.30 p.m. to 2.0 p.m.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—
   (i) The passage will be read *twice*, with an interval of three minutes between the readings.
   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.
   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates :—

(Maximum time of reading—four minutes)

Wie gewöhnlich ging ich an diesem Abend auf dem Heimweg durch eines der ältesten und stillsten Quartiere der Stadt. Da stand jenseits der Straße zwischen einer Kirche und einem Krankenhaus eine alte graue Steinmauer, die ich immer gern sah, weil keine Reklamebilder noch darauf gekommen waren. Auch heute sah ich wieder diese alte Mauer still in ihrem Frieden liegen, und doch war etwas an ihr verändert: ich sah eine kleine Tür, die ich noch nie bemerkt hatte. Erstaunt blieb ich stehen und blickte aufmerksam hinüber, ohne doch hinüber zu g e h e n, denn die Straße dazwischen war so naß und weich. Ich wußte wahrhaftig nicht, ob diese Tür immer dagewesen oder neu hinzugekommen war. Alt sah sie ohne Zweifel aus, uralt. Wahrscheinlich hatte ich sie hundertmal gesehen und bloß nie beachtet. Vielleicht war sie frisch bemalt und fiel mir deswegen auf. Ich glaubte über der Türe ein helles Schild zu sehen, auf dem etwas geschrieben stand. Alles war aber so undeutlich, daß ich endlich trotz Schmutz und Pfützen hinüberging. Da sah ich in der Tat ein Schild, schwach beleuchtet, und über das Schild liefen leuchtende Buchstaben und verschwanden alsbald, kamen wieder, liefen rasch vorüber und verschwanden wieder. Neugierig versuchte ich, einige der flüchtig erscheinenden Wörter zu lesen. Sie waren schwer zu lesen und mußten halb erraten werden, die Buchstaben folgten sich so unregelmäßig und erloschen so rasch. Endlich aber gelang es mir, mehrere Worte hintereinander zu ergreifen und ich las: „ Zaubertheater — Eintritt nicht für jedermann — nur für Glückliche." Ich versuchte, die Tür zu öffnen; die schwere alte Klinke bewegte sich auf keinen Druck. Ich trat einige Schritte zurück und sah wieder zum Schild hinauf. Es kamen aber keine Buchstaben mehr. Lange blieb ich auf der Straße stehen und wartete; vergebens, das Buchstabenspiel war zu Ende.

Als ich später an demselben Abend zufällig wieder durch das alte Stadtviertel ging, blickte ich prüfend zu der alten Mauer hinüber. Friedlich sah die steinerne Wand mich an, in tiefer Dämmerung geschlossen — und nirgends eine Tür, nur dunkle, stille Mauer ohne Loch. Tief erschüttert kehrte ich nach Hause zurück.

GERMAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Thursday, 20th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the special sheet provided.

QUESTIONS	*Marks*
1. Where was the wall situated ? Why did the author like seeing it ?	3
2. Describe the author's perplexity on seeing the door and how he tried to explain the matter to himself.	3
3. What made him cross the street ? Why had he been reluctant to do so ?	3
4. What was the announcement which he read ? Describe the way in which this announcement was made and explain why it was very difficult to read.	4
5. How did the author try to follow up the announcement, and with what result ?	1
6. Explain why the author felt so " shaken " when he went home that night.	1
	15

GERMAN

HIGHER GRADE—(SECOND PAPER (b))

Thursday, 20th March—2.15 P.M. to 4.0 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—(1) Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for writing that is difficult to read.

(2) The use of German script is optional.

1. Translate into German :—

Having no desire to play tennis, Anna let the others go off without her and decided to go and pay a short visit to her Granny, whose room was the second on the left.   The old lady was very pleased to see her grand-daughter, but conversation was a little difficult, for Mrs. Hunter was very deaf.   Anna therefore took her leave as soon as she could without appearing impolite and went slowly downstairs.   She avoided the study, for she knew that Mr. Hunter was always busy writing at this time.   She looked at her face for a while in the big mirror in the hall, then she went out into the bright sunshine.   The others had not yet started playing but were sitting around talking.   Anna went

round to the back of the house, where she heard someone working.   Here she found Gregor, the gardener, who at once recognized Anna and greeted her cordially.   Anna asked him about his work—what he was doing, how many cows there were at the farm just now, and whether he could drive a car. Gregor answered her questions and added all sorts of things which might interest her—how to tell when it is going to rain, where to look for black-birds' nests, and how he knew that summer had really come when he could cover six daisies with one foot.   Anna would have liked to stay and listen to Gregor all afternoon, but Aunt Emma appeared and called her in to tea.

(50)

2. Write, in German, a composition on *one* of the following subjects :—

(a) Wie man sich mit wenig Geld gut amüsieren kann.

(b) Der schönste (oder der schrecklichste) Augenblick meines Lebens.

(25)

SPANISH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 25th March—9.15 A.M. to 9.45 A.M

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make your-self thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions.   Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

(i) The passage will be read *twice*, with an interval of three minutes between the readings.

(ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates :—Maximum time of reading—four minutes.

A las nueve de la noche llevó don Braulio a su mujer y a su cuñada a los Jardines. Iban éstas de mantilla, con vestidos de seda obscuros, luciendo su buen gusto en la misma sencillez y modestia de sus trajes. Don Braulio vestía, por su parte, de modo algo descuidado. Su traje y su sombrero tenían la forma en moda hacía diez años ; corbata negra siempre, cuello de camisa tan alto que le llegaba casi hasta las orejas. Doña Beatriz se había medio peleado con su marido para obligarle a llevar más bajos los cuellos y a comprar nuevo sombrero y nuevo traje. No había podido conseguirlo. " ¿ Qué quieres ?—decía don Braulio —. Así iba yo cuando muchacho, y no quiero variar. Así me quisiste ; así te casaste conmigo." Doña Beatriz no sabía al cabo qué responder, y dejaba ir a don Braulio como le daba la gana. Aquella noche, pues, no hizo la menor observación sobre el traje de su marido ; pero no por eso dejó de anudarle con gracia la corbata ni de peinarle el pelo lo mejor que supo.

Los tres tomaron un cochecito. En el camino decía don Braulio :

— Me parece, y lo siento, que os vais a fastidiar. No tenemos amigos. Ni siquiera tenemos conocidos. En medio de aquel bullicio vamos a estar como en un desierto.

— Hombre, no te preocupes por tan poco — respondió doña Beatriz —. Si no conocemos a nadie, si nadie nos habla, hablaremos entre los tres, oiremos la música y tomaremos el fresco.

— Tienes razón, hija mía, tienes razón. Yo me olvido de que eres una muchacha. Tus gustos son de muchacha. Mal hiciste en casarte con un viejo.

— Vamos, vamos — le contestó a eso su mujer —, dejémonos de niñerías. Alegrémonos y vamos a divertirnos hasta donde sea posible.

De esta suerte llegaron a los Jardines, tomaron billetes y entraron.

SPANISH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 25th March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the special sheet provided.

QUESTIONS	*Marks*
1. Where was don Braulio taking his wife and his sister-in-law ?	1
2. Describe the attire of the two ladies. What contrast was there between their style of dress and that of don Braulio ?	3
3. In what respects did doña Beatriz wish her husband to change his manner of dressing ? To what lengths had she gone in her efforts to persuade him to change ?	2
4. What were don Braulio's reasons for his conservatism in dress ?	2
5. Before they went out, what did doña Beatriz do to improve her husband's appearance ?	1
6. Contrast don Braulio's feelings about the outing with those of his wife.	3
7. What criticism was made of the marriage of doña Beatriz and don Braulio ? Who made it ? To what extent did it appear to be justified ?	3
	15

SPANISH

LOWER GRADE—(PAPER (b))

Tuesday, 25th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due regard to English form and expression :—

Portrait of my father

Quizás usted haya conocido a mi padre ; era un hombre alto, seco, fuerte. Su fortaleza tal vez se debiera a su oficio : era herrero[1]. Tenía su herrería muy cerca de la casa donde vivíamos. El pueblo entonces empezaba en la herrería y terminaba en los paredones del cementerio después de trasponer varias calles de tierra y ganar el camino que se iba perdiendo a lo lejos. Por ese camino, y a unas dos leguas, se llegaba a la propiedad del padre de usted. Cuando mi

memoria se remonta a aquel tiempo me parece verle a su padre alejándose en su coche que, entre nubes de polvo, se pierde bajo el sol de verano y deja vibrando en mis ojos el color móvil de sus ruedas rojas. Su padre venía a encargar algún trabajo al mío, quien, con un rostro lleno de satisfacción, lo prometía invariablemente para el domingo siguiente. Yo me moría por decirle a mi padre : " ¿ Esta vez me llevarás a mí también ? " Pero como callaba, él nunca adivinó en mis ojos aquel deseo mío.

Ese domingo, yo me levantaba también al alba. " Soledad, ¿ qué haces a esta hora ? " me preguntaba mi padre sorprendido. Yo me sonreía dolorida, sin contestar. " Ven, chiquilla." Entonces él mismo me preparaba el chocolate dominical, rompía una galleta dentro del tazón, me tocaba la cara y se iba, después de ordenar sus herramientas necesarias en una vieja valija de cuero. Al volver de misa, mi madre me encontraba dormida de codos en la mesa y me despertaba. Desde ese momento, con una vigilancia impaciente yo esperaba a mi padre, a veces hasta la noche, para verle regresar y oír algo nunca oído. Pero él se acostaba sin decir palabra, mientras yo le imaginaba de regreso de un paraíso al que sólo se podía llegar en un coche de ruedas rojas. **(35)**

(1) *herrero* = blacksmith.

2. Read the passage below, then answer the questions which follow it.

N.B.—The passage is NOT to be translated.

Pensamientos nocturnos

Habían sonado ya las dos de la noche. El capitán se hallaba en la cama desde las once, y sin embargo sólo había logrado echar un sueñecito de media hora. Le acaecía esto muchas veces. Era hombre de poco dormir, al menos de noche. De día solía echar siestas repentinas y fantásticas donde menos pudiera imaginarse, en el establo cuando iba a inspeccionar el ganado, en la iglesia oyendo misa, y hasta montado a caballo cuando recorría los caminos pedregosos. Tal molesto trastorno en las horas de reposo le enfadaba mucho consigo mismo, pero infinitamente más con cualquiera que osase ponérselo de manifiesto.

Había encendido la luz ya tres o cuatro veces y tomado entre las manos un tomo de historia, creyendo conciliar el sueño otras tantas ; pero en cuanto daba un soplo a la vela volvía a quedar despabilado. Al fin se resignó a permanecer con los ojos abiertos dejando vagar su pensamiento por aquellos asuntos que más le interesaban. Lo que más le interesaba por el momento eran las indemnizaciones que iba a tomar pronto por sus terrenos expropiados. Al fin no había tenido más remedio que ceder ante la fuerza mayor. Las tierras iban a ser partidas por el ferrocarril, y un puñado de oro iba a caer en sus manos. Lo agrio con lo dulce. Porque si don Félix amaba apasionadamente sus tierras, no amaba con menos pasión el oro. Bastante de este precioso metal tenía escondido dentro de las paredes del desván(1) y en los ángulos obscuros de sus vigas.

Embebido en estas imaginaciones se hallaba cuando sonaron en la puerta dos golpecitos discretos. Dió un salto en la cama y preguntó despavorido :

—¿ Quién va ?

—¡ Señor, hay ladrones en casa !

El capitán era bravo, pero vivía con la perpetua pesadilla(2) de los ladrones. Un día y otro esperaba el asalto. Y al fin había llegado el momento supremo ; había sonado la hora del combate.

(1) *desván* = loft.
(2) *pesadilla* = fear.

A.—Answer, *in English*, the following questions :— 　　　　*Marks*

　1. For how long had the captain been unable to sleep on the night in question ? 　1

　2. From what peculiarity did he suffer ? Describe how this peculiarity affected him by day. 　4

　3. How did he himself regard this peculiarity ? How did he feel when people mentioned it ? 　2

　4. Describe the captain's actions as he lay in bed. State his purpose and whether or not he was successful. 　3

　5. What had recently occurred to affect his interests ? What advantages and disadvantages did this occurrence have for him ? 　7

　6. What event interrupted his reflections ? Why did the information told to him not take him completely by surprise ? Describe his reactions to the situation and show whether or not they were natural in such a man. 　5

　　　　　　　　　　　　　　　　　　　　　　　—

　　　　　　　　　　　　　　　　　　　　　　22

B.—Answer, *in Spanish*, the following questions :—

　1. ¿ Qué pasa generalmente cuando uno se duerme montado a caballo ? 　1

　2. ¿ Cómo se explica la costumbre española de la siesta ? 　2

　3. ¿ Qué quieren decir estas expresiones :—
　　　　(*a*) pensamientos nocturnos ; 　2
　　　　(*b*) tomar lo agrio con lo dulce ? 　2

　4. ¿ Qué es un ladrón ? 　1

　　　　　　　　　　　　　　　　　　　　　　　—

　　　　　　　　　　　　　　　　　　　　　　8

　　　　　　　　　　　　　　　　　　　　　(30)

3. Write, in Spanish, a continuous story based on the following summary. **Your story should be written in the past tense and should be from half to three-quarters the length of your answer to Question 1.** (" Portrait of my father.")

　A Juan le regala su padre un perrito—los dos se divierten grandemente en el campo—poco a poco el animal aprende a obedecer—por fin se le permite dormir en casa—empiezan los pequeños disgustos—se encuentran medio comidas las zapatillas favoritas del padre—éste se pone furioso y decreta la expulsión del perro. 　**(20)**

　　　　　　　　　　————————

SPANISH

HIGHER GRADE—(FIRST PAPER)

Tuesday, 25th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

A lodging for the night

Cuando llegué aun no rayaba el día.   Sobre la ciudad nevada, el claro de la luna caía sepulcral y doliente.   Yo, sin saber dónde a tal hora buscar alojamiento, vagué por las calles, y en aquel caminar indeterminado llegué a la plaza donde vivía Fray Ambrosio.   Me detuve bajo el balcón de madera para guarecerme de la llovizna, que comenzaba de nuevo, y a poco observé que la puerta hallábase entornada.   Tal era la inclemencia de la noche, que sin detenerme a meditarlo, resolví entrar, y gané a tientas la escalera. Fray Ambrosio asomó en lo alto, alumbrándose con un velón.   Vestía el cuerpo flaco y largo con una sotana recortada, y cubría la temblona cabeza con negro gorro puntiagudo, que daba a toda la figura cierto aspecto de astrólogo grotesco.   Entré con sombría resolución, sin pronunciar palabra, y el fraile me siguió alzando la luz para esclarecer el corredor.   Allá dentro sentíanse callados rumores de voces y dineros.   Reunidos en la sala jugaban algunos hombres, con los sombreros puestos y las capas desprendiéndose de los hombros. Todos guardaron silencio.   Algunos ojos se volvían desapacibles, fijándome una mirada rápida, y tornaban su atención a las cartas.   Por fin uno se puso en pie, y los demás me hicieron sitio en torno de la mesa.   Pero el buen fraile intervino en seguida, matando de un soplo la luz y poniendo fin al juego.   Por las ventanas se filtraba ya la claridad del amanecer.

(30)

2. Read carefully the poem below, then answer the questions which follow it.

N.B.—The poem is NOT to be translated.

The caged lion

Entre barrotes negros, la dorada melena
paseas lentamente y te tiendes por fin,
descansando los tristes ojos sobre la arena
que brilla en los angostos senderos del jardín.

5   Miro tus grandes uñas, inútiles y corvas ;
se abren tus fauces, veo el inútil molar ;
e inútiles como ellos van tus miradas torvas[1]
a morir en el hombre que te viene a mirar.

Un día suavemente, con sus corteses modos,
10   hizo el hombre la jaula para encerrarte allí ;
y ahora te contempla, apoyado de codos
sobre el hierro prudente que lo aparta de ti.

No cede.   Bien lo sabes.   Diez veces en el día
tu cuerpo contra el hierro carcelario se fué :
15   diez veces contra el hierro fué inútil tu porfía.
Tus ojos, muy lejanos, hoy dicen : ¿ para qué ?

[1] torva = fiera.

Alguna vez te he visto durmiendo tu tristeza,
la melena dorada sobre la piedra gris,
abandonado el cuerpo con la enorme pereza
20   que las siestas de fuego tienen en tu país.

Y sobre tu salvaje melena enmarañada[2]
mi cuello delicado sintió la tentación
de abandonarse al tuyo, yo como tú, cansada,
de otra jaula más vasta que la tuya, león.

25   Como tú, contra aquélla mil veces he saltado.
Mil veces, impotente, me he vuelto a acurrucar.[3]
¡ Cárcel de los sentidos que las cosas me han dado !
Ah, yo del universo no me puedo escapar.

[2] enmarañada = desordenada.
[3] acurrucarse = encogerse.

Questions : Answer Nos. 1 to 7 *in English*, No. 8 *in Spanish*.   *Marks*

1. Where is the scene of the poem set ?   What details are given of
   the place ?   2

2. In what respects was the lion's appearance still impressive ?
   How does the poem reveal the true state of affairs ?   4

3. " No cede " (line 13).   To what do these words refer ? Show what
   significance their meaning has for the man and for the lion and
   how the feelings of each are affected by the knowledge.   6

4. In what different ways did man and beast come to possess this
   knowledge ?   2

5. Explain the thought underlying the words " corteses modos "
   (line 9).   2

6. Is the writer of the poem a man or a woman ?   Quote from the
   text in support of your answer.   1

7. Explain fully the ways in which the writer feels the lion's fate
   to be symbolic of the writer's own.   With what feeling does
   this parallel inspire the writer and how did the feeling find its
   expression ?   7

8. Explain, *in Spanish*, the meaning of :—
   (*a*) la jaula (line 10).   2
   (*b*) ojos lejanos (line 16).   2
   (*c*) una cárcel (line 27).   2
                                                                          ——
                                                                           30
                                                                          ——

3. Translate carefully, with due attention to English form and expression :—

A writer in restless mood

Han transcurrido algunos días.   Eugenio está sentado en el sofá ;   pero
no tiene en sus manos ni lápiz ni cuartillas.   Su palidez de persona que ha
pasado varias noches de insomnio y su mirada inmóvil y dura revelan que no

se trata ya de preocupaciones literarias, sino de algún problema grave de su propia vida. A espaldas de Eugenio, una de las ventanas deja ver un mar de borrasca, espumoso, un mar de naufragio, verdadero reflejo de su propio estado de alma en aquel momento.

Su agitación ya no cabe en el ambiente estrecho de la sala. Sale afuera en busca de luz y de espacio. Tiene que sujetarse el sombrero con la mano. El viento es muy recio ; huele a mar y trae partículas de agua. Al llegar a la carretera mira en la dirección del tronco de eucalipto que a Marga le sirve ordinariamente de asiento. Marga no está ; pero ha dejado sobre el tronco un pequeño libro de tapas amarillas y rojas. Eugenio siente que aquel libro abandonado allí, junto al precipicio, tiene algo de trágico ; pero se trata de Marga, Marga la optimista, como él suele llamarla. Sigue andando, camino del faro. Hay que inclinar el cuerpo hacia adelante para vencer la resistencia del aire.   (25)

SPANISH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 25th March—1.30 P.M. to 2.0 P.M.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

(i) The passage will be read *twice,* with an interval of three minutes between the readings.

(ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden.* Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates :—(Maximum time of reading—four minutes)

El Virrey aquella mañana montó en su carroza preocupado y sin detenerse, como de costumbre, a examinar sus mulas. El cochero, que sabía ya el camino que tenía que seguir, agitó las riendas de las mulas ligeramente, y los animales partieron al trote. Cerca de un cuarto de hora pasó el Virrey inmóvil en el fondo de la carroza y entregado a sus meditaciones ; pero repentinamente sintió una violenta sacudida, y la rapidez de la marcha aumentó de una manera notable. Al principio prestó poca atención, pero a cada momento era más rápida la carrera.

Su Excelencia sacó la cabeza por una de las ventanillas, y preguntó al cochero :

— ¿ Qué pasa ?

— Señor, que se han espantado estos animales y no obedecen.

Y la carroza atravesaba calles y callejuelas y plazas, y doblaba esquinas sin chocar nunca contra los muros, pero como si fuera caminando al azar.

El Virrey era hombre de corazón, y resolvió esperar el resultado de aquello cuidando no más de colocarse en uno de los ángulos de la carroza y cerrar los ojos. Repentinamente detuviéronse las mulas ; volvió a sacar el Virrey la cabeza por la ventanilla, y se encontró rodeado de multitud de hombres, mujeres y niños que gritaban alegremente :

— ¡ Indultado ! ¡ Indultado !

La carroza del Virrey había llegado a encontrarse con la compañía que conducía a un condenado a muerte ; y como era de ley que si el monarca en España, o los virreyes en las colonias, encontraban a un hombre que iba a ser ejecutado, esto valía el perdón, con aquel feliz encuentro quedó indultado el pobre ya desesperado.

Todo el mundo atribuyó aquello a un milagro patente. No se sabe si el cochero, aunque aseguraba que sí, también creía en lo milagroso del lance. Lo que sí pudo averiguarse fué que tres meses después se casó con la hija del indultado, y que Su Excelencia le hizo un gran regalo de bodas.

SPANISH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 25th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the special sheet provided.

QUESTIONS

Marks

1. In what way did the Viceroy behave differently from usual on the morning in question, and why ?   1

2. When and how did he first become aware that something unusual was taking place ?   2

3. State what happened, and say what explanation the coachman gave of the mules' behaviour.   3

4. When the Viceroy put his head out of the carriage window for the second time, what did he see and hear ?   3

5. Explain the change of emotion that must have occurred among the crowd.   3

6. What grounds are there for doubting the coachman's explanation of the coincidence ? What advantage had his position given him ?   2

7. In what part of the world, and at what period, did the incident take place ?   1

    15

SPANISH

HIGHER GRADE—(SECOND PAPER (b))

Tuesday, 25th March—2.15 P.M. to 4.0 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines. Marks will be deducted for writing that is difficult to read.

1. Translate into Spanish :—

A strange little scene comes next. Henry rode down to Hatfield to see his younger daughter. Aware that Mary was in the house, he had given orders that she should not attempt to speak with him, and sent his captain of the guard to her room with instructions to prevent her from leaving it. She managed to send him a message, however, asking if she might kiss his hand. He refused, and went out to his horse again ; but, with his foot in the stirrup[1], by chance looked up. Mary was on the terrace, kneeling, with both hands stretched out towards him. He hesitated, bowed to her, put his hand to his hat, and departed. A few days later he explained to the French

[1]*stirrup* = estribo.

envoy that his daughter was obstinate by reason of her Spanish blood, and that until she yielded he would not speak to her. The ambassador gently said that she had been very well brought up, and could not prevent the tears from coming into his eyes as he praised her.

The contest between proud father and a daughter no less proud went on. Anne Boleyn came to Hatfield, and sent for Mary as Queen. The girl answered that she knew no Queen in England but her own mother. Anne swore in rage that she too would humble this Spanish haughtiness, and straightway took measures to do so. Shortly afterwards Mary fell ill. Her mother heard of it, and begged permission for them to be together. Again the King refused.

(50)

2. Write, in Spanish, a composition on *one* of the following subjects:—

    (*a*) Los días más felices de mi vida.

    (*b*) Razones para estudiar la historia.   (25)

ITALIAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Wednesday, 26th March—9.15 A.M. to 9.45 A.M.

This paper must not be seen by any candidate

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the "Instructions to Candidates" given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows:—

   (i) The passage will be read *twice*, with an interval of three minutes between the readings.

   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates:— (Maximum time of reading—four minutes).

Il padre di Stefano e di Paoletta è fratello di mia madre.

Mio fratello, Emanuele, è piú giovane di me di cinque anni.

Tutti sanno che noi quattro ci siamo sempre voluti bene e ci siamo sempre aiutati a vicenda nelle situazioni difficili in cui ci siamo trovati. Oltre a questro, tra me e Stefano c'è stato un accordo dovuto all'età e alla scoperta comune che facevamo del mondo lontano da R.

Dopo tre lunghi, grigi e penosi anni di collegio ci misero a pensione in casa d'una vedova, il cui marito, vent'anni prima, era stato amico di nostro nonno. Questa vecchia signora abitava un gran porto di mare, e la nostra grande passione era il porto, la darsena. Non passava giorno senza che ci facessimo una scappata. Sapevamo tutto dei piroscafi, dei velieri, delle navi da guerra che entravano e uscivano, italiane e straniere. Sopratutto ci interessavano quelle che venivano da lontano, da paesi sconosciuti di cui avevamo una cognizione vaga come era possibile a ragazzi come noi vissuti sempre tra i monti. Ma quelle scarse cognizioni ci servivano di stimolo, e presto scoprimmo che le poche parole d'inglese e di francese imparate a scuola, se erano insufficienti a intavolare un discorso bastavano però per salire a bordo; dove ne imparavamo altre ancora, aiutandoci con un piccolo manuale di conversazione che Stefano s'era procurato.

Un giorno Stefano mostrò a un marinaio di un mercantile olandese un piccolo coltello dal manico di corno lavorato a fuoco. Il marinaio chiese quanto doveva pagare per averlo. Stefano, pronto, disse una cifra. Il marinaio contrattò, pagò il prezzo convenuto e disse di portargliene degli altri.

Cosí cominciò il nostro piccolo commercio.

ITALIAN

Lower Grade—(Paper (a))

AURAL COMPREHENSION TEST

Wednesday, 26th March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the special sheet provided

QUESTIONS   *Marks*

1. What was the relationship between the writer and Stefano and Paoletta? How do you know?   2

2. Who was Emanuele?   1

3. How did the four children show their friendship to each other?   1

4. What impression does the writer retain of his schooldays?   1

5. With whom did the writer and Stefano stay in the seaport?   2

6. What different kinds of ships did they see there?   Which ones interested them most?   3

7. Why was their knowledge of foreign lands somewhat vague?   1

8. Describe the transaction which took place between Stefano and the sailor.   3

9. To what did this transaction lead?   1

      15

ITALIAN

Lower Grade—(Paper (b))

Wednesday, 26th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate into English:—

L'America d'oggi e di ieri.

Per gli Europei del primo Ottocento l'America rappresentava, sotto molti aspetti, l'esatto contrario di quello che rappresenta oggi. Dal 1776 alla morte di Lincoln, era la mecca dei radicali, la sola grande nazione dove la democrazia fosse attuata con successo. Oggi, l'America è diventata il baluardo del capitalismo, la speranza principale di coloro che sono terrorizzati dall'avanzare della marea socialista e comunista, la piú importante promessa di stabilità nel mezzo delle trasformazioni caleidoscopiche che sbigottiscono gli attoniti abitanti dell'Europa e dell'Asia. Il cambiamento dell'opinione europea di sinistra nel suo atteggiamento verso l'America è dovuto a un mutamento verificatosi in Europa piú che a un mutamento dell'America. Inoltre, i popoli con una disposizione d'animo ribelle sono spinti per forza dal loro temperamento ad avversare i ricchi e i potenti, e l'America è piú ricca e potente di ogni altra nazione. Se fate l'elogio della Svezia a un comunista, egli potrà considerarvi sviato, ma non vi chiamerà lacchè del capitalismo, poiché la Svezia non è grande e forte; ma se fate l'elogio dell'America, sospetterà in voi un servilismo e una obliquità morale senza limiti. Molto diversa era l'epoca di Byron e di Shelley, i quali entrambi esaltarono l'America. Allora il nuovo continente non poteva minacciare nessuno, ed essi se lo figuravano un paese di semplici contadini imbevuti di tutte le virtú dei Romani della Repubblica. Va osservato, però, che né Byron, né Shelley personalmente ci si recò mai.

(35)

2. Read the passage below, then answer the questions which follow it.

Lingua madre e lingua figlia.

In quale rapporto sta l'italiano con la lingua dei padri, il latino? Evidentemente una risposta precisa si può dare soltanto attraverso un confronto minuto delle due lingue, che ne studi accuratamente le somiglianze e le differenze, e ne spieghi il perché.

Da un lato si è detto che l'italiano non è altra cosa che la continuazione del latino, cioè il latino stesso trasformatosi man mano, di secolo in secolo, fino a diventare la nostra lingua. Dall'altro invece si è detto che il latino è la lingua madre e l'italiano è la lingua figlia.

Come spesso accade quando, invece di considerare in pieno le cose si cerca di accostarsi ad esse per mezzo di metafore, le espressioni di " lingua madre " e di " lingua figlia " sono lontane dal rispecchiare esattamente la realtà storica: ma non è detto che, prese con un pizzico di sale, non contengano una parte di verità. Lo vedremo fra poco.

Piú esatta è indubbiamente l'altra formulazione del rapporto fra latino e italiano. Trasportiamoci con la mente in un villaggio di Toscana e immaginiamo di essere messi in grado di ascoltare, di generazione in generazione, di secolo in secolo, la lingua che vi si è parlata dall'età romana, cioè da quando è scomparso l'ultimo vecchio che parlava etrusco, fino ad oggi. Di padre in figlio si sono avuti mutamenti ben lievi; qualche suono si è cambiato, un certo numero di vocaboli hanno sostituito altri vocaboli o sono venuti ad aggiungersi al patrimonio lessicale ereditario; ma insomma non vi è mai stato un momento in cui i parlanti abbiano avuto coscienza di esprimersi in una lingua diversa da quella dei loro genitori. Cosí non è possibile fissare il momento quando si può dire: " Qui finisce il latino e comincia l'italiano." Da questo punto di vista evidentemente la formula della continuità è la sola esatta. e quella di " lingua madre " e " lingua figlia " è invece erronea.

Ma se non è possibile segnare un limite ove si tenga conto soltanto della lingua parlata, la cosa diventa invece abbastanza facile quando si pensi alla lingua scritta.

Supponiamo che uno di noi si faccia fotografare una volta al mese dai dieci anni fino ai sessanta. Mentre la serie ininterrotta dei ritratti non mostrerebbe che insensibili mutamenti, il fanciullo, l'adulto il vecchio si distinguerebbero senz'altro. Ora in certi casi avviene che l'immagine si cristallizzi in tipi definiti: per esempio l'effigie della regina Vittoria d'Inghilterra sui primi francobolli emessi nel 1840, e l'immagine di lei nei suoi ultimi anni di regno. Serviamoci di codesto come termine di paragone. La lingua parlata si può confrontare con la serie ininterrotta delle fotografie, quella scritta, invece, con la fissazione dell'effigie di momenti determinati. Quella distinzione che, nella catena delle generazioni, è arbitraria, si presenta ovvia fra le due lingue scritte.

QUESTIONS   *Marks*

A. Answer in English:—

(1) What is the question which the author proposes to discuss? What, according to him, would be necessary before a satisfactory answer could be given to this question?   3

Marks

(2) What two theories in particular does the author set out to consider? Which of the two does he favour? What is his objection to the other, and why does he not reject it outright?   3

(3) Summarize the argument which he advances in support of his theory of how the spoken language developed, and state the conclusion to which it leads him. By what vivid picture does he drive home his point?   8

(4) By what comparison does the author illustrate the changes in the written language? What does he wish to convey to his reader by means of his illustration? Show in what way his choice of illustration is peculiarly appropriate.   6

         20

B. Answer in Italian: —

(1) In che senso si può chiamare il latino " la lingua dei padri "?   3

(2) Dov'è la Toscana? Nommare tre scrittori che venivano da questa parte d'Italia.   4

(3) Spiegare le espressioni " un pizzico di sale ", " il patrimonio lessicale ereditario ", " termine di paragone ".   3

         10

3. Write, in Italian, a continuous narrative based on the following summary: —

Your narrative is to be written in the past tense and in the first person singular, as if you were the person described in the story and you were recounting the incident in a letter to a friend.

Preparativi per una gita in Italia—Visita all'ufficio del turismo—Si discute l'itinerario—Mezzo e prezzo del viaggio—Per via aerea o per piroscafo e ferrovia?—Biglietti—Posti riservati—Bagaglio e franchigia di bagaglio— Cambio e moneta.   (20)

ITALIAN

HIGHER GRADE—(FIRST PAPER)

Wednesday, 26th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

(a) *Un paesaggio alpestre*

Il sole di mezzodì splendeva sul passo del Giulio, nudo d'alberi, circondato di vette rocciose, nel paese dei Grigioni. Sotto i suoi raggi, sfreccianti giú a perpendicolo, le pareti rocciose ardevano e scintillavano. A volte una gonfia nuvola temporalesca sorgeva e passava via : le muraglie della montagna parevano allora avvicinarsi e venire a cozzare l'una contro l'altra, sinistre, restringendo il paesaggio. Le poche pezze di neve pendenti fra i picchi, e le lingue dei ghiacciai, ora luccicavano abbaglianti, ora ripiombavano in una penombra verdastra.

In mezzo al ripiano del valico,[1] a destra e a sinistra della mulattiera, sorgevano due colonne mozze, che forse da oltre un millennio sfidano il tempo. A sommo d'una di esse le intemperie avevano scavato una specie di bacino, la pioggia l'aveva riempito ; un uccello saltellava sull'orlo, bevendo a quando a quando un sorso di quell'acqua celeste.

Risonò a un tratto, ripetuto e schernito dall'eco, il latrato d'un cane. Lassú, sul pendío a tratti ancora erboso, un pastore bergamasco aveva fatto la siesta.   Ora balzò in piedi, s'assicurò bene il mantello intorno alle spalle, e, con mosse ardite, da un pinnacoletto sporgente si precipitò giú per radunare le pecore che, simili a mobili punti bianchi, si perdevano verso il fondo della valle.   Uno dei suoi cani villosi[2] lo seguí ;   l'altro, forse trattenuto dal peso degli anni, non poteva tenergli dietro, e se ne stava lassú, su un'eminenza del terreno, e guaiva miserabilmente.

[1] *ripiano del vallico*, summit of the pass.   [2] *villoso*, shaggy.   (30)

(b) *Ariosto*

L'Ariosto — questo poeta, che andò sempre in traccia di pace e che aspirò sempre alla quiete per un bisogno insoddisfatto di tessere nel silenzio le auree trame delle sue finzioni — visse, per ironia della sorte, in un'età di guerre e di battaglie e di travolgimenti politici, e in una città e in una corte, in cui il tradimento e la congiura apparivano d'ora in ora sinistramente, come spettri accompagnati dalla violenza ;   ed ebbe, per avversità del destino, quasi tutta la vita occupata da cure e da negozi brigosi, di cui ricercheresti invano qualche riflesso, che non sia un accenno breve e frettoloso, nel suo capolavoro, cioè nell'opera che meglio e piú d'ogni altra rispecchia la sua fisonomia interiore. Nel *Furioso* vive un Ariosto diverso da quello delle poesie latine, delle Satire e delle Commedie : il vero Ariosto poeta, svincolato dalle pastoie delle cure quotidiane, l'Ariosto che ha ritrovato se stesso con la sua anima di sognatore e con il suo umile e grande cuore d'artista.   (25)

2. Carefully read the poem given below, and then answer the questions which follow.

N.B.—The poem is NOT to be translated.

In San Pietro

Per la profonda nave, che tanta nei secoli accolse
    anima umana e tanta nube serrò d'aroma,

Svolgesi il grave coro da bocche invisibili.   Un rombo
    l'organo a tratti caccia dalla sua selva ascosa,

Cupo nell'ombra il rombo propagasi giú pe' sepolcri :
    paion tremar dall'imo le portentose moli.

Vegliano al sommo i magni pontefici benedicendo :
    stanno alle ferree porte gli angeli ed i leoni.

Come solenne il canto !   Dall'onda uguale una voce
    levasi, con un alto melodioso grido.

Piange la voce, e al mondo rivela un divino dolore.
    Sgorgan le note, calde, quasi lacrime.

Piange la voce, sola.   Non ode nel gelido sasso
    il Palestrina ?   Sola piange la voce ;   e al mondo

Narra un divin dolore.   Non ode il sepolto ?   Non balza
    l'anima sua raggiante su l'ideali cime,

quasi colomba alzata a vol su pinnacoli d'oro ?
    Piange la voce, sola, nel silenzio.

QUESTIONS

A. Answer in English :—   *Marks*

   1. Where is the author ?   What thoughts first occur to him in the
      building ?   3

   2. Describe the means by which the writer conveys to the reader
      the character of the music which he hears.   Explain what you
      think he means by the words " al mondo narra un divin
      dolor " (lines 14 and 15).   7

   3. What architectural features does the poet mention ?   In what
      ways do these contribute to the effect produced by the music ?   6

   4. Why is the " selva ascosa " an appropriate figure for the organ ?   2

   5. What causes the poet to think of Palestrina ?   Explain, in this
      connection, the simile of the dove (line 17).   5

   6. What effect is produced by the last line of the poem ?   2

B. Answer in Italian :—

   1. Quale è la differenza fra *un rombo* e *un grido* ?   Perché si
      applica all'uno l'aggettivo " cupo " e all'altro l'aggettivo
      " alto " ?   3

   2. Distinguere i due significati della parola " *nave* ".   2
                                                   30

ITALIAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Wednesday, 26th March—1.30 P.M. to 2.0 P.M.

This paper must not be seen by any candidate

INSTRUCTIONS TO THE TEACHER

   1. Use the ten minutes preceding the beginning of the test to make yourself
thoroughly familiar with the passage to be read.

   2. When so instructed by the supervising officer, read to the candidates the
" Instructions to Candidates " given below.

   3. Then read the passage aloud to the candidates, speaking clearly and
naturally, and taking not more than *four minutes* to the reading.

   4. After this reading inform the candidates that they may now turn over
the printed question papers, and that they will have three minutes in which to
study the questions.   Remind the candidates that they may make notes during
this interval of three minutes, but only on the special sheets provided.   You
yourself will not be allowed to see the questions which are to be answered by
the candidates.

   5. When so instructed by the supervising officer, read the passage a second
time, in exactly the same manner as on the first occasion and taking the same
amount of time.

   6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows:—
    (i) The passage will be read *twice,* with an interval of three minutes between the readings.
    (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.
    (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden.* Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates:— (maximum time of reading—four minutes)

Riflessioni d'un italiano sul carattere inglese

In Inghilterra la politica generale e militante interessa solo categorie limitatissime di cittadini. Ciò che interessa le folle è lo sport, e le parate e i tornei storici dove si rievocano su grande scala gli episodi della gloria britannica. Questi attraggono milioni di spettatori, masse enormi, silenziose e composte ed immobili, dalle quali nei momenti culminanti dell'azione escono urla improvvise, come scoppi di crateri vulcanici—e, dopo l'urlo, il silenzio completo, e la immobilità.

Questo è un paese dove, se l'uomo singolo deve davvero esprimersi, per lo più tace. Il silenzio perfetto dice quello che è lo stato d'animo normale in un inglese. Il vocabolario inglese, cosí ricco e che utilizza, per esprimere le stesse cose, parole provenienti dalle origini piú diverse e lontane, non ha un verbo di uso comune che significhi " tacere "; è evidentemente un verbo di cui non si è mai sentito forte il bisogno, esprimendo esso un fatto che è, qui, naturale e normale. Nello stesso modo, la lingua italiana potrebbe far a meno benissimo del verbo " parlare ".

Piú del singolo, in Inghilterra si esprime la massa; e anzi, piú che non la massa presente e casuale, la massa tradizionale e storica, l'unità della stirpe in ciò che fu, è e intende ad essere. Non si tratta di una disciplina automatica, rigida, alla prussiana: da Berlino a Londra corrono abissi senza fondo, e si tratta di due popoli che ormai non si comprendono e non si comprenderanno piú malgrado il remoto legame di parentela. L'unità inglese esiste non per una costrizione esteriore, né per un atto di volontà e di forte disciplina interiore: anzi per indolenza, per semplificare, per non aver da pensare o da fare lui, come individuo, ciò che invece può esser fatto molto meglio dalla moltitudine, dalla società, dalla nazione, dalla storia. La radice della socialità inglese è la stessa dell'individualismo inglese: entrambi si basano su un istintivo programma del minimo sforzo.

ITALIAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Wednesday, 26th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the special sheet provided

QUESTIONS   *Marks*

1. What does the writer consider to be the attitude of the English to politics?   1

2. In what does he find their chief interests lie?   2

3. How does he describe the behaviour of an English crowd at a sporting event or a public festival?   3

4. What item of vocabulary does he remark is missing from English? Why does he consider this strange in a language such as English? What does he suggest might be a parallel in Italian, and why?   4

5. In what ways does he say the Germans and English differ, and what conclusion does he draw?   2

6. According to the writer, what lies at the foundation of the sense of unity of the English race? Mention three features of the English character which he quotes in illustration of this.   3

                                                        ——
                                                        15

ITALIAN

HIGHER GRADE—(SECOND PAPER (b))

Wednesday, 26th March—2.15 P.M. to 4 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for writing that is difficult to read.

1. Translate into Italian :—

San Remo is no more romantic than Margate, but it is, in landscape and people, Italian. And the very first morning that I woke on Italian soil, I realised that Italy was my second country. As I looked out of the window of my room, I knew that this was how I had always hoped the world would appear. There are painters who declare that the light in France or Holland —or even in England—is more beautiful, or at any rate better for painting : but this was the light I needed and in which I thrived. Here there was no necessity to struggle for breath with an enveloping fog ; here, on the contrary, was a serene air, scented on the mountains with herbs and in the valleys by orange-blossom ; here was not the cold light of the north, to which I was used, but light that was clear and yet varied. Light ! Light was everywhere, entering even through the narrow slats[1] of the green Venetian shutters[2]

         [1] slats = *stecche.*   [2] Venetian shutters = *persiane.*

which were kept closed throughout the middle of the day, light from the sky and from the sea—but how different a sea from that of Scarborough—trembling, moving, giving life and colour to every plain, dull surface. I discovered, too, the simple and unspoiled nature of the people of Italy, who laugh and cry and sing—or sang in those days—so easily. Moreover, though this town seemed comparatively new, something told me that existence here, especially among the fishermen and peasants, was immemorially old.

(50)

2. Write, in Italian, an Essay on *one* of the following subjects :—

    (*a*) Colloqui con gli alberi.

    (*b*) La scienza al servizio dell'uomo.

    (*c*) Un esercito internazionale.   (25)

RUSSIAN

Lower Grade—(Paper (a))

AURAL COMPREHENSION TEST

Monday, 24th March—9.15 A.M. to 9.45 A.M.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Write on the blackboard these words :—

    пашу ⎱ plough,   снопы sheaves.
    пахать ⎰ cultivate,

4. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

5. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions.   Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided.   You yourself will not be allowed to see the questions which are to be answered by the candidates.

6. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

7. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

   (i) The passage will be read *twice,* with an interval of three minutes between the readings.

   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden.* Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates.   (Maximum time of reading—four minutes.)

A fable : The farmer overhears an argument among his domestic animals.

Лошадь, корова, овца и собака заспорили между собою, кого из них хозяин больше любит. „Конечко меня,“ говорит лошадь, „я пашу и таскаю снопы с поля и дрова из лесу вожу ; сам он на мне ездит ; пропал бы он без меня совсем.“ „Нет, хозяин меня больше любит,“ говорит корова, „я его самого и всю его семью молоком кормлю.“ „А я всех их одеваю,“ вмешалась овца, „без моей шерсти хозяину и его семье пришлось бы замёрзнуть.“ „Все вы полезны хозяину,“ сказала собака, „тут и спорить нечего, только я полезнее вас ; я стерегу всё добро хозяина : днём и ночью покоя не знаю ; всё бегаю да оберегаю и хлеб и молоко и одежду и вас самих и хозяина !“ „Так-то так,“ сказала опять лошадь, „но тебе нечего было бы и оберегать, если бы я не пахала и не привозила всякого добра, корова не давала молока, а овца — шерсти.“ Подслушал хозяин этот спор и говорит : „Перестаньте спорить попустому : все вы мне нужны, и каждая из вас полезна на своём месте, у своего дела.“

RUSSIAN

Lower Grade—(Paper (a))

AURAL COMPREHENSION TEST

Monday, 24th March—9.15 a.m. to 9.45 a.m.

Answers are to be written on the special sheet provided.

QUESTIONS	Marks
1. What is the subject in dispute ?	1
2. How does the horse support its claim ?	3
3. What has the cow to say for itself ?	1

4. What does the sheep say would happen if it did not exist ?   2

5. Why is the dog so arrogant ?   3

6. Which one of the other three replies ?   In what terms does it try to sum up ?   3

7. What is the end of the argument ?   2

———

15

RUSSIAN

LOWER GRADE—(PAPER (b))

Monday, 24th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page.   Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

Waiting for the ferry

Александр Сергеевич с сыном Володей ехал в далёкую деревню. Через несколько часов тарантас их остановился на берегу реки. Так как на реке моста не было, то нужно было переезжать на пароме.

В ожидании парома, на этом берегу находилась толпа крестьян и крестьянок, пешком и в телегах.   У некоторых телег были сзади привязаны лошади, быки и коровы.   За плечами у крестьянок висели корзины с яйцами ;   в руках были кадочки[(1)] с маслом ;   другие держали кур и гусей.

Алекс. Серг. узнал от крестьян, что они отправляются на торг[(2)] в маленький город, который был виден на противоположном берегу реки.   Володя видел какие товары крестьяне везли в город, но ему захотелось узнать, что они будут покупать там.   С этим вопросом он обратился к седому старику, который ласково отвечал : „ Что нам нужно в городе ?   Вот, видите, мне нужно купить соли и нужен мне топор — мой совсем иступился.   Ведь, у нас в деревне кроме чёрного хлеба, молока и яиц, ничего не найдёшь.   Один едет

[(1)] small casks.

[(2)] to market.

купить сапоги а другому нужна шляпа. Там стоит женщина ; ей нужно <u>сицу на сарафан</u>⁽³⁾. Всем же нам нужны деньги. Что есть, то и везём продавать."

В это время пором подплыл к берегу и разговор Володи со стариком прекратился.

<div align="right">(35)</div>

⁽³⁾ chintz for a sarafan (a long dress).

2. Read the passage below, then answer *in English* the questions which follow it.

N.B.—The passage is NOT to be translated.

Balloon ascent nearly a century ago.

Вот на таком воздушном шаре в тысяча восемьсот шестьдесят втором году поднялись два храбрых англичанина. Шар полетел вверх очень быстро, и чем выше он поднимался, тем становилось холоднее. Поднявшись версты на три, <u>воздухоплаватели</u>⁽¹⁾ досгигли облаков. Когда шар полетел сквозь облака, дрожали от холода и сырости.

Кончились облака, стало опять светло, показалось голубое небо и солнце ; значит, шар поднялся выше облаков. Облака казались сверху белым волнистым полем, словно его покрывал снег. Через разрывы облаков кое-где можно было видеть землю : поля, леса, города, море. Выше облаков стало ещё холоднее. На высоте около пяти верст настал такой холод, что замерзла вода. Дышать стало трудно, в ушах зашумело, сердце забилось сильно, но воздухоплаватели не хотели опускаться. Напротив, они высыпали весь песок из корзины, так что шар стремительно пошел вверх.

На высоте восьми верст Г.⁽²⁾ не мог поднять руку ; ещё несколько минут и он упал без памяти. А шар всё поднимался. Обоим <u>лётчикам</u>⁽¹⁾ угрожала смерть. Земля была на десять верст под ними. Г. лежал как мёртвый. К.⁽²⁾ тоже едва дыша, собрал последние силы, чтобы взять <u>шнурок от клапана</u>⁽³⁾ ; но руки не действовали. Тогда он зубами схватил и потянул шнурок. Клапан отворился и шар начал опускаться.

Через несколько времени оба ученые оправились.

⁽¹⁾ aeronauts, airmen, fliers.
⁽²⁾ Г. and К. are the names of the airmen.
⁽³⁾ valve-rope or cord.

QUESTIONS

A.—*To be answered in English :—*   *Marks*

  (1) In line 2 a certain adjective is applied to the airmen.   Show
      that the use of this word is fully justified by summarizing
      the narrative, describing

     (*a*) what the aeronauts saw as they rose in the air ;   4

     (*b*) their experience at various heights ;   6

     (*c*) the state to which they were reduced before they
          decided to return to earth.   5

  (2) Of what nationality were the airmen ?   In what year was
      this ascent made ?   2

  (3) What means were used
     (*a*) to cause the balloon to rise higher ?
     (*b*) to bring it down ?   3

B—Отвечать по русски на эти вопросы :—

  (1) Чем облака казались сверху ?   3

  (2) Что случилось на высоте пяти верст ?   2

  (3) Когда лётчики хотели пойти ещё выше, что им
      пришлось сделать ?   3

  (4) На какую высоту поднялись, когда решили
      спуститься ?   2
                                            —
                                         (30)

3. Write, in Russian, a continuous story based on the following summary :—
Your story should be written in the past tense, and should be from one-half
to three-quarters the length of your answer to question 1.

Верная собака

Смерть крестьянина — погребение[1] — собака проводила гроб
хозяина — печально завывала[2] — сторож кладбища[3] прогнал её —
на другой день она ещё на могиле — ужасная погода — сторож
сжалился над собакою — кормит — поведение[4] обитателей деревни ? —
сколько времени осталась там собака ?

                                           (20)

            [1] funeral.
            [2] whined.
            [3] churchyard.
            [4] behaviour, attitude.

RUSSIAN

HIGHER GRADE—(FIRST PAPER)

Monday, 24th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines.

   Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate carefully, with due attention to English form and expression :—

   (*a*) *Before taking off for a flight over the Arctic.*

Я спешил домой. Времени в моем распоряжении оставалось очень мало. Надо было успеть ещё раз обсудить с участниками перелета некоторые вопросы, а также привести в порядок свои личные дела. Как-никак я улетаю в Арктику: никогда нельзя определенно сказать, сколько времени задержит нас у себя эта „ гостеприимная хозяйка “.

У Маруси, моей жены, дергаются уголки губ, когда она спрашивает о дне вылета.

Я ласково обнимаю ее.

——Любимая, неужели ещё не привыкла? Ведь ты мой старый боевой товарищ . . .

Маруся улыбается :

——Какой там боевой товарищ! Сижу дома и жду от тебя вестей. Вот была бы я механиком, тогда другое дело. Летала бы всегда с тобой. Ни за что бы от тебя не отстала.

——Зачем тебе быть механиком? Ты замечательная мать и жена.

Маруся хотела что-то сказать ещё, но ей помешали мои товарищи, которые шумно ввалились в мой кабинет. Экипаж обоих самолетов, готовых к вылету на Землю Франца-Иосифа, был в полном[1] сборе. По обыкновению начались горячие споры. Близость вылета возбуждала мысль, рождались новые идеи и предложения. Меня радовала инициативность товарищей, но как командир я поневоле охлаживал их восторг. Товарищ М. заявил, что он хочет предложить глубокую научную экспедицию в Карском море.

(28)

[1] in full assembly, *i.e.*, all present.

(b) Dressing-station in the Crimean War.

С трудом пробившись между пешком шедшими ранеными, молодой человек вошёл в эту первую комнату, взглянул и тотчас же невольно повернулся назад и выбежал на улицу : это было слишком ужасно !

Большая, высокая, тёмная зала, освещённая только четырьмя или пятью свечами, с которыми доктора подходили осматривать раненых, была буквально полна. Носильщики беспрестанно вносили раненых, складывали их один подле другого на пол, на котором уже было так тесно, что несчастные толкались и мокли в крови друг друга, и шли за новыми. Сёстры, со спокойными лицами и с выражением деятельного практического сочувствия, то там то сям мелькали между ранеными. Доктора, с засученными[1] рукавами, стоя на коленях, осматривали и зондировали раны, несмотря на ужасные стоны страдальцев. Один из докторов сидел около двери за столиком, и в ту минуту, как в комнату вошёл офицер, записывал уже 532.

Человек сорок солдат-носильщиков, дожидаясь ноши перевязанных[2] в госпиталь и мёртвых в часовню, стояли у дверей и, молча, изредка тяжело вздыхая, смотрели на эту картину.

(27)

[1] with rolled up.

[2] bound up, *i.e.*, the soldiers whose wounds had been dressed.

2. Read the passage given below, then answer the questions that follow it.

N.B.—The passage is NOT to be translated.

Сказка о рыбаке и рыбке

Жил старик со своею старухой
У самого синего моря ;
Они жили в ветхой землянке[1]
Ровно тридцать лет и три года.
Старик ловил неводом рыбу,
Старуха пряла свою пряжу.
Раз он в море закинул невод,
Пришел невод с одною тиной.[2]

[1] землянка = жилище подземное

[2] тина = грязь

Он в другой раз закинул невод,
Пришел невод с травой морскою.
В третий раз закинул он невод,
Пришел невод с одною рыбкой,
С непростою рыбкой, золотою.
Как взмолится[3] золотая рыбка,
Голосом молвит[4] человечьим :
„ Отпусти ты, старче, меня в море,
Дорогой за себя дам откуп :[5]
Откуплюсь чем только пожелаешь.“
Удивился старик, испугался :
Он рыбачил тридцать лет и три года
И не слыхивал, чтоб рыба говорила.
Отпустил он рыбку золотую
И сказал ей ласковое слово :
„ Бог с тобою, золотая рыбка !
Твоего мне откупа не надо ;
Ступай себе в синее море,
Гуляй там себе на просторе.“

Воротился старик ко старухе,
Рассказал ей великое чудо.
„ Я сегодня поймал было рыбку,
Золотую рыбку, непростую ;
По нашему говорила рыбка,
Домой в море синее просилась,
Дорогою ценою откупалась :
Откупалась чем только пожелаю.
Не посмел я взять с нее выкуп ;[5]
Так пустил ее в синее море.“
Старика старуха забранила :
„ Дурачина ты, простофиля ![6]
Не умел ты взять выкупа с рыбки ! “

[3] взмолится = просит милости

[4] молвит = говорит

[5] откуп (*in this case*) = выкуп ransom

[6] простофиля = глупый, наивный

QUESTIONS

A.—*To be answered in English :—*   *Marks*

(1) What kind of tale must this be ?

    Summarize the content of these lines, naming the three personages concerned, their circumstances and occupations, the kind of home two of them had, its situation, and the length of time they had lived there.   8

(2) What apparatus was used and what did it bring to light on the three occasions on which it was used ?   3

(3) What offer was made to the man ?   Who made it ?   What reasons had the man for acting as he did ?   6

(4) Describe the scene between the man and the woman when he went home.   Did she take the same view of his action as himself ? How did she express herself ?   6

(5) Can any deduction be made from these lines as to the character of the two principals ?   3

B.—Отвечать по русски на эти вопросы :—

(1) Что значит, ,, Рыба говорит по нашему " ?   2

(2) Почему рыбачка считала простодушным своего мужа ?   2

                                       (30)

RUSSIAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Monday, 24th March—1.30 P.M. to 2.0 P.M.

This paper must not be seen by any candidate.

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Write on the blackboard the following :—

    Тверь is the name of a town on the Volga.

    поставщик = purveyor, contractor.

    равняться = to compare ourselves.

    раб   = slave.

4. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

5. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions. Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

6. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

7. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

  (i) The passage will be read *twice*, with an interval of three minutes between the readings.

 (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates.   (Maximum time of reading—four minutes.)

Too expensive even for the Emperor

В начале тридцатых годов, возвращаясь из Москвы, весной или осенью, царь Николай Павлович оставался в Твери несколько дней, ожидая безопасной переправы через Волгу. Поставщиком для стола государя и свиты был местный купец - богач. Он подал такой счёт, что удивил того, который счёт этот принял. „ Неужели у вас всё так дорого ? “ спросили купца. „ Нет, слава Богу; гакие цены только для царя. Нельзя же ему продавать, как всякому прочему.“ Стало это известно императору. Он пожелал видегь поставщика и спросил его: „ Так ты думаешь, что с меня надо брать как можно дороже ? “ „ Точно так, Ваше Величество. Можно ли равняться в чём с Вашим Величеством нам грешным, рабам Вашим ? Всё, что имею — Ваше, но в торговом деле товар и цена по покупателю,“ отвечал купец.

„ Ты, пожалуй, и прав отчасти, но хорошо, что не все так думают как ты. У вас в Твери жить и мие было бы не по карману.“ Счёт был оплачен, и Николай Павлович в Твери больше никогда не останавливался.

RUSSIAN

Higher Grade—(Second Paper (a))

AURAL COMPREHENSION TEST

Monday, 24th March—1.30 p.m. to 2.0 p.m.

Answers are to be written on the special sheet provided.

QUESTIONS   *Marks*

1. At what time of year did this incident occur ?   1

2. How was it that a stop had to be made in Tver ? How long did
they remain there ?   2

3. Who undertook to supply the Emperor's table ? In one word how
would you describe this person ? Why ?   3

4. What answer did he give to the very natural question that
was put to him ?   .   2

5. How did the Emperor react when the facts were brought to his
notice ?   1

6. Relate the conversation that took place.   4

7. What were the immediate outcome of the incident and its
permanent result ?   2
                                                               ___
                                                               15
                                                               ___

RUSSIAN

Higher Grade—(Second Paper (b))

Monday, 24th March—2.15 p.m. to 4 p.m.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh
page. Write legibly and neatly, and leave a space of about half an inch
between the lines.
Marks will be deducted for writing that is difficult to read.

1. Translate into Russian :—

Last night my wife and I were at the theatre. The play we saw was by a
young Russian author and we enjoyed it very much. We liked especially the
words spoken by the hero at the end of the third act. The tickets taken by my
brother turned out to be very good, so that we heard and saw everything. The
performance lasted three hours, and when it was finished the author came out

and thanked the public for their reception[1] and for the flowers they had given him.　After the theatre we went to a restaurant much frequented by theatre-goers.　There we had supper.　The table at which we sat was very nicely set and the supper we had ordered during the day was already awaiting us.

We sat on in the restaurant till midnight and I felt very much that I should like a smoke, but I was told that smoking was forbidden in the room in which the meal had been served.　So I went into the smoking-room[2] and remained there for an hour with a lighted cigar between my teeth.　You must not think that I am in the habit of spending my evenings that way.　The truth is, that was quite an exceptional occurrence :　it was our night off[3].　As a rule I have to work so hard that I am in bed by eleven o'clock and very glad to be there.

(50)

[1] приём　　　　[2] курительный зал　　　　　　[3] выходной is the adjective

2.　Write, in Russian, a composition on *one* of the following subjects :—

    (*a*)　Значение путешествия.

    (*b*)　Наше Отечество.

    (*c*)　Вода.　　　　　　　　　　　　　　　　　　　　(25)

GAELIC

Lower Grade—(Paper (a))

AURAL COMPREHENSION TEST

Tuesday, 25th March—9.15 a.m. to 9.45 a.m.

This paper must not be seen by any candidate

INSTRUCTIONS TO THE TEACHER

1.　Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2.　When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3.　Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4.　After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions.　Remind the candidates that they may make notes during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

   (i) The passage will be read *twice*, with an interval of three minutes between the readings.

   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates (maximum time of reading—four minutes) :—

Bha ann roimhe so coileach a chaidh e fhéin agus a chuid chearc a chur air àirigh an am an fhoghair. Thuit do shionnach, là bha 'n sin, a bhith gabhail an rathaid air tòir cobhartaich. Thug an coileach an aire dha, is leumar am bàrr craoibhe. Cha robh sin gun fhios do 'n t-sionnach, agus is e bha ann gun d' rinn e suidhe aig bun na craoibhe.

" Thig a nuas, a choilich," ars' esan, " tha naidheachd agam dhuit." " Cha tig," ars' an coileach. " Ud, thig a nuas, nach 'eil fhios agad gu bheil sinn càirdeach ? Is mise an sionnach, mac an t-sionnaich dhuinn-bhuidhe ; agus is tusa mac a' choilich mhic an uighe,—iar-ogha na peathar 's a bhràthar. Buaidh làrach—dèanamaid suidhe ! " " Cha dèan," ars' an coileach, " bithidh tu rium." " Cha bhi," ars' an sionnach, " nach 'eil fhios agad gu bheil a nis sìth air a h-éigheach eadar a h-uile beathach, agus nach 'eil a chridhe aig beathach gnothach a ghabhail ri beathach eile ? Is mise an teachdaire-gairm. Nach fhaic thu litir an ceangal ri bàrr m' earbaill ? Thig a nuas is leugh i."

Leum an coileach a nuas is mun gann a bhean a chasan do 'n làr bha e tarsainn am beul an t-sionnaich, is gun fhuireach ri mharbhadh thugar na buinn.

GAELIC

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 25th March—9.15 A.M. to 9.45 A.M.

Answers to be written on the special sheet provided

QUESTIONS	*Marks*
1. What fowls are mentioned, and where were they sent ?	2
2. What was the animal mentioned seeking ?	1
3. Who noticed him, and what happened ?	2
4. What was his request to one of the fowls ?	1
5. How did he try to prove his regard and innocence ?	3
6. What did he proclaim his mission to be ?	2
7. What was his final request ?	1
8. Was it granted ?	1
9. What was the result ?	2
	15

GAELIC

LOWER GRADE—(PAPER (b))

Tuesday, 25th March—10.0 A.M. to 12.15 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines. Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Translate into English :—

Cha b'e agus an tigh céilidh anns a' bhaile againn! Chan 'eilear ag gnogadh aig an dorus fhéin, ach fàilte an dorus an tallain, agus " am bheil sibh gu dòigheil an so an nochd ? " " Teannaibh a nuas is dèanaibh suidhe," their cuideigin a stigh. Chan fhada gus am bi a' bheinge làn agus gach cathair is furm a tha a stigh, agus na balaich is na caileagan 'nan suidhe an cùil an sud is an so. Chan 'eil fear-cathrach no té-chathrach ann, neo faodaidh tu ràdh gur h-ann tha trì no ceithir luchd-cathrach ann, an sud is an so am measg chàich. Is e am modh àite thoirt do fhear-an-tighe is do bhean-an-tighe, ach mar is trice is e fear is té de 'n luchd-céilidh a tha a' stiùradh a' chòmhraidh is gnothaichean na céilidh.

Tha an toiseach naidheachdan an latha air an aithris aig fear is té mar a chuala iad iad—naidheachdan a' bhaile is na sgìreachd is an t-saoghail mhóir ; agus sin cho òrdail, fiosrachail is móran na's blasda na ged bhitheadh iad 'gan leughadh a leabhar.

Tha sin deasbud a' dol air adhart, mar is trice air riaghaltas na rìoghachd agus air gnothaichean eile an t-saoghail, agus a h-uile fear is té a thogras a' toirt am beachd fhéin gu tuigseach, socrach, gun chabhaig, gun mhoille.   An uair a theirgeas sin tha sgeulachdan is toimhseachain air an aithris, agus iomadach uair sgeul aig na bodaich air na seann laoich a bha ann o chionn fhad an t-saoghail, agus air urram is aithne nan daoine o 'n tàinig iad.

(30)

2. Read the poem below, then answer the questions which follow it :—

N.B.—The poem is NOT to be translated.

1	O eilein naoimh 'sa' chuan an Iar,
	'S tu dhùisgeas suas na smuaintean mór,
	Bhith 'g amharc ort 'san fheasgar chiar
	'Sa' ghrian dol sios 'na h-uile ghlòir.

5	Chaidh iomadh bliadhna nis a seach
	O 'n thàinig Calum treun an àigh,
	'Na churach faoin gu d' fhonn a steach,
	'Na chridhe caomh bha iochd is bàidh.

	'N so thog e suas an solus iùil
10	A bha gu soillseach fada mach
	Air Alb' gu léir 'san robh a dhùil,
	O mhachair réidh gu sliabh nan clach.

	'N sin thàinig laoich is rìghrean treun
	Is sagairt aosd' nan doirean dlùth,
15	A dh' fhaotainn solus glan bho 'n ghréin
	Bha dealradh ann an I mo rùin.

	Thog foghlum suas a cheann gu h-àrd,
	Is eòlas mór 'san tìm o chian,
	An so bha 'm manach is am bàrd
20	Mu shligh' na slàint' a' labhairt dian.

	Bho d' fhonn chaidh mach gu iomadh tìr
	Na teachdairean bha làn de ghaol,
	A chur an céill an t-soisgeil fhìor
	An ceàrnaibh iomallach de 'n t-saoghal.

25	Shéid ort an doineann gharg bho 'n Tuath
	Le sgrios bha oillteil ann a sgéith,
	'Nuair thàinig na Lochlannaich le fuath,
	Is dh' fhàg iad rùisgte thu 'nan déidh.

	Ach thog thu suas a rìs do cheann,
30	Do chlachan grinn tha 'g inns' an sgeòil,
	'S do thogail àlainn, dhaingeann, theann,
	'S an tric bu bhinn a dh' éirich ceòl.

O 's pailt na gaisgich tha 'nan tàmh
A nis ad thulaich ghrinn 'nan suain,
35   Rìghrean is naoimh an sin fo phràmh
'S cha dùisg iad suas gu latha luain.

Soraidh leat nis " I mo ghràidh,"
Ged chluinnear annad " Geum na bà,"
Tha iomradh ort air iomadh tràigh,
40   Is bidh gu buan gu latha bhràth.

QUESTIONS

Notes to Candidates.

(a) The answers to the following questions may be in either Gaelic or English except when otherwise indicated.

(b) Arabic numerals, within brackets, refer to lines.

	Marks
1. Name and locate the island referred to.	2
2. When, and under what circumstances, was the author first urged to compose the poem ?	2
3. Summarize the description given of Calum Cille.	4
4. Mention the people who are said to have come to the island, and tell their purpose in doing so.	4
5. What changes were brought about (a) in the island, and (b) beyond the island ?	3
6. Translate literally " doineann gharg " (25), and explain fully what it refers to.	3
7. Give a description of the island as it is to-day.	3
8. Explain the expressions in inverted commas in the last verse. Can you quote the prophecy, attributed to Calum Cille, from which these expressions are taken ?	4
9. Give English equivalents for :— curach (7), sliabh (12), manach (19), oillteil (26), fuath (27), latha luain (36).	3
10. Form adjectives from the following nouns :— iochd (8), bàidh (8), sgrios (26), iomradh (39).	2
	30

3. Write, in Gaelic, a continuous story based on the following summary, and complete it in your own way. Give it a title. **The story should be about the same length as your answer to question 1.**

Cuairt ri cois na mara—sgeirean is eòin is feamainn de gach seòrsa—sligean is maorach—long bhriste air a' chladach . . .   (25)

GAELIC

Higher Grade—(First Paper (a))

Tuesday, 25th March—10.0 a.m. to 12 Noon.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page.   Write legibly and neatly, and leave a space of about half an inch between the lines.   Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. (*a*) Translate into idiomatic English :—

Is e beachd coitcheann a' Ghàidheil nach 'eil mór stàth anns a' Ghàidhlig mar mheadhon foghluim agus nach fheàirrde, ach gur misde, neach aige i an uair a théid e an ceann a chosnaidh.   A nis chan 'eil stéidh aig a' Ghàidheal no aig neach eile air son nam beachdan a tha sin.   Tha iad tur clì.   Agus chan ann a chum buannachd ar cloinne a tha e gum bitheadh iad air am beathachadh le a leithid de mhearachdan.

Chan e uiread na Gàidhlig, ach cion na Beurla, an cnapstarra gu minic, agus có dhearbhas ormsa nach ionnsaichear Beurla gun a' Ghàidhlig a chall, no gun antromaich eòlas na Gàidhlig foghlum an cainnt choimhich ?

Nan tuigeadh is nan creideadh na Gàidheil gur i a' Ghàidhlig an soitheach anns am faighear taisgte spiorad nan daoine o 'n tàinig iad, gur i ghléidh dhuinn na subhailcean sin an eachdraidh ar sinnsir air am miann leinn beachdachadh, gur i a tha a' toirt cunntais air gràsan ar n-athraichean, tadhal an dòchais agus an rùintean, agus a' luaidh air gnìomh an làmh ;   nan tuigeadh iad sin, agus nan creideadh iad gu bheil aca an sin luach thar nithean diomhain mar tha airgiod agus òr, cha bhitheadh iad caoin-shuarach a thaobh an còir-bhreith, agus cha mheasadh iad mar chàirdean an dream a spìonadh an dìleab o 'n dligheach.

Ach có theagaisgeas na Gàidheil agus cuin ?

Chan 'eil sin gun fhreagairt mar an ceudna do 'n fheadhainn a their nach cuir Gàidhlig gu bràth mìrean ime air an aran dhuinn.   **(30)**

1. (*b*) Translate into English *or* turn carefully into Scottish Gaelic :—

Lá n-aon iomorro dá ndeachaidh Conchubar, rí Uladh, do chaitheamh fleidhe go teach Fheidhlimidh, sgéalaighe Chonchubair, agus ré linn na fleidhe sin rug bean Fheidhlimidh inghean álainn, agus do-rinne Cathbhaidh Draoi, do bhí san chomhdháil an tan sin, tuar agus tairngire don inghin, go dtiocfadh iomad dochair agus díotha don chóigeadh dá toisg.   Arna chlos sin don laochraidh, do thogradar a marbhadh do láthair.

" Ni déantar ", ar Conchubar, " acht béaraidh mise liom í, agus cuirfead ar oileamhain í, go raibhe 'na haon-mhnaoi agam féin ".

Deirdre do ghairm an draoi Cathbhaidh dhi.   Do chuir Conchubar i lios ar leith í, agus oide agus buimeach dá hoileamhain, agus ní lamhadh neach don chóigeadh dol 'na láthair acht a hoide agus a buimeach agus banchàinteach Chonchubair, dá ngairthí Leabarcham.   Do bhí ar an ordughadh soin go beith ionnuachair [1] dhi, agus gur chinn ar mhnáibh a comhaimsire i sgéimh.   **(20)**

[1] ionnuachair = aig aois pòsaidh.

2. Read the poem below, then answer the questions which follow it :—

N.B.—The poem is NOT to be translated.

An Dubh Ghleannach

Latha dhomh 's mi 'n cois na tràghad
Chuala mi caismeachd nan Gàidheal ;
Dh' aithnich mi meòir grinn a' Bhràighich
Air sionnsar ùr bu lùghmhor gàirich,
5　Is thuig mi gun do ghluais an t-àrmunn,
Fear thogail an tùir uasail stàiteil.

Dhìrich mi 'm bruthach le h-éibhneas
Dh' éisdeachd ri fàilte righ Seumas ;
Chunnaic mi 'n Druimineach dhubh ghleusda
10　Cur fa-sgaoil a h-aodaich bréid-ghil
Air machair mhìn sgiamhach réidhleach,
Mar steud cruidheach ag cur réise.

'Nuair gheibheadh i cliathaich fo fharsuingeachd,
Soirbheas 'na sliasaid 'ga brosnachadh,
15　Mar shiùbhladh mial-chu bras-astarach,
'Na ruith air sliabh is fiadh air thoiseach,
I dìreadh nan tonn liath 's 'gan sgoltadh
Shnaidheadh i iad mar iarunn locrach.

Bha Neptune agus Aeolus eudmhor :
20　Dh' iarr iad builg nan stoirm a shéideadh ;
Dh' òrduich iad gach bòrd dhith reubadh,
'S na siùil a shracadh 'nam bréidean
Le borb-sgread is fead na reub-ghaoith',
Cur siaban thonn 'na steall 's na speuran.

25　Thòisich ùr-spairn chruaidh mar dh' iarr iad :
Chruinnich neòil dhubha na h-iarmailt
'Nan trom lùirichean dlùth iargalt,
'S iad a' trusadh sùrd 's a' lionadh
Mar dhorch smùid a fùirneis iaruinn,
30　Gu brùchdadh stoirm bha garbh is fiadhaich.

Bheartaich iad* gach ball neo-chearbach
Ullamh, deas gu gleachd ri fairge ;
Tharruing i le gaoith an earra-dheas,
Ghlac i 'n caol fo taobh 's bu doirbh e ;
35　'S ged bha Neptune saoithreach, stoirmeil,
Mhaslaich an saobh-shruth 's an dorch e !

Chaidh rìgh nan soirbheas gu dhùbhlan
Aig meud na strannaraich 's na h-ùpraid ;
Dh' fhosgail na builg air an cùlaibh
40　Mun gann a fhuair iad an dùnadh ;
Bha Maighdeann nam Mór-bheann cùirteil
An acarsaid fo shròin na dùthcha !

* an sgioba

QUESTIONS

Notes to candidates.

(a) The answers to the following questions may be in either Gaelic or English, except when otherwise indicated.

(b) Arabic numerals, within brackets, refer to lines.

Marks.

1. "An Dubh Ghleannach" was the pleasure boat of Alexander   2
Macdonald of Glenaladale.   Explain how the attention of the poet
was drawn to the departure of the boat.

2. Can you suggest who (a) am Bràigheach, (b) an t-àrmunn are ?   3
What achievement is attributed to the latter ?

3. To what is the boat compared (a) at the beginning, (b) in the   3
course of her voyage ?

4. Who are Neptune and Aeolus ?   What was their attitude to   5
the boat ?   What instructions did they give ?

5. What was the result of these instructions ?   Describe in your   5
own words the appearance of the clouds.

6. How did the crew prepare for the storm, and what was the   4
outcome of their efforts ?

7. Mention any verse which has specially appealed to you.   State   4
the reason for your preference, and give briefly the substance of the
verse in your own words.

8. Give Gaelic synonyms for any *four* of the following :—

sionnsar (4), soirbheas (14), bréidean (22), siaban (24),   2
iarmailt (26), mhaslaich (36).

9. Comment on the use of compound words in the passage.   Analyse   2
carefully any *four* examples.

30

GAELIC

HIGHER GRADE—(FIRST PAPER (b))

AURAL COMPREHENSION TEST

Tuesday, 25th March—12.15 P.M. to 12.45 P.M.

This paper must not be seen by any candidate

INSTRUCTIONS TO THE TEACHER

1. Use the ten minutes preceding the beginning of the test to make yourself thoroughly familiar with the passage to be read.

2. When so instructed by the supervising officer, read to the candidates the " Instructions to Candidates " given below.

3. Then read the passage aloud to the candidates, speaking clearly and naturally, and taking not more than *four minutes* to the reading.

4. After this reading inform the candidates that they may now turn over the printed question papers, and that they will have three minutes in which to study the questions.   Remind the candidates that they may make notes

during this interval of three minutes, but only on the special sheets provided. You yourself will not be allowed to see the questions which are to be answered by the candidates.

5. When so instructed by the supervising officer, read the passage a second time, in exactly the same manner as on the first occasion and taking the same amount of time.

6. Remind the candidates that the questions are to be answered in English.

INSTRUCTIONS TO CANDIDATES

1. Listen carefully to the following passage with a view to answering questions on its content.

2. The questions are to be answered in English.

3. You are on no account to touch the printed question papers or to do any writing until you are told to do so.

4. The procedure will be as follows :—

   (i) The passage will be read *twice*, with an interval of three minutes between the readings.

   (ii) After the first reading you will be allowed to turn over the printed question papers and you will have three minutes in which to study the questions.

   (iii) After the second reading you will write your answers on the special sheets provided.

5. All writing during the first and second readings is *strictly forbidden*. Notes may be made during the interval between the readings, but only on the special sheet provided.

6. You may not ask for the repetition of any word or phrase.

Passage to be read to the candidates (maximum time of reading—four minutes) :—

Na Lochlannaich

An uair a leughas sinn eachdraidh ar dùthcha chì sinn gu bheil móran iomraidh innte mu na Lochlannaich. Is iad sin na daoine a thàinig thar sàile a Lochlann a shireadh am beòshlainte feadh na Gàidhealtachd agus nan Eilean. Bha iad 'nan daoine calma agus treun agus bu bheag leotha na dhòirteadh iad de fhuil air son an dùilean a choimhlionadh.

Is ann mu dheireadh na h-ochdamh linne a thàinig na Lochlannaich do na h-eileanan Gàidhealach an toiseach. B' e I Chaluim Chille a' cheud àite air an d' rinn iad. Loisg iad an eaglais agus na seann leabhraichean a bha anns an eilean agus thug iad leotha a h-uile nì a b' fhiach. Cha do thoilich so iad.

Rinn iad an nì ceudna anns gach eilean a tha eadar Leódhas agus Eilean Mhanainn. Ghabh iad seilbh air gach rud a bha annta, agus rinn iad tràillean de na h-Eileanaich. Is e Somhairle mac Gille-Bhrìde a' cheud fhear a dh' fheuch ri am bacadh. Chaidh leis glé mhath, agus chuir e iad a mach a Earra-Ghàidheal gu buileach. Bha an dùthaich so aig a mhic 'na dhéidh. Is iomadh dòigh a dh' fheuch rìghrean na h-Albann air son na h-eileanan fhaighinn, ach cha tàinig a h-aon diubh gu buil gus an do chuir an treas rìgh Alasdair ruaig orra aig an Leargaidh Ghallda anns a' bhliadhna dà cheud deug, trì fichead 's a trì. An sin fhuair Alba seilbh air na h-Eileanan an Iar.

GAELIC

HIGHER GRADE—(FIRST PAPER (b))

AURAL COMPREHENSION TEST

Tuesday, 25th March—12.15 P.M. to 12.45 P.M.

Answers to be written on the special sheet provided

QUESTIONS   *Marks*

1. Which people are first mentioned, and whence are they said to have come ?   1

2. What type of folk are they said to have been ?   2

3. During which century did they first arrive off the coast of Scotland ?   1

4. Which place did they plunder first ?   1

5. What other regions in the neighbourhood did they raid, and what happened to the native inhabitants ?   3

6. Who opposed them first, and with what result ?   2

7. Who else sought to regain the Western Isles ?   2

8. Who finally defeated the invaders, and where ?   2

9. What is the date given for this encounter ?   1
                                                         ――
                                                         15
                                                         ――

GAELIC

HIGHER GRADE—(SECOND PAPER)

Tuesday, 25th March—2.0 P.M. to 4.0 P.M.

The value attached to each question is shown in brackets after the question.

N.B.—Begin the answer (or fair copy of an answer) to each question on a fresh page. Write legibly and neatly, and leave a space of about half an inch between the lines. Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION I

1. Write, in Gaelic, an essay, of not more than two pages in length, on any *one* of the following subjects :—

    (a) "B' e m' ulaidh-sa riamh na h-Eileanan Iar,
        Far an cluinnear cainnt nam beann ".

    (b) An ataireachd bhuan.

    (c) Na h-òrain Ghàidhlig as docha leam.

    (d) An t-àite anns an d' rugadh mi.

(30)

2. Translate into Gaelic :—

Once every year, for a few fleeting days, I return to the place of my birth—
an gleann 'san robh mi òg.   Just why, it would be hard to explain.   For the
chairs by the fireside have now new tenants ; the dear old friends who filled
them are gone.   It is the same throughout the glen, too.   One by one the old
folks have been gathered to their fathers.   A new brood has arisen that to me
is alien.   Only an old school-comrade here and there.   But to meet these, to
look into their eyes again, to feel the firm hand-grip, to hear the warmth in
their voices, is one of the deepest joys in life.   As we move about the world
we are ever forming new friendships.   But new friends can never be quite like
these.   We see new friends as through a glass, darkly, but into and through
the friends of our childhood days we see with eyes of utter understanding.

(30)

Section II

3. Answer question (1) and any *two* of the others.   The answers may be in
Gaelic or in English.

(1) Select any *one* of the following poems.   Name the author with approxi-
mate dates.   Sketch briefly the substance of the poem, and discuss its style.

Oran an t-Samhraidh, Ri Fuaim an t-Saimh,
Iorram Dharaich, Gaoir nam Ban Muileach,
Oran Mór MhicLeòid, Oran na Comhachaig.

OR

Select any prose work by *one* of the following authors.   Give an account of
its substance and show why it appeals to you.

Dr. Norman Macleod, Donald Mackechnie, Dr. Kenneth Macleod,
Dr. Donald Lamont.   (8)

(2) Write brief notes on any *two* of the following :—

Uilleam Mac Dhun-Léibhe, An Siorram MacNeacail, Iain Ruadh
Stiùbhart, Rob Donn, Silis Nighean MhicRaghnaill.   (6)

(3) Locate and explain the meaning of any *six* of the following :—

Dubhaird, Bràghaid Albann, Caol Acuinn, A' Mhorbhairn, Na
h-Eileanan Sianta, Cinn-ghiùthsaich, A' Chomraich, An Tairbeart,
Dun Chailleann.   (6)

(4) Give a short account of an important event in the history of the High-
lands referred to by any of the Gaelic bards.   Quote a few lines which you
consider significant.   (6)

SCIENCE

Lower Grade

Wednesday, 19th March—1.45 P.M. to 4.15 P.M.

Not more than SIX questions should be attempted.   Three, but not more
than three, of these must be taken from Part I (General Science).   The remaining
three questions must be taken from the two sections in Part II dealing with the
branches studied in the later stages, at least one question being taken from each
of the two sections.

Answers should, wherever possible, be illustrated by clear diagrams of reasonable size.

Mathematical tables will be supplied to those who desire them.

The value attached to each question or part of a question is shown in the margin.

Before handing in their Examination books, candidates should enter in the space provided on the front cover the numbers of the questions they have attempted.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

PART I.—General Science

Only THREE questions from this part should be attempted.

Marks

1. Make a labelled sketch of the apparatus you would use to remove all moisture, carbon dioxide, and oxygen from a stream of exhaled air issuing from a tube.   State the chemical reaction which occurs during the removal of the carbon dioxide.   8

Describe and explain all that would occur if (i) burning calcium is held in one jar of oxygen, (ii) burning carbon in another, (iii) neutral litmus solution is then added to each jar, (iv) the contents of the jars are then mixed ?   8

2. Describe experiments which show that :—

   (i) copper is a better conductor of heat than iron,
   (ii) pressure in a liquid increases with depth,
   (iii) water contracts and then expands on cooling from room temperature to just above its freezing point,
   (iv) there are circular lines of force around a straight wire carrying an electric current.

The observations which justify the conclusions should be clearly stated.   16

3. Choose *one* of the following plants and make a large labelled drawing of its flower cut lengthwise through the centre :—

buttercup, sweet pea, wallflower.   4

State how pollination and fertilization are brought about in this flower.   5

Describe experiments (one experiment for each) which you have performed to show—

   (i) that the pea seed stores starch,
   (ii) that germinating seeds produce heat.   7

4. What conditions would you provide in school in order to make observations on the development of (i) a frog, and (ii) a butterfly or moth, from the egg to the adult stage ?   6

Draw and describe a tadpole about a week old.   How does it breathe and feed ?   5

Give an illustrated account of the chrysalis of the insect chosen above and mention two of the ways in which the chrysalis is protected from its natural enemies.   How long does this stage usually last if the insect pupates (i) during the summer, (ii) in the autumn ?   5

PART II

Only THREE questions from this part should be attempted—see instructions on page 1 of this paper.

Section 1.—Physics   *Marks*

5. State the principle of moments and describe an experiment to verify the principle for three non-parallel co-planar forces.   9

A uniform rod 20 cm. long swings freely about its centre of gravity. A piece of bronze is hung at one end of the rod and is balanced by hanging a 20-gm. weight 1 cm. from the other end.   Where should the weight be hung to maintain equilibrium when the bronze is completely immersed in water ?   8

(Density of bronze = 9 gm. per c.c.)

6. (*a*) Describe, giving full experimental details, how you would determine the coefficient of linear expansion of copper.   8

(*b*) State Boyle's Law and Charles' Law.

A uniform vertical glass tube closed at its upper end has its lower end immersed in mercury.   When the barometric height is 75 cm. and the temperature 10° C. the level of the mercury in the tube is 1 cm. above that in the cistern and the trapped air column is 80 cm. long.   At what temperature will the levels become equal, the barometric height and the length of the tube below the surface of the mercury remaining unchanged ?   9

7. Describe how you would determine the refractive index of water and explain the theory of your method.   8

State the formula connecting u, v, and f for a convex lens.

Find two positions for a small object standing on the optical axis of a convex lens of focal length 10 cm. such that the image is twice the size of the object.   Write a note on the nature of the images.   9

8. Make a labelled sketch of any named primary cell which contains a depolarizer.   5

How would you find experimentally the internal resistance of this cell ?   6

A cell of internal resistance 1 ohm passes a current of 0·3 amp. through two 2-ohm resistances arranged in series.   Calculate the E.M.F. of the cell.   Find the potential difference across the cell when the resistances are arranged in parallel.   6

Section 2.—Chemistry

Answers to questions in this section should, wherever possible, be supplemented by equations.

$$H = 1, \; O = 16, \; Mg = 24, \; Cl = 35 \cdot 5$$ *Marks*

9. What is meant by stating that the atomic weight of copper is 63·5 ?   State the relationship between the atomic weight, the equivalent weight, and the valency of an element.   Write the formulae of the two oxides of copper.   4

Describe an experiment to show that copper has two valencies.   8

An element forms two oxides in one of which it is monovalent and in the other divalent.   There is 80 per cent. of the element in the higher oxide.   Calculate the percentage of the element in the lower oxide.   5

10. What do you understand by oxidation ?   2

Describe experiments (one for each) to show that manganese dioxide and nitric acid are oxidizing agents. How would you test one product of each reaction to show that oxidation had taken place.   10

0·5 gm. of magnesium was completely oxidized. Calculate the volume of 1·5 N hydrochloric acid which would be required to neutralize the oxide.   5

11. Give two tests to distinguish between the following pairs of substances :—

    (i) Slaked lime and powdered chalk.   4
    (ii) Nitrous oxide and oxygen.   4
    (iii) Sulphur dioxide and sulphuretted hydrogen.   4
    (iv) Ammonium chloride and potassium nitrate.   5

Section 3.—Botany

12. Make labelled drawings of transverse sections of the stem and root of a young dicotyledon to show as simply as possible the arrangement of the tissues in each.   10

Describe what happens as secondary thickening takes place in a stem.   7

13. Describe experiments (one experiment for each)—

    (i) to confirm that a plant requires iron for healthy growth,   6
    (ii) to show that a plant gives off oxygen during photosynthesis,   5
    (iii) to demonstrate the transpiration pull of leaves.   6

14. Write notes on :—

    (i) the structure of a dandelion " clock ",   4
    (ii) the characters which distinguish monocotyledons from dicotyledons,   6
    (iii) the structure of the corm of a named plant,   4
    (iv) the importance of humus in the soil.   3

Section 4.—Zoology

15. Make a large labelled drawing of the blood system of the earthworm and indicate by arrows the direction in which the blood flows.   8

Explain how the system works, and why, though relatively simple, it is adequate for the needs of the earthworm.   9

16. Write notes on :—

    (i) the reproduction of hydra,   8
    (ii) the snail's method of feeding,   4
    (iii) the structural adaptations of a fish for locomotion.   5

Either

17. (a) (*For candidates professing Zoology.*)

Write an account of the position, appearance and functions of the following, as found in frog :—

        bladder, testes, stomach, lungs, fat bodies.   17

Or

17. (*b*) (*For candidates professing Zoology and Human Physiology.*)
Explain the following happenings :—

    (i) the panting of a runner after a race,

    (ii) " watering " of the mouth,

    (iii) the need for fresh fruit and vegetables in a diet,

    (iv) the clotting of blood when a finger is cut,

    (v) the dilation of the pupil of the eye in a dim light.　　　17

SCIENCE

HIGHER GRADE—(BOTANY)

Wednesday, 26th March—1.0 P.M. to 3.0 P.M.

FIVE questions in all should be attempted.

Answers should, wherever possible, be illustrated by clear diagrams of reasonable size.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

Marks

1. In what respects does the leaf of any fern you have studied differ from the fern prothallus ?　　　7

Give a detailed account of the process of fertilization in the Fern. How does the sexual reproduction of the Fern differ from that of Spirogyra ?　　　13

2. Where are the carpels of a flowering plant and what are their functions ?　　　3

Explain the terms *perigynous flower, free-central placentation, apocarpous ovary,* and in each case illustrate your explanation by a labelled drawing from a named plant.　　State the family to which each plant belongs.　　　12

Name two families which resemble each other in important respects but which may be distinguished by the structure of their fruits.　Describe the fruit of a named plant from each of these families.　　　5

3. Describe experiments (one experiment for each)

    (i) to demonstrate root-pressure,　　　6

    (ii) to show that the water transpired from a leaf passes mainly through the stomata,　　　6

    (iii) to compare, by means of a potometer, the rates of transpiration of a shoot in light and in darkness.　　　8

Explain the reasons for the precautions taken in setting up these experiments.

4. Make a drawing to show the general arrangement of the tissues in a young dicotyledon stem as seen in transverse section.   Make an enlarged sketch of a representative part to show the microscopic structure.   10

Write a detailed account of the vascular tissues in the stem, indicating how the structure of each is related to its function.   10

5. Describe how a potato plant manufactures and stores its food.   12

Write a detailed account of the process by which the plant uses the stored food as a source of energy.   8

6. Select *five* of the following plants.   In each case state where you would expect to find the plant growing and what features it possesses that help it to survive in this particular habitat.

Lesser celandine, marram grass, butterwort, coltsfoot, heather, bindweed, mistletoe.   20

7. **Either** (*a*) Write a brief explanation of the following :—

(i) Young plants often wilt after being transplanted.
(ii) Dried prunes swell when steeped in water.
(iii) Lawns need not be mown in winter.
(iv) Plants may die if the soil becomes waterlogged.
(v) Toadstools may be found growing on heaps of farmyard manure.
(vi) Daisies tend to spread on a lawn.
(vii) The depth at which seeds are sown depends on their size.   20

Or (*b*) Discuss the ways in which the health of plants is closely dependent on the physical and chemical nature of the soil.   15

Mention some of the effects which vegetation may have on a soil.   5

SCIENCE

HIGHER GRADE—(CHEMISTRY)

Wednesday, 26th March—9.30 A.M. to 11.30 A.M.

Not more than **FIVE** questions should be attempted.   Answers should, wherever possible, be illustrated by clear diagrams of reasonable size and supplemented by equations.

$$H = 1, C = 12, N = 14, O = 16, Na = 23, S = 32,$$
$$Cl = 35\cdot5, Cu = 63\cdot5.$$

The value attached to each question or part of a question is shown in the margin. Mathematical tables will be supplied to those who desire them.

Before handing in their Examination books, candidates should enter in the space provided on the front cover the numbers of the questions they have attempted.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.
                                                                          Marks

1. Describe the experiment you would perform with cupric oxide to determine as accurately as possible the equivalent of oxygen and hence the equivalent of copper.   Explain why coal gas would be unsuitable for this experiment.   11

If you repeated the experiment with cuprous oxide in place of cupric oxide what difference, if any, would you expect to find in the values of the two equivalents ?

Name and state the law which these two experiments illustrate.   5

If you obtained your cupric oxide by heating copper nitrate, calculate the weight of oxide you would expect to obtain from 1·5 gm. of the nitrate.   4

2. How would you prepare hydrobromic acid ?   7

Write equations for the reactions between hydrobromic acid and (i) chlorine, (ii) caustic soda solution, (iii) concentrated sulphuric acid. In each case state the type of the reaction.   9

How would you attempt to identify two of the products in (iii) ?   4

3. Given potassium nitrate, ammonium chloride, and sulphuric acid, describe briefly (without sketches) how you would prepare and collect (i) oxygen, (ii) nitrogen, (iii) nitrous oxide, (iv) nitric acid.   (A preparation may involve more than one step.)   17

How would you show that nitric acid contains hydrogen ?   3

4. Given pure sodium bicarbonate detail the steps you would take to standardize a specimen of sulphuric acid of which the concentration is known to lie between 2N and 3N.   11

1·07 gm. of ammonium chloride is heated with 80 c.c. of 0·5N caustic soda in a flask A.   The escaping vapour is absorbed in 50 c.c. of N sulphuric acid in a receiver B.   The heating is continued until there is no further reaction.   Calculate (i) the volume of N sulphuric acid required to neutralize the contents of flask A and (ii) the volume of 0·5N caustic soda required to neutralize the contents of receiver B, when the reaction is complete.   9

5. Outline a laboratory experiment illustrating how sulphuric acid may be manufactured commercially starting from sulphur.   9

Starting from concentrated sulphuric acid, how would you obtain a reasonably pure specimen of sulphur ?   7

State some of the principal uses of sulphur and of its compounds.   4

6. State four methods of salt formation, two involving the use of the appropriate acid and two not.   Show how your methods could be applied to the preparation of chlorides, giving one example for each method.   12

Explain what is meant by a normal salt and an acid salt.   Name an acid which forms such salts and describe how you would prepare specimens of the two sodium salts of that acid.   8

Marks

7. Either (*a*) How would you produce ozone in the laboratory ?   5

Outline the experiments you would perform, the results you would expect, and the reasoning you would adopt to establish a formula for ozone.   8

Describe and explain the reactions between hydrogen peroxide and (i) lead sulphide, (ii) acidified potassium permanganate solution.   7

Or (*b*) Describe with the aid of a diagram the commercial preparation and purification of coal gas.   12

A sample of water gas is known to contain hydrogen, carbon monoxide, carbon dioxide, and nitrogen. When 100 c.c. of this gas was shaken up with caustic soda solution the volume was reduced by 1 c.c. The volume was then increased to 150 c.c. by the addition of oxygen and the mixture exploded over mercury. After cooling, it was found that the volume had been reduced by 92 c.c. When the residue was shaken up with caustic soda solution there was a further reduction of 46 c.c. Calculate the composition of the 100 c.c. of water gas and the volume of residual oxygen. (All volumes are given at room temperature and pressure.)   8

SCIENCE

HIGHER GRADE—(PHYSICS)

Wednesday, 19th March—1.45 P.M. to 4.15 P.M.

Not more than SIX questions should be attempted. Two, but not more than two, of these must be taken from Section I (Mechanics), and the remainder from not fewer than two other sections.

$g = 32$ *ft. per sec. per sec. or* 981 *cm. per sec. per sec.*

Answers should, wherever possible, be illustrated by clear diagrams of reasonable size.

The value attached to each question or part of a question is shown in the margin.

Mathematical tables will be supplied to those who desire them.

Before handing in their Examination books, candidates should enter in the space provided on the front cover the numbers of the questions they have attempted.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION I (MECHANICS)

Two, but not more than two, questions from this Section must be attempted.

Marks

1. State the principle of moments and describe an experiment by which you could verify it for four parallel co-planar forces. (Your experiment should allow verification about more than one point in the plane.)   9

A uniform block of stone resting on a level surface is in the form of a cube of edge 2 ft. and weighs 800 lb. If it is to be tilted about one edge what vertical force should be applied at the middle of the opposite edge? The tilting is to be done by inserting one end of a 5-ft. iron bar 6 inches in under the block at this point and levering the block up. If the bar weighs 12 lb. calculate the least effort required just to tilt the block about its edge.   7

2. What is meant by the statement that the coefficient of kinetic (sliding) friction between two surfaces is $\frac{7}{16}$? Describe an experiment to determine the coefficient of kinetic friction between two surfaces as accurately as possible and explain the theory underlying your calculation.   9

A 10-ft. plank rests with one end on the ground and the other on a window-sill 6 ft. above the ground. A wooden box of mass 16 lb. slides down the plank. If the coefficient of kinetic friction between the box and the plank is $\frac{7}{16}$, calculate the acceleration of the box.   7

3. Three non-parallel co-planar forces act on a body; state two essential conditions of equilibrium.

A uniform metal plate in the shape of a rectangle 8 in. by 4 in. and with a hole bored in each corner has a mass of 5 lb. Using this plate as the rigid body how would you verify experimentally the conditions you have stated.   11
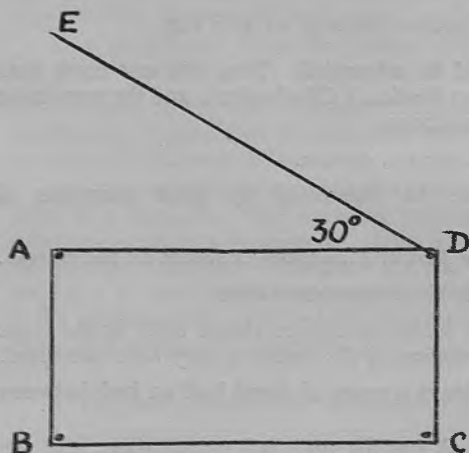
The diagram shows the same plate pivoted on a pin through the hole at A and held with the edge AD horizontal by a string attached to E vertically above A. Find the direction and magnitude of the reaction at the pin A.   5

4. Explain the difference between the units pound-weight and poundal.

Describe an experiment to find the relation between the acceleration of a moving body and the force producing the acceleration.   10

A cyclist and his bicycle have a combined mass of 200 lb. At what rate does the cyclist work in maintaining a steady speed of 15 m.p.h. against a constant resistance such that if he were to stop pedalling the bicycle would come to rest in 20 seconds?   6

SECTION II (HEAT AND HYDROSTATICS)

Marks

5. Explain what is meant by *the pressure at a point in a liquid.* Describe an experiment to show how this pressure varies with density.   7

Why must the pressure exerted by a stationary liquid on a surface of its containing vessel be everywhere at right angles to that surface ?   2

Area
7·5 sq. cm

2 cm.

2 cm.

Area
15 sq. cm.
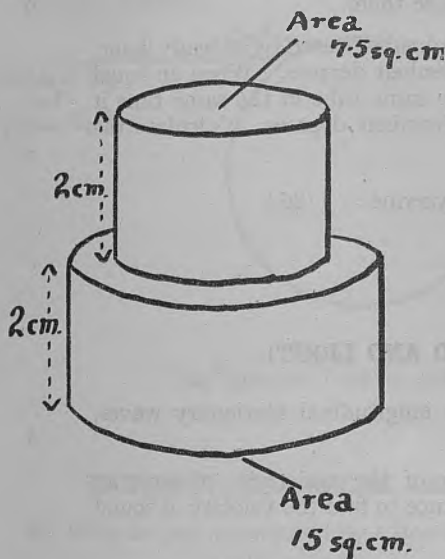
The diagram shows a cylindrical can with a narrower cylindrical neck. It is filled to the brim with a liquid of specific gravity 1·2. Calculate—

(i) the pressure the liquid exerts on the base of the can ;

(ii) the force the liquid exerts on the base of the can ;

(iii) the weight of the liquid in the can.

Account for the difference in the answers obtained in (ii) and (iii).   5

Assuming that the container has a detachable base how would you verify experimentally that your calculated value for the force in (ii) is correct ?   3

6. You wish to draw a graph showing the relation between the volume and temperature (in degrees Centigrade) of a fixed mass of gas at constant pressure. Describe the experiment you would do to secure the necessary data and sketch the graph you would obtain.

Show how this graph leads to the conception of absolute temperature.   10

State the general gas law. Calculate the density of air at 17° C. and a pressure of 75 cm. of mercury, given that the density of air at N.T.P. is 1·29 gm. per litre.   7

7. Describe the experiment you would perform to find the coefficient of *cubical* expansion of glass. Explain fully the theory underlying your calculation.   12

The graduation mark on a 1-litre flask is correct for 15° C. The flask is filled to the mark with turpentine when both turpentine and flask are at 5° C. What is the real volume of this turpentine ? What would the real volume of this turpentine become if the temperature of the flask and its contents were then raised to 15° C. ?   5

(Coefficient of cubical expansion of glass = 0·000027 per Centigrade degree.)

(Coefficient of cubical expansion of turpentine = 0·00094 per Centigrade degree.)

8. Define *calorie* and *specific heat*.   3

The temperature of an oven is known to be over 300° C.   If you have no thermometer reading more than 110° C., how would you determine experimentally the temperature of the oven ?   State the main sources of error, explain whether they would raise or lower your result, and say how you would minimize them.   9

Water, which flows through a metal tube heated by a steady flame, has its temperature raised by 20 Fahrenheit degrees.   When an equal volume of glycerine flows through the same tube in the same time it has its temperature raised by 27 Fahrenheit degrees.   Calculate the specific heat of glycerine.   5

(Specific gravity of glycerine = 1·26.)

SECTION III (SOUND AND LIGHT)

9. Explain what is meant by (i) longitudinal stationary waves, (ii) resonance.   5

Describe, with a full explanation of the underlying theory, an experiment which makes use of resonance to find the velocity of sound in air.   8

Calculate the number of beats produced per second when an open organ pipe of length 5 ft. and a closed one of length 2·75 ft. are sounded together.   4

(Velocity of sound in air = 1,100 ft. per sec.)

10. Write the formula for the frequency, n, of a note produced by a stretched string and state the units in which each quantity, n, l, m, T, is measured.   5

Explain in detail how you would verify experimentally the relation between n and m, other factors remaining constant.   8

Two wires, identical in all respects except that one is twice as thick as the other, vibrate under similar conditions.   How do the fundamental notes they produce compare in pitch ?   4

11. Explain the symbols u, v, f as applied to a *concave lens*.   State your sign convention and derive mathematically the formula which expresses their relationship.   6

Describe an experiment by which this relationship may be verified.   6

When an object is placed 10 cm. from a spherical *mirror*, a real image twice the size of the object is formed.   State the type of mirror used and find its radius of curvature.   5

12. Distinguish between *deviation* and *dispersion*.   4

Describe, with an explanation of the purpose of each part of the apparatus, a laboratory method of producing a pure spectrum on a screen.   7
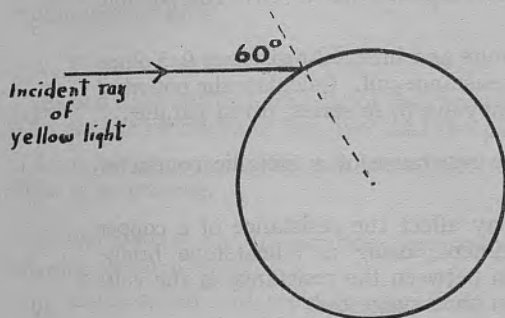
A glass cylinder has a diameter of 4 in. A ray of yellow light meets it as shown in the sketch. With the aid of trigonometric tables, draw a diagram to show the path of an emergent ray which has undergone one internal reflection. Explain whether this internal reflection is total or partial.   6

(air $^\mu$glass = 1·54 for yellow light.)

SECTION IV (MAGNETISM AND ELECTRICITY)

13. What do you understand by a line of force in a magnetic field ?   2
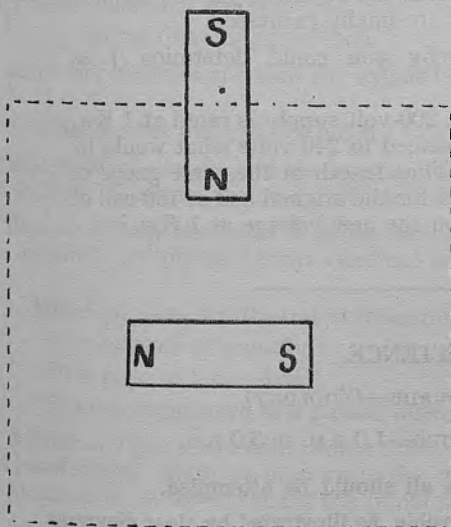
Two bar magnets of equal strength are placed as shown. Sketch the lines of force of the part of the field within the dotted rectangle.   4

Sketch the lines of force in the neighbourhood of a solenoid carrying an electric current ; show the direction of the current as well as that of the lines of force.   3

Sketch the apparatus and describe the method you would use to find the ratio of the pole strengths of a long solenoid when it carries a current of (i) 2 amp. and (ii) 3 amp.   8

14. Define the volt and distinguish between the *electromotive force* and the *potential difference* of a cell.   4

Explain fully how you would use a potentiometer to compare the e.m.f.s of two cells.   A pupil doing such an experiment found that the galvanometer gave a deflection to the same side no matter where the tapping key was put on the potentiometer wire.   Give two possible explanations of this happening.   9

Two cells each of e.m.f. $1 \cdot 8$ volts and internal resistance $0 \cdot 5$ ohms send a current through a 2-ohm resistance coil.   Calculate the potential difference across the cells when they are (i) in series, (ii) in parallel.   4

15. On what factors does the resistance of a metallic conductor depend ?

Suggest two factors which may affect the resistance of a copper voltameter.   Describe an experiment, using a Wheatstone bridge circuit, to investigate the relation between the resistance of the voltameter and *one* of the factors you have suggested.   10

An ammeter with full-scale deflection marked 15 is labelled " Milliamperes " and " Resistance = 5 ohms."   A shunt is attached to the ammeter, which is then connected in series with a battery and a copper voltameter in which $0 \cdot 88$ gm. of copper are deposited after the current has run for half an hour.   During the half hour the ammeter needle remained at the 15 mark.   What is the resistance of the shunt ?   7

(Electro-chemical equivalent of copper $= 0 \cdot 00033$ gm. per coulomb.)

16. State the unit of each symbol in the equation $JH = I^2Rt$, and define the unit in which both sides are finally expressed.   4

Describe an experiment whereby you could determine J as accurately as possible.   7

An electric radiator for use on a 200-volt supply is rated at 1 Kw. If the voltage of the supply was changed to 240 volts what would be the new rating of the radiator ?   What length of the same gauge of manganin wire should be substituted for the original coil of 150 cm. of manganin wire to keep the rating on the new voltage at 1 Kw. ?   6

SCIENCE

HIGHER GRADE—(ZOOLOGY)

Friday, 21st March—1.0 P.M. to 3.0 P.M.

FIVE questions in all should be attempted.

Answers should, wherever possible, be illustrated by clear diagrams of reasonable size.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

Marks

1. Make a list of the characters common to vertebrates. What characters are peculiar to birds ?   10

State the groups to which the following belong :—
        bat, whale, tortoise, eel, newt, cuckoo.   3

Write a brief account of the life history and habits of the cuckoo or other named bird.   7

2. How does an adult frog catch its food ?   4

Make a large labelled drawing of the digestive system of this animal. What are the functions of the liver and the pancreas in digestion ?   11

Describe any experiment you have performed showing the digestive action of an enzyme.   5

3. Write notes on the position, appearance, and functions of the following in a named fish :—
        testes, spinal cord, semi-circular canals, vasa efferentia, oviduct(s).   20

4. Describe the reproductive system of the earthworm, illustrating your answer by large labelled drawings.   15

Write an account of this animal's life history.   5

5. What do you understand by (i) breathing, and (ii) internal or tissue respiration ? What is the purpose of respiration ?   5

Describe the position and structure of the following in a rabbit or other named mammal and state how they function in respiration :—
        larynx, diaphragm, alveoli.   13

State four respects in which the exhaled air differs from inhaled air.   2

6. What are the functions of blood ?   5

Make labelled drawings of the hearts of a fish, a frog, and a mammal and indicate by arrows the course which the blood takes in these hearts.   10

Explain (i) why the heart of a fish need not be as elaborate as that of a mammal, and (ii) why hydra does not need a blood system.   5

7. **Either** (a) Give an illustrated description of :—
        (i) a maggot of housefly,   5
        (ii) a pupa of honey-bee,   4
        (iii) an aquatic larva of a named insect.   3

Mention any protective adaptations shown by insects during the larval and pupal stages. Write an account of the changes which must occur in the structure of an insect during the pupal stage.   8

Or (b) Select a habitat familiar to you. Name *four* animals living there which belong to different groups and discuss the influence which the physical, climatic, and other features of the environment have on the habits of these animals.

What effects do these animals have on the habitat ?   20

SCIENCE

HIGHER GRADE—(ZOOLOGY AND HUMAN PHYSIOLOGY)

Friday, 21st March—1.0 P.M. to 3.0 P.M.

FIVE questions in all should be attempted.
Answers should, wherever possible, be illustrated by clear diagrams of reasonable size.

The value attached to each question or part of a question is shown in the margin.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION I—ZOOLOGY	*Marks*

1. Make a list of the characters common to vertebrates. What characters are peculiar to birds ?   10

State the groups to which the following belong :—
       bat, whale, tortoise, eel, newt, cuckoo.   3

Write a brief account of the life history and habits of the cuckoo or other named bird.   7

2. How does an adult frog catch its food ?   4

Make a large labelled drawing of the digestive system of this animal. What are the functions of the liver and the pancreas in digestion ?   11

Describe any experiment you have performed showing the digestive action of an enzyme.   5

3. Write notes on the position, appearance, and functions of the following in a named fish :—
       testes, spinal cord, semi-circular canals, vasa efferentia, oviduct(s).   20

4. Describe the reproductive system of the earthworm, illustrating your answer by large labelled drawings.   15

Write an account of this animal's life history.   5

SECTION II—HUMAN PHYSIOLOGY

5. What do you understand by (i) breathing, and (ii) internal or tissue respiration ?   3

Describe the position and structure of the following in man and state how they function in respiration :—
       larynx, diaphragm, alveoli.   13

Why is fresh air one of the essentials for good health ?   4

6. Describe the position and functions of the adrenal, the thyroid, and the pituitary glands.   16

The pancreas is not only a source of digestive juices. Write an account of its other function.   4

Marks

7. **Either** (*a*) Discuss the statement that water is one of the most vital constituents in man's diet.   12

How is the amount of water in the body regulated ?   8

Or (*b*) (i) What visible effects are produced on the skin by heat, and by cold ? How are these effects brought about and how may they contribute to the maintenance of a constant body temperature ?   8

(ii) Describe the lymphatic system and state the functions of lymph.   12

TECHNICAL SUBJECTS—GROUP I

Higher Grade—(Applied Mechanics)

Monday, 24th March—9.15 a.m. to 11.15 a.m.

Not more than FIVE questions should be attempted.

20 marks are assigned to each question.

When candidates use a formula they must explain each symbol.   Units must always be stated.

Take $\pi = \dfrac{22}{7}$, *and* $g = 32$ *ft. per sec. per sec.*

Square-ruled paper and four-place logarithmic tables are provided.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. The end of a steel tube is screwed into a socket which is fixed between two plates by a bolt of diameter *d* in. as shown in Figure 1.

The external diameter of the tube is 1·75 in., the bore is 1·25 in. and the diameter at the bottom of the screw thread is 1·53 in.

If the maximum tensile stress in the tube is to be 6 tons per sq. in. and the maximum shear stress in the bolt has not to exceed $4\frac{1}{2}$ tons per sq. in., determine—

(*a*) the maximum tensile load on the tube ;

(*b*) a suitable diameter for the bolt ;

(*c*) the extension of the tube under the maximum load if its length is 10 ft. and Young's modulus for the material is 14,000 tons per sq. in. (You may leave your answer in fractional form.)

FIGURE. 1

2. Figure 2 shows the outline of a loader-transporter truck weighing 35 cwt. when unloaded.   Its centre of gravity is at G.

The hopper carrying a load of 10 cwt. hangs from a bent jib ABC, pivoted on axis A.   The piston rod from the hydraulic cylinder D is attached to the jib at B.   The cylinder is 3 in. diameter.

When the load is in the position shown, calculate—

(a) the pressure in lb. per sq. in. in the cylinder D ;

(b) the reaction forces, R_1 and R_2, on the wheels of the truck.

FIGURE 2

3. Define the *polygon of forces*.

Four co-planar forces A, B, C, D act together at a point and are in equilibrium.

Force A of 30 lb. acts vertically and pulls on the point ; force B of 40 lb. has a line of action at 60° clockwise from that of A and pushes on the point. Forces C and D have equal magnitudes of 35 lb.

(a) Determine graphically the directions of the lines of action of forces C and D with reference to the line of action of A.

(Scale : 1 in. represents 10 lb.)

(b) Verify analytically that the system is in equilibrium.

4. The tangential force between the cutting tool and an 8-in. diameter steel bar which is being turned in a lathe is 4,000 lb.

The driving pulley of the lathe runs at 240 revs. per minute and the gear ratio between it and the lathe spindle is 6 to 1 (*i.e.*, the speed of the spindle is one-sixth of the speed of the driving pulley).

Bearing and gearing friction absorbs 25 per cent. of the power supplied to the driving pulley, which is grooved for a V-belt drive.

The effective diameter of the pulley is 14 in. and the ratio of tensions in the drive is 10 to 1.

Each belt has a cross-sectional area of 0·4 sq. in. and the working stress in the material is 250 lb. per sq. in.

Determine the number of V-belts required for the drive.

5. Define *coefficient of friction* and *British Thermal Unit*.

One of the bearings of a 10-in. diameter shaft running at 120 revs. per minute carries a load of 4,500 lb.

The coefficient of friction between the shaft and the bearing bush is 0·05, and the bearing is water-cooled in order to keep its temperature constant.

Determine—

   (a) the frictional torque on the shaft ;
   (b) the heat generated in the bearing in B.Th.U. per minute ;
   (c) the rise in temperature in degrees Fahrenheit of the cooling water passing through the bearing, if 8 lb. per minute are supplied ;
   (d) the weight of water required per minute, with the same temperature rise as in (c), when, owing to defective lubrication, the coefficient of friction rises to 0·08.

6. A train of wagons weighing 25 tons is hauled up a gradient of 1 in 40 by means of a wire rope.   The tractive resistance of the train is 18 lb. per ton.

If the acceleration is 0·8 ft. per sec. per sec., determine—

   (a) the pull required on the rope ;
   (b) the horse-power when the speed reaches 6 ft. per sec. ;
   (c) the acceleration with which the train would run back down the gradient if the rope became disconnected from it.   (You may leave your answer in fractional form.)

7. An electric train running between stations A and B starts from A with a uniform acceleration of 1·3 ft. per sec. per sec., which is maintained for a distance of 300 yards.

The speed thus attained is then reduced by one quarter by running with the power off for 45 seconds, after which an application of the brakes brings the train to rest at B in 12 seconds.   Assume the retardations are uniform.

Calculate—

   (a) the distance AB ;
   (b) the time taken for the journey ;
   (c) the retardation produced by the brakes in ft. per sec. per sec.

SCIENCE—ENGINEERING

TECHNICAL SUBJECTS—GROUP II

HIGHER GRADE—(APPLIED MECHANICS AND HEAT ENGINES)

Monday, 24th March—9.15 A.M. to 11.15 A.M.

Candidates should attempt FIVE questions, viz., THREE questions from Section I and TWO questions from Section II.

20 *marks are assigned to each question.*

When candidates use a formula they must explain each symbol. Units must always be stated.

Take $\pi = \dfrac{22}{7}$, *and* $g = 32$ *ft. per sec. per sec.*

Square-ruled paper and four-place logarithmic tables are provided.

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

SECTION I

1. The end of a steel tube is screwed into a socket which is fixed between two plates by a bolt of diameter d in. as shown in Figure 1.

The external diameter of the tube is $1 \cdot 75$ in., the bore is $1 \cdot 25$ in. and the diameter at the bottom of the screw thread is $1 \cdot 53$ in.

If the maximum tensile stress in the tube is to be 6 tons per sq. in. and the maximum shear stress in the bolt has not to exceed $4\frac{1}{2}$ tons per sq. in., determine—

    (a) the maximum tensile load on the tube ;

    (b) a suitable diameter for the bolt ;

    (c) the extension of the tube under the maximum load if its length is 10 ft. and Young's modulus for the material is 14,000 tons per sq. in. (You may leave your answer in fractional form.)

FIGURE. 1

2. Figure 2 shows the outline of a loader-transporter truck weighing 35 cwt. when unloaded. Its centre of gravity is at G.

The hopper carrying a load of 10 cwt. hangs from a bent jib ABC, pivoted on axis A. The piston rod from the hydraulic cylinder D is attached to the jib at B. The cylinder is 3 in. diameter.

When the load is in the position shown, calculate—

(a) the pressure in lb. per sq. in. in the cylinder D;

(b) the reaction forces, R_1 and R_2, on the wheels of the truck.

FIGURE 2

3. Define the *polygon of forces*.

Four co-planar forces A, B, C, D, act together at a point and are in equilibrium.

Force A of 30 lb. acts vertically and pulls on the point; force B of 40 lb. has a line of action at 60° clockwise from that of A and pushes on the point. Forces C and D have equal magnitudes of 35 lb.

(a) Determine graphically the directions of the lines of action of forces C and D with reference to the line of action of A.

(Scale: 1 in. represents 10 lb.)

(b) Verify analytically that the system is in equilibrium.

4. The tangential force between the cutting tool and an 8-in. diameter steel bar which is being turned in a lathe is 4,000 lb.

The driving pulley of the lathe runs at 240 revs. per minute and the gear ratio between it and the lathe spindle is 6 to 1 (*i.e.*, the speed of the spindle is one-sixth of the speed of the driving pulley).

Bearing and gearing friction absorbs 25 per cent. of the power supplied to the driving pulley, which is grooved for a V-belt drive.

The effective diameter of the pulley is 14 in. and the ratio of tensions in the drive is 10 to 1.

Each belt has a cross-sectional area of $0·4$ sq. in. and the working stress in the material is 250 lb. per sq. in.

Determine the number of V-belts required for the drive.

Section II

5. A steam boiler has a grate area of 14 sq. ft. and consumes 15 lb. of coal per sq. ft. of grate per hour. The calorific value of the coal is 12,500 B.Th.U. per lb.

Steam, $0·94$ dry, is generated at 175 lb. per sq. in. from feed water at 150° F.

If the thermal efficiencies of the boiler and the engine which it supplies are 72 per cent. and 12 per cent. respectively, calculate—

(a) the horse-power of the engine ;

(b) the steam consumption in lb. per H.P. hour.

Extract from Steam Tables :—

p lb. per sq. in.	t temp. °F.	h B.Th.U.	L B.Th.U.
175	371	344	854

6. A petrol-electric set generating current at 230 volts uses 6 pints of petrol per hour. The calorific value of the petrol is 146,000 B.Th.U. per gallon.

Calculate—

(a) the current in amperes supplied by the set if the overall thermal efficiency is 24 per cent. ;

(b) the I.H.P. of the petrol engine driving the dynamo, if the indicated thermal efficiency of the engine is 30 per cent. ;

(c) the B.H.P. of the engine if the mechanical efficiency of the dynamo is 94 per cent. ;

(d) the fuel consumption in pints per hour per Board of Trade unit of electricity generated.

7. The percentage composition of a sample of coal is 88 per cent. carbon, 4 per cent. hydrogen and 3 per cent. oxygen.

Calculate—

(a) the weight of air required per lb. of fuel for complete combustion, if the air used is 50 per cent. in excess of the theoretical amount ;

(b) the heat given up by the flue gases per lb. of coal burned if, as they pass through an air-pre-heater, they heat the combustion air on its way to the boiler furnace from 60° F. to 360° F. ;

(c) the Higher Calorific Value of the coal.

Specific heat of air $= 0·24$.

Calorific values : $\begin{cases} \text{carbon, 14,500 B.Th.U. per lb.} \\ \text{hydrogen, 62,000 B.Th.U. per lb.} \end{cases}$

TECHNICAL SUBJECTS

Higher Grade—(Technical Drawing)

Wednesday, 26th March—1.0 p.m. to 4.0 p.m.

Question 1 should be attempted and *either* **Question 2** *or* **Question 3. The Figures are on a separate paper.**

Both sides of the drawing paper may be used.

The value attached to each question is shown in brackets after the question.

1. Figure 1 shows two views of a combined cover plate and bearing bracket for a rotary pump. The top arm of the bracket is slotted as shown for part of its length in order that a ball-bearing casing, which is not shown, may be gripped in position by the transverse bolt.

Draw, full size—

(*a*) the end view as given, but omitting the transverse bolt and nut ; show the 12 stud holes by their centre lines only ;

(*b*) a cross-sectional elevation, taken on the centre line AB, in place of the given elevation ; omit hidden parts ;

(*c*) under the elevation, a plan with its lower half as a section on the centre line CD and its upper half as an outside view ; omit hidden parts.

Do not give dimensions.

N.B.—Place your board and tee-square so that horizontal lines will be parallel to the *short* edge of your board.   **(60)**

Either

2. A sheet-metal duct of elliptical cross-section passes through the ridge of a roof as shown in Figure 2.

The duct has a major axis of 3 ft. and a minor axis of 2 ft.

Draw, to a scale of **1 in. represents 1 ft.**—

(*a*) the given view ;

(*b*) a plan ;

(*c*) a view looking in the direction of the arrow ;

(*d*) the true shapes of the openings in the roof.   **(40)**

Or

3. Figure 3 shows the plan and an incomplete front elevation of a hopper.

Draw, to a scale of 1 in. represents 1 ft.—

(*a*) the given plan ;

(*b*) the complete front elevation ;

(*c*) an end elevation to the right of the front elevation ;

(*d*) the development of the surface of the pyramidal part of the hopper.   **(40)**
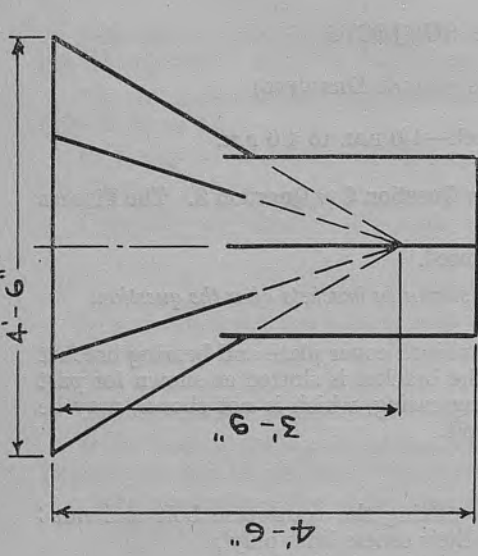
FIGURE 3
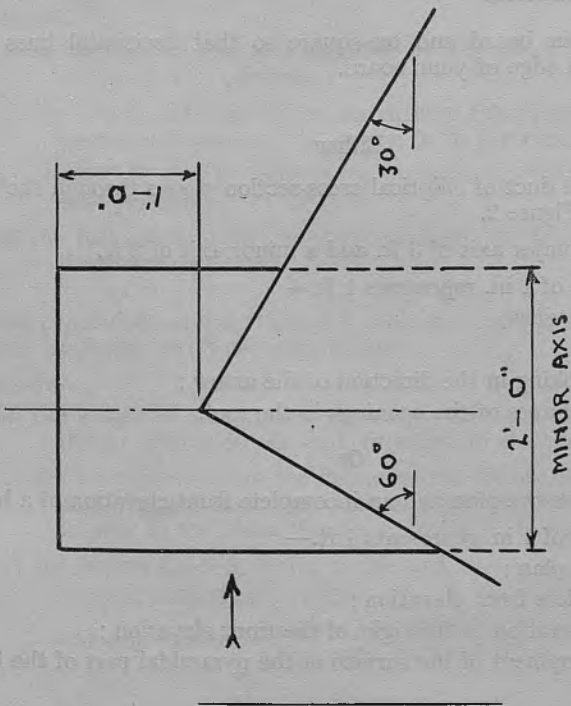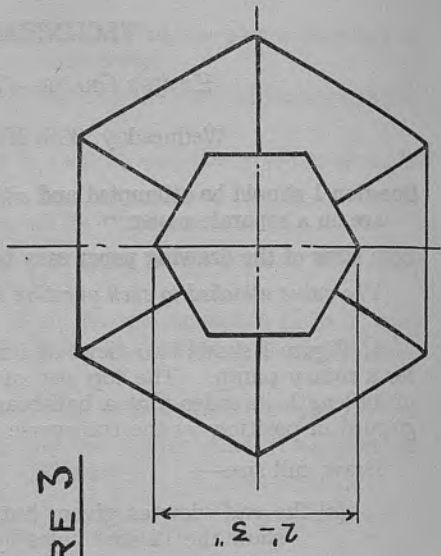
FIGURE 2

MUSIC

LOWER GRADE

Tuesday, 11th March—1.0 P.M. to 3.0 P.M.

N.B.—Write in ink, legibly and neatly, and leave a space of about half an inch between the lines. Care must be taken to make the notation clear ; notes indistinctly placed will be regarded as wrong. Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

The answers to Section I must be written in the space provided on this examination paper, which must be given up with the examination book. The ruled pages in the examination book may be used for rough work on these questions.

The answers to Section II are to be written in the examination book provided.

The value attached to each question is shown in brackets after the question.

Number of seat occupied at examination.

FILL THIS IN FIRST

Name of School...

Name of Pupil..

SECTION I

ALL the questions in this section should be attempted.

1. (*a*) Transpose the following a perfect fourth higher. Use the staves provided, the upper in the alto clef and the lower in the tenor clef. Insert the appropriate key signature for the new key and name the new key in the space provided. **(9)**

BACH
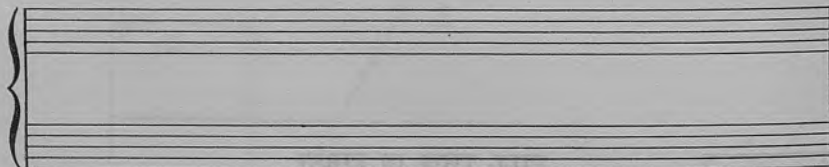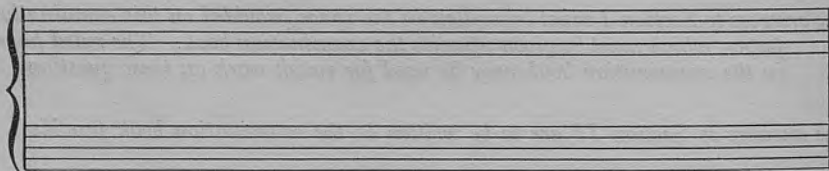
New key = ...

(*b*) Write the solfa names of the notes in the upper part (no time or rhythm signs need be added) :— **(3)**

.............................|.............................|.............................|.............................|....

2. Name each of the following intervals and state at least one key in which each interval is found.   **(4)**
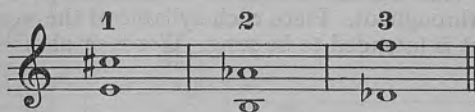
Interval	Key
1.	....
2.	....
3.	....

3. Write in staff notation the whole of *one* of the following tunes. Insert the key and time signatures ; mark the phrases thus [⬚⬚⬚⬚⬚⬚] , lettering them A, B, C, etc., for reference ; indicate and name the modulations. State, with reasons, whether the tune is in binary or ternary form, and point out any interesting characteristics which it may possess, *e.g.*, sequences, rhythmic figures. The words need not be added.

> The oak and the ash.   (F minor)
> Golden slumbers.   (B flat major)
> Charlie is my darling.   (D minor)
> The harp that once through Tara's halls.   (D major)
> Afton water.   (F major)   **(16)**

4. Write in staff notation a melody suitable for singing to *one* of the following stanzas. Add a musical term to indicate tempo or mood, and insert expression marks throughout. Place each syllable of the words below the note or notes to which it is intended to be sung. Words or phrases may be repeated if desired.

> " A cat came fiddling out of a barn,
> With a pair of bagpipes under her arm ;
> She could sing nothing but fiddle cum fee,
> The mouse has married the bumble-bee."

<div align="center">OR</div>

> " Heap high the farmer's wintry board !
> Heap high the golden corn !
> No richer gift has autumn poured
> From out her lavish horn ! "

(20)

5. Continue the following to make a shapely melody eight bars in length, ending on the key note. Add expression and phrasing marks. **(18)**

SECTION II

Answer question 9 and ONE other question from this section.

6. Write brief but comprehensive notes on *three* of the following :—
   organ ; percussion instruments ; plainsong ; lieder ; wind quintet ; polyphony. **(15)**

7. Write an account of the influence folk-song has had on certain composers, mentioning any particular works which show this influence. Quote in staff notation a theme from one of the works named. **(15)**

8. Give a concise account of the " overture " (including " concert overture "), its form and development from the seventeenth century up to the present day. Refer to specific examples naming the composer and the approximate date, and quote in staff notation a theme from one of the works you have named. **(15)**

9. Identify *three* of the following themes. Name the work (indicating the movement if it contains more than one), the composer and the approximate date of its composition.

Write a short paragraph about the form, general characteristics (including the orchestration if it is written for orchestra), and mood of *one* of the works (or movements) you have identified ; quote in staff notation a bar or two of at least one principal theme other than the one you have identified.   (15)

Be careful to letter your answers correctly.

MUSIC

HIGHER GRADE

Tuesday, 11th March—1.0 P.M. to 3.30 P.M.

N.B.—Write in ink, legibly and neatly, and leave a space of about half an inch between the lines. Care must be taken to make the notation clear ; notes indistinctly placed will be regarded as wrong. Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

The answers to the first four questions in Section I must be written in the space provided on this examination paper, which must be given up with the examination book. The ruled pages in the examination book may be used for rough work on these questions. The answer to question 5 is to be written in the examination book.

In order to obtain a pass in this paper, candidates must satisfy the examiners in Section I.

The answers to Section II are to be written in the examination book provided.

The value attached to each question is shown in brackets after the question.

| Number of seat occupied at examination. | **FILL THIS IN FIRST** |

Name of School...

Name of Pupil...

SECTION I

All candidates should attempt THREE *questions from this section, and three only, of which numbers* 1 *and* 2 *are compulsory.*

1. Write in staff notation a melody suitable for singing to *one* of the following stanzas. Add a musical term to indicate tempo or mood, and insert expression marks. Place each syllable of the words below the note or notes to which it is intended to be sung. Words or phrases may be repeated if desired. Indicate the cadences by placing on the bass stave the two notes necessary to define them ; you may figure these bass notes if you wish.

> " I have seen dawn and sunset on moors and windy hills
> Coming in solemn beauty like slow old tunes of Spain :
> I have seen the lady April bringing the daffodils,
> Bringing the springing grass and the soft warm April rain."

OR

> " The tide rises, the tide falls,
> The twilight darkens, the curlew calls ;
> Along the sea-sands damp and brown
> The traveller hastens toward the town,
> And the tide rises, the tide falls."

(22)
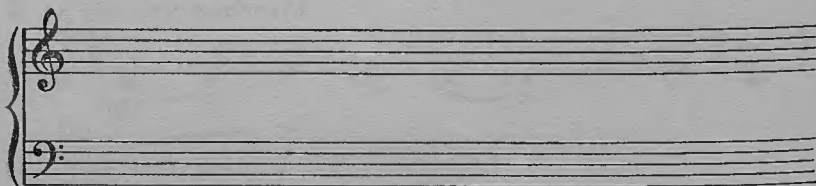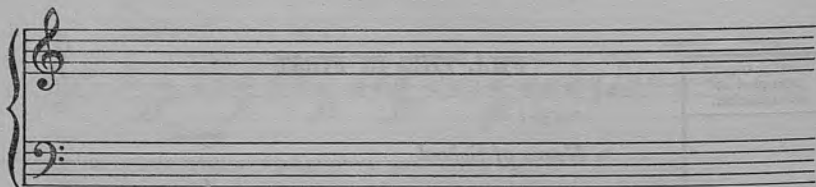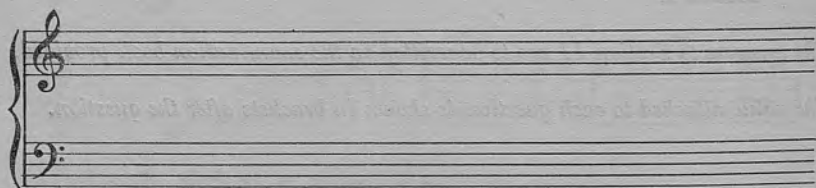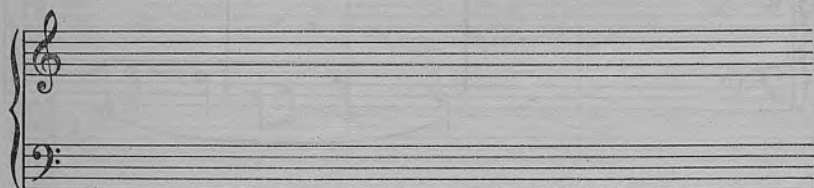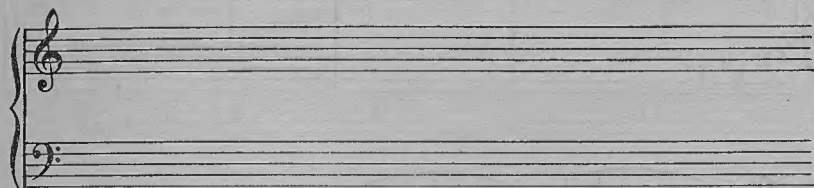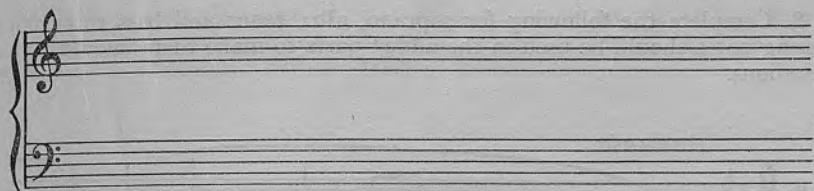
2. Complete the following for soprano, alto, tenor and bass throughout : passing notes should be used in the added parts to make them interesting and melodious.　　　　　　　　　　　　　　　　　　　　　　　　　　　(26)
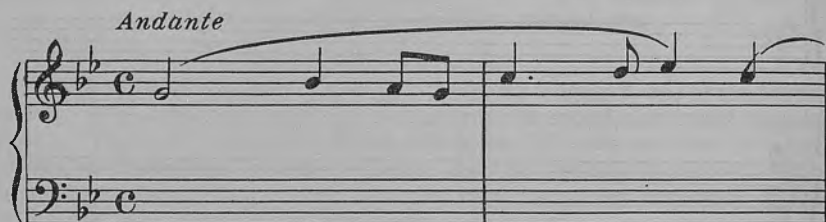
3. To the given treble part add a freely moving and melodious bass part in a similar style, to make an interesting and complete piece of two-part music for pianoforte.   Begin at * with a " point of imitation ".   (20)

4. Expand the following phrase into a melody of about 16 bars in length. It should be constructed largely on the rhythms and melodic figures contained in the given phrase, and it should contain at least one modulation and a point of climax. Phrase it and harmonize the cadences. Write a short analysis of your complete tune commenting on its structure, rhythm, modulations, etc.

(20)
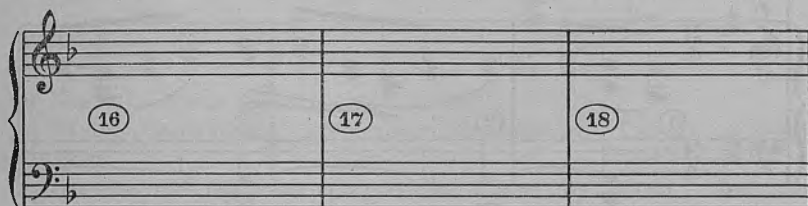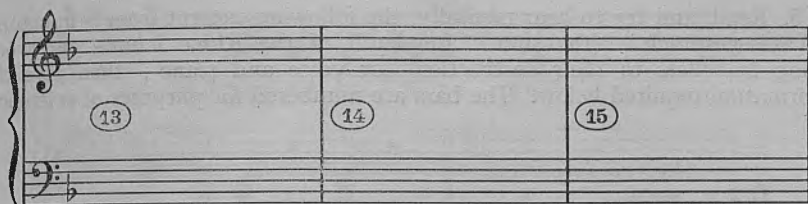
Analysis:-

5. Read, and try to hear mentally, the following excerpt from Schumann's "Waldesgespräch" (the siren "Loreley" of the Rhine haunts the wood luring travellers to their destruction) for voice and piano ; then give the information required below. The bars are numbered for purposes of reference.

Allegro impetuoso

The hour is late,— The wind is chill,— And o'er the wold it whis-tles shrill; The ways are dark: A - lone you ride, " 'Tis

I, fair maid, will be — your   guide."

(a) Name the key in which the extract begins.

(b) Name the keys through which the music modulates. Use the bar numbers for reference.

(c) Describe the harmonic progression, chord by chord, from bar 6 to the end.

(d) Point out any examples of sequence.

(e) With what kind of cadence does the passage end ?

(f) Point out the places where the character of the accompaniment changes. Have these changes any effect on the mood of the song ? If so describe them briefly.   (20)

SECTION II

Answer question 9 and ONE other question from this Section.

6. Write brief but comprehensive notes on any *two* of the following subjects. Refer to specific examples by name, and quote in staff notation two themes from the works you mention.

    (a) The lutenist composers.

    (b) The music of Scotland.

    (c) How Schubert developed the scope of the piano accompaniment in his songs.

    (d) Incidental music.   (16)

7. Trace the general development of music in *one* of the following branches only.

    (a) The pianoforte sonata from Haydn to Beethoven,

or (b) The symphony from Haydn to Brahms,

or (c) The concerto from Bach to Beethoven.

Quote at least two themes in staff notation from the works you mention.
                                                                          (16)

8. Name *three* Italian and *three* French composers ; give their approximate dates and name one important work by each. Write a short account of the work and influence of any *one* of the composers you have mentioned, and quote in staff notation at least *two* themes from his works.   (16)

9. Identify *four* of the following. Name the work (and the movement, if it contains more than one), the composer, and the approximate date of its composition.

Write a short paragraph about the form, general characteristics (including the orchestration if it is written for orchestra) and mood of *one* of the works (or movements) you have identified ; quote in staff notation a few bars of at least one principal theme other than the one you have identified. **(16)**

Be careful to letter your answers correctly.

A. *Allegro*

B. *Allegro*

C. *Largo*

D. *Presto*

E. *Adagio*

F. *Allegro*

G. *Allegro espress.*

H. *Meno moderato*
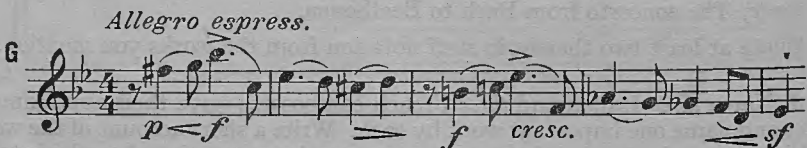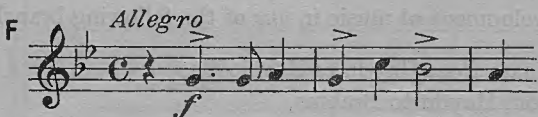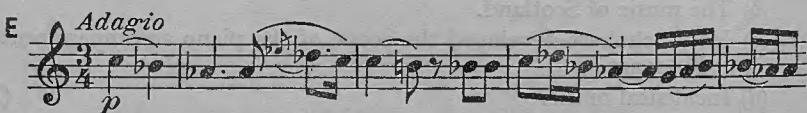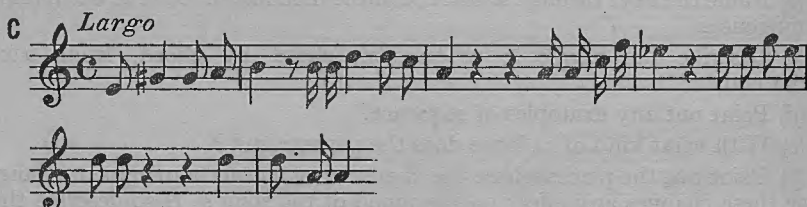
ART

Higher Grade—(First Paper)

Wednesday, 19th March—9.15 a.m. to 10.15 a.m.

All candidates must attempt ONE question from this paper.

40 *marks are assigned to each question.*

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

Painting

1. Write a short essay on Scottish painting of the eighteenth and nineteenth centuries. Include in your account the names of some of the prominent painters and examples of their work.

2. What is there in the style of painting which makes the work of Franz Hals so arresting ? Give a brief account of his work, and compare his painting with that of Pieter de Hoogh.

3. Trace briefly the development of Italian painting, mentioning the artists you know who added something to this development.

4. In the eighteenth century painters in France still owed their subject matter to the patronage of the court ; in the same period in England the patronage was that of the upper classes. To what differences in style did this give rise ? Mention particular painters and their works.

Architecture

5. Write an appreciation of the sculpture of the following periods :—
   Egyptian ; Grecian ; the Present Day.

6. Trace the history of the parish church.

7. Write briefly on Greek architecture from both the practical and the aesthetic point of view.

8. State what you know of Roman architecture. Mention any new materials used or methods of construction which were characteristic and discuss any advantages or disadvantages which, in your opinion, are evident in their use.

9. What influences have been at work to explain the rapid change in architectural design within the last fifty years ?

ART

Higher Grade—(Second Paper)

Wednesday, 19th March—10.30 a.m. to 12.30 p.m.

Both questions should be attempted.

30 *marks are assigned to each question.*

Section I—*Composition*

1. Make within a rectangle (7 inches by 5 inches, horizontal or upright) a sketch in colour for a figure composition illustrating *one* of the following subjects :—

   (a) Idle Hours.
   (b) The Gypsy Camp.
   (c) In a Kitchen Garden.
   (d) Low Tide.

Due credit will be given to preliminary sketches.

SECTION II—*Design*

2. Illustrate by a sketch a design suitable for *one* of the following :—

(*a*) An original all-over repeat pattern for a block printed linen or cotton dress fabric, using floral or leaf motifs.

    (Draw at least four repeats and colour sufficiently to show what the whole design would look like.)

(*b*) A book-end, or a toy, or a table lamp (including shade) using such material as plastics, wood, metal, or combinations of materials. Draw to a convenient scale and indicate clearly the construction and the materials used.

(*c*) A paper book-jacket (front only), size $7\frac{1}{2}$ inches by 5 inches. Choose one of the following titles, which must be included in the design, and execute in colour.

    " Turning Wheels," " Sea Shanties," " Farmer's Boy ".

(*d*) The cover for a Musical Festival Syllabus, including in the design the words " Musical Festival ". Size 7 inches by $4\frac{1}{2}$ inches (long side upright).

(*e*) An embroidery to decorate a " Juliet " cap and belt designed to be worn together. Draw only *one* section of the cap, the width of the section at the base being $6\frac{1}{2}$ inches, and the height of the section $4\frac{1}{2}$ inches. The width of the belt is 2 inches, and about 5 inches of the belt should be drawn.

    Execute in colour, state the type of material and threads to be used, and indicate clearly the various stitches employed.

BOOKKEEPING

LOWER GRADE

Friday, 21st March—1.0 P.M. to 4.0 P.M.

The value attached to each question is shown in brackets after the question.

Marks will be deducted for careless or badly arranged work.

1. In question 4 appears the statement " Feb. 2, 1952, W. Hay sent cheque for amount owing, less 5 per cent. cash discount ".

(*a*) Assuming that the cheque was drawn on the British Linen Bank, Princes Street, Edinburgh, 1, make out the cheque, together with its counterfoil.

(*b*) Make out an appropriate receipt for this payment. **(10)**

2. On 1st January, 1951, the total of the creditors' accounts in a trader's ledger was £1,724. During the year his purchases on credit were £8,645 ; allowances received by him were £423 ; bills accepted by him were £975 ; cash payments to creditors were £6,503 ; and discounts received by him were £324.

Make up a statement in the form of an account to show the amount owing to creditors on 31st December, 1951.   **(10)**

3. After the final accounts of a merchant had been prepared, the following errors and omissions in the records of the business were discovered :—

    (*a*) The proceeds of sale of a spare engine, £350, had been posted in error to sales account.

    (*b*) No entry had been made in respect of bank charges amounting to £6 15*s*. 0*d*.

    (*c*) An allowance of 9*s*. 10*d*. in respect of damaged goods, which had been made to J. Gray, had been entered as £9 10*s*. 0*d*.

    (*d*) A sale of goods on credit to J. Grant, £45, had been entered in error in the purchases book.

The original figure of net profit was £982 9*s*. 6*d*. : prepare a statement to show the correct figure.

(*Note.*—Journal entries are not required.)   **(10)**

4. On 1st February, 1952, the balances in the books of Messrs. Sharp and Barron, merchants, were as follows :—Cash in hand, £25 ; bank overdraft, £163 ; stock of goods, £683 ; motor vehicles, £892 ; sundry debtors (W. Hay, £48 ; C. Gauld, £73), £121 ; sundry creditors (J. Little, £86 ; W. Kyle, £143), £229 ; bills receivable (No. 43, on C. Gauld, due 4th Feb., 1952, £55 ; No. 45, on D. Long, due 18th Feb., 1952, £64), £119 ; bill payable (No. 17, to H. Gow, due 25th Feb., 1952), £265 ; provision for rent, £30 ; provision for bad debts, £80 ; loan from S. Binnie, £300 ; capital, Sharp, £423 ; capital, Barron, £350.

The partnership agreement states, *inter alia*, that Barron is to receive a salary of £60 per month for his services to the firm.

Open the necessary books of account and record therein the above and the following transactions. Bills books should be kept. Post to ledger. Balance off the bank cash book, but do not balance off ledger accounts. Extract a trial balance.

All receipts were paid into bank on the days they were received.

Trading and profit and loss accounts and a balance sheet are *not* required.

1952.

Feb. 1. Sent cheque for £30 in payment of rent due.

  ,,   2. W. Hay sent cheque for amount owing, less 5 per cent. cash discount.

  ,,   4. C. Gauld's bill, which fell due today, was dishonoured by non-payment : paid noting charges in cash, £1 5*s*. 0*d*.

  ,,   6. Bought of J. Little goods value £63.

  ,,   7. Sold to W. Hay goods value £95, less 10 per cent. trade discount.

  ,,   9. Bought of Cross Keys Garage, Ltd., new delivery van costing £475.

1952

Feb. 11. Received of J. Little credit note in respect of allowance for goods damaged, £7 ; accepted his bill for £100 at 20 days and sent him cheque for £40 in full settlement of balance owing.

,, 15. C. Gauld paid on account, £40.

,, 16. Sold to W. Nelson goods value £83, less 10 per cent. trade discount.

,, 16. W. Hay accepted bill for £85 10s. at 2 months in full settlement of his indebtedness.

,, 18. D. Long duly met his bill due today.

,, 19. Discounted at bank W. Hay's bill : amount received £84 2s. 6d.

,, 20. Cross Keys Garage, Ltd., agreed to accept in payment of amount owing an old van valued at £95 and cheque for balance. Payment was duly made.

,, 25. Met at bank bill due today.

,, 26. W. Nelson returned goods value £15 gross.

,, 27. Barron paid in as additional capital £200.

,, 27. C. Gauld is insolvent : agreed to accept a composition of 13s. 4d. in the £ in full settlement : received cheque in payment of half the composition and bill of exchange at one month for the other half : wrote off balance as a bad debt.

,, 28. Paid Barron salary for month, by cheque, £60.

,, 29. Sharp drew by cheque for his own use, £75.

,, 29. Bank charged interest on overdraft, £1 10s. 0d.

,, 29. Cash sales for month, £564 15s. 0d.

,, 29. Paid to S. Binnie, by cheque, interest on loan, £7 10s. 0d.   (70)

BOOKKEEPING

HIGHER GRADE

Friday, 21st March—1.0 P.M. to 4.0 P.M.

The value attached to each question is shown in brackets after the question.

Marks will be deducted for careless or badly arranged work.

1. (a) What types of errors are not revealed by a trial balance ? Give examples.

(b) What purposes are served by the giving of (i) trade discount, and (ii) cash discount ?   (10)

2. On 29th February, 1952, the following balances appeared in the books of Messrs. Leslie and Ruxton, Merchants.

Make up a trial balance and prepare trading account, profit and loss account, and balance sheet.

Cash in hand, £23 ; stock at 1st Sept., 1951, £5,921 ; sales, £21,675 ; purchases, £14,673 ; investments, £3,015 ; furniture and fixtures, £785 ; goodwill, £2,500 ; sundry debtors, £4,000 ; sundry creditors, £757 ; capital, Leslie, £6,000 ; capital, Ruxton, £4,000 ; sales returns, £974 ; purchases returns, £692 ; loan from Leslie, £600 ; bills payable, £715 ; general reserve, £1,800 ; goods on consignment, £680 ; bad debts, £116 ; wages, salaries and national insurance, £2,261 ; discounts received, £214 ; discounts allowed, £372 ; consignment to Nairn Bros., £716 (which includes £36 paid for carriage of the goods) ; dividends on investments, £85 ; current account, Leslie, £385 (Cr.) ; current account, Ruxton, £192 (Dr.) ; rent and rates, £184 ; provision for bad debts, £325 ; drawings account, Leslie, £360 ; drawings account, Ruxton, £270.

The difference between the totals of the debit and credit balances represents the cash at bank on 29th February, 1952.

Give effect to the following adjustments :—

(a) At 29th February, 1952, the estimated value of stock in hand was £4,959, and of furniture and fixtures, £630.

(b) Owing to an error, no entry was made in the books in respect of goods purchased on credit on 29th February, 1952, for £163.

(c) Included in sales is an amount of £983 which was received from the sale of investments valued at £725. The profit on the sale is to be transferred to general reserve.

(d) During the period the proceeds of sale of certain patented articles, on which the patentee is entitled to a royalty of 10 per cent., amounted to £1,420.

(e) An account sales received from Nairn Bros. showed that, of the total consignment of 40 cases, 30 cases had been sold at a price of £24 each, that landing and storage charges on the whole consignment were £44, that selling expenses in respect of the 30 cases were £17, and that agents' commission was 5 per cent. of gross proceeds.

(f) The balances of the partners' capital accounts are to remain constant : interest is to be allowed on capital at the rate of 4 per cent. per annum.

(g) Provisions for bad debts at the rate of 2½ per cent. and for discounts at the rate of 2 per cent. of the sundry debtors are to be carried forward.

(h) Provision is to be made for interest from 1st January, 1952, at the rate of 5 per cent. per annum on the loan from Leslie.

(i) Ten per cent. of the divisible profits are payable as commission to the general manager. Of the remainder 15 per cent. is to be put to general reserve and the balance divided between the partners in proportion to capital.   **(45)**

3. On 1st February, 1952, the balances in the books of J. Clark were as follows :—cash in hand, £15 ; stock of goods, £672 ; bank overdraft, £421 ; office furniture, £183 ; bills receivable (No. 16, on A. Rigg, due 28th February, 1952, £86 ; No. 21, on W. Bayne, due 30th March, 1952, £116), £202 ; creditor, W. Long, £285.

On the same day he agreed to go into partnership with C. Allan, who was to contribute £1,250 as his capital.

The new firm of Clark and Allan took over, on 1st February, 1952, the business of W. Duncan as a going concern, at a price of £900, of which £300 were to be paid forthwith and the balance was to be paid in three equal monthly instalments of £200 each.

W. Duncan's assets and liabilities were as follows :—stock of goods, £463 ; debtor, C. Laing, £44 ; bill payable (No. 35, to J. Hunter, due 3rd April, 1952), £164 ; office furniture, £685 ; loan from S. Rae, £200.

C. Allan's capital was duly paid into bank.

Open the necessary books of account and record therein the above and the following transactions. Bills books are to be kept. Post to ledger ; balance off the bank cash book, but do not balance off ledger accounts ; extract a trial balance.

All receipts were paid into bank on the days they were received.

1952.

Feb. 1. Paid by cheque, as agreed, part purchase price of W. Duncan's business.

„ 4. Discounted at bank bill No. 21 : amount received £114 15s. 0d.

„ 7. Bought of W. Long goods value £80, less 10 per cent. trade discount.

„ 8. Received from N. Ritchie for sale on his account goods value £174 ; paid in cash delivery charges, £3 15s. 0d. ; accepted Ritchie's bill for £150 at 30 days.

„ 11. Retired, by a payment by cheque of £162, bill payable No. 35.

„ 13. Received credit note from W. Long in respect of allowance on goods damaged, £7, and paid by cheque amount owing, less 2½ per cent. cash discount.

„ 15. Sold on credit to C. Laing part of Ritchie's consignment for £126.

„ 18. Paid off by cheque S. Rae's loan, together with interest to date, £8 10s. 0d.

„ 20. Sold on credit to N. Lees goods value £95 and received in payment bill at 60 days for this amount.

„ 22. C. Laing paid by cheque total amount owing, less 5 per cent. cash discount.

„ 23. Sold balance of N. Ritchie's consignment for cash, £94.

„ 25. Charged consignor agents' commission at the rate of 4 per cent. on gross proceeds and sent him account sales together with cheque for balance owing.

„ 28. Bill No. 16 due today is dishonoured by non-payment : paid noting charges in cash, 17s. 6d.

„ 29. Cash sales for month, £214.   (45)

(b) If his fixed overhead expenses are £450 per annum, his variable expenses are 9 per cent. of turnover, and his net profit is £650 per annum, what is his average weekly turnover (correct to the nearest pound) ?   **(15)**

AGRICULTURE

Higher Grade—(First Paper)

Tuesday, 25th March—9.30 a.m. to 11.30 a.m.

Not more than FIVE questions should be attempted.

Answers should, wherever possible, be illustrated by suitable diagrams.
Mathematical tables are supplied.

20 *marks are assigned to each question.*

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. (a) What are (i) igneous rocks, and (ii) sedimentary rocks ?   Give two common examples of each.

(b) Explain how (i) *sedentary soils*, (ii) *peat* and (iii) *deltas* are formed.

2. Explain the changes which potassium chloride normally undergoes when applied to the soil.   Describe the effect which the application of this fertilizer to the soil has on the composition of the drainage, and describe in outline any field or laboratory experiment which gives results that are in agreement with your statements.

3. Describe qualitative laboratory experiments to test the presence of *potassium* and *calcium* in a sample of soil.

4. (a) Explain what is meant by the *digestibility of foods.*

(b) State, without explaining the chemical tests involved, how the digestibility of a food constituent may be determined in the case of the ox.

(c) Indicate, with reasons, any respect in which the true digestibility might be greater or less than the experimental value.

5. (a) In the case of a single-cylinder internal combustion engine explain, using appropriate units, the relation between (i) *the work done per cycle,* (ii) *the stroke,* (iii) *the bore,* (iv) *the mean effective pressure.*

(b) Explain the difference between the work done in the cylinder and the output of work by the engine.

(c) Show by means of diagrams how (i) *the pressure of the exploding gases* and (ii) *the turning effect on the crankshaft* vary during the explosion stroke.

6. Describe fully any machine for distributing artificial fertilizers, explaining (i) *the action of the distributing mechanism,* (ii) *the method by which the rate of distribution is regulated and* (iii) *the methods adopted to secure evenness of distribution on sloping land.*

7. (*a*) What is meant by (i) *an anticyclone* and (ii) a *depression* in meteorology? Describe the wind and weather associated with each.

(*b*) Explain why the annual rainfall on high ground is usually different from that on low ground.

AGRICULTURE

Higher Grade—(Second Paper)

Tuesday, 25th March—1.30 P.M. to 3.30 P.M.

Not more than FIVE questions should be attempted.

Answers should, wherever possible, be illustrated by suitable diagrams.

Mathematical tables and square-ruled paper are supplied.

20 *marks are assigned to each question.*

N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

1. Name FIVE chemical elements, other than the elements of water, which plants obtain from the soil and which are essential for their healthy growth. In each case describe the effect which a deficiency of the element would have on the growth of the plant.

2. State the regions of Scotland in which the following crops are usually grown :—(i) *early potatoes,* (ii) *wheat,* (iii) *sugar beet,* and give reasons why the regions you mention are specially favourable for these crops.

3. Name TWO common ephemeral weeds and THREE common perennial weeds of arable land. In each case describe (i) *the conditions under which they thrive,* (ii) *the crops in which they are usually found,* and (iii) *the characteristics which make them troublesome.*

4. Make a labelled diagram of the *alimentary system* of the sheep and explain how starch is digested.

5. Write notes on *milk* under the following headings :—(i) *secretion of milk,* (ii) *colostrum,* (iii) *specific gravity of milk,* (iv) *sterilization of dairy utensils.*

6. Give a descriptive account of **EITHER** (*a*) *liver fluke in sheep,* **OR** (*b*) *virus diseases of potatoes.*

7. (*a*) Name FOUR British breeds of beef cattle.
(*b*) Describe in detail the points you would look for in a commercial beef steer.

APPENDIX

LIST OF AUTHORITIES BY WHOM EVIDENCE OF SUCCESS AT THE SCOTTISH LEAVING CERTIFICATE EXAMINATION IS CONDITIONALLY ACCEPTED IN LIEU OF PRELIMINARY EXAMINATIONS.

N.B.—FOR PARTICULARS AS TO THE CONDITIONS GOVERNING ACCEPTANCE REFERENCE SHOULD BE MADE TO THE REGULATIONS OF THE AUTHORITY CONCERNED.

Scottish Universities Entrance Board :
    University of Aberdeen.
    University of Edinburgh.
    University of Glasgow.
    University of St. Andrews.
University of Oxford.
University of Cambridge.
University of London.
University of Bristol.
University of Durham :
    Durham Colleges.
    The Medical School, King's College,
                            Newcastle-upon-Tyne.
Northern Universities Joint Matriculation Board :
    University of Manchester.
    University of Liverpool.
    University of Leeds.
    University of Sheffield.
    University of Birmingham.
University of Wales.
The Queen's University of Belfast.
Girton College, Cambridge.
Imperial College of Science and Technology :
    Royal College of Science.
    Royal School of Mines.
    City and Guilds (Engineering) College.

Royal Holloway College, Englefield Green, Surrey.
The Law Society of Scotland.
The Law Society of England.
The General Council of Medical Education and Registration
    of the United Kingdom.
The Joint Examinations held by :
            The Royal College of Physicians of Edinburgh.
            The Royal College of Surgeons of Edinburgh.
            The Royal Faculty of Physicians and Surgeons of
            Glasgow.
The Examining Board in England by the Royal College of
    Physicians of London, and the Royal College of Surgeons
    of England.
The Pharmaceutical Society of Great Britain.
The Institute of Chartered Accountants of Scotland.
The Institute of Chartered Accountants in England and
    Wales.
*The Society of Incorporated Accountants and Auditors.
*The Association of Certified and Corporate Accountants.
*The Institute of Municipal Treasurers and Accountants
    (Incorporated).
The Institute of Company Accountants, Limited.
The Faculty of Actuaries in Scotland.
The Institute of Actuaries.
The Chartered Insurance Institute.
The Institute of Bankers.
The Institute of Bankers in Scotland.
The Chartered Institute of Secretaries.
The Royal Sanitary Institute and Sanitary Inspectors'
    Examination Joint Board.
*The Royal Sanitary Association of Scotland.
The Royal Institution of Chartered Surveyors.
The Royal Institution of Chartered Surveyors (Scottish
    Branch).
The Chartered Auctioneers' and Estate Agents' Institute.
The Royal Institute of British Architects.
The Engineering Joint Examination Board.

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* Evidence of having obtained the Day School Certificate (Higher)
·is also accepted by these Authorities ; and by the

Air Ministry—for entry as Aircraft Apprentice and as Apprentice Clerk,
Royal Air Force.

The Institution of Cost and Works Accountants.
The Royal Institute of Chemistry.
The National Froebel Foundation.
The Institute of Physics.
The Royal College of Veterinary Surgeons.
The British Optical Association.
The Chartered Institute of Patent Agents.   .
The Library Association.
The Textile Institute.
*The Institute of Transport.
*The Chartered Society of Massage and Medical Gymnastics.
The Building Societies Institute.
The Chartered Society of Physiotherapy.
The Institute of Brewing.
The Associated Board of the Royal Schools of Music.
The Royal Incorporation of Architects in Scotland.
The Society of Radiographers.
The Scottish Association of Opticians.
The Institute of Housing (Incorporated).
The National Society for Art Education.
The Advertising Association.
The College of Speech Therapists.
The Society of Chiropodists.

A LIST OF PUBLICATIONS

OF THE

SCOTTISH EDUCATION DEPARTMENT

IS AVAILABLE AS

SECTIONAL LIST No. 36

*which may be
obtained free
on application
from*

H.M. STATIONERY OFFICE

*at any of the addresses shown
on cover page four*

1. STATUTORY INSTRUMENTS—*contd.*

(e) Grant Regulations—contd.

The Education (Scotland) Social and Physical Training Grant Regulations, 1946. S.R. & O., 1946, No. 864, S.37. 1*d*. (2½*d*.).

The Central Institutions (Scotland) Grant Regulations, 1947. S.R. & O., 1947, No. 2221, S.78. 2*d*. (3½*d*.).

The Education Authorities (Scotland) Grant Regulations, 1948. S.I. 1948, No. 961, S.69. 2*d*. (3½*d*.).

The Education Authorities (Scotland) Grant (Amendment No. 1) Regulations, 1949. S.I. 1949, No. 2061, S.143. 1*d*. (2½*d*.).

The Education Authorities (Scotland) Grant (Amendment No. 2) Regulations, 1951. S.I. 1951, No. 1930, S.96. 2*d*. (3½*d*.).

The Education (Scotland) Miscellaneous Grants Regulations, 1948. S.I. 1948, No. 2767, S.202. 1*d*. (2½*d*.).

The Education (Scotland) Miscellaneous Grants (Amendment No. 1) Regulations, 1950. S.I. 1950, No. 1481, S.107. 1*d*. (2½*d*.).

The Residential Special Schools and Orphanages (Scotland) Grant Regulations, 1948. S.I. 1948, No. 2768, S.203. 1*d*. (2½*d*.).

(f) Miscellaneous

Children and Young Persons (Scotland), Care and Training Regulations, 1933. S.R. & O., 1933, No. 1006, S.55. 4*d*. (5½*d*.).

Children and Young Persons (Scotland), Employment of Children in Entertainments. S.R. & O., 1939, No. 64, S.5. 2*d*. (3½*d*.).

Children and Young Persons (Scotland) Employment of Children in Entertainments. S.R. & O., 1947, No. 1660, S.67. 2*d*. (3½*d*.).

Education (Meals Service) (Scotland) Regulations, 1946. S.R. & O., 1946, No. 799, S.32. 1*d*. (2½*d*.).

The School Meals Premises (Reimbursement of Minister of Works) (Scotland) Regulations, 1950. S.I. 1950, No. 576, S.39. 1*d*. (2½*d*.).

School Health Service (Scotland) Regulations, 1947. S.R. & O., 1947, No. 415, S.13. 1*d*. (2½*d*.).

Educational Conferences (Scotland) Regulations, 1947. S.R. & O., 1947, No. 119, S.R. 1*d*. (2½*d*.).

Incidental Expenses (Scotland) Regulations, 1947. S.R. & O., 1947, No. 120, S.3. 1*d*. (2½*d*.).

The Contributions for Educational Services (Prescription of Areas) (Scotland) Regulations, 1951. S.I. 1951, No. 899, S.54. 2*d*. (3½*d*.).

Reports on Handicapped Children (Scotland) Order, 1947. S.R. & O., 1947, No. 1576, S.62. 2*d*. (3½*d*.).

Approved Schools (Contributions by Education Authorities) (Scotland) Regulations, 1949. S.I. 1949, No. 389, S.21. 1*d*. (2½*d*.).

Approved Schools (Contributions by Education Authorities) (Scotland) Regulations, 1951. S.I. 1951, No. 515, S.22. 2*d*. (3½*d*.).

Approved Schools (Form of Court Record) (Scotland) Regulations, 1949. S.I. 1949, No. 1637, S.114. 1*d*. (2½*d*.).

The Educational Endowments (Prescription of Information) (Scotland) Regulations, 1951. S.I. 1951, No. 548, S.25. 2*d*. (3½*d*.).

The Register of Educational Endowments (Prescription of Contents) (Scotland) Order, 1951. S.I. 1951, No. 549, S.26. 2*d*. (3½*d*.).

2. CIRCULARS

Circular 30 (1951) (Relating to the Scottish Leaving Certificate Examination of 1952) (December, 1951). 1*s*. 3*d*. (1*s*. 4½*d*.).

Circular 76 (Education (Meals Service) (Scotland) Regulations) (June, 1946). 1*d*. (2½*d*.).

Circular 110 (Education (Scotland) Act, 1946. Reports on Handicapped Children (Scotland) Order). (July, 1947.) 1*d*. (2½*d*.).

Circular 119 (The Central Institutions (Scotland) Grant Regulations, 1947). (October, 1947) 1*d*. (2½*d*.).

Circular 130 (Education Authorities (Scotland) Grant Regulations, 1948). (May, 1948.) 1*d*. (2½*d*.).

Circular 145 (Scottish Leaving Certificate) (January, 1949). (Out of print.)

Circular 151 (Education Authorities (Scotland) Grant Regulations, 1948) (April, 1949). 4*d*. (5½*d*.).

Circular 154 (The Education (Scotland) Act, 1949) (May, 1949). 6*d*. (7½*d*.).

Circular 157 (Scottish Leaving Certificate) (June, 1949). 2*d*. (3½*d*.).

Circular 183 (The Schools (Scotland) Code, 1950) (June, 1950). 2*d*. (3½*d*.).

Circular 188 (Schemes of Work for Secondary Departments) (Revised : December, 1950). 4*d*. (5½*d*.).

Circular 194 (Index to Education (Scotland) Act, 1946) (October, 1950). 4*d*. (5½*d*.).

Circular 202 (The Children and Young Persons (Scotland) Act, 1937) (October, 1951). 6*d*. (7½*d*.).

Circular 206 (Secondary Education. The Report of the Advisory Council) (March, 1951). 6*d*. (7½*d*.).

Circular 211 (The Teachers' Salaries (Scotland) Regulations, 1951) (March, 1951). 2*d*. (3½*d*.).

Circular 218 (Schools (Scotland) Code, 1950. The School Leaving Record (Scotland) Rules) (June, 1951). 2*d*. (3½*d*.).

Circular 224 (Visual and Aural Aids. The Report of the Advisory Council) (September, 1951) 3*d*. (4½*d*.).

3. REPORTS

Departmental

Young Citizens at School. Report on experiments in Education for Living. 1*s*. (1*s*. 1½*d*.).

Educational Endowments in Scotland. Report of the Committee appointed in January, 1948. 2*s*. (2*s*. 2*d*.).

Report on Education in Scotland in 1951 (Cmd. 8515). 3*s*. 6*d*. (3*s*. 8*d*.)

Supply of Teachers. First Report of the Departmental Committee appointed by the Secretary of State. (Cmd. 8123.) 9*d*. (10½*d*.).

(8) Francisco Pizarro (century   )...
....
....

(9) The Bill of Rights (century   )..
....
....

(10) Saladin (century   )...
....
....

(11) The Battle of Salamis (century   )..
....
....

(12) Sir Christopher Wren (century   )..
....
....

SCOTTISH LEAVING CERTIFICATE EXAMINATION

1952

HISTORY

LOWER GRADE

SECTION 1

(To be attempted by all candidates)

Thursday, 13th March—9.30 a.m. to 12 noon

FILL THIS IN FIRST

Name of School ....

Name of Pupil ....

**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**

2

SECTION 1 (a)

On the accompanying map mark the position of each of the following with a cross and add the appropriate number as given below :—

(1) Bannockburn.

(2) Berlin.

(3) Carnarvon.

(4) Drogheda.

(5) Genoa.

(6) Killiecrankie.

(7) Poitiers.

(8) Rouen.

(9) Torres Vedras.

(10) Worcester.   (5)

Scale of Miles

10 Longitude East of Greenwich
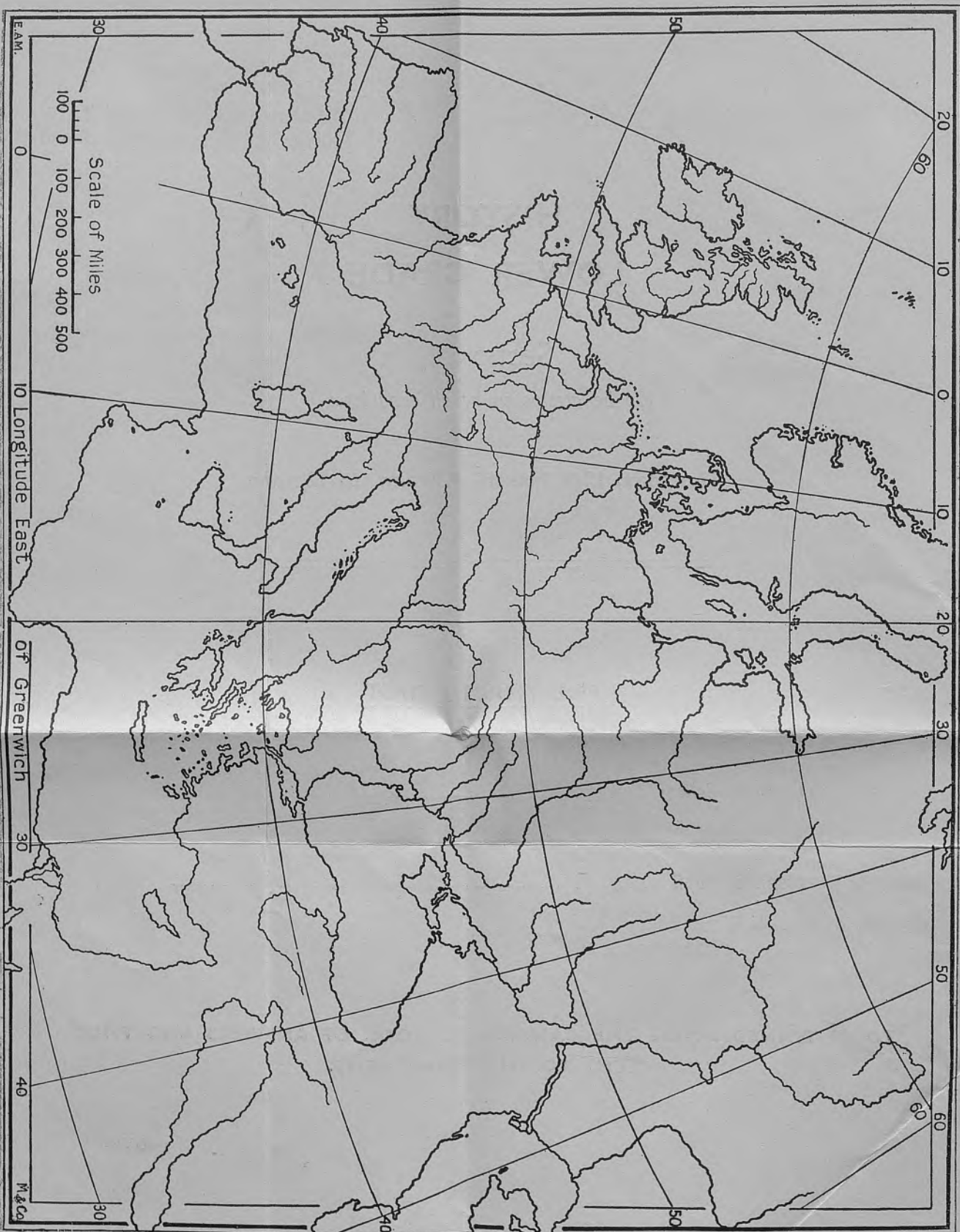
SECTION 1 (*b*)

Give the century, B.C. or A.D., of *ten* of the following, indicate who or what each was, and say why each is important in history.   Answers must be written in the space provided after each name.   (15)

(1) Alfred the Great (century   )..

....

....

(2) Marcus Antonius (century   )...

....

....

(3) Roger Bacon (century   )..

....

....

(4) The First Book of Discipline (century   )..

....

....

(5) Martin Luther (century   )..

....

....

(6) St. Margaret of Scotland (century   )..

....

....

(7) William Paterson (century   )..

....

....

SCOTTISH LEAVING CERTIFICATE EXAMINATION

1952

HISTORY

HIGHER GRADE—II

SECTION I

(To be attempted by all candidates)

Thursday, 13th March—1.30 p.m. to 4 p.m.

FILL THIS IN FIRST

Name of School ....

Name of Pupil ....

**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**

SECTION 1 (a)

On the accompanying map mark the position of *ten* of the following with a cross and add the appropriate number as given below :—

(1) Athens.

(2) Avignon.

(3) Belgrade.

(4) Byzantium.

(5) Florence.

(6) Lepanto.

(7) Lübeck.

(8) Naples.

(9) Nice.

(10) Poitiers.

(11) Salamanca.

(12) Tarentum.

(13) Tripoli.

(14) Turin.

(15) Vienna.

(5)

Scale of Miles

100   0   100   200   300   400   500

Longitude East of Greenwich
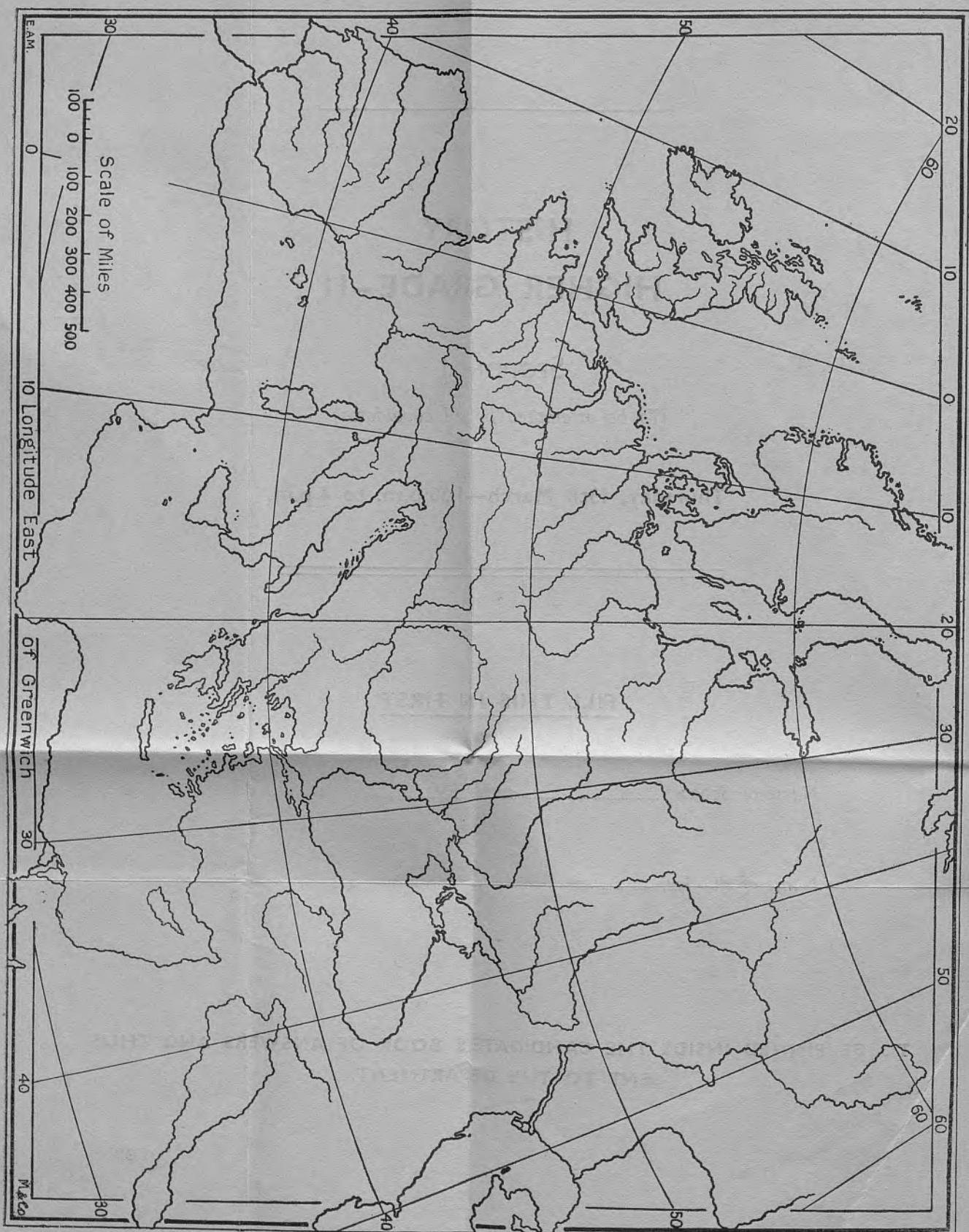
SECTION 1 (*b*)

Give the century, B.C. or A.D., of each of the following, indicate who or what each was, and say why each is important in history. Answers must be written in the space provided after each name. (15)

(1) Cicero (century   )..

....

....

(2) Epaminondas (century   )..

....

....

(3) Galileo (century   )...

....

....

(4) The Hegira (century   )...

....

....

(5) Innocent III (century   )..

....

....

(6) Massacre of St. Bartholomew's Day (century   )................

....

....

(7) Michelangelo (century   )...

....

....

(8) First Partition of Poland (century   )...

....

....

(9) Second Punic War (century   )...

....

....

(10) Rienzi (century   )...

....

....

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1952

HISTORY
HIGHER GRADE—I

SECTION 1

(To be attempted by all candidates)

Thursday, 13th March—9.30 a.m. to 12 noon

FILL THIS IN FIRST

Name of School ....

Name of Pupil ....

**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**

[OVER

SECTION 1 (a)

On the accompanying map mark the position of *ten* of the following with a cross and add the appropriate number as given below :—

(1) Acre.

(2) Agincourt.

(3) Alexandria.

(4) Arbroath.

(5) Athelney.

(6) Badajoz.

(7) Berwick.

(8) Bordeaux.

(9) Carnarvon.

(10) Largs.

(11) Northampton.

(12) Plymouth.

(13) Quiberon Bay.

(14) Sheriffmuir.

(15) Whitby.
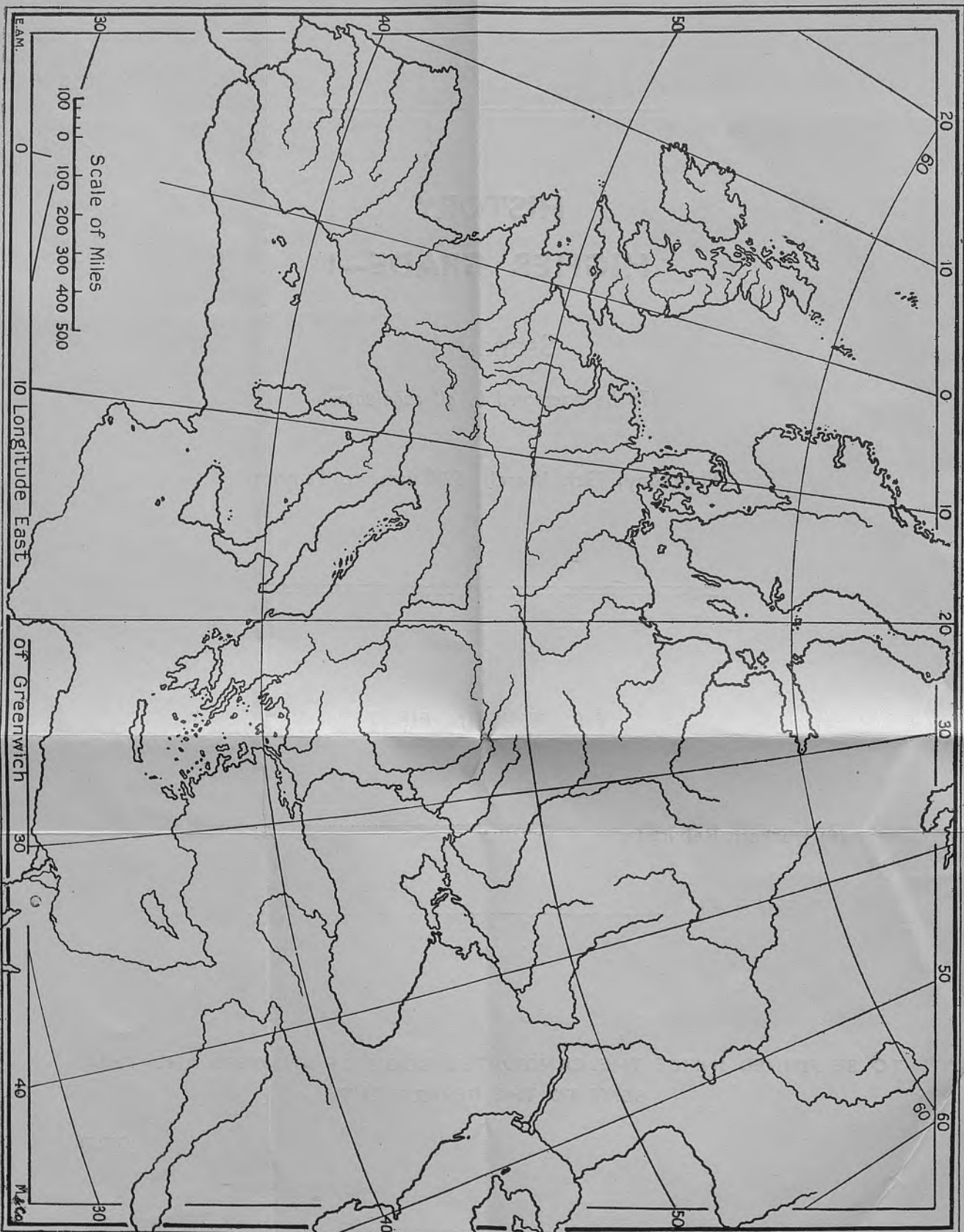
(5)

2

Scale of Miles

100 0 100 200 300 400 500

Longitude East of Greenwich

Section 1 (*b*)

Give the century, B.C. or A.D., of each of the following, indicate who or what each was, and say why each is important in history.   Answers must be written in the space provided after each name.   (15)

(1) Agricola (century   )...

....

....

(2) Roger Bacon (century   )...

....

....

(3) Edmund Burke (century   )...

....

....

(4) Thomas Cranmer (century   )..

....

....

(5) Domesday Book (century   )..

....

....

(6) Durham Report (century   )...

....

....

(7) Robert Owen (century   )...

....

....

(8) Porteous Riots (century   )...
....
....

(9) Solemn League and Covenant (century   )..
....
....

(10) Peace of Wedmore (century   )..
....
....

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1952

GEOGRAPHY
LOWER GRADE

MAPS

FILL THIS IN FIRST

Name of School...

Name of Pupil...

**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**

[OVER

BRITISH ISLES

0 10 20 50 Miles

Land over 1000 feet
500 feet contour line
100 fathoms isobath

Long. of 0 Greenwich

N·G·H·

CONTOUR MAP OF A REGION

CONTOUR MAP OF A REGION

Scale
1:63,360

Towns & Villages

Main Roads

Railways

Contours are at 100
feet intervals

Placenames – Features
of relief, Towns, etc.,
are lettered.
Villages are numbered.
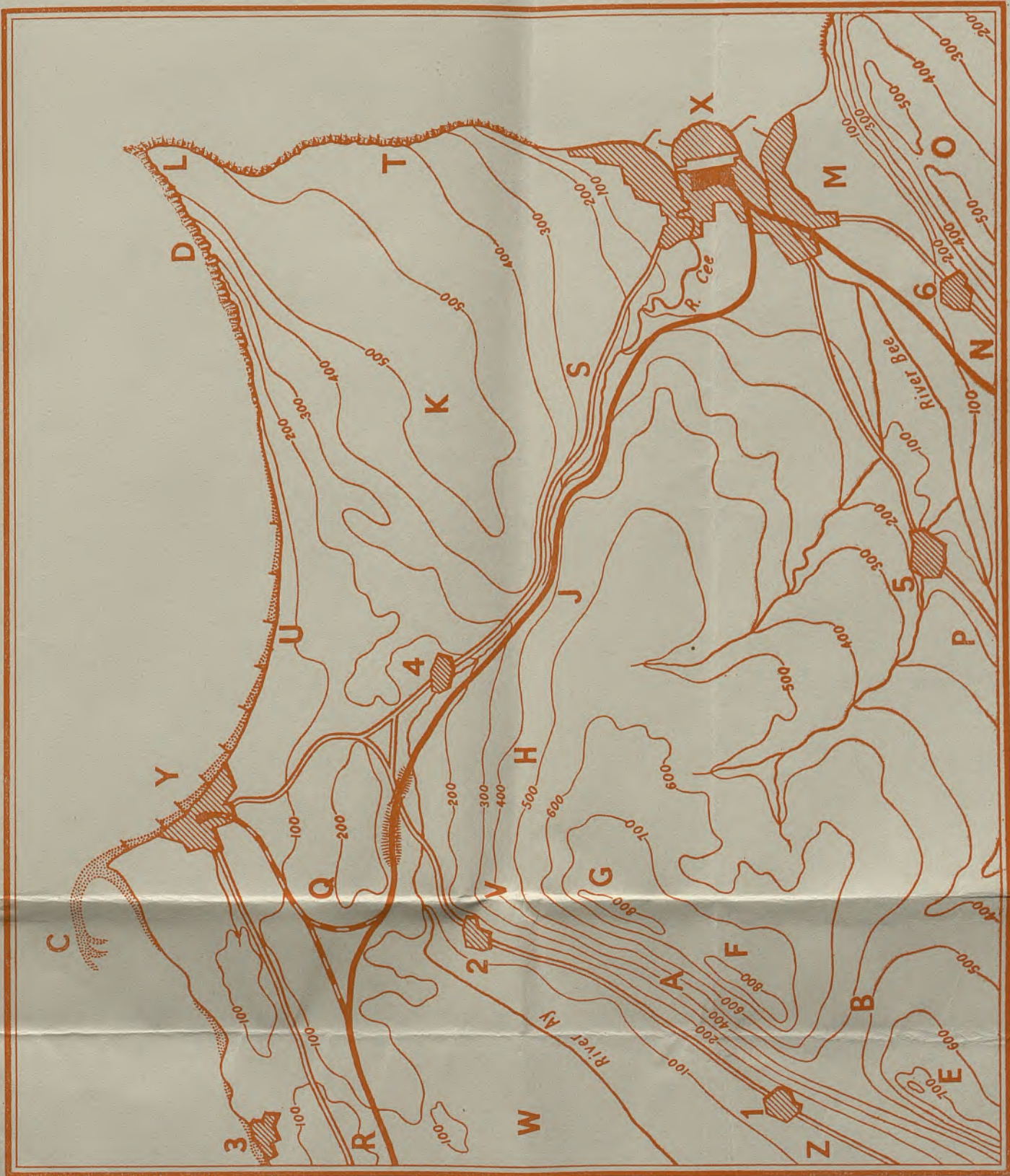
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3

N·G·M

THE WORLD

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E

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C

D

K

F

B

G

L

M H

Mercator's Projection

180 150 120 90 60 30 0 30 60 90 120 150 180

60 45 30 15 0 15 30 45 60

SCOTTISH LEAVING CERTIFICATE EXAMINATION, 1952.

GEOGRAPHY
HIGHER GRADE-(FIRST PAPER)

ORDNANCE SURVEY MAP

FILL THIS IN FIRST

Name of School ....

Name of Pupil ....

TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS
AND THUS SENT TO THE DEPARTMENT.
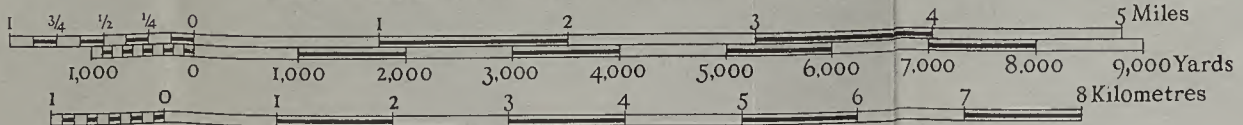
[Over

3519

THE NATIONAL GRID

To refer to a particular point:- (1) Read, for each half of the reference the double figures printed in large type in the margins, which denote tens of Kilometres and Kilometres. (2) Then, to obtain reading to nearest 100 metres, estimate position of point in tenths from the grid lines which are 1000 metres apart.
THUS TO GIVE A NORMAL NATIONAL GRID REFERENCE ON THIS SHEET.

EXAMPLE	Gillbank	
East		
Take west edge of square in which point lies and read the large figures printed opposite this line on north or south margins.	62	
Estimate tenths Eastwards.	4	
	624	
North		
Take south edge of square in which point lies and read the large figures printed opposite this line on east or west margins.	34	
Estimate tenths Northwards	2	
	342	
Reference	624342	

Magnetic Var.ⁿ
10°30′ W. 1st. Jan. 1951.

Scale: One Inch to One Statute Mile = 1/63360

ORDNANCE SURVEY 1951.

1 ¾ ½ ¼ 0   1   2   3   4   5 Miles

1,000 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 Yards

1 0 1 2 3 4 5 6 7 8 Kilometres

Heights are in feet above Mean Sea Level.   Contours are at 50 feet vertical intervals
True North at the West edge of this sheet is 0° 34′ 13″ E. of Grid North.
Annual change in Magnetic Variation is about 8′ E.

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1952

GEOGRAPHY
HIGHER GRADE (FIRST PAPER)

MAP

FILL THIS IN FIRST

Name of School...

Name of Pupil...

**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**

EUROPE

40 30 20 10 0 10 20 30 40

60

60

50

50

50

40

40

40

0 50 100 200 Miles

Land over 3000 feet
1200 feet contour line
100 fathoms isobath

20

10

0

10

20

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1952

GEOGRAPHY
HIGHER GRADE (SECOND PAPER)

MAP

FILL THIS IN FIRST

Name of School...

Name of Pupil...

TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS SENT TO THE DEPARTMENT.

FORMOSA *(Question 9)*

RELIEF

Approximate Height
(Feet)

- ▮ Over 10,000
- ▨ 3000 – 10,000
- ▩ 300 – 3000
- ☐ 0 – 300

RAINFALL

Average Annual Rainfall
(Inches)

- ▨ Over 120
- ▨ 80 – 120
- ▤ 60 – 80
- ☐ 40 – 60

NORTH:
No dry season.
Winter maximum.

SOUTH:
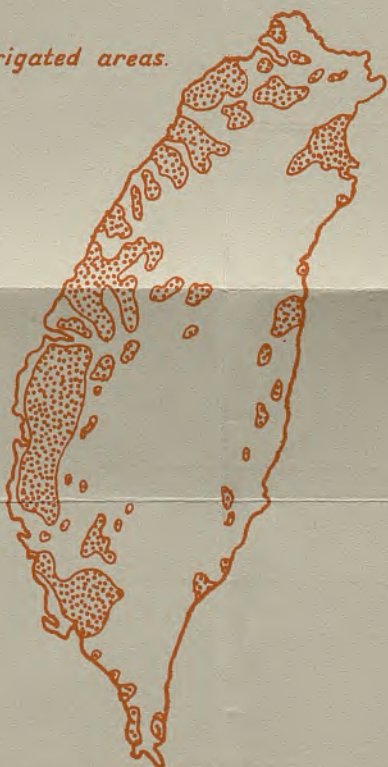Dry season in Winter.
Summer maximum (monsoon).

0   20   40 Miles

GENERAL   TEMPERATURE
Coolest month over 60°F.
Seven months over 70°F.

IRRIGATED   AREAS

- ▨ Irrigated areas.

AGRICULTURE

Mountain and Forest

- ▮ Double cropped paddy rice.
- ▥ Tea.
- ▧ Sugar cane.
- ▨ Banana and pineapple.
- ☐ No dominant crop.
- ⌒ Limit of cultivated land.

NOTE:
Rice is grown throughout
the cultivated area.
Sweet potatoes are also
widespread, being second
to rice as a food crop.

N·G·M

(C37409) 1,300 + 1,025 + 2 + 200 + 53   3/52

SCOTTISH LEAVING CERTIFICATE EXAMINATION

1952

MATHEMATICS

HIGHER GRADE—II

GRAPH

(SECTION I—QUESTION 4)

(To be attempted by all candidates)

Monday, 17th March—1.0 p.m. to 3.30 p.m.

FILL THIS IN FIRST

Name of School ....

Name of Pupil ....

**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**