



SCOTTISH EDUCATION DEPARTMENT

SCOTTISH
LEAVING CERTIFICATE
EXAMINATION

EXAMINATION PAPERS

1954



EDINBURGH: HER MAJESTY'S STATIONERY OFFICE

1954

PRICE 17s. 6d. NET



SCOTTISH EDUCATION DEPARTMENT—1954

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1. STATUTORY INSTRUMENTS

(a) Primary and Secondary Education

- The Schools (Scotland) Code, 1950. S.I. 1950, No. 915, S.62. 6d. (7½d.).
- 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

- The Central Institutions (Scotland) Recognition (No. 1) Regulations, 1950. S.I. 1950, No. 175, S.123. 1d. (2½d.).
- The Further Education (Scotland) Code, 1952. S.I. 1952, No. 2201, S.114. 3d. (4½d.).

(c) Bursaries and Scholarships

- The Education Authority Bursaries (Scotland) Regulations, 1953. S.I. 1953, No. 1123, S.6d. (7½d.).
- The Supplemental Allowances (Scottish Scholars at English Universities) Regulations, 1951. 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.8. 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' Pensions (National Insurance Modifications) (Scotland) Regulations, 1948. S.I. 1948, No. 944, S.67. 3d. (4½d.).
- The Superannuation (Civil Servants and Teachers) (Scotland) Rules, 1950. S.I. 1950, No. 89, 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. 135, 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 Superannuation (Teaching and Public Boards) (Scotland) Rules, 1952. S.I. 1952, No. 214, S.109. 6d. (7½d.).
- The Teachers' Pensions (National Service) (Scotland) Rules, 1952. S.I. 1952, No. 518, S.11. 3d. (4½d.).
- The Teachers (Special Recruitment) (Scotland) Regulations, 1952. S.I. 1952, No. 660, S.21. 3d. (4½d.).
- The Training of Teachers (Scotland) (Amendment No. 7) Regulations, 1953. S.I. 1953, No. 1121, S.96. 2d. (2½d.).
- The Teachers' Salaries (Scotland) Regulations, 1954. S.I. 1954, No. 403, S.41. 1s. (1s. 1½d.).

(e) Grant Regulations

- Educational Development, Research and Services (Scotland) Grant Regulations, 1946. S.R. & O., 1946, No. 1267, S.53. 1d. (2½d.).
- The Central Institutions (Scotland) Grant Regulations, 1947. S.R. & O., 1947, No. 2221, S.76. 2d. (3½d.).
- The Education Authorities (Scotland) Grant Regulations, 1948. S.I. 1948, No. 961, S.69. 2d. (3½d.).
- The Education (Scotland) Miscellaneous Grants Regulations, 1948. S.I. 1948, No. 2767, S.202. 1d. (2½d.).
- The Residential Special Schools and Orphanages (Scotland) Grant Regulations, 1948. S.I. 1948, No. 2768, S.203. 1d. (2½d.).
- The Further Education (Voluntary Associations) (Scotland) Grant Regulations, 1952. S.I. 1952, No. 2202, S.115. 3d. (4½d.).

SCOTTISH EDUCATION DEPARTMENT

SCOTTISH
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EXAMINATION PAPERS

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EDINBURGH: HER MAJESTY'S STATIONERY OFFICE

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SCOTTISH LEAVING CERTIFICATE EXAMINATION

The Scottish Leaving Certificate Examination is held annually by the Scottish Education Department. In 1954 it commenced on Tuesday, 9th 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 (1953), dated 4th Sept. 1953. (Price 1s. 0d.; post free 1s. 1½d.)

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, 10th March—9.30 A.M. to 10.30 A.M.

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.

Write an appropriate title at the head of your composition.

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

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

- (a) A real-life adventure, **either** your own **or** one of which you have heard or read.
- (b) A description of your favourite holiday resort.
- (c) Reflections on Saturday morning duties **or** buying a new dress **or** having your photograph taken **or** watching a queue assemble for the cinema.
- (d) What trade or profession do you wish to enter, and why ? **(35)**

ENGLISH

LOWER GRADE

(SECOND PAPER—INTERPRETATION, LANGUAGE, AND LITERATURE)

Wednesday, 10th 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.

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

1. In the fog and chill of Monday morning, November 11th, 1918, the minutes dragged slowly along the front. An occasional shot, an occasional burst of firing, told that peace was not yet. Officers had their watches in their hands, and the troops waited with the same grave composure with which they 5 had fought. At two minutes to eleven, opposite the South African brigade, which represented the easternmost point reached by the British armies, a German machine-gunner, after firing off a belt without pause, was seen to stand up beside his weapon, take off his helmet, bow, and then walk slowly to the rear. Suddenly, as the watch-hands touched eleven, there came a second of 10 expectant silence, and then followed a curious rippling sound, which observers far behind the front likened to the noise of a light wind. It was the sound of men cheering from the Vosges to the sea.

Victory dawned upon a world too weary for jubilation, too weary even for comprehension. The crescendo of the final weeks had dazed the mind. The 15 ordinary man could not grasp the magnitude of a war which had dwarfed all earlier contests, and had depleted the world of life to a far greater degree than a century of the old Barbarian invasions. In Britain the figures were too astronomical to have much meaning—nearly ten million men in arms from the Empire, of whom over three million were wounded, missing or dead; nearly 20 ten thousand millions of money spent, and shipping lost to the extent of seven hundred and fifty millions. The plain citizen could only realize that he had come, battered and broken, out of a great peril, and that his country had not been the least among the winners of victory. Her fleet had conducted the blockade which sapped the enemy's strength, and had made possible the 25 co-operation of allies separated by leagues of ocean. Her wealth had borne the main financial burden of the alliance. Her armies, beginning from small numbers, had grown to be the equal of any in the world, alike in training, discipline and leadership. Moreover, her steady resolution had been a bulwark to all her confederates in the darkest hours.

John Buchan.

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 :—

grave composure (line 4) ; *had dwarfed all earlier contests* (lines 15–16) ; *had depleted the world of life* (line 16) ; *a bulwark to all her confederates* (lines 28–29). (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 :—
expectant (line 10) ; *rippling* (line 10) ; *jubilation* (line 13) ;
sapped (line 24). (4)

(c) Give words of opposite meaning to *likened* (line 11) ; *final* (line 14) ;
magnitude (line 15) as they are used in the passage. (3)

(d) Give a general analysis of the sentence “ *Suddenly . . . light wind* ”
 (lines 9–11). (4)

(e) Why is it appropriate to say that victory “ dawned ” ? What
 figure of speech is this ? Point out two other examples of this
 figure in the passage. (4)

(f) In what way was the scene at the front strange after the previous
 weeks ? What details in the description convey the feeling of
 suspense ? (5)

(g) For what reasons was the ordinary citizen bewildered when peace
 came ? (4)

(h) What contributions had Britain made to victory ? (8)

2. Write a **short** letter in reply to the following advertisement :—

Overseas employment. Opportunities available in many fields for
 young men and women of good education. For further information
 apply O.E. Agency, 57, Old Grove, London, N.W.5, stating country
 preferred. (5)

3. Choose an example of **one** of the following types of character as portrayed
 by Shakespeare, and describe the part which he or she plays in the plot :—

a professional fool ; an ambitious man ; a revengeful man ; a
 woman disguised as a man ; a sage ; a soldier ; a courtier. (10)

4. Write an account of **one** of the following scenes or incidents :—

the family gathering in *The Cotter's Saturday Night* ; the punish-
 ment of the Ancient Mariner ; the meeting of Madeline and Porphyro ;
 the throwing away of Excalibur ; the death of Sohrab. (10)

5. Name three stories describing life on an island, and relate a striking
 incident that occurs in any **one** of the stories. (10)

6. Write a character sketch of a person created by any **one** of the following
 writers :—

Chaucer ; Bunyan ; Addison ; Goldsmith ; Lamb. (10)

7. What kind of book, other than fiction, would you choose for holiday
 reading ? Illustrate your answer by referring to one example that you think
 worth recommending. (10)

ENGLISH

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

Wednesday, 10th March—9.30 A.M. to 10.30 A.M.

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.

Write an appropriate title at the head of your composition.

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

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

- (a) A character sketch of **one** of the following :—a person given to telling tall stories ; a bore ; a cantankerous person ; a wag ; a greedy or selfish person.
- (b) Rehearsing for the school play.
- (c) Imagine that you had been a soldier with Caesar in Gaul **or** a nurse with Florence Nightingale in the Crimea **or** a companion of Livingstone in darkest Africa **or** a British sailor on the Arctic convoys to Russia during the second world war. Write an account of your adventures.
- (d) Your views on **one** of the following :—the Third Programme of the B.B.C. ; the picture paper in modern journalism ; football pools ; equal pay for men and women.
- (e) The Coronation by radio **or** by television. (35)

ENGLISH

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

Wednesday, 10th March—11.0 A.M. to 12.40 P.M.

Answer Questions 1, 2 and 3.

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

1. In a community of hunters or of shepherds every man easily and necessarily becomes a soldier. His ordinary avocations are perfectly compatible with all the duties of military service. However remote may be the expedition on which he is bound, he finds it easy to transport with him the stock from which he derives his subsistence. The whole people is an army; the whole year a march. Such was the state of society which facilitated the gigantic conquests of Attila¹ and Timour.² But a people which subsists by the cultivation of the earth is in a very different situation. The husbandman is bound to the soil on which he labours. A long campaign would be ruinous to him. Still his pursuits are such as give to his frame both the active and the passive strength necessary to a soldier. Nor do they, at least in the infancy of agricultural science, demand his uninterrupted attention. At particular times of the year he is almost wholly unemployed, and can without injury to himself afford the time necessary for a short expedition. Thus the legions of Rome were supplied during its earlier wars. The season during which the Roman farms did not require the presence of the cultivators sufficed for a short inroad and a battle. These operations, too frequently interrupted to produce decisive results, yet served to keep up among the Romans a degree of discipline and courage which rendered them not only secure but formidable. The archers and billmen of the middle ages, who with provisions for forty days at their backs left the fields for the camp, were troops of the same description. But when commerce and manufactures begin to flourish a great change takes place. The sedentary habits of the desk and the loom render the exertions and hardships of war insupportable. The occupations of traders and artisans require their constant presence and attention. In such a community there is little superfluous time; but there is generally much superfluous money. Some members of the society are therefore hired to relieve the rest from a task inconsistent with their habits and engagements.

Lord Macaulay.

¹ A leader of the Huns (*died* A.D. 453).

² A great Mongol conqueror (*died* 1405).

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

- (a) Explain briefly but clearly the meaning of the following phrases as they are used in the passage :—

perfectly compatible with (lines 2-3); *the whole year a march* (line 6); *active and passive strength* (lines 10-11); *the sedentary habits of the desk* (line 23). (8)

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

subsistence (line 5); *facilitated* (line 6); *supplied* (line 15); *artisans* (line 24).

What single noun is used to describe a soldier who hires his services for pay?

What is the force of the prefix in *community* and in *superfluous*? (6)

- (c) Express in your own words, tersely and intelligibly, the idea conveyed in the sentence—*These operations . . . formidable.* (lines 17-19). (4)

- (d) (i) State the kind of each of the following clauses :—
however remote may be the expedition (lines 3–4) ;
as give to his frame . . . soldier (lines 10–11).
- (ii) Pick out from the passage one example of each of the following :—
 an adjectival phrase ; an adverbial phrase of time ; a complement. (5)
- (e) Indicate the places where the passage naturally divides itself into sections. (2)
- (f) Distinguish, by using an appropriate word or phrase in each case, the three kinds of society mentioned in the passage. What historical illustrations are given of two of these societies ? Suggest an example of the third. (6)
- (g) Make a summary of the passage in appropriate paragraphs, and not exceeding half the length of the original. (14)

2. (a) Combine the following statements into a well-knit paragraph, making as skilful a use of subordination as you can :—

During the morning there had been lowering thunder clouds—Montrose mounted the scaffold—a burst of sunlight flooded the street—he was forbidden to address the mob—he made a few remarks to the magistrates—he ascended the ladder with a stately carriage—he uttered these last words : “ God have mercy on this afflicted land ”—the hangman pushed him off—a great sob broke from the crowd—they had cause to sob—that day was done to death a great man—Scotland has not seen such a man again. (9)

(b) Rewrite the following passages correctly, adding all the necessary punctuation. (Make the punctuation marks large and distinct.)

- (i) across the road theres a big shop called charless polytechnic stores ltd where they sell boys and mens clothes their goods are first class but many persons cant afford those high prices of theirs.
- (ii) but i said edmund spenser who wrote the world famed faerie queene has been called the poets poet yes he replied and that means the ordinary man has passed final judgement on him the only judgement that counts he is not read. (7)

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

- (a) And drowsy tinklings lull the distant folds.
- (b) The mountains and the hills shall break forth before you into singing and all the trees of the field shall clap their hands.
- (c) On a sudden open fly
 With impetuous recoil and jarring sound
 The infernal doors and on their hinges grate
 Harsh thunder.
- (d) Not louder shrieks to pitying heav'n are cast
 When husbands or when lapdogs breathe their last.
- (e) I loved Ophelia : forty thousand brothers
 Could not, with all their quantity of love,
 Make up my sum.
- (f) His honour rooted in dishonour stood,
 And faith unfaithful kept him falsely true. (4)

ENGLISH

HIGHER GRADE—(SECOND PAPER—LITERATURE)

Wednesday, 10th 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.

1. (a) What is the main difference between tragedy and comedy? Give as full an account as you can of the last scene in any Shakespearian tragedy or comedy which you have read.

Or

(b) Choose a comparatively minor character from any play of Shakespeare which you have studied, and show how he or she has been made a recognizable individual, not just an agent in the action.

Or

(c) "Shakespeare has drawn no perfect hero." Illustrate the truth of this statement with reference to any **one** of the following plays:—*Richard II, Julius Caesar, Hamlet, Macbeth, King Lear, Antony and Cleopatra, The Tempest.*

(20)

2. (a) Chaucer not only describes the pilgrims in *The Prologue* but also tells us what he had learned about their lives before he met them. Mention information of the second kind given about any **four** of the pilgrims.

Or

(b) "No one tells a tale in verse better than Chaucer." From your knowledge of any *Canterbury Tale* which you have read show how Chaucer succeeds in arousing and holding the reader's attention.

(15)

3. Choose a portion of the work of any **one** of the following authors which you have studied in some detail; give an account of the subject-matter and the style and say if you have enjoyed reading the author and why:—

Swift, Gibbon, Galt, Lockhart, Newman, De Quincey, Washington Irving, Adrian Bell.

(15)

4. Mention **four** patriotic poems, giving the names of the authors and their approximate dates. Choose your favourite among the poems mentioned and write a brief appreciation of it. (15)

5. Show how the personality, tastes, and interests of any English essayist with whom you are familiar are revealed in his works. (15)

6. Write a short essay of about a page and a half in length on **one** of the following subjects :—

The supernatural element in Pope's *The Rape of the Lock* ; Wordsworth's sonnets ; the use made by Keats of natural scenery in his odes ; Browning's power of portraying character. (15)

7. " The two primary dispositions of Dickens are to make the flesh creep and the sides ache." Illustrate from your reading of Dickens the blend of the horrible and the ludicrous in his novels. (15)

8. (a) Select any **one** of the following characters, name the novel in which he or she appears, and give an account of the part played in the story by the character :—

Mr. Darcy, Mr. Woodhouse, Madge Wildfire, Bailie Nicol Jarvie, Henry Esmond, Mrs. Poyser, Jane Eyre, Eustacia Vye, Lord Hermiston.

Or

(b) Give an account of a novel written by any **one** of the following :—

Charles Reade, Anthony Trollope, Wilkie Collins, Bulwer Lytton, Arnold Bennett, J. M. Barrie, Compton Mackenzie, Graham Greene. (15)

9. Choose any **one** of the following poems, give the author's name and say when he lived, and then write an account of the poem you choose, referring to the style and versification as well as to the subject matter :—

L'Allegro, *The Deserted Village*, *The Cotter's Saturday Night*, *Kubla Khan*, *The Lay of the Last Minstrel*, *Ode to the West Wind*, *Oenone*, *Reynard the Fox*, *Heroic Poem in praise of Wine*. (15)

10. Describe any book written either in prose or in verse which deals with the Second World War, mentioning particular incidents in or aspects of the book that have aroused your interest and curiosity. (15)

HISTORY

LOWER GRADE

Thursday, 11th 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 (<i>to be attempted by all candidates</i>)	<i>Marks</i>
(See separate sheet provided for this section.)	20

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

1. Outline the course of either the Scottish War of Independence to 1328 or the French wars of Edward III.	15
--	----

In either case account for the successes and final failure of the English.	5
--	---

2. Write notes on two of the following :—the Anglo-Saxon Conquest, the Norsemen in Scotland, William the Conqueror, the Scottish church in the days of St. Margaret and David I, Magna Carta, the Black Death.	20
---	----

3. Give reasons for the outburst of European activity overseas in the fifteenth, and first half of the sixteenth centuries.	5
---	---

Give an account of the Portuguese and Spanish contributions to this movement.	15
---	----

4. What were the causes of the Reformation either in England or in Scotland ?	20
---	----

5. In what ways was the reign of Elizabeth I a glorious one ?	20
---	----

6. Describe the quarrel between Charles I and his subjects either in England from 1629 to the summoning of the Long Parliament or in Scotland from 1633 to the signing of the Solemn League and Covenant in 1643.	15
---	----

In either case show how far Charles was to blame and how far he can be justified.	5
---	---

7. What were the main domestic problems that faced Charles II during his reign (1660–85) and how far was he successful in solving them ?	20
--	----

8. Describe the events leading up to the War of the Spanish Succession.	15
---	----

Was Britain justified in going to war ?	5
---	---

Marks

9. Describe the friction between Scotland and England from 1689 to 1707 and explain how this led to the Union of the Parliaments.

20

Section 3 (1714 to the present day)

10. "Let sleeping dogs lie". To what extent does this characterise the policy of Walpole?

20

11. Give an account of the events that led up to the American War of Independence.

15

Do you consider that the war was caused chiefly by British tyranny?

5

12. Describe the changes that took place in industrial production **either** in Scotland **or** in England in the second half of the eighteenth century and the early years of the nineteenth.

20

13. What part was played by Britain in the war against Napoleon from 1803 to 1815?

20

14. Sketch the career of Sir Robert Peel.

15

What do you consider his most important contribution to history and why?

5

15. Explain and criticise the foreign and imperial policy of Disraeli.

20

16. Give an account of the exploration and settlement of Australia from Captain Cook's voyage to the discovery of gold in 1851.

20

17. Write notes on **two** of the following :—Robert Clive, Lord Shaftesbury (1801–85), Italian unification (1859–61), Cecil Rhodes, the suffragette movement, the consequences of the Serajevo murder, the union of Scottish churches (1929).

20

18. **Either** (a) Describe the role of the British monarchy today.

or (b) Give an account of the development of the British Trade Union movement in the twentieth century.

or (c) Explain the causes and significance of the war in Korea.

20

HISTORY

HIGHER GRADE

(FIRST PAPER—BRITISH HISTORY)

Thursday, 11th March—9.30 A.M. to 12 NOON

All candidates must attempt FIVE questions, viz., Section 1 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.

To face page 12]

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1954

HISTORY
HIGHER GRADE—I

Thursday, 11th March—9.30 a.m. to 12 noon

SECTION I

(To be attempted by all candidates)

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

(8) The Siege of Orleans (century).....

.....

.....

(9) The Popish Plot (century).....

.....

.....

(10) George Wishart (century).....

.....

.....

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. Compare the effects of the Roman and Anglo-Saxon conquests on the history of Britain.

2. What problems faced Henry II at his accession and how far was he successful in solving them?

3. What signs of growing national feeling can be discerned in **either** Scotland **or** England during the thirteenth century?

4. Account for the downfall of the Lancastrian dynasty.

5. Write notes on **two** of the following :—the Synod of Whitby, Domesday Book, St. Anselm, James I of Scotland, the mediaeval English **or** Scottish town, Warwick the Kingmaker.

Section 3 (1485 to 1763)

6. In what ways did the Reformation in Scotland differ from that in England?

7. How far was Elizabeth I successful in dealing with the social and economic problems of her time?

8. Compare Cromwell's methods of government with those of Charles I.

9. Can the Revolution of 1688 be rightly considered to mark a turning point in English foreign policy?

10. On what grounds may Walpole be called the first prime minister?

11. Discuss the view that for Britain the Seven Years War was not primarily a European struggle.

Section 4 (1763 to 1914)

12. How far was George III responsible for causing the War of American Independence and for the defeat of Britain?

13. Do you consider that her sea power was Britain's chief contribution to the defeat of Napoleon?

14. To what extent and for what reasons were the reforms of the 1830's unsatisfactory to the poorer classes of the people?

15. Explain the different stages of Gladstone's Irish policy. How far was it statesmanlike?

16. What changes did British foreign policy undergo between 1900 and 1907?

17. **Either** (a) Wool and gold: how far have these two affected the development of Australia?

or (b) Estimate the importance of Cecil Rhodes in South African history.

18. Write notes on **two** of the following :—John Wilkes—Henry Dundas, Viscount Melville—the Disruption of the Church of Scotland—the Marquis of Dalhousie—the state of British agriculture in the second half of the nineteenth century—Lloyd George's Budget of 1909.

HISTORY

HIGHER GRADE

(SECOND PAPER—EUROPEAN HISTORY)

Thursday, 11th 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. Describe the life of Athenian citizens in the time of Pericles.

2. Estimate the historical importance of Alexander the Great.

3. Explain the political grievances of the Roman plebs at the beginning of the fifth century B.C. and show how far these had been removed by the time that the Lex Hortensia had been passed.

4. Compare the services to Rome of Marius and Sulla.

5. Account for the establishment of the Augustan principate.

6. Write notes on **two** of the following :—Spartan education, the Battle of Marathon, the Boeotian League, Plato, Quintus Fabius Cunctator, the Emperor Vespasian.

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

7. Why is the coronation of Charlemagne a landmark in history ?
8. To what extent was Hildebrand successful in his conflict with the Holy Roman Empire ?
9. What were the advantages and what were the weaknesses of feudalism as a method of government ?
10. Compare the importance in French history of Louis IX and Philip IV.
11. Explain the objects of the Hussite movement and show its religious and political importance.
12. Write notes on **two** of the following :—Henry the Fowler, The Caliphate of Cordova, the Dominican Order, the Emperor Charles IV, Cola de Rienzi, the Hanseatic League.

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

13. Show how Italy took the lead in the Renaissance.
14. Explain how Charles V acquired his empire and account for its weakness.
15. Estimate the debt of Louis XIV to Richelieu and Mazarin.
16. Was Peter the Great a blessing or a curse to Russia ?
17. How far did Frederick the Great follow the lines of policy laid down by the Great Elector ?
18. Write notes on **two** of the following :—Charles the Bold of Burgundy, William the Silent, the Edict of Nantes, the causes of the Thirty Years' War, the Peace of Utrecht, the Bourbon Family Compacts.

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

19. How far are the eighteenth century Partitions of Poland to be condemned and how far can they be justified ?
20. "Liberté, Egalité, Fraternité." How far was the domestic policy of Napoleon in accordance with these ideals ?
21. Why may Turkey be called "the sick man of Europe" between 1815 and 1856 ?
22. "Not by speeches and resolutions of majorities—that was the blunder of 1848 and 1849—but by blood and iron." Why did Bismarck say this and how far does it explain his own policy ?
23. Which of the Great Powers do you consider chiefly responsible for the War of 1914 and why ?
24. Write notes on **two** of the following :—Turgot, the Confederation of the Rhine, Belgian Independence (1830–9), Mazzini, the Second French Republic, the Triple Alliance of 1882.

GEOGRAPHY

LOWER GRADE

Friday, 12th 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 Scotland :—

- (a) Mark and name: Stranraer; Thurso; Stornoway; Edinburgh. 2
- (b) Delimit with continuous lines to show extent **four** Scottish coalfields, and mark and name **one** important town on each. 5
- (c) Print the letters in brackets over areas noted for the following (**one area for each**) :—
 herring fishing (F); hosiery (H); early potatoes (P);
 pig farming (A); silk manufacturing (S). 2½
- (d) Delimit thus, , an area north of the Highland boundary fault where the average annual rainfall is less than 30 in. 1½
- (e) Outline with a continuous line the drainage basins of the following rivers :—
 Tay; Tweed. 2

(13)

2. On the accompanying map of the world :—

- (a) Insert and name: New York; Singapore; Rio de Janeiro; Cairo. 2
- (b) Name the rivers marked A, B, and C, the ocean currents marked D, E, and F, and the canals marked G, H, J, and K. Print the names beside the letters. 2½
- (c) Mark thus, , the area of :—
 (i) Equatorial rain forest in Africa;
 (ii) Mediterranean climate in Australia; and
 (iii) Temperate grassland in South America. 2½

Marks

- (d) The routes of three well-known explorers are marked thus,, ————, and ————, and numbered 1, 2, and 3 in the legend of the map. Beside each number print :—
- (i) the name of the explorer who followed the route ; and
 - (ii) the century during which he made the journey. 3
- (e) Print the following commodities over areas noted for their production (**one area for each**) :—
- jute ; bananas ; copper ore ; coffee. 2
- (12)
3. Examine the contour map supplied and answer the following :—
- (a) Write a general description of the relief of the area (**not more than 12–15 lines**). 8
 - (b) Show by referring to specific features that this area has been glaciated. 4
 - (c) Account for the growth of a town at M. 3
- (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.

In any question credit will be given for appropriate sketch-maps and diagrams.

SECTION B

Marks

4. (a) In what ways do latitude, distance from the sea, and altitude influence temperature ? 9
- (b) Explain the difference in the following temperatures :—

	Location.	Altitude.	January Temperature.
Bordeaux ..	44° 50' N. 0° 31' W.	246'	40·6° F.
Vladivostok ..	43° 10' N. 132° 0' E.	50'	7·3° F.

6
(15)

5. Write **brief** notes on the location, appearance, and economic importance of **three** of the following :—
- selva ; veld ; maquis ; mallee scrub ; everglades ; taiga ; spinifex ; tundra. (15)

6. (a) Describe the world distribution of **either** rice **or** maize. 8
- (b) What are the conditions necessary for the cultivation and harvesting of the selected crop ? 7
- (15)

7. (a) For any **one** continent in which there is considerable hydro-electrical development, describe broadly the location of the generating areas ; and 6

- (b) Indicate how their distribution depends upon (i) adequate rainfall, (ii) relief, and (iii) economic demands. 9
- (15)

SECTION C

British Isles

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

Marks

(a) Write a geographical description of **one** of the following Scottish industries :—

tourism ; coalmining ; distilling ; fishing ; cattle farming.

(15)

(b) Select **one** fairly large area in **either** England and Wales **or** Ireland, write a brief description of its agriculture, and show how the relief, soil, and climate of the area influence its agriculture.

(15)

9. Attempt **EITHER** (a) **OR** (b) :—(a) Describe the position and explain the importance of **three** of the following :—

(i) The Forth Bridge and the Tay Bridge ;

(ii) Aberdeen ;

(iii) Nithsdale ;

(iv) Stirling ;

(v) Lairg.

(15)

(b) What geographical factors have contributed to the industrial development of **one** of the following :—

(i) Northumberland and Durham ;

(ii) London ;

(iii) South Wales ?

(15)

Europe

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

Plain of Lombardy ; Plain of Hungary ; Ukraine ; Greece ; Meseta of Spain ; Bohemia.

(15)

11. Write explanatory notes on **three** of the following :—

(i) " The sea unites Norwegians, the land divides them."

(ii) " For the Dutch the sea has ever been both friend and foe."

(iii) " Switzerland lies at the hub of Europe."

(iv) " The Rhine is the High Street of Europe."

(v) " Africa begins at the Pyrenees."

(15)

The Rest of the World

12. (a) Draw a sketch-map to show the distribution of natural vegetation in North America, north of Mexico.

10

(b) Indicate **briefly** how the natural vegetation is being altered by the inhabitants.

5

(15)

13. Write a geographical description of **either** Mexico **or** the West Indies under the headings of relief, climate, vegetation, and occupations.

(15)

Marks

14. Divide **either** India and Pakistan **or** China into major regions of relief, and write a reasoned geographical description of **one** of your divisions. (15)

15. Draw sketch-maps to illustrate how sheep farming and cattle farming are related to climate in Australia. (15)

16. Select **three** of the following ports and describe their position, trade, and importance :—

Cape Town ; Durban ; Mombasa ; Zanzibar ; Freetown ;
Algiers. (15)

17. Draw a sketch-map to show the relief and drainage of South America and state how these have influenced the opening-up of the continent. (15)

GEOGRAPHY

HIGHER GRADE—(FIRST PAPER)

Friday, 12th 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.

In any question credit will be given for appropriate sketch-maps and diagrams.

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. After studying the part of the one-inch map of the British Isles which is provided :—

(a) Write a general description (15-20 lines) of the relief and drainage of the area. 18

(b) Comment on the sites of villages in the following area :—

360390 — 360520 — 450520 — 450390.

Refer to specific examples. 10

(c) Comment on the routes followed by road A423, the Great Western Railway, and the Oxford Canal from Banbury to the northern edge of the map. 8

(36)

2. On the accompanying map of North America :—

Marks

(a) Insert, if necessary, and name :—

Rivers : Columbia ; Ohio ; Colorado ; San Joaquin.

Towns : Philadelphia ; St. Louis ; Montreal ; Los Angeles.

4

(b) Mark thus, \simeq , and name :—

Mohawk Gap ; Soo Canal ; Strait of Belle Isle.

3

(c) Insert the 32° F. isotherm for January, reduced to sea level, and write a sentence in the margin of the map comparing the annual range of temperature at A with that at B.

NOTE. The 72° F. isotherm for July, reduced to sea level, is already inserted.

3½

(d) Print over areas noted for their production (**ONE area for each**) :—winter wheat ; petroleum ; cane sugar ; tobacco ; oranges.

2½

(e) Print the name of each of the following explorers at **one** part of the coast of the United States or Canada which he visited and after it write the century in which the visit was made :—

Cabot ; Raleigh ; Drake.

3

(16)

SECTION B

THREE questions should be attempted from this Section.

3. Describe carefully how you would draw a dot map to show the distribution of wheat in Scotland, stating in your answer the maps to which you would refer and the statistical data required.

(16)

4. Write brief notes on **four** of the following, describing them and indicating how men utilize them :—hanging valley ; raised beach ; alluvial fan ; spring line ; loess ; coral reef.

(16)

5. (a) What is soil erosion ?

4

(b) By referring to specific areas show (i) how it is caused, and (ii) how it may be remedied.

12

(16)

6. Account for the distribution of sheep and cattle in **either** South America **or** Africa **or** Australia.

(16)

7. The following table gives the climatic data of a station 131 feet in altitude and approximately 100 miles from the sea.

(a) Indicate where, in your opinion, it is situated, stating clearly but briefly how you have reached your conclusion.

8

(b) Using the given information and your conclusion under (a) explain the seasonal variation of rainfall.

8

(16)

To be given with
Geography—Higher Grade (First Paper)

SCOTTISH LEAVING CERTIFICATE EXAMINATION—1954

GEOGRAPHY—HIGHER GRADE (FIRST PAPER)

QUESTION 10

Study this picture carefully before answering



	J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.	Yr.	Marks
Temp. °F.	24	29	41	57	68	76	79	77	68	55	39	27	53	
Rain In.	·1	·2	·2	·6	1·4	3·0	9·4	6·3	2·6	·6	·3	·1	24·9	
No. of days with rain	2	3	4	4	7	11	14	11	8	3	3	2	72	
Percentage wind frequency	{ Winter					N.	NE.	E.	SE.	S.	SW.	W.	NW.	
	{ Summer					17	8	5	6	6	8	18	32	
						10	9	12	26	16	10	7	10	

8. "The distribution of ships on the trade routes of the world varies with the seasons."

Amplify and discuss.

(16)

9. (a) What is meant by (i) nomadism, and (ii) transhumance?

6

(b) Select **either** a nomadic people **or** a group practising transhumance and describe their way of life.

10
(16)

10. The accompanying air photograph of part of Scotland was taken looking southwards. Using the evidence of the photograph **only**, describe the physical geography (including vegetation) and the human geography of the area.

(16)

GEOGRAPHY

HIGHER GRADE—(SECOND PAPER)

Friday, 12th 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.

In any question credit will be given for appropriate sketch-maps and diagrams.

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

1. Attempt **either** (a) **or** (b).

Mark

(a) Write a geographical description of **one** of the following:—

- (i) The Solway Lowlands of Scotland;
- (ii) The Basin of the Tweed;
- (iii) Banffshire and Aberdeenshire;
- (iv) The Northwest Highlands.

(20)

(b) Select **two** of the following cities and show how geographical factors have contributed to their growth:—

Glasgow; Edinburgh; Aberdeen; Dundee.

(20)

2. Attempt **either** (a) or (b).

Marks

(a) Describe and account for the distribution of the various industries in England west of the Pennines and north of the Midland Gap. (20)

(b) Describe the physical geography of England south and east of the Trent and Warwickshire Avon and including Cornwall and Devon. (20)

3. Comment on the combination of geographical factors which contributed to the disastrous floods which occurred in south-east England on 31st January, 1953, and subsequent days. Explain the immunity of the west coast of England. (20)

SECTION B

4. Compare and contrast **two** of the following pairs of towns :—

- (i) Gibraltar and Istanbul ;
- (ii) Madrid and Milan ;
- (iii) Marseilles and Genoa ;
- (iv) Copenhagen and Cologne.

Illustrate with appropriate sketch-maps. (20)

5. What aspects of the geography of the countries concerned do the following statistics illustrate and wherein do they require to be treated with caution ?

		<i>Area in Sq. Miles</i>	<i>Population</i>	<i>Density per Sq. Mile</i>	
Sweden	.. ..	173,426	6,924,888	40	
Denmark	.. ..	16,576	4,045,232	244	
Switzerland	.. ..	15,944	4,645,000	291	
Belgium	.. ..	11,755	8,512,195	724	(20)

6. Write a geographical account of the trade of **either** the North Sea **or** the Baltic Sea **or** the Mediterranean Sea. (20)

SECTION C

7. Attempt **either** (a) or (b).

(a) Compare and contrast the western and eastern coastlands of the United States. (20)

(b) Write a geographical account of hydro-electrical development in Canada, explaining in your answer the fact that Canada has the largest per capita output of electricity in the world although it is only second in exploited water-power. (20)

8. Describe the relief and climate of **one** of the following and show how they, together with any other major factors, influence the agriculture of the selected area :—

Texas ; Prairies of Canada ; Deccan ; Californian Valley ; Steppes of Siberia. (20)

9. Give **three** examples of densely peopled lowlands in the monsoon lands of Asia and indicate the causes and consequences of the high densities found in such areas. (20)

SECTION D

Marks

10. Amplify and explain the following statements :—

(i) Within the Tropics the Andes are more densely peopled than the adjoining lowlands ; and

10

(ii) Outwith the Tropics the lowlands of South America are more densely peopled than the Andes.

10
(20)11. Write a systematic geographical description of **one** of the following :—

North Island, New Zealand ; Murray-Darling Basin ; South Island, New Zealand.

(20)

12. Write an explanatory account of the vegetation of Africa.

(20)

ARITHMETIC

Tuesday, 9th 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.**Four-place logarithmic tables are provided, but their use is permitted only in questions 9 and 10.**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.****In questions 1 to 8 the use of logarithmic tables is not permitted.**1. (i) Evaluate $\frac{(0.2)^3 \times 1.17}{(0.3)^2 \times 0.52}$.(ii) Express $11\frac{1}{4}d.$ as an exact decimal fraction of £1, and hence or otherwise find the cost of 10,000 articles at $11\frac{1}{4}d.$ each.

2. A firm used each week 392 tons of coal at 75s. per ton. If the price of coal increased by 5 per cent., find the increase in the weekly coal bill.

How much coal at the higher price could have been bought for the same weekly expenditure as before ?

3. A bus which seats 35 passengers can be hired for a day's touring for £18 15s. A further £4 is allowed for incidental expenditure, and the charge for lunch and tea is 8s. 6d. per passenger. What should be the cost per head of the day's outing, assuming that all the seats in the bus are taken?

What is the smallest number of seats which must be taken at 25s. each for the receipts to cover the expenses?

4. A man borrows £2,000, and at the end of each of the following two years he pays the lender £180, part of which is payment of interest at $4\frac{1}{2}$ per cent. per annum on the amount of his debt during the year, and the rest of which goes to reducing his debt. How much does he still owe after the second payment?

5. The scale of a map is 6 inches to the mile. What area in acres is represented on the map by 1 square inch?

What is the area in acres of a field represented on the map by a trapezium the parallel sides of which are 1·2 in. apart and have lengths 1·4 in. and 1·9 in.?

6. Along part of a new road two bungalows and a block of eight flats have frontages to the road of 36 feet, 40 feet, and 180 feet respectively. If the road charges for this section of the road are £364 16s., calculate

(i) the cost per foot of frontage;

(ii) the sum payable by each house-owner (the owners of the flats pay equal shares of the charge for their frontage).

7. A company with a capital of £160,000, issued in £5 shares, makes a profit of £20,000 in a certain year. It places £6,000 in a reserve fund, and divides the rest of the profit among the shareholders. A shareholder holds 60 of the £5 shares: what is his share of the profit after income tax has been deducted at 9s. in the £?

8. A burgh levied rates at 13s. 9d. in the £ in a year when the total rateable value was £263,200. Find the amount due to be collected.

In the following year the rateable value increased by £9,400 and the total amount to be collected was £183,200. What was the smallest rate per £, expressed to a whole number of pence, necessary to raise this amount?

The use of logarithms is permitted in questions 9 and 10.

9. A motorist plans a motoring holiday in France and expects to cover a distance of 3,000 kilometres. He estimates his petrol consumption at 29 miles per gallon. If petrol costs 63 francs 50 centimes per litre in France, how much British money, to the nearest £, should he allow for the cost of petrol in France?

1 mile = 1.609 kilometres, 1 gallon = 4.546 litres,
£1 = 984 francs.

10. A ship turns in a circle and takes $3\frac{1}{2}$ minutes steaming at 15 knots to complete the circle. Find in yards

(i) the distance travelled by the ship ;

(ii) the diameter of the turning circle.

1 knot = 1 nautical mile per hour, 1 nautical mile = 6,080 feet.
Take $\pi = 3.142$.

MATHEMATICS

LOWER GRADE—(FIRST PAPER)

Monday, 15th 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.

Four-place logarithmic tables are provided.

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.

10

Marks

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

12

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

6

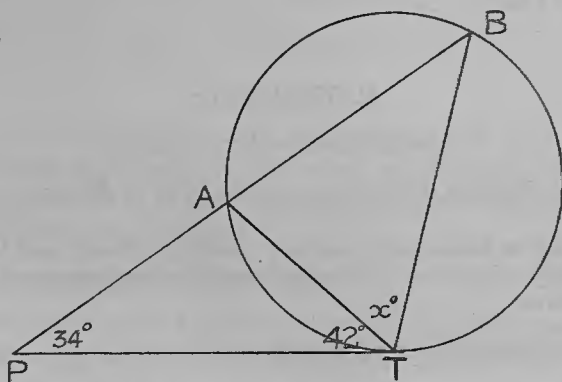
Deduce that, if triangles ABC and PQR are equal in area and have $AB = PQ$ and $BC = QR$, then the angles ABC and PQR are either equal or supplementary.

5

4. In this question figures need not be reproduced, and references to theorems are not required.

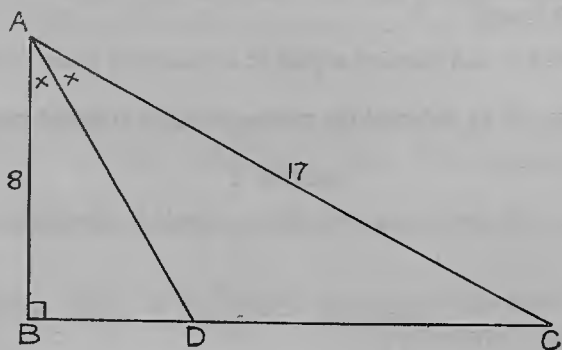
(i) PT is a tangent and PAB a secant to the circle ATB . Angle $TPB = 34^\circ$; angle $PTA = 42^\circ$; angle $ATB = x^\circ$. Calculate the value of x .

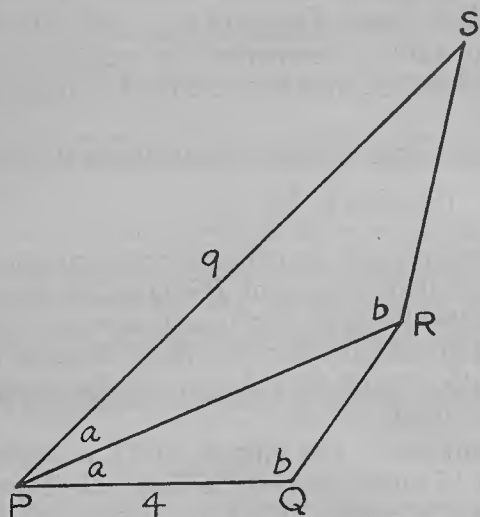
4



(ii) Triangle ABC is right-angled at B , and the bisector of angle BAC cuts BC at D . $AB = 8$ in.; $AC = 17$ in. Find the lengths of BC and BD .

4





(iii) In the above figure, angle $PQR = \text{angle } PRS$;
 angle $QPR = \text{angle } RPS$; $PQ = 4$ in. ; $PS = 9$ in.
 Find the length of PR .

4

(iv) Tangents are drawn from a fixed point A to a set of concentric circles with common centre C . **State** the locus of the points of contact of these tangents.

4

SECTION II

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

5. In an acute-angled triangle ABC , E and F are the feet of the perpendiculars from B and C respectively to the opposite sides.

Prove that (i) B , C , E , and F are concyclic ; (ii) triangles AEF and ABC are similar. (Section I, 2.)

7

If angle BAC is 60° and D is the mid-point of BC , prove that the triangle DEF is equilateral.

10

6. The median AD of a triangle ABC is produced its own length to E . Prove that $ACEB$ is a parallelogram.

4

The median CF is produced to meet EB produced at H . Prove that $HB = BE$.

8

L is the mid-point of AH . Show that AB , HD , and EL are concurrent.

5

7. $ABCD$ is a quadrilateral in which $AB = 7$ cm., $BC = 8$ cm., $CD = 7$ cm., $DA = 15$ cm., and $BD = 13$ cm.

Without using tables, determine the **exact** sizes of the angles BAD and BCD , and prove that the quadrilateral $ABCD$ is cyclic.

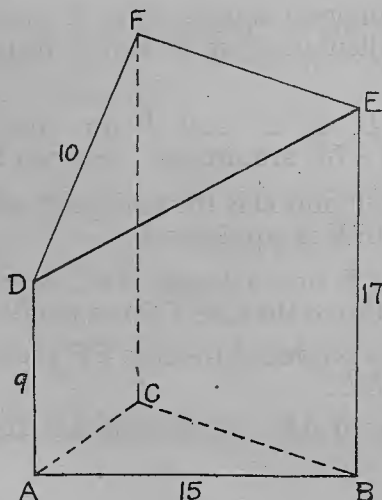
Show that the area of the quadrilateral $ABCD$ is $\frac{161\sqrt{3}}{4}$ sq. cm. (Section I, 3.)

8. A ship is sailing due South at a constant speed. At a certain moment it is at a point P whose bearing from a given point A is 28° West of North, and one hour later has reached a point Q , distant 5 miles from A on a bearing 76° West of South. Find, by calculation, the speed of the ship in miles per hour.

At the moment when the ship is at Q , a motor-boat, which travels at 15 miles per hour, is despatched from A on a course 28° West of South. Find the distance the motor-boat will have to travel in order to reach the path of the ship, and show that it would arrive at this point on the path approximately $4\frac{1}{2}$ minutes before the arrival of the ship.

9. The accompanying diagram represents part of a triangular prism. The triangle ABC is right-angled at C , and lies in a horizontal plane; AD , BE , and CF are vertical, and $BEFC$ is a rectangle; $AB = 15$ in., $BE = 17$ in., $AD = 9$ in., and $DF = 10$ in.

- (i) Find the lengths of DE and AC .
- (ii) Prove that the triangle DEF is right-angled.
- (iii) Find the size of the angle between the planes DEF and $CBEF$.



MATHEMATICS

LOWER GRADE—(SECOND PAPER)

Monday, 15th 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. (i) Solve the equation
 $(x - 2)(x - 3) - (x - 1)(x - 2) = 3(x - 5).$ 6
- (ii) Three dozen protractors cost £2. The protractors were of two kinds, one kind costing 10d. each, the other kind 1s. 4d. each. How many were there of each kind? 7
2. (i) Solve the equation $x^2 + 3x - 5 = 0$, giving the roots correct to the first decimal place. 4
- (ii) Evaluate $\pi(R^2 - r^2)$ when $R = 251$ and $r = 249$. Take $\pi = 3.142$. 4
- (iii) Write down the formula for the volume, V , of a cylinder in terms of the radius, r , and the height, h ; derive a formula for the diameter, d , of the cylinder in terms of V and h . 4
- (iv) Evaluate, without using tables, $\frac{\sin 135^\circ \cos 120^\circ}{\cos 45^\circ}$. 4
3. In a triangle ABC , $AB = 3.6$ in., angle $B = 24^\circ$, and angle $C = 54^\circ$. Calculate the length of AC .
 If the bisector of angle BAC meets BC at D , calculate the length of AD . 12
4. Graph question—see separate sheet. 11

SECTION II

Only THREE questions should be attempted from this Section.

5. (i) Divide $6x^3 - 13x^2 + 4$ by $3x - 2$. Marks
 Factorize fully $6x^3 - 13x^2 + 4$. 6
- (ii) A rectangle is 4 in. longer than it is broad. Show that the area of a square of the same perimeter is 4 sq. in. greater than the area of the rectangle. 10
6. (i) Calculate the radius of a sphere whose volume is 100 c.c. Take $\pi = 3.142$, and give the answer to three significant figures. 8
- (ii) Given that $\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$, calculate f when $u = 24.3$ and $v = 27.6$. 8
7. A long rectangular sheet of metal, 11 in. wide, is to be shaped to form an open water channel.
- (i) If the sheet is bent so that the cross-section of the channel is semicircular, what is the radius of the semicircle and the area of the cross-section?
 Take $\pi = \frac{22}{7}$. 4
- (ii) If the sheet is bent to form three faces of a rectangular prism and the area of the rectangular cross-section is 15 sq. in., what are the possible dimensions of the cross-section? 12
8. AB and AC are two radii of a circle, centre A and radius R , and the angle BAC is θ . Show that
 $BC^2 = 2R^2 (1 - \cos \theta)$. 6
- If $R = 10$ in., find (i) the length of BC when θ is 109° ;
 (ii) the value of θ when BC is 5 in. long. 10
9. (i) S varies as the square of d , and $S = 38\frac{1}{2}$ when $d = 3\frac{1}{2}$. What is the value of S when $d = 10\frac{1}{2}$? 4
- (ii) The marked price, $\pounds M$, of an article for sale is such that after allowing the buyer a discount of $d\%$ of that marked price the seller still makes a profit of $d\%$ of the cost price, $\pounds C$. Express the ratio of M to C in terms of d .
 If $M : C = 2 : 1$, show that $d = 33\frac{1}{3}$. 12

MATHEMATICS

HIGHER GRADE—(FIRST PAPER)

Monday, 15th 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.

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

All the questions in this Section should be attempted.

Marks

1. Prove that the square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the other two sides.

12

Deduce that the square on the diagonal of a cube has an area three times that of a face of the cube.

4

2. AB and CD are two straight lines which, when produced, meet at P. Prove that, if the rectangles AP.BP and CP.DP are equal, then A, B, C, and D are concyclic.

11

3. Prove that, in a triangle ABC, $\frac{a}{\sin A} = 2R$, where R is the radius of the circumcircle of the triangle, considering the cases where angle A is (i) acute, (ii) obtuse, (iii) right.

7

4. Establish the equation of a circle in the form

$$(x - a)^2 + (y - b)^2 = r^2.$$

5

Verify that the point A (6, 8) lies on the circle whose equation is $x^2 + y^2 - 10x - 7y + 16 = 0$, and find the coordinates of B and C, the points in which the circle cuts the x-axis, B being the point nearer the origin.

The perpendicular from C to AB meets the circle again at D. Find the coordinates of D.

10

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. BC is the diameter of a semicircle BAC ; AP is perpendicular to BC and meets BC at P. Semicircles are described on BP and PC as diameters, on the same side of BC as A, and AB and AC intersect these semicircles at X and Y respectively.

Prove that—

- | | | |
|--|----------------|---|
| (i) B, X, Y, C, are concyclic ; | (Section I, 2) | 6 |
| (ii) $XY = AP$; | | 5 |
| (iii) XY is a common tangent to the semicircles on BP and CP as diameters. | | 6 |

6. ABC is a triangle, with AD a median. E is a point on AC such that angle ADE is equal to angle ABC. EF, drawn parallel to AD, meets BC at F.

Prove that—

- | | | |
|--|--|----|
| (i) triangles ABD, DEF are similar ; | | 5 |
| (ii) $\frac{EF}{FD} = \frac{CF}{FE}$. | | 12 |

7. From an observation point 720 feet above sea-level a ship A is observed in a direction 30° East of South at an angle of depression of 9° and a ship B in a direction 70° West of South at an angle of depression of 14° .

Calculate the distance between the ships, and the bearing of ship B from ship A.

17

8. A is the point (x_1, y_1) , B the point (x_2, y_2) . The point P divides AB in the ratio $m : n$. Prove that the abscissa of the point P is $\frac{mx_2 + nx_1}{m + n}$, and write down the ordinate of P.

5

A is a fixed point $(2, 0)$ and P a variable point (h, k) . R divides PA internally in the ratio $5 : 2$, and S divides PA externally in the ratio $5 : 2$. Find the coordinates of R and S in terms of h and k , and deduce that, if OR and OS are perpendicular, O being the origin, then P lies on a circle whose centre is O. State the radius of the circle.

10

Deduce that, for all positions of P, OR bisects the angle AOP.

2

Marks

9. LMN is an isosceles triangle, LM being equal to LN. P is a point on LM, and LN is produced to Q so that $NQ = MP$. PQ cuts MN at R.

By applying the formula of Section I, 3, prove that

$$PR = RQ \text{ and } \frac{MR}{RN} = \frac{LQ}{LP}. \quad 12$$

Hence, or otherwise, show that the area of the triangle PMR is greater than the area of the triangle QNR. 5

MATHEMATICS

HIGHER GRADE—(SECOND PAPER)

Monday, 15th 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. (a) Factorize completely :—

$$(i) \ 1 + x - y - 72(x - y)^2; \quad 2$$

$$(ii) \ x^3(2x + 5y) - y^3(5x + 2y). \quad 4$$

(b) Find the values of m for which the equation

$$x^2 - 2mx + m^3 - m^2 - m + 2 = 0$$

has equal roots.

6

2. (a) Solve the equations :—

$$3x^2 + xy - 3y^2 = 3y + x,$$

$$3x + 2y = 2.$$

8

(b) Verify that

$$(1 + 2^{\frac{1}{2}} + 2^{\frac{1}{3}})(1 + 2^{\frac{1}{2}} - 2^{\frac{1}{3}}) = 3(2^{\frac{1}{2}} + 1)(2^{\frac{1}{2}} + 1)(2^{\frac{1}{2}} - 1). \quad 5$$

3. (a) If $a : b = c : d$, prove that

$$\frac{a + b + c + d}{a + b} = \sqrt{\frac{(a + c)(b + d)}{ab}}$$

4

(b) The total cost of providing dinners in a factory canteen is made up of two parts, of which one is constant and the other varies directly as the number of meals served. For 100 meals served the cost per meal is 1s. 9d. and for 150 it is 1s. 6d. How many meals must be served in order that the cost per meal may be only 1s. 3d.?

Explain why the cost per meal can never be as low as 1s., no matter how many dinners are provided.

7

4. (a) Assuming the usual formulae for $\sin(A + B)$ and $\cos(A + B)$, deduce the formula for $\tan(A + B)$ in terms of $\tan A$ and $\tan B$. Without using tables, prove that $\tan 75^\circ = 2 + \sqrt{3}$.

6

(b) Find, for the range 0° to 360° inclusive, the values of θ which satisfy the equation

$$\cos 2\theta - \cos \theta = \sin 2\theta + \sin \theta.$$

6

5. With the usual notation for the sides and angles of a triangle ABC and assuming the formula

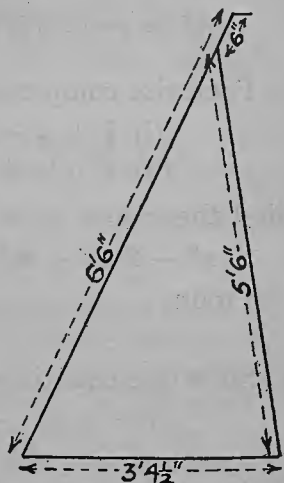
$$a^2 = b^2 + c^2 - 2bc \cos A,$$

prove that

$$\sin \frac{A}{2} = \sqrt{\frac{(s - b)(s - c)}{bc}}.$$

5

A pair of steps is 6 ft. 6 in. long. The back is 5 ft. 6 in. in length and is hinged to the steps at a distance of 6 in. from the top. When the ladder and the back are fully extended, as shown in the diagram, the distance between them on the floor is 3 ft. 4½ in. Calculate, to the nearest half-inch, the height of the top of the steps from the floor.



8

6. (a) If $y = 10x - \frac{4}{3}x^2$, find from first principles the rate of change of y with respect to x . 4

(b) If y is a function of x such that $\frac{dy}{dx} = 3x(2 - x)$, and $y = 2$ when $x = 2$, find y in terms of x . Find also the coordinates of the point on the graph of the function at which the gradient is 3. 7

SECTION II

Only two questions should be attempted from this Section.

7. A cyclist set out for home at 11 a.m. and on the journey his machine broke down, his average speed up to that point having been 10 miles per hour. After a delay of 10 minutes he was given a lift for the remainder of the journey in a motor car which travelled at an average speed of 30 miles per hour, and he found that, for the journey as a whole, his average rate of travel had been 20 miles per hour. If he had cycled five times as far as he had actually done and at the same average speed, and had then completed the journey on foot at 4 miles per hour, he would have arrived home at 2.45 p.m. How far from his home did the breakdown occur? 14

8. Write down the formulae for the n^{th} term and the sum of n terms of the geometrical progression whose first term is a and whose common ratio is r . State the condition for the progression to have a *sum to infinity* and derive an expression for this sum. 5

For the geometrical progression $2, -\sqrt{2}, 1, \dots$, find the sum of the first *eight* terms, expressing your result with a rational denominator. 4

Show that the *sum to infinity* of the terms of this series succeeding the $2n^{\text{th}}$ term is to the *sum to infinity* of the whole series as $1 : 2^n$. 5

9. (a) Assuming any necessary formulae, prove that for a triangle ABC the following identities hold:—

$$(i) \sin A (c \cos B - b \sin C) + \sin B (c \cos A + a \sin C) = c \sin C; \quad 3$$

$$(ii) \frac{1 + \cos A}{2a} + \frac{1 + \cos B}{2b} + \frac{1 + \cos C}{2c} = \frac{s^2}{abc}. \quad 4$$

(b) If $A + B + C = 90^\circ$, prove that

$$\frac{\sin 2A + \sin 2B + \sin 2C}{\sin 2A + \sin 2B - \sin 2C} = \cot A \cot B. \quad 7$$

10. Find the turning values of the function

Marks

$$y = (1 + 2x)(4 - x^2),$$

and determine their nature.

6

State the coordinates of the points in which the graph of

$$y = (1 + 2x)(4 - x^2)$$

cuts the axes of x and y .

2

Using the information found, make a rough sketch of the graph of $y = (1 + 2x)(4 - x^2)$.

2

Find the area in the first quadrant bounded by the graph and the coordinate axes.

4

ELEMENTARY ANALYSIS

ADDITIONAL MATHEMATICAL SUBJECT

Wednesday, 17th March—9.30 A.M. to 12 NOON

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) Solve the equation

Marks

$$16x^{\frac{3}{2}} + 4x^{-\frac{3}{2}} = 65.$$

5

(ii) Prove that the determinant

$$\begin{vmatrix} \cos A & , & \cos B & , & \cos C \\ \cos^2 A & , & \cos^2 B & , & \cos^2 C \\ \sin^2 A & , & \sin^2 B & , & \sin^2 C \end{vmatrix}$$

is equal to $(\cos A - \cos B)(\cos B - \cos C)(\cos C - \cos A)$.

6

Hence obtain all the values of x within the range $0^\circ \leq x \leq 360^\circ$ which satisfy the equation

$$\begin{vmatrix} \cos x & , & \cos 2x & , & -\frac{1}{2} \\ \cos^2 x & , & \cos^2 2x & , & \frac{1}{4} \\ \sin^2 x & , & \sin^2 2x & , & \frac{3}{4} \end{vmatrix} = 0.$$

4

Marks

2. (i) The equation $a \cos \theta + b \sin \theta - 1 = 0$ has two unequal roots α and β which do not differ by a multiple of 2π ; prove that

$$\frac{\cos \frac{1}{2}(\alpha + \beta)}{a} = \frac{\sin \frac{1}{2}(\alpha + \beta)}{b} = \frac{\cos \frac{1}{2}(\alpha - \beta)}{1},$$

and find $\cos \frac{1}{2}(\alpha - \beta)$ in terms of a and b .

If the roots of the equation $A \cos \theta + B \sin \theta - 1 = 0$ are 2α and 2β , express A and B in terms of a and b . 10

(ii) Eliminate θ between the equations

$$x = \cos \theta - \sin \theta, \quad y = \cot \theta. \quad 5$$

3. Prove that, if nC_r denotes the number of combinations of n things taken r at a time, then

$${}^nC_r + {}^nC_{r-1} = {}^{n+1}C_r. \quad 3$$

Hence or otherwise prove that, n being a positive integer,

$$(1+x)^n = 1 + {}^nC_1x + {}^nC_2x^2 + \dots + {}^nC_nx^n, \text{ and} \quad 4$$

deduce that

$$1 + \frac{1}{2} {}^nC_1 + \frac{1}{3} {}^nC_2 + \dots + \frac{{}^nC_n}{n+1} = \frac{2^{n+1} - 1}{n+1}. \quad 4$$

Find the term independent of x in the expansion of

$$\left(x^2 + \frac{2}{\sqrt{x}}\right)^{10}. \quad 4$$

$$4. \text{ Prove from first principles that } \frac{d}{dx} \sin 3x = 3 \cos 3x. \quad 5$$

Differentiate the following functions with respect to x :—

$$(i) e^{(x+1)^2} \sin 3x; \quad (ii) \frac{x^2}{\sqrt{1+x^2}}. \quad 3, 3$$

Show that the derivative with respect to x of the function $\log_e \tan \left(\frac{\pi}{4} + \frac{x}{2}\right)$ is $\sec x$. 4

$$5. (i) \text{ If } x = a \tan \theta, y = a \sin^2 \theta, \text{ find } \frac{dy}{dx} \text{ and prove that } \frac{d^2y}{dx^2} = \frac{2 \cos^3 \theta \cos 3\theta}{a}. \quad 9$$

(ii) Prove by the methods of the integral calculus that the volume of a right circular cone of which the radius of the base is a and the height is h is $\frac{1}{3}\pi a^2 h$. 6

SECTION II

Marks

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

6. (i) Prove that the infinite series

$$\frac{x}{1.2} + \frac{x^2}{2.3} + \frac{x^3}{3.4} + \dots$$

is convergent if $|x| \leq 1$, and find its sum when $x = 1$. 6

Investigate the convergency or divergency of the series

$$\frac{2}{1.3} + \frac{3}{2.4} + \frac{4}{3.5} + \dots$$

4

- (ii) Express

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

in partial fractions. 5

State the conditions of validity for the expansion of E in the form

$$E = a_0 + a_1x + a_2x^2 + \dots,$$

and find the values of a_0, a_1, a_2, a_3, a_4 . 5

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

If $x = \cos \theta + i \sin \theta$, and $y = \cos \phi + i \sin \phi$, find the modulus and amplitude of $x^m + y^n$. 6

Prove that

$$\cos 5\theta = 16 \cos^5 \theta - 20 \cos^3 \theta + 5 \cos \theta,$$

and hence solve the equation

$$32x^5 - 40x^3 + 10x = 1. \quad 9$$

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

$$(i) \frac{x(x-1)}{x+1}; \quad (ii) \frac{x^2}{\sqrt{(3-2x^3)}}; \quad (iii) \cos^2 x \cos 2x. \quad 4, 5, 5$$

Evaluate

$$\int_0^1 x \sin^{-1} x \, dx. \quad 6$$

9. Find the turning points on the curve whose equation is

$$y = \frac{(x-1)^2}{x^2+2},$$

stating, with proof, which is a maximum and which a minimum. 8

Investigate the manner in which the curve approaches its asymptote and sketch the curve. 5

Find the area enclosed by the curve, the x -axis, and the ordinates $x = 0$ and $x = \sqrt{2}$. 7

DYNAMICS

ADDITIONAL MATHEMATICAL SUBJECT

Tuesday, 23rd 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.

$$g = 32 \text{ ft./sec.}^2$$

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 moves along a fixed straight line so that its distance, s feet, from a fixed point O on the line is given by the relation

$$s = t^3 - 6t^2 + 9t,$$

where t (in seconds) is measured from the instant at which the particle is initially at O .

Determine (i) its initial velocity and acceleration ;

(ii) the times at which it is at rest ;

(iii) the time at which its acceleration is zero ;

(iv) the range of values of t for which the particle is moving towards O ;

(v) the range of values of t for which the velocity is decreasing.

15

2. A locomotive of mass 150 tons starts from rest along a level track and, for 1 minute, maintains a constant tractive force of 5,350 lb. wt. against resistances which amount to 10 lb. wt. per ton. Find the speed which the locomotive has then attained, and the horse-power which it is then developing.

9

If it now maintains this rate of working and the resistances remain constant, show that it will ultimately reach a speed of $53\frac{1}{2}$ miles per hour.

6

3. On the side BC of a square ABCD a point E is taken such that $BE = 3EC$. A force of 4 units acts along AB, a force of 10 units along AE, and forces of 3 units act along each of the sides BC, CD, and AD, the forces in each case acting in the direction indicated by the order of the letters. Find the magnitude and direction of the resultant of these forces, and determine the point in AB through which the line of action of the resultant passes. 15

4. Define simple harmonic motion.

A particle describing a simple harmonic motion of period $\frac{2\pi}{\omega}$ and amplitude r is initially at one extremity of an oscillation. Find, in terms of ω and r , its distance from the centre of oscillation and its velocity at time t . 6

The maximum velocity of a particle describing a simple harmonic motion is 5 feet per second, and its velocity is 3 feet per second when the displacement of the particle from the centre of oscillation is 7 inches. Find the amplitude and the period of the motion. 9

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

SECTION II

Only two questions should be attempted from this Section.

5. Prove that the centre of gravity of a uniform right circular cone of altitude h is on the axis of the cone at a distance of $\frac{1}{4}h$ from the base. 6

(i) From a uniform circular lamina of radius R a circular lamina of radius $\frac{1}{3}R$ is removed, the circumference of the smaller circle passing through O , the centre of the larger. Show that the centre of gravity of the remaining lamina is distant $\frac{R}{24}$ from O . 5

(ii) A uniform solid is formed by joining to the base of a right circular cone the plane face of a hemisphere of the same radius. If the composite solid rests in equilibrium when any point on the hemisphere is in contact with a horizontal surface, prove that the semi-vertical angle of the cone is 30° .

(You may assume that the centre of gravity of a hemisphere of radius r is at a distance $\frac{3r}{8}$ from the plane face of the hemisphere.) 9

6. Prove that, if a particle is moving with uniform speed v in a horizontal circle of radius r , it has an acceleration $\frac{v^2}{r}$ towards the centre of the circle.

5

If the bob of a conical pendulum is moving in a circle of radius r in a horizontal plane which is at a distance h below the point of suspension of the pendulum, prove that the period of the pendulum is $2\pi\sqrt{\frac{h}{g}}$.

7

Show that, if the bob is suddenly released and moves freely under gravity till it strikes a horizontal surface which is at a distance $5h$ below the point of suspension, it will then be distant $3r$ from the point on this surface immediately below the point of suspension.

8

7. State necessary and sufficient conditions for the equilibrium of a body acted on by three non-parallel co-planar forces.

3

A uniform rod of length $2l$ and weight W is on the point of slipping with one end on a horizontal surface and the other end against a vertical wall. If the limiting angle of friction at each end of the rod is λ and the angle of inclination of the rod to the vertical is θ , prove that $\theta = 2\lambda$.

9

In order just to keep the rod from slipping when the angle of inclination to the vertical is increased to $2\lambda + \alpha$, a couple is applied to the rod. Show that the moment of this couple is $Wl \sin \alpha$.

8

8. State Newton's Second Law of Motion.

Masses m_1 and m_2 ($m_1 > m_2$) are connected by a light inextensible string passing over a smooth fixed peg. Find the acceleration of the masses.

5

To one end of a light inextensible string passing over a smooth fixed peg is attached a mass A of 1 lb., and to the other end are attached masses B and C, each of 1 lb.; initially all three masses are held at rest. At a given instant they are released and one second later A collides and coalesces with a mass D of 1 lb. which is at rest.

Find (i) the velocity of the masses immediately after the impact ;

(ii) the distance through which B and C fall in the first two seconds of their motion.

8

At the end of one second from the instant of impact, the mass C drops off. Find what further time will elapse before B returns to its original starting position.

7

GEOMETRY

ADDITIONAL MATHEMATICAL SUBJECT

Friday, 19th 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 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

Marks

1. Prove that, if θ is the angle between the pair of straight lines represented by the equation $ax^2 + 2hxy + by^2 = 0$,

$$\tan \theta = \pm \frac{2\sqrt{(h^2 - ab)}}{a + b}$$

6

Find the value of c which makes the equation

$$8x^2 - 2xy - y^2 + 12x + 12y + c = 0$$

represent a pair of straight lines.

Draw a diagram showing these lines and the pair of lines represented by the equation $x^2 - 14xy + 13y^2 = 0$, and show that the quadrilateral enclosed by the four lines is cyclic.

14

2. Prove that, if the line $lx + my + n = 0$ intersects the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ at A and B, the equation

$x^2 + y^2 + 2gx + 2fy + c + k(lx + my + n) = 0$, where k is a constant, represents a circle passing through A and B.

4

Marks

Find the common points of the intersecting system of circles given by the equation

$$x^2 + y^2 + (2k + 4)x - (k + 4)y - (4k + 17) = 0. \quad 7$$

Show that the polars of the point P (4, 0) with respect to the members of the system are concurrent, and find the coordinates of the point of concurrence. 9

3. Prove that the gradient of the tangent at the point P ($at^2, 2at$) on the parabola $y^2 = 4ax$ is $\frac{1}{t}$; hence prove that the equation of the normal at P is $y + tx = 2at + at^3$. Prove also that the normal cuts the parabola again at the point whose parameter is $-t - \frac{2}{t}$. 8

P is a point on a given parabola with vertex A and PA is produced to cut the directrix at R. If PR is produced its own length to K, show that the line through K parallel to the axis of the parabola and the normal at P intersect on the parabola. 12

4. Define an ellipse. 1

An ellipse of eccentricity e has a focus at the point $(ae, 0)$, and a directrix the line $x = \frac{a}{e}$; show that its equation is $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ where $b^2 = a^2(1 - e^2)$. 6

A chord PP' of the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ is perpendicular to the major axis A'A. If A'P and AP' intersect in Q, show that Q lies on the hyperbola $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$. 13

5. Establish the equation of the tangent at the point (x_1, y_1) on the hyperbola $xy = c^2$, in the form $xy_1 + x_1y = 2c^2$. 5

A variable line through the fixed point A ($2a, 0$) meets the y-axis at L; the line through B ($0, 2a$) parallel to LA meets the x-axis at M. Find the locus of the mid-point of LM and show that LM is a tangent to this locus. 15

SECTION II

Marks

6. Prove that, if a transversal cuts the sides BC, CA, and AB of a triangle ABC at L, M, and N respectively,

$$\frac{BL}{LC} \cdot \frac{CM}{MA} \cdot \frac{AN}{NB} = -1. \quad 7$$

A circle passes through the vertices B and C of an acute-angled triangle ABC and cuts AB at D and AC at E. The line joining A to the mid-point of DE is produced to cut CD at F and BC at G.

Prove that (i) $\frac{CF}{FD} = \frac{AC}{AE}$; 5

(ii) $\frac{BG}{GC} = \frac{AB^2}{AC^2}$. 8

7. Prove that the arms of an angle and its internal and external bisectors together form a harmonic pencil. State a valid converse of this theorem. 7

The tangent at a point P on the circle on AB as diameter cuts the tangents at A and B in C and D respectively. Prove that, if O is the centre of the circle, O (AP, CD) is a harmonic pencil. 4

If E is the foot of the perpendicular from P to AB, and AD cuts PE at F, prove that PF = FE. 5

Show also that B, F, and C are collinear. 4

8. State a construction, using only a straight-edge, for the polar with respect to a given circle of a point outside the circle. 3

ABCD is a quadrilateral inscribed in a circle. AC and BD intersect at K ; AB and DC intersect at L ; AD and BC intersect at M. Prove that the triangle KLM is self-conjugate with respect to the circle. 5

If the tangents at B and D intersect at P, prove that P lies on LM. 6

Prove also that PD, LK, and the tangent at A are concurrent. 6

Marks

9. A triangular prism ABCLMN has a horizontal base ABC; AL, BM, CN are vertical and BCNM is a rectangle. The plane which bisects the angle between the planes ABML and ACNL cuts MN at X.

Prove that $\frac{MX}{XN} = \frac{AB}{AC}$.

9

Any points P, Q, and R are taken on AL, BM, and CN respectively, and the plane ALX cuts QR at Y.

Prove that $\frac{\Delta APQ}{\Delta APR} = \frac{QY}{YR}$.

11

LATIN

LOWER GRADE

Monday, 22nd March—9.15 A.M. to 11.45 A.M.

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Marks

1. Translate into English :—

Either (a) or (b)

(a) Caesar induces the boy king, Ptolemy, to send envoys to Achilles ; they are treacherously attacked.

De his rebus cum ageretur apud Caesarem, subito exercitus regis equitatusque omnis venire Alexandriam nuntiatur. Caesaris copiae non erant tantae ut eis, extra oppidum si esset pugnandum, confideret. relinquebatur⁽¹⁾ ut se oppido teneret consiliumque Achillae cognosceret. milites tamen omnes in armis esse iussit regemque hortatus est ut ex suis amicis legatos ad Achillam mitteret et, quid ipse vellet, ostenderet. a quo missi Dioscorides et Serapion, qui ambo legati Romae fuerant magnamque apud patrem regis auctoritatem habuerant, ad Achillam pervenerunt. quos ille, cum in conspectum eius venissent, priusquam audiret aut cuius rei causa missi essent cognosceret, corripere atque interficere iussit; quorum alter accepto vulnere per suos pro occiso sublatus,⁽²⁾ alter interfectus est.

⁽¹⁾ relinquebatur ut = it remained that.

⁽²⁾ pro occiso sublatus = was taken up for dead.

- (b) Advised by a Sibylline prophesy to "go fetch the Mother," the Romans consult Paeon and are bidden to bring the Mother of the Gods from her temple on Mount Ida.

Consulitur Paeon : "divorum arcessite matrem,"
 inquit ; "in Idaeo est invenienda iugo."
 mittuntur proceres.⁽¹⁾ Phrygiae tum sceptrā tenebat
 Attalus : Ausoniis rem negat ille viris.
 mira canam : longo tremuit cum murmure tellus,
 et sic est adytis⁽²⁾ diva locuta suis :
 "ipsa peti volui. ne sit mora, mitte volentem.
 dignus Roma locus, quo deus omnis eat."
 ille soni terrore pavens "proficiscere" dixit :
 "nostra eris : in Phrygios Roma refertur⁽³⁾ avos."
 mille manus coeunt : et picta coloribus ustis⁽⁴⁾
 caelestum matrem concava puppis habet.

(1) proceres = nobles.

(2) adytis . . . suis = in her shrine.

(3) Roma refertur = Rome traces her origin.

(4) ustis = encaustic (i.e. colours applied when heated).

26

2. Translate into English :—

Decius suggests to his soldiers how they may obtain more booty and how they may profitably dispose of it.

P. Decius igitur, ubi comperit per exploratores profectum esse Samnitium exercitum, advocato consilio, "cur per agros" inquit "vagamur, vicitim⁽¹⁾ circumferentes bellum? urbes et moenia adgrediamur." adprobantibus omnibus ad Murgantiam, validam urbem, oppugnandum exercitum ducit; tantusque ardor militum fuit et amore ducis et spe maioris praedae ut uno die vi atque armis urbem caperent. ibi Samnitium plurimi pugnantes circumventi captique et alia praeda ingens capta est. quae ne impedimentis gravibus agmen oneraret, convocari milites Decius iubet. "num hac" inquit "victoria sola aut hac praeda contenti eritis? omnes Samnitium urbes fortunaeque in urbibus relictæ vestrae sunt, quia legiones eorum tot proeliis fusas postremo finibus expulistis. vendite praedam et lucro inlicite⁽²⁾ mercatores ut sequantur agmen: ego suggeram⁽³⁾ quae vendatis. ad Romuleam hinc eamus, ubi vos labor haud maior, praeda maior manet."

(1) vicitim = from village to village.

(2) lucro inlicite = lure on with (the hope of) gain.

(3) suggerere = to furnish, to supply.

36

- | | <i>Marks</i> |
|--|--------------|
| 3. Translate into Latin :— | |
| (1) We are ashamed of you. You ought not to have done that. | 3 |
| (2) I feared that you would set out in the middle of the night. | 3 |
| (3) If you decide to attack the temple, we will resist you. | 3 |
| (4) The teacher asked the pupils whether they could find those flowers for him. | 3 |
| (5) Surely our friends do not think we shall ever forget them? | 4 |
| (6) Let us try to persuade him to go to Italy with us. | 4 |
| 4. (a) Give the first person singular of the present subjunctive of :—
nolle, prodesse, polliceri, mori, abire, fieri. | 3 |
| (b) Give the genitive plural of :—fluctus, onus, dives, gravior, canis, dens. | 3 |
| (c) Give English synonyms, derived from Latin, for the following words :—farming, crowd, yearly, frightened. | 2 |
| 5. (a) In not more than two sentences for each, comment on the origin and the modern application of any two of the following phrases :—a Pyrrhic victory, Fabian tactics, crossing the Rubicon, a triumphal procession. | 4 |
| (b) Give the name of the Roman god of the sea.
Give the name of a famous Roman writer of lyric poetry.
Give the name of the battle at which Octavian defeated Antony and Cleopatra.
Give the name of the distinguishing garment worn by the principal Roman magistrates.
Give the name of a Roman seaport in the south of Italy.
Put the following events in chronological order, placing the earliest first :—the sack of Rome by the Gauls, the battle of Philippi, Caesar's first invasion of Britain. | 3 |
| (c) In about fifty or sixty words tell what you know about Coriolanus or about Sulla. | 3 |

LATIN

HIGHER GRADE—(FIRST PAPER)

Monday, 22nd March—9.15 A.M. to 11.45 A.M.

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Translate into English :—

1. Cicero gives warning of the danger within the city.

Marks

Mihi credite, iudices, in discrimen extremum venimus ; nihil est iam unde nos reficiamus aut ubi lapsi resistamus. hostis est enim in urbe, in foro—di immortales ! sine gemitu hoc dici non potest—non nemo etiam in illo sacrario reipublicae, in ipsa, inquam, curia non nemo hostis est. di faxint⁽¹⁾ ut meus conlega, vir fortissimus, hoc Catilinae nefarium latrocinium armatus opprimat ! ego togatus vobis bonisque omnibus adiutoribus hoc periculum consilio discutiam et comprimam. sed quid tandem fiet, si haec elapsa de manibus nostris in eum annum qui consequitur redundarint ? unus erit consul, et is non in administrando bello sed in deligendo conlega occupatus. versabitur in urbe furor, in curia timor, in foro coniuratio ; omni autem in sede ac loco ferrum flammamque metuemus. quae iam diu comparantur, eadem ista omnia, si ornata suis praesidiis erit res publica, facile et magistratuum consiliis et privatorum diligentia comprimentur.

(1) faxint = faciant.

45

2. Ilioneus tells the king that the Trojans have not been driven by a storm to his country, but have come willingly, guided by the Fates.

Dixerat : et dicta Ilioneus sic voce secutus :
 “ rex, genus egregium Fauni, nec fluctibus actos
 atra subegit hiems vestris succedere terris,
 nec sidus regione viae⁽¹⁾ litusve fefellit :
 consilio hanc omnes animisque volentibus urbem
 afferimur, pulsī regnis quae maxima quondam
 extremo veniens sol aspiciebat Olympo⁽²⁾.
 dis sedem exiguum patriis litusque rogamus
 innocuum et cunctis undamque auramque patentem.
 multi nos populi, multae—ne temne quod ultro
 praeferimus manibus vittas ac verba precantia—
 et petiere sibi et voluere adiungere gentes ;
 sed nos fata deum vestras exquirere terras
 imperiis egere suis. hinc Dardanus ortus :
 huc repetit⁽³⁾ iussisque ingentibus urguet Apollo
 Tyrrhenum ad Thybrim et fontis vada sacra Numici.

(1) regione viae = in our course.

(2) extremo Olympo = from Olympus' utmost border.

(3) huc repetit = recalls us hither.

37

Scan the line beginning “extremo,” and the next two lines, marking the principal caesura in each.

3

Marks

3. The defeat of Porus, the Indian leader, and King Alexander's clemency towards him.

Iam Alexander, pertinacia Pori cognita, vetabat resistentibus parci. ergo undique in pedites et in ipsum Porum tela congesta sunt; quibus tandem gravatus labi ex elephanto coepit. rex spoliari corpus Pori, interemptum esse credens, iussit et qui detraherent loricam vestemque concurrere; tum belua⁽¹⁾ spoliante coepit appetere corpusque domini rursus dorso suo imponere. ergo telis undique obruitur; confossoque eo in vehiculum Porus imponitur. quem rex ut vidit adlevantem oculos, non odio sed miseratione commotus, "quae amentia," inquit, "te coegit, rerum mearum cognita fama, belli fortunam experiri?" at ille, "neminem me fortiozem esse censebam. meas enim noveram vires, nondum expertus tuas; fortiozem esse te belli docuit eventus." aegrum curavit rex haud secus quam si pro ipso pugnasset; mox donavit ampliore regno quam tenuit.

(¹) belua = the beast.

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LATIN

HIGHER GRADE—(SECOND PAPER)

Monday, 22nd 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.

Marks

1. Translate into Latin :—

In the same year Tacfarinas, who had been routed by Camillus in the previous summer, renewed hostilities in Africa, hoping to secure an easy victory. After destroying many villages and carrying off much booty, he finally had the temerity to surround the camp of a Roman cohort. This cohort was under the command of Decrius, a soldier experienced in warfare, who considered it disgraceful that Romans should be besieged by Africans. Cheering on his men to offer battle in the open plain, he drew up his line in front of his entrenchments. At the first attack the cohort was driven back, but its commander, throwing himself fearlessly in the path of those who were retreating, rebuked the standard-bearers for allowing Roman soldiers to turn their backs on an enemy whom they had so often defeated. At the same time he received several wounds. Although his eye had been pierced by an arrow, he resolutely resisted the enemy and did not stop fighting until he fell deserted by his men.

50

2. Translate into Latin :—

Marks

- | | |
|--|---|
| (1) At last the Romans were persuaded to elect him consul a second time. | 3 |
| (2) There can be no doubt that she deserved that punishment, but I fear that you will admire her. | 4 |
| (3) What was he to do? He was too wise to remain in Athens among so many enemies. | 4 |
| (4) We adopted this plan in order to discover more quickly the extent of the danger. | 4 |
| (5) Our teacher will be angry with us if we admit that we have forgotten the story. | 4 |
| (6) No one will prevent you from residing in Italy provided that you do not try to return to Rome. | 4 |
-
- | | |
|--|---|
| 3. (a) Give the nominative singular masculine of the future participle of:—corripio, obliviscor, volvo, requiro, fingo, torqueo. | 3 |
| (b) Give the ablative singular of:—pignus, paries, lac, particeps. | 2 |
| (c) Give the Latin for :—blind in one eye, hither and thither, as soon as possible, on 23rd April. | 2 |

GREEK

LOWER GRADE

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

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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.

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1. Translate into English :—

Marks

- (a) A Persian raid on Alexander's fleet is frustrated by the king's prompt action.

Οἱ δὲ Πέρσαι τὰς μὲν πολλὰς τῶν νεῶν πρὸ τοῦ λιμένος παρέταξαν, εἴ πως⁽¹⁾ ἐγκαλέσαιτο ἐς τὸ πέλαγος τοὺς Μακεδόνας· πέντε δὲ αὐτῶν ἔπεμψαν εἰς τὸν μεταξὺ τῆς τε Λάδης νήσου καὶ τοῦ στρατοπέδου λιμένα, ἐλπίσαντες κενὰς καταλήψεσθαι τὰς Ἀλεξάνδρου ναῦς. τοὺς γὰρ ναύτας ἀποσκηδάννυσθαι τὸ πολὺ⁽²⁾ ἀπὸ τῶν νεῶν πεπυσμένοι ᾗσαν.

⁽¹⁾ εἴ πως = in the hope that.

⁽²⁾ τὸ πολὺ = for the most part.

ἀλλὰ μέρος μὲν τι ἀπὴν τῶν ναυτῶν, ἐκ δὲ τῶν παρόντων
 ξυμπληρώσας Ἀλέξανδρος δέκα ναῦς, ὡς προσπλευούσας τὰς
 πέντε τῶν Περσῶν κατεῖδε, πέμπει ἐπ' αὐτάς, ἐμβάλλειν⁽¹⁾
 ἀντιπρώρους κεύσας. οἱ δὲ ἐν ταῖς πέντε ναυσὶ τῶν
 Περσῶν, ὡς παρ' ἐλπίδα ἀναγομένους τοὺς Μακεδόνας ἐπὶ
 σφᾶς εἶδον, ὑποστρέψαντες ἔφευγον πρὸς τὸ ἄλλο ναυτικόν.
 καὶ ἡ μὲν Ἰασσέων⁽²⁾ ναῦς ἀλίσκεται αὐτοῖς ἀνδράσιν ἐν τῇ
 φυγῇ, αἱ δὲ τέσσαρες ἔφθασαν καταφυγοῦσαι εἰς τὰς
 οἰκείας τριήρεις. οὕτω δὲ ἀπέπλευσαν ἄπρακτοι ἐκ Μιλήτου
 οἱ Πέρσαι.

(1) ἐμβάλλειν ἀντιπρώρους = to ram.

(2) Ἰασσέων = of the Iassians.

(b) The young men who have rescued the infant Pyrrhus from pursuit by his enemies find a refuge for him at the court of Glaucias.

Οἱ δὲ νεανίαι οὕτω σωθέντες καὶ φθάσαντες τὴν δίωξιν
 εἰς Ἰλλυρίους ἦλθον πρὸς Γλαυκίαν τὸν βασιλέα· καὶ
 καθεζόμενον αὐτὸν εὐρόντες οἴκοι μετὰ τῆς γυναικὸς ἐν
 μέσῳ τὸ παιδίον ἐπὶ τῆς γῆς κατέθεσαν. ὁ δὲ βασιλεὺς,
 τοὺς τοῦ Πύρρου ἐχθροὺς δεδοικώς, σιωπὴν εἶχε πόλυν
 χρόνον βουλευόμενος· ἐν τούτῳ δὲ ὁ Πύρρος ἀπ' αὐτομάτου
 προσεργύσας⁽¹⁾ καὶ λαβόμενος τοῦ ἱματίου ταῖς χερσὶ καὶ
 προσεξαναστὰς πρὸς τὰ γόνατα τοῦ Γλαυκίου γέλωτα
 πρῶτον, εἶτα οἶκτον⁽²⁾ παρέσχεν. τὸ δὲ τέλος τὸν Πύρρον
 παρέδωκε τῇ γυναικὶ ὁ βασιλεὺς, κεύσας ἅμα τοῖς τέκνοις
 τρέφεσθαι· καὶ μικρὸν ὕστερον ἐξαιτουμένων τὸ παιδίον τῶν
 πολεμίων καὶ διακρίσια τάλαντα διδόντων, οὐκ ἐξέδωκεν,
 ἀλλὰ καὶ γενόμενον δώδεκα ἐτῶν καταγαγὼν εἰς τὴν
 Ἠπειρον βασιλέα κατέστησεν.

(1) προσεργύσας = having crept towards.

(2) οἶκτος = pity.

2. Translate into Greek :—

Marks

- | | |
|--|---|
| (1) All good citizens ought to be willing to fight for their country. | 3 |
| (2) Will the teacher not prevent the boys from saying such things ? | 3 |
| (3) We knew that the soldiers would save these old men. | 3 |
| (4) You were not so foolish, Athenians, as to trust that barbarian. | 3 |
| (5) He fled from the city because he feared that he would be put to death. | 4 |
| (6) The majority wondered whether the young man would be wiser than his brother. | 4 |
3. (a) Give the aorist infinitive passive of πράττω, πείθω, τίθημι and the second singular of the present imperative, active, of δηλῶ, ἴστημι, οἶδα. 3
- (b) Give the accusative singular of ὁδοῦς, κύων, Δημοσθένης, πατρίς, κέρας, βοῦς. 3
- (c) Give one English word derived from each of the following Greek words :—ὕπνος, δεσπότης, δύναμις, ἄριστος. 2
4. (a) Tell in two sentences for each what you know about Aristides and Epaminondas. 4
- (b) Give the name of the Greek god of war.
 Give the name of the narrow piece of land which links the Peloponnese with the rest of Greece.
 Give the name of the leader of the Greeks at the battle of Plataea (479 B.C.).
 Give the name of the earliest of the three great Greek writers of tragedy.
 Give the Greek word for any Greek measure of length.
 Give the name of the Lydian king who was conquered by Cyrus.
 Give the name of the hero who slew the Minotaur.
 Give the designation of foreigners resident in Athens. 4
- (c) In about fifty or sixty words tell what you know about the battle of Salamis or about the upbringing of a Spartan boy. 3

GREEK

HIGHER GRADE—(FIRST PAPER)

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Translate into English :—

Marks

1. The speaker reminds the Athenians how their ancestors had once taken the lead in persuading the other states in the Amphictyonic League to punish violators of the shrine at Delphi.

Ταύτην ποτὲ τὴν χώραν, ᾧ ἄνδρες Ἀθηναῖοι, κατώκησαν Κιρραῖοι καὶ Ἀκραγαλλίδαι, γένη παρανομώτατα, οἱ εἰς τὸ ἱερὸν τὸ ἐν Δελφοῖς ἡσέβουν, ἐξημέρτανον δὲ καὶ εἰς τοὺς Ἀμφικτύοντας. ἀγανακτήσαντες δ' ἐπὶ τοῖς γενομένοις μάλιστα μέν, ὡς λέγεται, οἱ πρόγονοι οἱ ὑμέτεροι, ἔπειτα δὲ καὶ οἱ ἄλλοι Ἀμφικτύονες μαντεῖαν⁽¹⁾ ἐμαντεύσαντο παρὰ τῷ θεῷ, τίνη χρῆ τιμωρία τοὺς ἀνθρώπους τούτους μετελθεῖν. καὶ αὐτοῖς ἀναιρεῖ⁽²⁾ ἡ Πυθία πολεμεῖν Κιρραίοις καὶ Ἀκραγαλλίδαις παντ' ἥματα καὶ πάσας νύκτας, καὶ τὴν χώραν αὐτῶν ἐκπορθήσαντας⁽³⁾ καὶ αὐτοὺς ἀνδραποδισαμένους ἀναθεῖναι⁽⁴⁾ τῷ Ἀπόλλωνι τῷ Πυθίῳ, καὶ ταύτην τὴν χώραν μῆτ' αὐτοὺς ἐργάζεσθαι μῆτ' ἄλλον ἔαν. λαβόντες δὲ τὸν χρησμὸν οἱ Ἀμφικτύονες ἐψηφίσαντο, Σόλωνος εἰπόντος Ἀθηναίου τὴν γνώμην, ἐπιστράτευσεν ἐπὶ τοὺς ἀνθρώπους τούτους κατὰ τὴν μαντεῖαν τοῦ θεοῦ· καὶ συναθροίσαντες δύναμιν ἱκανὴν τῶν Ἀμφικτυόνων ἐξηνδραποδίσαντο τοὺς ἀνθρώπους καὶ τὴν πόλιν αὐτῶν κατέσκαψαν· καὶ ἐπὶ τούτοις ὄρκον ὤμοσαν ἰσχυρὸν μῆτ' αὐτοὶ ταύτην τὴν γῆν ἐργάσεσθαι μῆτ' ἄλλω ἐπιτρέψειν.

(1) μαντεῖαν ἐμαντεύσαντο παρὰ τῷ θεῷ = inquired at the god's oracle.

(2) ἀναιρεῖν = to ordain (in answer to the inquiry).

(3) ἐκπορθεῖν = to pillage, to devastate.

(4) ἀναθεῖναι = to consecrate, to devote.

40

2. The Athenians reject a Corinthian accusation that they are breaking the peace ; they say that they are justified in preventing the Corinthians from avenging themselves on the people of Corecra.

Τῇ δὲ ὑστεραία ἀναγαγόμεναι αἵ τε Ἀττικαὶ τριάκοντα νῆες καὶ τῶν Κερκυραίων ὅσαι πλώιμοι ἦσαν ἐπέπλευσαν ἐπὶ τὸν λιμένα ἐν ᾧ οἱ Κορίνθιοι ὥρμουν, βουλόμενοι εἰδέναι εἰ ναυμαχήσουσιν. οἱ δὲ τοῦ οἴκαδε πλοῦ μᾶλλον

δισκοῦν⁽¹⁾ ὅπη κομισθήσονται,⁽²⁾ δεδιότες μὴ οἱ Ἀθηναῖοι νομίσαντες λελύσθαι τὰς σπονδάς, διότι εἰς χεῖρας ἤλθον, οὐκ ἔῴσι σφᾶς ἀποπλεῖν. ἔδοξεν οὖν αὐτοῖς ἄνδρας ἄνευ κηρυκείου⁽³⁾ προσπέμψαι τοῖς Ἀθηναίοις καὶ πείραν⁽⁴⁾ ποιήσασθαι. πέμψαντές τε ἔλεγον τοιάδε. ἄδικεῖτε, ὦ ἄνδρες Ἀθηναῖοι, πολέμου ἄρχοντες καὶ σπονδὰς λύοντες· ἡμῖν γὰρ πολεμίους τοὺς ἡμετέρους τιμωρομένοις ἐμποδῶν ἴστασθε ὅπλα ἀνταιρόμενοι. εἰ δ' ὑμῖν γνώμη ἐστὶ κωλύειν τε ἡμᾶς ἐπὶ Κέρκυραν ἢ ἄλλοσε εἴ ποι βουλόμεθα πλεῖν καὶ τὰς σπονδὰς λύετε, ἡμᾶς τούσδε πρῶτους λαβόντες χρήσασθε ὡς πολεμίους.' οἱ μὲν δὴ τοιαῦτα εἶπον· οἱ δὲ Ἀθηναῖοι τοιάδε ἀπεκρίναντο. 'οὔτε ἄρχομεν πολέμου, ὦ ἄνδρες Πελοποννήσιοι, οὔτε τὰς σπονδὰς λύομεν, Κερκυραίοις δὲ τοῖσδε ξυμμάχοις οὔσι βοηθοὶ ἤλθομεν. εἰ μὲν οὖν ἄλλοσέ ποι βούλεσθε πλεῖν, οὐ κωλύομεν· εἰ δὲ ἐπὶ Κέρκυραν πλεύσεσθε, οὐ περιοφόμεθα κατὰ τὸ δυνατόν.'

(1) διασκοπεῖν + genitive = to be concerned about.

(2) κομίζεσθαι = to travel, to journey (here 'to get back').

(3) κηρύκειον = a herald's wand.

(4) πείραν ποιήσασθαι = to test their intentions.

3. Either (a) or (b).

(a) Telemachus reveals his identity to the fugitive Theoclymenus, gives a favourable reception to his plea for aid, and promises him hospitality.

Τὸν δ' αὖ Τηλέμαχος πεπνυμένος ἀντίον ἦῤδα·
 'τοιγὰρ ἐγὼ τοι, ξεῖνε, μαλ' ἀτρεκέως ἀγορεύσω.
 ἐξ Ἰθάκης γένος εἰμί, πατήρ δέ μοι ἐστὶν Ὀδυσσεύς,
 εἴ ποτ' ἔην. νῦν δ' ἤδη ἀπέφθιτο λυγρὸν ὄλεθρον.
 τοῦνεκα νῦν ἐτάρους τε λαβὼν καὶ νῆα μέλαιναν
 ἤλθον πευσόμενος πατρὸς δὴν οἰχομένοιο.'

Τὸν δ' αὖτε προσέειπε Θεοκλύμενος θεοειδής·
 'οὔτω τοι καὶ ἐγὼν ἐκ πατρίδος, ἄνδρα κατακτὰς
 ἔμφυλον.⁽¹⁾ πολλοὶ δὲ κασίγνητοί τε ἔται⁽²⁾ τε
 Ἄργος ἀν' ἱππόβοτον, μέγα δὲ κρατέουσιν Ἀχαιῶν.

τῶν ὑπαλευάμενος⁽³⁾ θάνατον καὶ κῆρα μέλαιναν Marks
 φεύγω, ἐπεὶ νῦ μοι αἶσα κατ' ἀνθρώπους ἀλάλησθαι.⁽⁴⁾
 ἀλλὰ με νηὶς ἔφεσσαι, ἐπεὶ σε φυγὼν ἰκέτευσα,
 μὴ με κατακτείνωσι· διωκέμεναι γὰρ οὕτω.'

Τὸν δ' αὖ Τηλέμαχος πεπνυμένος ἀντίον ἡῦδα·
 'οὐ μὲν δὴ σ' ἐθέλοντά γ' ἀπώσω νηὶς εἵσης.
 ἀλλ' ἔπευ· αὐτὰρ κεῖθι φιλήσσαι, οἷά κ' ἔχωμεν.'

(1) ἔμφυλος = of the same tribe or race.

(2) ἔται = fellow-clansmen.

(3) ὑπαλευάμενος = shunning, avoiding.

(4) ἀλάλησθαι = to wander.

37

Scan the line beginning οὕτω τοι, and the next two lines, marking the principal caesura in each.

3

(b) Demophon tells the children of Heracles, who have sought refuge with him, that he is unwilling to sacrifice a maiden to Kore (Persephone) in order to secure victory over their enemies.

Δη. σφάζει κελεύουσίν με παρθένον Κόρη
 Δήμητρος, ἣτις ἐστὶ πατὴρ εὐγενοῦς.
 ἐγὼ δ' ἔχω μὲν, ὡς ὄρεας, προθυμίαν
 τοσήνδ' ἐς ὑμᾶς· παῖδα δ' οὔτ' ἐμὴν κτενῶ
 οὔτ' ἄλλον ἀστῶν τῶν ἐμῶν ἀναγκάσω
 ἄκονθ'. ἐκὼν δὲ τίς κακῶς οὕτω φρονεῖ,
 ὅστις τὰ φίλτατ' ἐκ χερῶν δώσει τέκνα;
 καὶ νῦν πικρὰς ἂν συστάσεις⁽¹⁾ ἂν εἰσίδοις,
 τῶν μὲν λεγόντων ὡς δίκαιον ἦν ξένοις
 ἰκέταις ἀρήγειν, τῶν δὲ μωρίαν ἐμὴν
 κατηγορούντων· εἰ δὲ δὴ δράσω τόδε,
 οἰκεῖος ἤδη πόλεμος ἐξαρτύεται.⁽²⁾
 ταῦτ' οὖν ὅρα σὺ καὶ συνεξεύρισχ' ὅπως
 αὐτοὶ τε σωθήσεσθε καὶ πέδον τόδε,
 ἀγὰρ πολίταις μὴ διαβληθήσομαι.
 οὐ γὰρ τυραννίδ' ὥστε βαρβάρων ἔχω.

(1) σύστασις = conflict.

(2) ἐξαρτύεται = is being set afoot, i.e. will arise.

37

Scan the line beginning ἰκέταις, and the next two lines, marking the principal caesura in each.

3

GREEK

HIGHER GRADE—(SECOND PAPER)

Friday, 19th 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

Not long afterwards Callicratidas went up to Lydia and proceeded at once to the house of Cyrus, in order to ask from the Persian the money which the Spartans needed. On his arrival, he ordered the guards to announce to Cyrus that Callicratidas had come and wished to speak to him. When one of the guards said that his master was dining and was not at leisure,⁽¹⁾ Callicratidas replied “ Well,⁽²⁾ I am willing to wait until Cyrus has leisure to converse with me.” After a short time, however, fearing that, if he stayed longer, he might seem foolish to the barbarians, he went away. The next day he came once more to the door, and again the guards refused to let him enter. In great indignation he set off for Ephesus, swearing that, as soon as he returned to Sparta, he would persuade the Greeks to make peace with one another and to form an alliance against the barbarians.

⁽¹⁾ I am at leisure = σχολή ἐστί μοι. ⁽²⁾ Use οὐν.

48

2. Translate into Greek :—

(1) If they had repented of their folly, our friends would not now be in prison.

4

(2) Whenever we return there, we ask whether the old woman still lives in that house.

4

(3) May you never forget those who have saved their country in this war !

4

(4) Let us try to reach the city before them and not continue to waste time here.

4

(5) This dog has attacked so many children that we shall have to destroy him immediately.

4

3. (a) Give the nominative singular masculine of the aorist participle active of ἀφίημι, ἀμαρτάνω, ἐσθίω, and the perfect infinitive of ἐργάζομαι, κτῶμαι, ἀφικνούμαι.

3

(b) Give the dative plural of :—υἱός, νεώς, τεῖχος, γόνυ.

2

(c) Give the Greek for :—at the beginning of spring, day by day, along the river, to esteem highly.

2

HEBREW

LOWER GRADE

Tuesday, 23rd March—9.30 A.M. to 12 NOON

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 bad spelling and bad punctuation, and for writing that is difficult to read.

Answers in Hebrew must be written in the square character.

Marks

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

וַיַּעֲשׂוּ בְנֵי-יִשְׂרָאֵל הָרַע בְּעֵינֵי יְהוָה וַיִּתְּנֵם יְהוָה בְּיַד-מֶדֶן
שֶׁבַע שָׁנִים: וַתַּעַז נֹד-מֶדֶן עַל-יִשְׂרָאֵל מִפְּנֵי מֶדֶן עָשׂוּ לָהֶם
בְּנֵי יִשְׂרָאֵל אֶת-הַמִּנְהָרוֹת אֲשֶׁר בְּחָרִים וְאֶת-הַמְּעָרוֹת וְאֶת-
הַמְּצָדוֹת: וְהָיָה אִם-זָרַע יִשְׂרָאֵל וְעָלָה מֶדֶן וַעֲמָלָק וּבְנֵי-קָדָם
וְעָלוּ עֲלָיו: וַיַּחֲנוּ עֲלֵיהֶם וַיִּשְׁחִיתוּ אֶת-יְבוּל הָאָרֶץ עַד-בִּזְאוֹ
עֲזָה וְלֹא יִשְׁאִירוּ מִחַיָּה בְּיִשְׂרָאֵל וְשָׂה וְשׁוֹר וַחֲמֹר: כִּי לָהֶם
וּלְמִקְיָהֶם אֵין מִסְפָּר וַיָּבֹאוּ בָּאָרֶץ לְשַׁחֲתָהּ: וַיִּדַּל יִשְׂרָאֵל מְאֹד
מִפְּנֵי מֶדֶן וַיִּזְעֲקוּ בְנֵי יִשְׂרָאֵל אֶל-יְהוָה:

(After Judges vi, 1-6)

20

- (b) על־נְהָרוֹת בָּבֶל שָׁם יִשְׁכְּנוּ גַם־בָּכִינוּ בְּזָכְרֵנוּ אֶת־צִיּוֹן :
- עַל־עַרְבִים בְּתוֹכָהּ תָּלִינוּ בְּנוֹרוֹתֵינוּ :
- כִּי שָׁם שְׁאַלְנוּ שׁוֹבֵינוּ דְּבַר־יִשְׁרָאֵל¹ וְתוֹלְלֵינוּ שְׁמַחָה
שִׁירוֹ לָנוּ מִשִּׁיר צִיּוֹן :
- אִיךָ נָשִׁיר אֶת־שִׁיר־יְהוָה עַל אֲדָמַת גִּבְרָה :
- אִם־אֲשַׁבְּחֶנּוּ יְרוּשָׁלַם תִּשָּׁבַח יְמִינִי :
- תִּדְבֹק־לְשׁוֹנִי לְחִבִּי אִם־לֹא אֲזַכְּרֶכִּי
- אִם־לֹא אֶעֱלֶה אֶת־יְרוּשָׁלַם עַל־רֹאשׁ שְׁמַחָתִי :
- זָכֹר יְהוָה לִבְנֵי אֲדוֹם אֵת יוֹם יְרוּשָׁלַם
- הָאֲמָרִים² עָרוֹ עָרוֹ עַד הַיְסוֹד בָּהּ :
- בְּתֹכָהּ הִשְׁדִּידָהּ אֲשֶׁר־יִשְׁעֵלָם־לָהּ
- אֶת־גְּמוּלָהּ שְׁנִמְלֶתָ לָנוּ :
- אֲשֶׁר־יִשְׁאַחֲזוּ וְנִפֹּץ אֶת־עַלְלֶיהָ אֶל־הַסֶּלַע :

¹ תוֹלֵל = Tormentor

² עָרָה = To be naked

(Psalm cxxxvii)

(c)

בְּרַבֶּת עַם

תִּחְנֹקֶנָּה יְדֵי כָל־אֲחֵינוּ ¹הַמְּחֻנָּנִים
 עֲפָרוֹת אֶרְצֵנוּ בְּאֶשֶׁר הֵם שָׁם ;
 אֶל יִפֹּל רוּחְכֶם—²עֲלִיזִים מִתְרוֹנָנִים
 בָּאוּ שָׁבָם אַחֵד לְעֶזְרַת הָעָם !

הֵן סוֹפְרִים אֲנַחְנוּ אֶת־נֹדְכֶם ³וְחוֹבְכֶם
 וְנִפְי הַדְּמָעוֹת הִזְעַת הָאֶף,
 הַיּוֹרְדִים כְּטַל לְיִשְׂרָאֵל וּמְשׁוֹבְכִים
 וּבָשׁוּ הַנִּלְאָה חֲשׂוֹמָה בְּכָף.

אֶל תֹּאמְרוּ : קִטְנוּ—הִטָּרַם תִּתְּבוֹנֵנוּ
 בְּנֵי אֲבִיר יַעֲקֹב הַחֹלְכִים בְּקָרֵב ;
 מִימֵי זְרָבָל יְדִינוּ לֹא כֹונֵנוּ
 מִכָּעַל אֲדִירִים בְּמַהוּ וְרָב.

מִי בָּז לַיּוֹם קִטְנוֹת? הַבּוֹז לַמִּתְלוֹצְצִים
 מִלְטוּ אֶת־עַמְּכֶם וְאֶת־עַשׂוֹ—
 עַד־נִשְׁמַע מִרְאֲשֵׁי הַהָרִים ⁴מִתְפֹּאֶצִּים
 קוֹלוֹת אֲדוֹנֵי הַקּוֹרָאִים : עָלוּ !

¹ חֻנָּן = To treat with loving care.² עֲלִיז = Exultant.³ חוֹב = Debt or Sin.⁴ פּוֹץ = To scatter.

2. Parse the words underlined in the two passages which you have translated. 18
3. Render into pointed Biblical Hebrew :—
- (a) In the days of the judges the men of the cities of the land went out and fought against the enemies of the people.
- (b) And the men of Israel went up to the city and took wives.
- (c) I have found your dog which you seek. Take him.
- (d) And the man of God went out of the house of his friend and wept. 22
4. Point and translate into English :—

(a) אמר אלהים אל מלכם בחלום חנה אתה מת על האשה
אשר לקחת והיא בעלת בעל :

(b) אמר המלך לאשת עבדו עמדי לפני :

(c) השמר לך פן תברת ברית ליושב הארץ ולקחת מבנותיו
לבניך :

(d) וישלחו ויקראו את האיש וימליכוהו על עם הארץ וימלך
ימים רבים :

20

HEBREW

HIGHER GRADE—(FIRST PAPER)

Tuesday, 23rd 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)

וַיְהִי בִשְׁמֵעַ הַמֶּלֶךְ הַזֶּה תִּזְקְיָהוּ וַיִּקְרַע אֶת-בְּגָדָיו וַיַּחֲבֹס בִּשְׁקָ וַיָּבֹא
בֵּית יְהוָה: וַיִּשְׁלַח אֶת-אֲלִיָּקִים אֲשֶׁר עַל-הַבַּיִת וְאֵת שָׂבְנָא
הַסּוֹפֵר וְאֵת זִקְנֵי הַכֹּהֲנִים מִתְּבָסִים בִּשְׁקִים אֶל-יִשְׁעֵיהֶוּ כִּי-
אֲמוּץ תִּנָּבִיא: וַיֹּאמְרוּ אֵלָיו כֹּה אָמַר תִּזְקְיָהוּ יוֹם צָרָה
וְתוֹכַחַתָּה וְנִאָצְתָּה הַיּוֹם הַזֶּה כִּי בָאוּ בָנִים עַד-מִשְׁפַּר וְכַח אֵין
לְלֶדֶת: אוֹלֵי יִשְׁמַע יְהוָה אֱלֹהֶיךָ אֵת דְּבָרֵי רַב-שָׁקָה אֲשֶׁר
שָׁלַחוּ מֶלֶךְ-אַשּׁוּר אֲדָנָיו לְחַרֵּף אֱלֹהִים חֵי וְהוֹכִיחַ בְּדָבָרִים
אֲשֶׁר שָׁמַע יְהוָה אֱלֹהֶיךָ וַנִּשְׁאַתָּ תִּפְלָה בְּעַד הַשְּׂאֲרִית הַנִּמְצָאָה:
וַיָּבֹאוּ עַבְדֵי הַמֶּלֶךְ הַזֶּה תִּזְקְיָהוּ אֶל-יִשְׁעֵיהֶוּ: וַיֹּאמֶר אֲלֵיהֶם יִשְׁעֵיהֶוּ
כֹּה תֹאמְרוּן אֶל-אֲדֹנֵיכֶם כֹּה אָמַר יְהוָה אֱלֹהֵיכֶם מִפְּנֵי
הַדְּבָרִים אֲשֶׁר שָׁמַעְתָּ אֲשֶׁר נָדְפוּ נַעֲרֵי מֶלֶךְ אַשּׁוּר אוֹתִי: הֲנִי
נֹתֵן בּוֹ רוּחַ וְשָׁמַע שְׁמוּעָה וְשָׁב אֶל-אַרְצוֹ וְהַפְּלֵתִיו בְּחֶרֶב
בְּאַרְצוֹ:

(Isaiah xxxvii, 1-7)

29

(b)

יַעֲנֶה יְהוָה בַּיּוֹם צָרָה יִשְׁנֹבֵבָה שֵׁם אֱלֹהֵי יַעֲקֹב:
וַיִּשְׁלַח-עֲזָרָה מִקְדָּשׁ וּמִצִּיּוֹן יִסְעָרָךְ:
יִזְכֹּר כָּל-מִנְחֹתֶיךָ וְעוֹלֹתֶיךָ יִדְשָׁנָה-סֶלֶה:
יִתְּנֶלְךָ בְּלִבְבֶּךָ וּכְל־עֲצָתְךָ יִמְלֵא
נִרְנָנָה בִישׁוּעָתְךָ וּבִשְׁם-אֱלֹהֵינוּ נִדְּגֵל
יִמְלֵא יְהוָה כָּל-מִשְׁאֲלוֹתֶיךָ:
עֲתָה יִדְעָתִי כִי הוֹשִׁיעַ יְהוָה מִשִּׁיחוֹ
יַעֲנֶהוּ מִשְׁמִי קִדְשׁוֹ בְּנִבְרֹת יִשַׁע יָמִינוּ:
אֵלֶּה בָּרֶכֶב וְאֵלֶּה בַּסּוּסִים וְאַנְחֵנוּ בְּשֵׁם-יְהוָה אֱלֹהֵינוּ נִזְכִּיר:
הַמָּה בָּרְעוּ וַיִּפְּלוּ וְאַנְחֵנוּ קָמְנוּ וְנִתְעוֹדָד:
יְהוָה הוֹשִׁיעָה הַמֶּלֶךְ יַעֲנֵנוּ בַיּוֹם-קָרְאָנוּ:

(Psalm xx)

29

(c)

בַּעֲרוֹב הַיּוֹם
 בֵּין עָבִי אֵשׁ וְעָבִי דָם
 הַשְׁמֵשׁ רָד לִפְנֵי תַּיִם,
 וְקִרְנֵי אוֹר בְּעֵד הָעֵב,
 בַּחֲנִיתוֹת יִמְחָרְמוֹת רַב־
 וַיִּשֶׁק הַכֶּכֶר נֹהַ נֹה,
 וַיִּצֵּת־אֵשׁ בִּירֵק הַסֶּבֶד־
 עַל־רֹאשׁ הַחֶרֶשׁ יִצֵּק אוֹר,
 וַיִּתֵּן אֵשׁ בְּמִי־הַיָּאוֹר־
 וַיִּצֵּף אֶת־רֹאשׁ הַגִּבְעָה פֶּן,
 בִּקְמָה זָרֵק ²זֵיז ³וַיִּז־
 וַיֵּט וַיִּשֶׁק כֶּנֶף הַיּוֹם,
 וַיִּרֶד חֵי אֶל־פִּי הַתְּהוֹם־
 אֲזִי יָבוֹא כָּל־הַיָּקוֹם בְּצֵל,
 חֲלִיל הוֹלֵךְ־בָּא חֲלִיל,
 וְרוּחַ קָל בָּא, נָשַׁב, נָס,
 וַיִּשֶׁק לִי וַיִּגַּל לִי רִז־

¹ מֵרַט = To sharpen, polish.² זֵיז = Brightness.³ נֹזֵה = To sprinkle.

2. Point and translate :—

(a) וַיֹּאמֶר הָעָם לֹא תֵצֵא כִּי אִם־נָס נָנוּס לֹא יִשְׁמָנוּ אֵלֵינוּ לֵב :

(b) וַיְהִי רָעַב בְּיָמֵי דָוִד שְׁלֹשׁ שָׁנִים שָׁנָה אַחֲרֵי שָׁנָה וַיִּבְקֹשׁ אֲחִדְפָּנִי

יְהוָה

(c) וַתּוֹסֶף הַמֶּלֶכְמָה לַחַיּוֹת וַיֵּצֵא דָוִד וַיִּלְחֶם בְּאֵיבָיו וַיָּךְ בָּהֶם

מִכָּה גְדוֹלָה וַיֵּשֶׁב הָעִירָה :

(d) 28 קוּמוּ אַחִי עָלֹו בֵּית אֱלֹהֵינוּ וְנַעֲמִדָה בְּהָר קִדְשׁוֹ :

3. Write :—

(a) the 3rd plural masculine imperfect Qal of

יָדַעַ, לָקַחַ, מוֹתַ, אָמַרַ, אָסַף

5

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

נָתַן the Qal of

נָגַד the Hiphil of

עָשָׂה the Niphal of

דָּרַשׁ the Piel of

20

(c) the construct plural of

בּוֹכֵב, בּוֹחֵן, עֵין, עִיר, בֵּית

5

4. Illustrate, using the verb שָׁמַר, the main negative particles in Hebrew.

4

HEBREW

HIGHER GRADE—(SECOND PAPER)

Tuesday, 23rd 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.

Marks

1. Render into pointed Biblical Hebrew :—

But when the evening was come he who was over the house shut the tent from without and dismissed them that waited from the presence of their lord. But Judith was left alone in the tent and Holofernes lying upon his bed, for he was drunk. And Judith had said to her servant that she should stand without her bed-chamber and wait for her coming out, as she did daily. So all went away from her presence and none was left in the room, neither small nor great. And Judith standing by his bed said to herself, "O Lord God of all power, look in this hour upon the works of my hands for the exaltation of Jerusalem. For now is the time to help thine inheritance, and to do the thing that I have purposed to the destruction of the enemies which are risen up against us." And she came to the head of Holofernes' bed and took down his sword from thence and drew near, and took hold of the hair of his head, and said, "Strengthen me, O Lord God of Israel, this day." And she smote twice upon his neck with all her might and took away his head from him and tumbled his body down from the bed. Then she went forth and gave the head to her maid, and she put it in her bag of victuals and they twain went forth to prayer, according to their custom.

60

2. Render into pointed Biblical Hebrew :—

- (a) The thieves entered the houses of the people of the city and took their silver and their gold.
- (b) And the chief saw the king of his enemies in his chariot and he pursued him and slew him.
- (c) Rise up, my brethren and return with me to the land of our fathers.
- (d) Keep me by thy spirit, O God, that I may serve thee and glorify thy holy name.

20

FRENCH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 16th 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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).

Par un dimanche d'automne, Pierre conduisait les vaches aux champs. La première vache, en tête, les menait toutes, car elle connaissait bien le chemin. Elle s'avança sans hésiter et Pierre suivit les bêtes sans inquiétude.

Arrivés au champ dans la vallée, les vaches se mirent à brouter paisiblement. Pierre trouva à terre quelques noix tombées. Cela lui donna l'idée d'entrer dans le bois pour voir s'il y en avait encore, mais il n'en restait que quelques-unes. Pierre les cueillit et les déposa au pied d'un grand arbre, se disant qu'il les prendrait au retour.

Tout en continuant à chercher, il vit un nid en haut d'un arbre. Il eut alors envie de monter voir ce qu'il y avait dedans. Il y grimpa, mais il ne trouva rien dans le nid. Pierre resta longtemps là-haut, et, quand il descendit, il ne se rappelait plus de quel côté il était venu. Il tâcha de retrouver l'arbre près duquel il avait déposé les noix, mais en vain. Il fallut qu'il essayât toutes les directions avant de réussir à sortir du bois. Seulement, au lieu de se retrouver dans le champ où il avait laissé les vaches, il sortit par le parc juste derrière le château. Il rentra vite dans le bois, de peur qu'on ne l'aperçût. Cette fois il réussit à trouver le bon chemin, et il se mit à courir aussi vite qu'il put vers le champ.

Lorsqu'il y arriva, le champ était vide : nulle part il n'y avait trace de vaches. Il remarqua que le soleil commençait à descendre, et il se dit qu'il devait être passé midi. Il fallut rentrer.

Pierre repartit aussitôt en courant et arriva derrière les bâtiments de la maison. Soudain son père sortit de la cour en criant :

"Qu'est-ce que tu as fait, Pierre ? J'ai été deux fois au champ pour te chercher, parce que les vaches sont revenues toutes seules à la maison. Elles ont traversé le parc et elles ont arraché toutes les fleurs devant le château."

Pierre s'arrêta, honteux, frappé de peur.

FRENCH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 16th March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

	Marks
1. When did this incident take place ?	1
2. (a) What job was entrusted to Peter on this day ?	
(b) How did Peter feel as he set out on this job ? Why ?	2
3. (a) What made Peter think of going into the wood ?	
(b) What success had he there ?	1½
4. How did Peter come to lose his way in the wood ?	2
5. What landmark did he look for ?	1
6. Tell what happened before he got back to his field.	2
7. What discovery did Peter make when he got back there ? What time was it then, and how did Peter know ?	1½
8. What did Peter's father ask when Peter arrived home and what did he tell Peter ? How did this news affect Peter ?	4

15

FRENCH

LOWER GRADE—(PAPER (b))

Tuesday, 16th 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.

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 :—

Le matin était frais et l'herbe chargée de rosée.⁽¹⁾ Mais Bichette, la petite chèvre, bien reposée, bien nourrie, n'avait pas froid et se sentait toute fière de sa liberté.

Elle traversa des prés et des vergers ; tout était nouveau et merveilleux pour elle. Ses petits sabots s'enfonçaient parfois dans la terre molle. Il lui fallait passer par-dessus des fossés ou des ruisseaux et elle en faisait un jeu en sautant.

Soudain elle s'arrêta, indécise. Il n'y avait plus de haie entre les champs et la route. Mais il y avait quelque chose de plus grave : à quelque distance une maison lui barrait le chemin.

"Je peux passer par ce petit champ-là," se dit Bichette. Et elle y entra.

Au pied d'un vieux poirier elle aperçut de beaux choux qui la tentèrent. Elle y goûta, les trouva succulents et se mit à s'en régaler. Hélas ! elle s'exposait en toute innocence aux plus grands dangers, car ce petit champ bien cultivé, dans lequel elle venait d'entrer, était le jardin potager de la maison. A peine eut-elle croqué trois feuilles de chou qu'un aboiement furieux la fit sursauter de terreur. Elle leva sa tête et vit un chien féroce s'élancer sur elle.

Elle fit un bond de côté, comprit qu'elle n'avait pas le temps de fuir, chercha un refuge, et sauta sur une branche du vieux poirier. (30)

(1) rosée = dew

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

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

Il y avait seulement huit jours que Jean était au collège, mais il croyait bien y être depuis trois grands siècles et ne s'habituaît pas à cette séparation de sa mère. Il arriva qu'un après-midi, étant en promenade avec ses camarades, on s'était arrêté à l'entrée du Bois de Boulogne, près de la maison de ses parents. 5 Jean ne put résister à la tentation d'aller voir sa mère et s'échappa.

Mais à son grand étonnement la maison était close, les volets fermés, un grand écriteau "A LOUER" sur la porte, et Jean resta là, interdit, prêt à pleurer.

10 "Madame d'Argenton est à la campagne, à Etiolles," dit une voix près de lui. C'était le facteur qui passait.

Jean oublia le collège, oublia tout. Au lieu de retourner vers ses camarades, il prit une rue qu'il ne connaissait pas, et, faisant appel à tout son courage, s'arrêta devant le premier venu.

"C'est bien loin, Etiolles, monsieur ?"

15 "Hé ! pas tout près. C'est de l'autre côté de Bercy."

"Merci, monsieur," dit Jean, et il s'éloigna vivement, craignant les questions.

Il se rappelait être allé à Bercy il n'y avait pas longtemps. Le chemin n'était pas difficile, on n'avait qu'à gagner la Seine et à la suivre en remontant toujours. Mais c'était loin, et il n'avait pas d'argent pour prendre le chemin 20 de fer. Cependant le désir de voir ses parents lui donnait des forces. Il descendit au long de la berge et se mit à marcher vite sur le pavé étroit qui borde l'eau.

Après bien des heures Jean se trouva sur un quai, d'où une odeur de vin montait, mêlée au goût de bois humide. C'était Bercy. Mais déjà la nuit tombait. Jean se sentit ému. Chaque pas qu'il faisait l'éloignait de Paris,

25 de son bruit, de ses lumières. Après venait l'ombre, l'inconnu. Au loin, de droite à gauche, s'étendaient des champs qui semblaient de partout toucher la ligne de l'horizon.

30 L'enfant restait là, immobile. C'était la première fois qu'il se trouvait si tard dehors et tout seul. En outre, il n'avait rien mangé ni bu depuis le matin et souffrait d'une grande soif. A présent il commençait à comprendre dans quelle terrible aventure il s'était lancé. Peut-être se trompait-il et marchait-il en sens inverse de ce beau pays d'Etiolles si désiré et si lointain. Et même s'il était dans la bonne direction, quelle force il lui faudrait pour aller jusqu'au bout !

35 L'idée lui vint alors de ne pas quitter Bercy. Il pourrait bien se coucher dans un des fossés creusés de chaque côté de la route et y dormir en attendant le jour.

QUESTIONS

A.—Answer in English :—

- | | <i>Marks</i> |
|---|--------------|
| (1) How long had John been at boarding school? Was he happy there? How do you know? | 2 |
| (2) "Jean resta là, interdit, prêt à pleurer." (lines 7/8). | |
| (a) Where was John at this moment? Explain how he came to be there. | 3 |
| (b) What feelings are revealed by "interdit" and "prêt à pleurer"? Explain in each case what reasons John had for feeling thus. | 2 |
| (3) "Il se mit à marcher vite sur le pavé étroit qui borde l'eau." (line 21.) | |
| (a) What "water" is referred to here? | |
| (b) Where was John making for? | |
| (c) In which direction did he have to go to get there? | |
| (d) Explain how John came to be walking along this road. | 7 |
| (4) "Chaque pas qu'il faisait l'éloignait de Paris." (line 24.) | |
| (a) At what point in his journey did this thought occur to John? | |
| (b) Do you think the thought gave him satisfaction or not? Give reasons for your opinion. | 3 |
| (5) "A présent il commençait à comprendre dans quelle terrible aventure il s'était lancé." (lines 30/31.) | |
| (a) In what light did his adventure now appear to him? | |
| (b) What various factors led John to this realisation? | |
| (c) What was he tempted to do in consequence? | 5 |

B. Answer in French :—

- | | |
|---|---|
| (6) Pourquoi Jean craignait-il les questions? (line 16.) | 3 |
| (7) Pourquoi l'auteur dit-il, en parlant d'Etiolles, "ce beau pays si désiré"? (line 32.) | 2 |
| (8) Qu'est-ce que vous avez appris au sujet de Bercy en lisant ce morceau? | 3 |

3. Write, in French, a letter to a friend telling the incident which is outlined in the following summary.

Past tenses must be used, and your letter should be of approximately the same length as your answer to question 1.

Summary :—

Vous allez au marché. Vous achetez certaines choses. Vous perdez votre porte-monnaie. Vous allez au commissariat de police. Il y a là un porte-monnaie. On vous questionne, et vous devez convaincre l'agent de police que ce porte-monnaie est bien le vôtre. (25)

FRENCH

HIGHER GRADE—(FIRST PAPER)

Tuesday, 16th 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.

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 :—

Marcel laissa sa brouette⁽¹⁾ sur la lisière du bois et se mit à faire le tour de ses terres dont les limites étaient marquées par des branches plantées dans le sol. Il marchait lentement, plein d'un bonheur muet mais profond. Il marchait en agitant dans sa tête une chose après l'autre : ce qu'il fallait faire, par quoi commencer. Il choisit même l'emplacement de sa chaumière future. Enfin, ôtant son veston, il se mit à défricher⁽²⁾ sa terre.

Il souleva une énorme pierre : " Tu es restée assez longtemps à te reposer, maintenant tu peux soutenir ma chaumière."

Et comme il coupait un buisson d'épines, il dit avec un sourire moqueur : " Ne te défends pas ! Crois-tu que je te laisse pour que tu déchires mon pantalon ? "

Parfois, lorsqu'il s'arrêtait pour reprendre haleine, il regardait son champ et murmurait avec ferveur : " Tu es à moi ! à moi ! Personne ne t'arrachera à moi ! " Puis, prenant en pitié cette pauvre terre encombrée de mauvaises herbes, inféconde et sauvage, il ajoutait d'une voix caressante, comme à un petit enfant : " Attends un peu, petite orpheline, je vais te chérir, te nourrir, et tu porteras des fruits comme les autres, n'aie pas peur ! "

Ainsi travailla-t-il jour après jour. Il travaillait seul, sans prendre garde à la fatigue ni à la chaleur. Même il dormait la nuit sur son champ pour ne pas perdre un seul instant.

" Je me reposerai dimanche," disait-il.

(30)

(¹) la brouette : the wheelbarrow.

(²) défricher : to clear (land).

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

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

- Comme un pauvre captif vieilli dans sa prison
 Se cramponne aux barreaux étroits de sa fenêtre,
 Pour voir mourir le jour et pour le voir renaître,
 Ou comme un exilé, promeneur assidu,
 5 Regarde du coteau le pays défendu
 Se dérouler au loin sous l'immensité bleue,
 Ainsi je fuis la ville et cherche la banlieue.
 Avec mon rêve heureux j'aime partir, marcher
 Dans la poussière, voir le soleil se coucher
 10 Parmi la brume d'or, derrière les vieux ormes,
 Contempler les couleurs splendides et les formes
 Des nuages baignées dans l'occident vermeil,
 Et, quand l'ombre succède à la mort du soleil,
 M'éloigner encore plus par quelque agreste⁽¹⁾ rue
 15 Dont l'ornière rappelle un sillon de charrue,
 Gagner les champs pierreux, sans songer au départ,
 Et m'asseoir, les cheveux au vent, sur le rempart.
 Au loin, dans la lueur blême du crépuscule,
 L'amphithéâtre noir des collines recule,
 20 Et, tout au fond du val profond et solennel,
 Paris pousse à mes pieds son soupir éternel.
 Le sombre azur du ciel s'épaissit. Je commence
 A distinguer des bruits dans ce murmure immense.
 Et je puis, écoutant, rêveur et plein d'émoi,
 25 Le vent du soir froissant les herbes près de moi,
 Et, parmi le chaos des ombres débordantes,
 Le sifflet douloureux des machines stridentes,
 Ou l'aboïement d'un chien, ou le cri d'un enfant,
 Ou le sanglot d'un orgue au lointain étouffant,
 30 Ou le tintement clair d'une tardive enclume⁽²⁾,
 Voir la nuit qui s'étoile et Paris qui s'allume.

⁽¹⁾ agreste : rustic.

⁽²⁾ enclume : anvil.

QUESTIONS

A. *Answer in English:—*

1. To what different kinds of men does the author compare himself? In what ways does he feel that he resembles those men?

Marks

6

2. (a) Where do the poet's footsteps lead him as he goes in search of what he longs for?

2

(b) Mention the details of the scene which give him pleasure as he goes.

5

3. "L'amphithéâtre noir des collines recule," (line 19). Explain this line.

2

4. "Paris pousse à mes pieds son soupir éternel." (line 21).

(a) Why does the poet say that Paris is "à mes pieds"?

(b) To what does "soupir" refer? What does the word reveal of the poet's feelings about Paris? Why does he add the adjective "éternel"?

3

5. "... Je commence

A distinguer des bruits . . ." (lines 22-23).

(a) Enumerate the various sounds which the author hears as he sits.

4

(b) In what ways does he indicate whether he finds any of those sounds sad or cheerful?

2

B.—Answer in French:—

6. Expliquez les vers suivants:

(a) "Le sombre azur du ciel s'épaissit . . ." (v. 22).

2

(b) ("Et je puis . . .")

"Voir la nuit qui s'étoile et Paris qui s'allume" (v. 31).

2

7. "... une tardive enclume" (v. 30)

Pourquoi le poète dit-il que l'enclume est "tardive"?

2

 (30)

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

L'hiver revint. Bientôt ce fut Noël, un Noël tout poudré de neige qui rendit la terre toute blanche comme un paradis d'enfants. En cette occasion Yvonne et son mari firent venir les petits Bridel à la maison et on passa une après-midi charmante. Jean-Pierre fut tour à tour un loup, un cheval, et un chien parfaits. Un arbre de Noël occupait la place d'honneur dans la grande salle. Après la distribution des oranges, Yvonne et Jean-Pierre étaient allés reconduire les enfants. On s'attarda un peu chez les Bridel: il fallut, sous peine de fâcher ces braves gens, prendre le café.

Ils revinrent par le chemin, qui était étrangement clair ce soir-là au lieu d'être boueux et noir entre les haies. Leur maison, dont les contours s'adoucis-
saient sous des festons de neige, était restée illuminée, et on voyait, à travers les rideaux, la rangée de géraniums minuscules qu'on avait dû rentrer à l'intérieur à cause du froid. Après le souper, qu'Yvonne avait préparé avec plus de soin qu'à l'ordinaire et qu'elle servit dans l'arrière-salle décorée de houx, ils avaient ouvert la porte pour regarder la merveille de ces deux plaines étincelantes du ciel et de la terre.

(25)

FRENCH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 16th 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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 la fin de mon premier semestre au collège j'avais non seulement rattrapé les meilleurs élèves de la classe, je les avais dépassés, et le prix d'excellence qu'on donne avant les vacances de Pâques fut pour moi. Je vous laisse à penser si l'on fêta brillamment cette victoire. Lorsque j'apportai à mon père le petit livre doré que j'avais gagné en six mois, il le prit avec une émotion visible et me dit : " C'est bien, c'est bien. Le fils sera plus que le père. C'est la grande loi du progrès." Maman prit le volume et s'en alla le feuilleter à la fenêtre, non pour lire, mais plutôt, je suppose, pour cacher une larme ou deux. On décida tout de suite qu'il y aurait un grand dîner à la maison, qu'on inviterait tous nos amis, et que le principal du collège et mon professeur seraient de la partie. Cela dit, l'heureux père mit sa belle redingote des dimanches et s'en alla distribuer les invitations pour le lendemain soir. Elles furent acceptées de bon cœur.

Le festin fut non seulement copieux, mais exquis. Mes maîtres, qui étaient hommes de bonne humeur et de bel appétit, faisaient honneur à la cuisine tout en célébrant les mérites de leur élève, à qui ils promettaient un avenir fabuleux. Une grande discussion s'ouvrit alors sur les beautés et les avantages des diverses professions.

Tout à coup la porte s'ouvrit brusquement et la servante parut en disant : "Bien des pardons, la compagnie, mais le ciel est tout rouge sur la vieille ville et il me semble que j'entends sonner le tocsin."

En un clin d'œil tout le monde fut sur pied et hors de la maison. "C'est la fabrique de meubles," dit mon père. "Deux cents personnes sans travail et sans pain si tout cela flambait ! Excusez-moi, messieurs, je cours passer mon uniforme."

Il disparut et revint, pour ainsi dire, au même instant, portant sa tunique et son casque de pompier. Ma mère n'essaya pas de le retenir ; elle lui dit simplement : "Pas d'imprudence ; songe que nous n'avons que toi."

"N'aie pas peur," répondit mon père, et il partit en courant du côté de l'incendie.

FRENCH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 16th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

	<i>Marks</i>
1. To what victory does the author refer ? Why was it considered so remarkable ?	1
2. Describe how the boy's parents received the news.	3½
3. (a) How was the event to be celebrated ? (b) How did the father show that he regarded this occasion as a very important one ?	3
4. (a) In what ways did the guests endeavour to give pleasure to their host and hostess ? (b) What became the main topic of conversation ?	2½
5. Describe the interruption which occurred.	2
6. What had happened, and what thought occurred to the father as soon as he realised this ?	1
7. What did the mother say to her husband as he left ? Why did she feel it necessary to do so ?	2
	—
	15
	—

FRENCH

HIGHER GRADE—(SECOND PAPER (b))

Tuesday, 16th 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.

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

1. Translate into French :—

As I was climbing the hill I caught sight of something disappearing behind the trunk of a tree. I stopped, struck with fear. Was it a bear, or a man, or a monkey ? I could not tell, but, since I preferred the dangers which I knew to those which I did not know, I began to run back towards the beach. Instantly the creature reappeared and tried to head me off.⁽¹⁾ I was tired, and I soon realised that I could never escape from this creature by running. I had been able to see, however, that it was a man, and this fact reassured me a little. I stood still, therefore, and while I was wondering what I should do, I suddenly remembered my pistol.⁽²⁾ The thought that I was not defenceless gave me back my courage. I turned and walked boldly towards the stranger. He had hidden himself in the meantime, but as soon as I took a step he came out from behind his tree and advanced to meet me. Then he hesitated and, to my great astonishment, threw himself on his knees with hands outstretched.

“ Who are you ? ” I asked.

“ Ben Gunn,” he replied in a trembling voice. “ I’m poor Ben Gunn, and I haven’t spoken to a man for three years.”

(1) to head off : interceptor

(2) the pistol : le pistolet.

(50)

2. Write, in French, an essay on **one** of the following subjects. Your essay should not be shorter than your answer to Question 1.

(a) Quels sont, à votre avis, les défauts et les qualités des Ecossois ?

(b) Racontez un incident dans lequel un homme (ou une femme ou un enfant) fait preuve d’un courage, d’une générosité, ou d’un dévouement exceptionnels.

(25)

GERMAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Thursday, 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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).

In unserem Garten standen mehrere Haufen von Holz, die mir große Freude machten. Wenn ich allein war, kletterte ich darauf herum und überstieg sie wie Gebirge; wenn mein Bruder mitspielte, hielten wir die Haufen für Schlösser, die wir stürmen und verteidigen konnten.

Auf den höchsten Haufen durfte ich allein klettern; meinem kleinen Bruder war es streng verboten. Dieser Haufen lehnte sich an die Gartenmauer und reichte bis unter die Gipfel der alten Lindenbäume des Nachbargartens. Oben auf diesem Haufen, wo niemand mich sehen konnte, verbrachte ich viele glückliche Stunden.

Eines schönen Nachmittags saß ich dort oben im Schatten und schnitzte aus einem Stück Holz ein kleines Schiff. Plötzlich bemerkte ich über mir etwas, was einem Neste glich. Um besser sehen zu können, schob ich mich weiter rückwärts und immer weiter; endlich kam ich dem Rande des Holzhaufens so nahe, daß ich hintenüberstürzte und gerade auf den Rücken fiel. In der einen Hand hielt ich noch das offene Messer und in der anderen das angefangene Schiffchen. Glücklicherweise hatte ich nicht den Hals gebrochen. Ich sprang wieder auf und versuchte tief aufzuatmen—aber umsonst; ich konnte keinen Atem holen. Um Hilfe zu suchen, lief ich zu meinem Bruder, der in dem kleinen Gartenhaus spielte. Ich konnte aber kein einziges Wort hervorbringen; deshalb versuchte ich mit allerlei Handbewegungen mich verständlich zu machen. Der Kleine, der von meinem Unfall nichts wußte, fand meine Handbewegungen so

komisch, daß er vor Lachen fast hintenüberfiel. Um ihm zu zeigen, daß die Sache ernst war, wollte ich ihm eben in die Haare greifen, als es mir endlich gelang, ein wenig Atem zu holen.

„Ich bin von dem höchsten Haufen gefallen,“ sagte ich mit Mühe. Da verstand der Kleine, daß es mir schlecht ging, und er wurde sofort eben so hilfreich, als er vorher lustig gewesen war. Er rieb mir den Rücken, bis ich ohne Schwierigkeit atmen konnte, und half mir die Treppe hinaufgehen, um ins Haus zu kommen.

GERMAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

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

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

- | | Marks |
|---|-------|
| 1. What opportunities for play did the wood piles in the garden provide for the author ? | 2 |
| 2. Describe the position of the biggest pile. | 3 |
| 3. Describe the circumstances which led up to the author's fall. | 4 |
| 4. In what ways was he particularly fortunate not to have hurt himself badly ? | 2 |
| 5. What effect had the fall on the author and what did this circumstance compel him to do ? How did the younger brother behave when the older ran to him ? Explain his behaviour. | 3 |
| 6. When the younger brother realised what had happened, what did he do to help ? | 1 |

15

GERMAN

LOWER GRADE—(PAPER (b))

Thursday, 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.—(1) Begin the answer (or fair copy of an answer) to each question on a fresh page.

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 :—

Während die Kinder unter den Tannen gespielt hatten, waren die Erwachsenen fleißig gewesen. Bei der Bank vor der Berghütte stand jetzt der Tisch und die nötigen Stühle, und alles lag bereit, damit hier im Freien das Mittagessen eingenommen werden konnte.

Die Kinder waren über diesen Speisesaal entzückt, von dem man weit hinab ins Tal und über alle Berge weg in den blauen Himmel hineinschauen konnte. In den Tannen säuselte der milde Wind und spielte eine fröhliche Musik zum Essen.

„So etwas habe ich noch nie erlebt. Es ist wirklich herrlich!“ rief Alaras Mutter wieder und wieder aus.

So nahm das lustige Mahl seinen Verlauf⁽¹⁾. Die Eltern der Kinder und der Besitzer der Berghütte verstanden sich außerordentlich gut, und ihr Gespräch war immer lebhafter geworden.

Ihre Meinungen über Menschen und Dinge waren so ähnlich, daß man glauben konnte, sie ständen schon jahrelang in einer engen Freundschaft. So ging eine gute Zeit dahin. Auf einmal schaute die Mutter gegen Westen hin und sagte :

„Wir müssen fort, Alara, die Sonne wird bald untergehen.“

Auf das Gesicht der kleinen Alara, das eben noch vor Freude gestrahlt hatte, kam ein ganz trauriger Ausdruck, und sie bat dringend :

„Oh, nur noch eine Stunde. Wir haben alles noch nicht gesehen. Oh, wenn der Tag nur zweimal so viele Stunden hätte!“

(30)

⁽¹⁾ Verlauf : course.

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

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

In meinem Heimatdorf standen die Bauernhöfe in stattlichen Gebäudegruppen. In der Nähe der Höfe lagen die Wohnungen der Feldarbeiter — Reihen von einstöckigen Häusern, die bis zu zehn oder zwanzig unter einem Strohdach vereinigt waren. Anders waren die Wohnungen der Handwerker. Diese waren Einzelhäuser, zu denen ein Stück Garten und ein Arbeitshof gehörten. Es gab auch Sommerwohnungen; diese

Häuser gehörten reichen Kaufherren, die in der schönen Jahreszeit das Land suchten und sich doch von der Großstadt nicht zu weit entfernen wollten. Unser Dorf, das besonders ruhig und reinlich war, lag ihnen gerade recht.

So war es in meiner Kindheit. Aber es blieb nicht lange so. Zuerst wurden einige Fabriken gebaut. Mit den Fabriken kamen ins Dorf Menschen, dergleichen man dort früher nie gesehen hatte. Da der Weg zur Stadt weit war, mußte man für diese Arbeiter im Dorfe selbst Wohnungen bauen. Dann entstanden große Häuser mit mehreren Stockwerken, worin Wasserleitung und Gasleitung waren. Bald nachher kam die Gasbeleuchtung der Straßen. Nun sprachen die wohlhabenden Dorfbewohner vom Fortschritt der Zeit. Sie begannen, ihr solides, einstöckiges Haus niederzureißen und an ihrer Stelle ein Miethaus⁽¹⁾ mit vielen Wohnungen und Stockwerken für die Arbeiter zu bauen. Das Grün der Felder verschwand unter Fabriken und Häusern. Die Bauern waren geschickt genug, den Preis ihrer Felder zu erhöhen. Sie hatten großen Einfluß in der Gegend und taten, was in ihrer Kraft lag, um jede Ecke ihrer Felder mit Gebäuden und Straßen auszufüllen. Dabei wurden sie reich, verloren aber mit dem Verkauf ihrer Felder ihre Beschäftigung. Die Feldarbeiter mußten sich anderswo Arbeit suchen. Die Handwerker nahmen nicht mehr ihre Söhne in die Lehre, weil ihre eigene Existenz so unsicher geworden war. Unter ihnen herrschte Unzufriedenheit: es war mit der alten Sicherheit des Lebens vorbei.

Bald wollten die reichgewordenen Bauern, die mit ihrem Gelde nichts Rechtes zu tun wußten, die eleganten Herren spielen. Es begann damit, daß sie sich ein steinernes Wohnhaus bauten; das war nicht mehr ein einfaches Bauernhaus, sondern eine modische Villa. Dann legten sie auch ihre Arbeitskleider ab, da sie in jeder Weise elegant erscheinen wollten. Es gab jedoch einige Bauern, deren Herz noch bei der alten Arbeit war und die im Dorfe und auf dem Hofe in ihren Arbeitskleidern herumwanderten; diese wurden von ihren Frauen und Kindern gescholten. Es war dahin gekommen, daß das Wort, „Bauer“ zu einem Schimpfwort geworden war. Das Dorf begann sich seiner Vergangenheit zu schämen.

⁽¹⁾ mieten: to rent, to let.

QUESTIONS

A.—Answer in English :—

Marks

1. (a) Describe the dwellings of the three main groups of people who formed the permanent population in the author's childhood, i.e., (i) the farmers, (ii) the farm workers, (iii) the craftsmen.

(b) What other dwellings are mentioned in the first paragraph? For what reasons had they been built in this village?

7

2. What was the cause of the sweeping changes which came over the village?

1

3. (a) In what ways did the farmers and other prosperous villagers turn the new situation to their advantage?

(b) Describe the changes which became evident in the outlook and way of life of the farmers and their families as a result.

10

4. In what ways were the farm workers and the craftsmen affected by the developments?

3

5. Mention one material improvement which benefited all sections of the community.

1

B.—Answer in German :—

6. Warum waren die Wohnungen der Feldarbeiter in der Nähe der Höfe?

3

7. Welche ist die „schöne Jahreszeit“? Warum wird sie so genannt?

2

8. „Mit den Fabriken kamen ins Dorf Menschen, dergleichen man dort früher nie gesehen hatte.“

Wer waren diese Menschen? Warum hatte man sie nie früher im Dorfe gesehen?

3

(30)

3. Write, in German, a continuous story based on the following summary :—

Your story must be written in the past tense and should be of approximately the same length as your answer to Question 1.

Professor im Museum — unartiger Knabe auch im Raum — plötzlich gibt es einen Krach — Knabe verläßt den Raum — Professor hat nichts bemerkt — der Aufseher kommt — findet wertvollen Becher zerbrochen — hält den Professor für schuldig.

(25)

GERMAN

HIGHER GRADE—(FIRST PAPER)

Thursday, 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.

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) Wir blieben stehen, bis die Sonne untergegangen war. Die Farbe des Himmels wurde für einen Augenblick noch flammender, dann begann alles nach und nach zu erbleichen und schmolz zuletzt in ein farbloses Ganzes zusammen. Nur die gewaltigen Berge, die das Eis enthielten, das wir am folgenden Tag besuchen wollten, glommen noch von einem unsichern Lichte, während mancher Stern über ihnen erschien. Wir gingen nun zur Hütte, um in dieser unsere Vorbereitungen zum Übernachten zu treffen. Die Hütte war, wie es im Winter in Gebirgsgegenden üblich ist, nicht gesperrt. Ein Holzriegel, der sehr leicht zu beseitigen war, schloß die Thür. Wir traten ein, suchten eine Kerze und machten Licht. Ein grober, hölzerner Tisch stand in der Mitte des Gemaches; vor dem Tische war eine bewegliche Bank und eine zweite lief an der Wand hin. Wir hatten die Absicht, hier ein warmes Mahl zu bereiten, aber—was wir kaum erwartet hatten—es zeigte sich nirgends das geringste Stück Brennholz. Wir entschlossen uns also, eine der Bänke zu verbrennen und dem Eigentümer später den Verlust wieder gutzumachen. Kaspar machte sich gleich mit der Art an die Arbeit, und bald brannte ein lustiges Feuer auf dem Herde. Ein Abendessen wurde bereitet, wie wir es oft bei unseren Ausflügen bereitet hatten; aus den mitgebrachten Decken wurden dann Betten zurechtgemacht, und wir begaben uns zufrieden zur Ruhe.

(30)

(b) Am Ufer des großen Plöner Sees lag eine einsame Bauernstelle. Einmal war das einzige Pferd, das dort im Dienst war, von so besonderer Art, daß es sich lohnt, seine Geschichte zu erzählen.

Hans — das besagte Roß — war nämlich ebenso arbeitsfieh wie listig. Dortzulande hält man im Sommer die Pferde, solange sie nicht vor Pflug und Wagen gebraucht werden, im Freien, und die Wiese, die Hans mit dem Rindvieh teilte, lag unmittelbar an dem See. Wenn Hans nun ahnte, daß man von ihm eine Fahrt nach Plön oder noch weiter verlangen wollte, dann ging er still zum Ufer hinunter, watete ein wenig im flachen Wasser, und schwamm dann mit starken Stößen seiner langen Beine, bis er eine Insel erreicht hatte, die unweit des Ufers der Bauernstelle gegenüber lag. Dort begab er sich auf einen kleinen Grassack, der hinter Bäumen versteckt lag, und war selig faul.

Wenn man ihn vermißte, dann mußte jedesmal jemand zur Insel hinüberrydern, den Flüchtling hinten am Rahn anbinden und ihn so zwingen, zu Heimat und Arbeit zurückzuschwimmen. Das hielt den Schlingel aber nicht ab, bei der nächsten Gelegenheit das Abenteuer zu wiederholen.

(25)

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

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

Bettlerballade

- Prinz Bertarit bewirtet Veronas Bettlerschaft
Mit weißem Brot und Kuchen und edlem Traubensaft.
Gebeten ist ein jeder, der sich mit Lumpen deckt,
Der, bittend auf den Brücken der Etich,⁽¹⁾ die Rechte streckt.
- Auf edlen Marmoresseln im Saale thronen sie,
Durch Riß und Löcher gucken Ellbogen, Beh und Knie.
Nicht nach Geburt und Würden, sie sitzen grell gemischt,
Jetzt werden noch die Hasen und Hühner aufgetischt.
- Der tastet nach dem Becher. Er durstet und ist blind.
Den Krüppel ohne Arme bedient ein frommes Kind.
Der Prinz, noch schier ein Knabe, wie Gottes Engel schön,
Erhebt den vollen Becher und singt durch das Getön:
- „Mit frisch gepflückten Rosen bekrön' ich mir das Haupt,
Des Reiches goldne Krone hat mir der Ohm⁽²⁾ geraubt.
Er ließ mir Tag und Sonne! Mein übrig Gut ist klein!
So will ich mit den Armen als Armer fröhlich sein!“

5. Ein Bettler stürzt ins Zimmer. „Grumell, wo kommst du her?“
 Der Schreckensbleiche stammelt: „Ich lausch' von ungefähr,
 Gebettet an der Hofburg . . . dein Ohm schickt Mörder aus,
 Nimm meinen braunen Mantel!“ Erzschrift ertönt
 im Haus.
6. „Drück in die Stirn den Hut dir! Er schattet tief.
 Geschwind!
 Da hast du meinen Stecken! Entspring, geliebtes Kind!“
 Die Mörder nahen klirrend. Ein Bettler schleicht davon.
 — „Wer bist du? Zeig das Antlitz!“ Gehobne
 Dolche drohn.
7. — „Laß ihn! Es ist Grumello! Ich kenn' das Loch
 im Hut!
 Ich kenn' den Riß im Ärmel! Wir opfern edler Blut!“
 Sie spähen durch die Hallen und suchen Bertarit,
 Der unter dunkeln Mantel dem dunkeln Tod entflieht. —
8. Er fuhr in fremde Länder und ward darob zum Mann.
 Er kehrte heim gepanzert. Den Ohm erschlug er dann.
 Verona nahm er stürmend in rotem Feuerschein.
 Am Abend lud der König Veronas Bettler ein.
 (1) Etzsch: Fluß Italiens. (Verona liegt an der Etzsch.)
 (2) der Ohm: der Onkel.

QUESTIONS

A. Answer in English :—

Marks

1. (a) Whom had Prince Bertarit invited to his feast ?
- (b) What details in the poet's description of the feast and the guests bring out the incongruities of the situation ? 6
2. What explanation does the Prince give for holding this feast ? 3
3. Who is Grumello ?
 Describe his entry.
 What story does he tell and in what way is it immediately confirmed ? 4
4. From the words spoken in verses 6 and 7 it is possible to deduce a sequence of events.
 Describe these events. 6
5. "Am Abend lud der König Veronas Bettler ein." (verse 8)
 Who is "der König" ?
 Why did he issue this invitation ?
 What had happened between the original feast and this invitation ? 3

B. Answer in German :—

- | | |
|---|----|
| 6. Warum streckt ein Bettler die Rechte? | 2 |
| 7. Warum <u>flammelt</u> Grumello? (verse 5) | 2 |
| 8. Warum nahten die Mörder flirrend und nicht
leise? (verse 6) | 2 |
| 9. Woher kam der rote Feuerchein? (verse 8) | 2 |
| | — |
| | 30 |
| | — |

GERMAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Thursday, 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. (a) When so instructed by the supervising officer, read to the candidates the "Instructions to Candidates" given below.

(b) Write on the blackboard the title of the passage to be read, i.e., "At the Fair."

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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.
- (iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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

7. I am going to write on the blackboard the title of the passage, which is, "At the Fair."

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

"At the Fair"

Wir kamen um die Mittagszeit in der Stadt an und gingen gleich auf den Markt. Bald fand ich mich vor einer Bude, die mich stark anzog. Sie hatte bunte Bilder mit allerlei seltsamen Meertieren und fabelhaften Geschöpfen, die halb Mensch, halb Fisch waren. Vor der Bude standen zwei Kerle, die abwechselnd schrien, daß hier das große Meerwunder zu sehen sei, das jeder Mensch sehen müsse. Während der eine der schmutzigen Kerle so schrie, klopfte der andere mit einem Stock auf die Bilder und schrie dazu : "Hier ! Hier ! Heran ! Zehn Pfennig die Person !"

Ich stand lange davor und betrachtete die Bilder und hörte den Kerlen zu. Ich hatte wohl zehn Pfennig in der Tasche, aber ich hatte sie schon für ein Stück Apfelkuchen bestimmt. Die Wahl fiel mir schwer. Ich sagte mir aber, daß ich ein Stück Apfelkuchen immer haben könnte, sobald ich zehn Pfennig hätte, und daß ich die Gelegenheit, dieses Wunder zu sehen, nicht wieder erhalten würde. So stieg ich denn zur Bühne empor und gab mein Geld hin, worauf mich einer der Männer hinter einen alten Vorhang schob. Da stand ich mit ein paar anderen Leuten in einem halbdunkeln Raume und wartete fieberhaft. Die beiden Kerle draußen schrien immer noch. Einige von uns wurden so ungeduldig, daß sie den Kopf durch den Vorhang steckten und riefen, ob es nicht bald losgehen würde, andere riefen, man wolle sie beschwindeln, und sie wollten ihr Geld wiederhaben. Als sie immer lauter wurden, kam einer der Kerle herein, hielt noch eine ähnliche Rede wie draußen und zog darauf einen andern Vorhang zurück, worauf wir in das Innere der Bude blickten, wo es aber ziemlich dunkel war. Dann zündete er eine Lampe an. Wir blickten hinunter und sahen einen kleinen Tümpel schmutzigen Wassers, in dem ein schwärzliches Tier schwamm, das nach meiner Kenntnis ein Seehund war. Ich war so enttäuscht, daß ich am liebsten dem Kerl eine Ohrfeige gegeben hätte. Ich wunderte mich, daß die Männer, die unter den Zuschauern waren, dabei ganz ruhig blieben und sich nur anlächelten, aber sie hatten wohl noch Geld genug, um sich ein Stück Apfelkuchen kaufen zu können.

GERMAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Thursday, 18th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

Marks

- | | |
|---|---|
| 1. (a) Describe the appearance of the booth which attracted the boy. | 2 |
| (b) What was going on in front of it ? | 3 |
| 2. What decision had the boy to make ? | |
| What were his reasons for deciding as he did ? | 2 |
| 3. How did the audience show its impatience ? | 2 |
| 4. Describe the showman's actions when he appeared inside the booth. | 2 |
| 5. What did the audience then see ? | |
| What feelings did this sight arouse in the boy ? | |
| What puzzled him about the attitude of the men in the audience and how did he explain it to himself ? | 4 |

15

GERMAN

HIGHER GRADE—(SECOND PAPER (b))

Thursday, 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.—(1) Begin the answer (or fair copy of an answer) to each question on a fresh page.

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 into German :—

"Which of you could show me an inn where I can get something to eat and a simple bed ?" said Conrad.

"I'm at your service," answered a man who had been listening attentively and had not yet said anything. "I know an excellent inn and I'll recommend you to the landlord, who is a friend of mine, and a good fellow."

"Is it near here?" asked Conrad.

The man nodded.

Conrad hesitated at first but then went off with the unknown man, thanking him for his kindness.

"Why should you thank me?" said the man. "One hand washes the other, and both of them wash the face. Isn't it our duty to help our neighbours?" And as he walked along, he began asking Conrad one question after the other. "I don't want to be inquisitive, but you seem to be very tired. What part of the country have you come from?"

"I've come from Leipzig."

"Really? According to what you said, you have been very badly treated."

"That's true. But here's an inn—I have no desire to go further. Can I not spend the night here?"

"As you please. . . . I'll show you the way."

The unknown man went ahead of Conrad through a small yard to the kitchen door, opened it, and went in with his companion. On either side of a long narrow table men sat eating. A waiter was hurrying to and fro. The landlord, who had been sitting by himself at the fireside, rose hastily to greet the new arrivals. (50)

2. Write, in German, an essay on **one** of the following subjects.

Your essay should not be shorter than your answer to Question 1 (translation into German) :—

- (a) Eine Spußgeschichte.
- (b) Schreiben Sie einen Brief an einen Freund, um ihm Ihre Zukunftspläne bekannt zu machen.

(25)

SPANISH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 23rd 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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.

— Le contaré lo que nos ha pasado—contestó el viejo pescador. —He sido pescador solamente hace cuatro meses. Antes fui guardia municipal en Lisboa. Vivo ahora muy pobremente, con mi mujer y mis tres hijos, y apenas tengo para cubrir mis necesidades. Este verano mi hijo mayor, que es bueno pero un poco tonto, estuvo en Cádiz, y habló allí con los pescadores de perlas. A la vuelta, un día, dijo en casa que la noche anterior había soñado que habíamos ido, él y yo y sus hermanos, a buscar perlas, y habíamos hallado un montón de estas joyas preciosas. Yo le dije que soñar no significaba nada, pero toda mi familia se puso casi loca, pensando en esta riqueza posible. Yo quería

convencer a mi mujer y a mis hijos de que un sueño es un sueño, pero no me hicieron atención. Suplicaron a San Pablo, que es el santo patrón del pueblo, para que venciera mi resistencia ; consultaron también con una mujer viejísima y sabía que vivía en una caverna fuera del pueblo. La vieja dijo que no había duda que había perlas en el mar, bastante cerca de la playa. Al último me dejé convencer ; tomamos todo el dinero que pude pedir prestado a mis amigos, compramos una barca, dejé mi empleo de guardia y fuimos al mar. Pero no tengo la costumbre ni la habilidad de buscar perlas debajo del agua y ha sucedido lo que temía. No hemos sacado más de cuatro perlas pequeñísimas. Estamos cansados y mi hijo mayor ha trabajado con tanto furor que se ha puesto enfermo. Tendré que vender la barca para pagar el dinero que me han prestado mis amigos. Yo volveré a mi trabajo tranquilo de dirigir la circulación por las plazas de Lisboa, y voy a tratar de ganar bastante dinero para hacer curar a mi hijo enfermo.

SPANISH

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 23rd March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

Marks

- | | |
|--|---|
| 1. Who is telling the story ? How long has he been in his present job ? What job had he before ? In what circumstances do he and his family live ? | 2 |
| 2. What does his family consist of ? What does he say about the character of his eldest son ? | 2 |
| 3. Describe the eldest son's dream. What experience had probably suggested this dream ? | 3 |
| 4. What difference of opinion arose between the father and the other members of the family as a result of the dream ? | 1 |
| 5. What influences did the family bring to bear upon the father in order to make him agree with them ? | 2 |
| 6. What steps did the father take to comply with the wishes of his family ? | 2 |
| 7. What were the results of the venture ? | 1 |
| 8. What are the father's plans for the future ? | 2 |

15

SPANISH

LOWER GRADE—(PAPER (b))

Tuesday, 23rd 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.**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 :—

Mi casa estaba fuera del pueblo, a unos doscientos pasos largos de las últimas de la Calle Mayor. Era de un solo piso, como correspondía a mi posición, pero, llegando yo a tomarle cariño, temporadas hubo en que hasta me sentía orgulloso de ella. Lo primero que se encontraba al entrar era la cocina, siempre limpia y blanqueada con cuidado ; cierto es que el suelo era de tierra, pero tan bien pisada, con sus piedrecillas haciendo dibujos, que en nada desmerecía de otros muchos en los que el dueño había echado cemento para sentirse más moderno. El hogar era amplio, y alrededor de la chimenea había un vasar* lleno de lozas de adorno, jarras con recuerdos pintados en azul, y platos con flores rojas o amarillas. Por la habitación se veían varias cosas : un calendario muy bonito que representaba una joven abanicándose sobre una barca, un retrato de mi padre, y tres o cuatro fotografías—unas pequeñas y otras más grandes—de no sé quien, porque siempre las vi en el mismo sitio y no se me ocurrió nunca preguntar. Teníamos también un reloj despertador que gritaba con voz aguda. Encendida la lámpara en el invierno, me emocionaba mirar las sombras de nosotros por la pared. Iban y venían, unas veces lentamente, otras a saltitos, como jugando. Me acuerdo que de pequeño las temía, y aún ahora, de mayor, me corre de vez en cuando un temblor cuando traigo memoria de aquellas tardes invernales.

(30)

* vasar = display-shelf.

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

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

El padre de Martín era hombre poco inteligente y poco comunicativo, a quien no le gustaba trabajar. La madre de Martín tampoco era mujer de carácter. La casa donde habitaban pertenecía a una familia rica, los Ohandos. La familia de Martín vivía casi de la misericordia de los Ohandos. En tales condiciones de miseria y de pobreza parecía lógico que Martín fuese como su padre y su madre : estúpido, tímido y humilde ; pero el muchacho resultó inteligente, decidido y audaz.

En esta época, los chicos no iban tanto a la escuela como ahora, y Martín pasaba mucho tiempo sin sentarse en sus bancos. No sabía de ella más sino que era un edificio oscuro, con unos anuncios blancos y sucios en las paredes, lo cual no le animaba a entrar. Le alejaba también de la escuela el ver que los chicos de la calle no le consideraban como uno de los suyos, a causa de vivir fuera del pueblo y de andar siempre con ropa rota.

Por eso les tenía algún odio : así que cuando algunos chicos de las casas de los extramuros entraban en el pueblo y comenzaban a echar piedras a los chicos del pueblo, Martín era de los más valientes en el combate ; dirigía los invasores y hasta los dominaba.

20 Nadie se ocupaba de él, ni en casa ni en la escuela. Este abandono le obligaba a formar sus propias ideas espontáneamente. Sabía donde había palomas e intentaba tomar los huevos ; robaba y comía toda clase de frutas. A los ocho años Martín tenía ya mala fama.

Un día, al salir de la escuela, Carlos Ohando, hijo de la familia rica, señalando a Martín con el dedo, gritó : ¡ Ése ! ¡ Ése es un ladrón ! El otro día te vi que estabas robando peras en mi jardín. Toda tu familia es de ladrones.

25 Martín, aunque él no podía negar la acusación, creyó que no debía permitir esta afrenta a su familia, y echándose sobre el joven Ohando le dió una fuerte bofetada. Ohando contestó con un puñetazo y así empezó la lucha.

30 La madre de Martín, al saber el suceso, quiso obligar a su hijo a presentarse en casa de los Ohandos y a pedir perdón ; pero Martín afirmó que antes le matarían. Ella tuvo que encargarse de dar toda clase de excusas y explicaciones a la poderosa familia. Desde entonces la madre miraba al hijo como a un réprobo.*

* réprobo = reprobate.

Questions

A.—Answer *in English* :—

Marks

1. Describe Martin's parents and the circumstances in which they lived.

5

2. What characteristics might Martin have been expected to have in such circumstances ? What qualities did he in fact possess ?

3

3. For what reasons did Martin seldom go to school ?

4

4. Describe the incident which led to the fight between Martin and Carlos.

4

5. (a) What did Martin's mother ask him to do after the fight ?

(b) What did he do ?

(c) What action did his mother then take and why was she so anxious to do so ?

6

B.—Answer *in Spanish* :—

6. ¿ Por qué andaba siempre Martín con ropa rota ?

2

7. ¿ Quiénes eran " los invasores " (line 16) ? ¿ Por qué luchaba Martín con ellos ?

3

8. ¿ Por qué miraba la madre a su hijo como " a un réprobo " (lines 31-32) ?

3

(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.

Sueña Pedro que a él y a su hermana se les ha dado un barco magnífico — pueden viajar donde quieran — van a las islas del océano Pacífico — descubren un gran tesoro — al volver en Escocia se ponen a gastar el dinero — se despiertan en la cama.

(25)

SPANISH

HIGHER GRADE—(FIRST PAPER)

Tuesday, 23rd 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.

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 :—

A Castilian " Moor "

Era Manrique hombre alto y vigoroso, cuyo aspecto era el cuadro convencional que nos hacemos de un moro. Su conducta que le había llevado a casarse con una mora acaso nació de un rasgo quizá permanente en su rama de los Manriques ; pues un abuelo suyo, enviado por el rey de Castilla en misión diplomática a Granada, había vuelto con una hija del Gran Visir. Nuestro Don Rodrigo Manrique había heredado de su abuela granadina mora no sólo el físico sino alguna que otra cualidad de su carácter menos a la vista. A la muerte de su padre se encontró a la cabeza de una amplia fortuna y con un buen puñado de hombres suyos para servir al rey. Don Rodrigo dió sus primeros pasos en la guerra luchando contra los árabes, hasta que tuvieron que sacarle en pleno combate de debajo de su caballo, con una pierna rota, inválido para mucho tiempo. Fué cuando regresaba de la batalla, acostado sobre una carreta de bueyes, que vió la primera vez a Fátima. Era hija de un jefe moro, cuya principal fuente de riqueza era el comercio de lana cruda de los ricos merinos de la vecindad, y de seda de Granada que se enviaban a Flandes, a cambio de mercancías de varias clases, en particular de telas de lana y de lienzo, para las casas de españoles acomodados. (30)

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

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

" A sad homecoming "

y cuando atardecía, vi mi casa de campo
aguardándome, como a la vuelta de un viaje
un amigo fiel.

5 ¡ Cuántas, cuántas ideas surgieron en mi mente
cruels, dolorosas, al verme frente a frente
de mi casa !

Hace un año que esta pobre aldeana
me espera, día por día. Yo marché una mañana
de otoño, y en mi pecho llevaba primavera.

10 Ya lejos, volví el rostro. Había una ventana,
igual que una pupila, mirando lastimera.
Mi amigo, al verla, dijo :—Será la vez postrera
que me mire.—Reí yo, para consolarle ;
pero este pobre joven ya no ha vuelto a mirarla.

- 15 Y ahora a mí, triste viajero, me mira,
y en el hueco profundo de sus negras pupilas
parece que lágrimas van rodando, tranquilas.
Esta casa de campo es una viejecita,
que me envuelve en su encanto maternal, y murmura
- 20 a mi oído consejos, y en su actitud anciana
la blancura del muro es noble nieve cana.⁽¹⁾
Hay casas modestas y de aspecto humilde,
que no han sabido nunca de bulliciosas fiestas.
El corazón que tienen estas casas modestas
- 25 es apacible, es bueno, de amor y de reposo.
Cuando, a veces, visito esas dulces moradas,
muy limpias, sin adornos, sin lujos, ordenadas,
con sus muebles sencillos, su piano aun abierto,
y sus fotografías de rientes señores,
- 30 escucho cierto rumor fragante, tenue,⁽²⁾ como
el crecer de flores,
y es el aliento de esas casas tan humildosas,
donde la vida corre sobre un cauce⁽³⁾ de rosas.

(1) nieve cana = white hair

(2) tenue = faint

(3) cauce = a (river) bed

Questions

A.—Answer in English :—

1. (a) When did the poet return home? When did he leave?
Contrast his feelings on these two occasions.
- (b) What has happened to bring about the change in his feelings?
By whom and in what way has this happening been
foretold? How had the poet reacted to this prophecy?
2. When the poet saw his house on his return, what two com-
parisons occurred to his mind?
3. After talking of his own house, the poet goes on to talk of
other houses which appeal to him.
 - (a) What is the atmosphere of these houses?
 - (b) What features of the houses help to create this atmosphere?
 - (c) What sound does he imagine he hears in these houses? To
what does he compare this sound and what is the purpose
of the comparison?

B.—Answer in Spanish :—

4. ¿ Qué es una aldeana? ¿ Qué quiere decir esta palabra en el
poema (line 7)?
5. ¿ Por qué parecen como " pupilas " las ventanas de la casa
(line 16)?
6. ¿ Por qué dice el poeta que la vida en estas casas " corre sobre
un cauce de rosas " (last line)?

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

“Choosing a career”

Por entonces acabé yo el quinto año en la escuela, y se me presentó la cuestión de qué debía de estudiar, de qué carrera iba a seguir. Yo sentía curiosidades; pero en definitiva, vocación clara y determinada, ninguna. Fuera de que me hubiera gustado tener éxito y correr por el mundo, ¿qué más había en mí? Nada. Oía hablar de viajes marítimos y me hubiera gustado embarcarme; hablaban de pintura, y me parecía un oficio muy bonito el de ser pintor; leía aventuras de un Marco Polo, y soñaba con el desierto o con los ríos inexplorados. Pero el ser médico, militar, abogado o comerciante no me hacía ninguna gracia. Tras de largas reflexiones, pensé que no tenía vocación alguna y que era un joven perfectamente inútil para la vida corriente. No tenía capacidad matemática alguna; no comprendía bien los aparatos de física, ni me gustaba la gramática. La música tampoco me decía nada, porque no recuerdo fácilmente las melodías. Necesito oír un trozo varias veces para que me llegue a gustar. En realidad me faltaba mucho de lo que debe tener un joven inteligente. En cambio, era yo un hombre de sentidos perspicaces, de una vista admirable, de oído fino y de un olfato de perro.

(25)

SPANISH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 23rd 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.
- (iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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) :—

Mi oficio de médico de aldea era entonces difícil y mal pagado. Algunas veces era también peligroso. Pienso muchas veces, ahora que soy viejo, en las visitas de noche que tenía que hacer. Recuerdo el vestirme, el montar a caballo y marchar de noche por unos caminos oscuros, el hombre con la linterna, y el perro que ladraba—y algunas veces mordía.

Algunas noches, con la luna en el cielo y los campos cubiertos de nieve, me parecía atravesar un paisaje de sueños. En cambio, otras noches había que no eran tan tranquilas. Una noche lluviosa cuando iba a caballo por un valle muy profundo de los Pirineos, vi un coche con tres caballos, que marchaba muy de prisa en dirección de Pamplona. No sé por qué se me ocurrió acercarme al vehículo e ir paralelamente a él; pero el cochero, a quien no le debiera gustar mi acercamiento, empezó a azotar a sus animales y a marchar con una velocidad extraordinaria. Yo, que no comprendía este deseo de escaparse, piqué fuertemente con las espuelas a mi caballo, y me puse a galopar detrás del coche. Así fuimos durante algún tiempo, tan veloz como el viento. De cuando en cuando, la cabeza del cochero apareció encima del coche, y, sin duda, me miraba a mí. Muy curioso, yo seguí detrás.

Al llegar a la entrada del pueblo, el cochero echó al suelo un gran paquete, y habló con alguien que estaba esperando en una puerta. En seguida los dos desaparecieron.

Sin duda se trataba de un asunto de contrabando, y el cochero había pensado que yo le perseguía. Después me dijeron en el pueblo que debía de ser coñac de Francia que los contrabandistas traían para un café de la Plaza Mayor. Además me avisaron que el cochero era hombre poco escrupuloso, y que decía por todas partes que estaba a punto aquella noche de matarme de un tiro.

SPANISH

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 23rd March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

	Marks
1. Who is telling the story? What was his opinion of his job in the early days?	2
2. What aspects of his night journeys does he remember?	3
3. What did he see on one of these journeys? What was his first action?	2
4. Describe what followed.	3
5. What happened as they approached the town?	2
6. What explanation suggested itself to the author? What information was he given by the townspeople?	3
	15

SPANISH

HIGHER GRADE—(SECOND PAPER (b))

Tuesday, 23rd 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.

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

1. Translate into Spanish :—

We were going along the road near Oviedo, in the north of Spain, when we heard a shout. It seemed to come from the top of the hill on the left. I didn't want to take any notice, but Richard, who was always curious, insisted that we should climb up to see what was going on. "It's only a shepherd, or peasants working in the woods" I said, but he would not listen to me. So up we went. We had been climbing for about ten minutes, when we both heard another shout, quite near. The ground was covered with bushes, which made our search difficult. "There he is" Richard exclaimed suddenly, and we saw an old man, lying on some stones. His face was white with pain, but there was no sign of a wound or blood. The man made a great effort to speak, and we could hear him say that we were in great danger if we stayed. We refused to go, naturally, without taking him with us, but when we tried to lift him, he struggled so much that we had to put him down again. His mouth was forming words, and Richard knelt down to listen. As he did so a little insect appeared from under the old man's arm, and I called "Look out! A scorpion (1)!" I was too late. It had stung Richard on the leg.

(1) a scorpion = un alacrán.

(50)

2. Write, in Spanish, a composition on **one** of the following subjects:—

(a) Un viaje que haría si tuviera yo una motocicleta.

(b) ¿Es verdad que los años más alegres de la vida son los que pasamos en la escuela?

(25)

Gaelic

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 23rd 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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):—

DUAIS NA H-EASGAIDHEACHD

“Seall a mach, Easgain,” ars’ an seann duine, “feuch am faic thu coltas na maidne.”

Chaidh Easgan a mach, agus an uair a thill e thubhairt e gun robh e air tòiseachadh ri fàs soilleir.

“Suidh tacan beag eile, Easgain,” ars’ an seann duine. “Chunnaic mi cruth anns a’ bheòlach a tha air a’ chagailt am fad agus a bha mi ag innseadh na sgeulachd. Chunnaic mi cuideachd bannse. Pòsadh sibhse an uair a thig sibh gu inbhe; agus an uair a bhitheas sibh seachd laithean pòsda, thig sibh an so, agus mur bi mise an so, togaidh sibh leac an teintein agus bheir sibh leibh na gheibh sibh foidhpe.”

Thàinig an latha, agus dh’ fhalbh Easgan agus Easgag dhachaidh. An ceann bhliadhnachan an uair a dh’ fhàs iad mór, phòs iad; agus an uair a bha iad seachd laithean pòsda thubhairt Easgag ri Easgan: “Théid sinn an diugh a dh’ fhaicinn Bodach-an-fhàsaich mar a gheall sinn.”

“Ni sinn sin féin,” ars’ Easgan agus dh’ fhalbh iad.

Ach an uair a ràinig iad an t-àite fhuair iad an tigh gun sgrath, gun chabar. Bha an seann duine bliadhnachan marbh. Bha feur is luachair is còinneach a’ fàs air an ùrlar. Cha robh leac an teintein r’ a faicinn idir. Ach chladhaich iad mu ’n cuairt an àite anns an robh i, agus fhuair iad i. Chaidh aca air a togail ged bha i glé throm, agus an sud fa chomhair an sùl bha crogan mór, agus e làn òir is airgid. Thug iad leòtha an crogan mar a dh’ àithn an seann duine dhaibh a’ dheanamh, agus chaidh iad dhachaidh gu an tigh féin far an robh iad mórán bhliadhnachan gu sona, sòlasach.

GAELIC

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Tuesday, 23rd March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

Marks

- | | |
|---|---|
| 1. What was the old man's request to Easgan ? | 1 |
| 2. What was Easgan's answer ? | 1 |
| 3. What did the old man see in the live ashes on the hearth ? | 2 |
| 4. What did he ask the young folk to do when they grew up ? | 2 |

	Marks
5. What did they find when they came back to the cottage ?	2
6. What had happened to the hearth stone ?	2
7. Having found it and raised it what did they see ?	2
8. What did they do with their find ?	1
9. What use were the contents of the crock to them ?	2
	—
	15
	—

Gaelic

Lower Grade—(Paper (b))

Tuesday, 23rd 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.

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

1. Translate into English :—

A Tobar-Mhoire chaidh sinn do Chanaidh, ach theab nach ruigeamaid e, oir bha a' ghaoth an ceann. Tha iasgairean Loch Fine an dùil nach fhacas cearban air còrsachan na dùthcha so gus an tàinig iad gu Loch Fine o chionn beagan bhliadhnachan, ach bha muinntir Chanaidh eòlach gu leòr air a' chearban. Bhitheadh iad 'gan iasgach ged nach itheadh iad dad dhiubh ach an t-adha.

A Canaidh chaidh sinn do Uibhist, ach ma bha Muile lom bha Uibhist na bu luime. Ach cha robh coslas luime air tigh-mór Bhaile-nan-Cailleach far an d' fhuair sinn ar deagh chàradh aig Mac 'ic Ailein. Chan 'eil fhios agam ciamar a chòrdadh na Caimbeulaich, nan robh iad leinn, agus na Domhnallaich, ach cha tàinig MacCailein na b' fhaide leinn na Muile ; thill e air ais do Inbhir-Aora.

An déidh dhuinn Uibhist fhàgail thàinig an droch uair oirnn. Ach tha e mórán na 's fhasa do mharaichean an t-Eilean Sgitheanach a thoirt a mach ri oidhche dhorchas, na tha e Uibhist a thoirt a mach. Dh' fheumadh duine a bhith gu math eòlach air cladaichean, agus bàghan, agus caoil, agus seòlaidean Uibhist, agus gu sònruichte Caolas na Hearadh, mun rachadh e dlùth orra anns an dorchadas, oir cha robh tighean-soluis againn an 1787 mar tha ann an diugh.

(30)

2. Read the poem below, then answer the questions which follow it :—

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

O théid sinn, théid sinn, le suigear agus aoidh,
 O théid sinn, théid sinn, gu deònach,
 O théid sinn, théid sinn thairis air an t-Srùidh,
 Gu muinntir ar dàimh is ar n-eòlais.

- 5 Chì sinn an Caol, air am faca sinn le gaoith,
Bàtaichean aotrom a' seòladh ;
Chì sinn na beanntan a ghleidheadh sneachd 'san t-samhradh,
Is chì sinn na h-aibhnichean bòidheach.
- 10 Chì sinn na glinn anns an d' rugadh sinn,
'S am bu ghnàth leinn bhith aotrom, gòrach,
'S chì sinn na coilltean le aighear is toil-inntinn,
'S am bu ghnàth leinn bhith cluinntinn nan smeòrach.
- 15 Chì sinn na raoin le blàth a' bheallaidh chaoin,
'S a' Chéitean bhitheas aobhach is bòidheach,
Is chì sinn na bruachan fo sgàil a' bharraich uaine
Gu tric anns na bhuain sinn an t-sòbhrach.
- 20 'S chì sinn na cluain air am bitheadh laoigh is uain
Ri mire gun ghruaim anns an Og-mhios,
'S chì sinn na h-onaich air an ionaltradh na caoirich,
O 'n d' fhuair sinn sàr aodaichean còmhdaich.
- 25 Chì sinn an lag, 's an t-eas gu beucach, grad,
'S am bradan a' leum suas 'na chòmhdhail,
Chì sinn am badan, 's am bitheadh coilich bheadrach,
Ri co-chath 's a' mhaduinn chiuin, cheòthar.
- 30 'S chì sinn gun ghruaim, a' bhanarach le fuaim,
'S a' bhuaile gu duanagach, òranach,
A' bleoghann a' chruidh ghuailfhionn is iad air sgur de nualan,
Le taitness toirt cluais agus deòin di.

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.

- | | <i>Marks</i> |
|---|--------------|
| 1. What indications does the poet give that
(a) he is looking forward with pleasure to his visit,
(b) the people of the district are not strangers to him ? | 4 |
| 2. An Caol (5) is the Kyle of Sutherland. Describe his recollections of it. | 2 |
| 3. Which phrase suggests that the mountains are of considerable height ? | 1 |
| 4. What memories are recalled by (a) the glens, (b) the woods ? | 4 |
| 5. Two months are referred to. What sights are associated with each ? | 4 |

6. Translate into English lines 21 to 24. 4
7. In what ways, according to the poet, do the haunts of the red-deer differ from those of the roe-deer ? 4
8. Describe in detail the scene depicted in the last verse. 4
9. Give the nominative and genitive singular forms of beanntan (7), aibhnichean (8), and glinn (9). 3
- 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.**

Air aoidheachd air an tuath—fàilte chridheil bho chàirdean gasda—biadh math is pailteas dheth—na seallaidhean mu 'n cuairt—an spréidh—na caoirich—an ciobair is na coin . . . (25)

GAELIC

HIGHER GRADE—(FIRST PAPER (a))

Tuesday, 23rd 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.

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

1. (a) Translate into idiomatic English :—

Alasdair Mac Mhaighstir Alasdair

An dòigh no dhà tha Sgiobaireachd Chlann Raghnaill a' tòirt bàrr-urram thar gach bàrdachd eile a sgrìobh Alasdair. Bha e riamh an coimhearsnachd a' Chuain Shiar, bha fuil nan sonn, aig an robh an dachaidh gu bitheanta air na h-uisgeachan, a' ruith an cuislibh a chuim. Cha robh dreach no fiamh an gnùis a' chuain nach b' aithne dha. Bha gaoir a' chladaich, buille throm thiamhaidh na tuinne, gu tric 'na chluasan.

Cha robh dath ag cinntinn anns an iarmailt, có dhiùbh bha i sèimh, ciuin, no bha na dùilean a' bagairt stoirm, nach b' fhiosrach leis, agus thug e guth do chumhachd nan speur, na gaoithe, agus na fairge, cho maith ri spiorad sliochd nan eilean, anns a' bhàrdachd iomraitich so.

Ged tha earrannan innte anns a bheil mac-meanmna a' bhàird car bho riaghailt, tha earrannan eile a dh' fhaoidte a chur ri taobh bàrdachd na Gréige agus na Ròimhe gun Alasdair mòran a chall bho an choimeas. Rinn Alasdair aoirean agus bàrdachd eile a bha sgaiteach agus beur, do nach faod sinn moladh a thoirt air chor air bith.

Ach bu mhiann leinn na dubhailcean sin a leigeil air dìochuimhne, air sgàth nan dàn ceutach agus oirdheirc leis an do rinn e saoi bhir litreachas nan Gàidheal. Thug iad sin dha àite anns an t-sreath as àirde de na filidhean, agus cumaidh a luchd-dùthcha cuimhne orra cho fada is a bhios an cànan air a labhairt, air a sgrìobhadh agus air a seinn. (30)

1. (b) Translate into idiomatic English :—

Fhuair mi mach o Eachunn eachdraidh an duine bhoichd so a bha anns an uaimh. Bu neo-dhuine gun mhath gun mhilleadh e, a nuas o òige. Ged a bha e gun mhóran toinise no tuigse, bha e 'na sheòl fhéin fo chàileigin de mheas anns an dùthaich. Bha e eòlach air aisridh chumhang an fhéidh is na h-earba, agus b' e a thoileachas-intinn an fhaghaid a leantainn le òigridh na tìre. Cha robh bearradh, no bealach, no aithghearradh troimh mhonadh, no beul-àtha air abhainn, no càrn, no garaidh, air nach robh e mioneòlach. Ré an t-samraidh b' i uaimh nan creag a chòmhnuidh; ghluais e o àirigh gu àirigh, is cha deachaidh e riamh air falbh falamh o aon diubh. Cha bhiodh e gun lòn fhad 's a bhiodh dearc air tom, meas no cnothan ann an coille; chan fhàilnicheadh a leaba am feadh a gheibheadh e fraoch badanach, gorm, a' fàs gu dosrach anns gach àite; agus mar thubhairt e fhéin, bha a chuid tromb soirbh r' an gleusadh. Bha a dhachaidh anns gach àite far an laigheadh a' ghrian air; agus còmhla cha do dhruideadh riamh air. Cha robh a mhàileid doirbh r' a giùlan: cha robh innte ach a' chlach-theine is am fadadh-spuinge, sgian-dubh a dh' fhionnadh nam fiadh, ribe a ghlacadh an fhìreoin, agus cromag iarunn a lùbadh nan geug. (20)

2. Read the poem below, then answer the questions which follow it :—

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

Oran do Lochiall le Gille na Ciotag.

- O thàinig mi dhùthaich Lochiall
 Cha robh iad rium spìocach no bochd.
 Fhuair mi iad uile 'nan comunn gun ghiomh,
 Làn fialachd, gun chrìne, gun sprochd.
- 5 Muinntir ghasda dha 'n dùthchas deagh ainm,
 Buidheann shealbhach fo 'n airm air gach cnoc,
 Bha sud ann an dùthchas duibh riamh,
 'S mór cliùiteach am bliadhna bhur ceann stoc.
- Dhomhnuill òig, o na fhuair thu do chòir,
 10 Lean am biùthas bu nòs, is chan olc :
 Bi gu furanach, farasda, fòil,
 Ris na daoine nach deònaich do lochd,
 Nì éirigh gu d' chuideachadh suas,
 Nam faicheadh iad tuasaid teachd ort,
- 15 Rachadh ullamh gu rùsgadh nan lann,
 'S iad chaisgeadh an nàmhaid le toirt.
- 'S tu 'n gasan tha eireachdail àrd,
 'S tu macant', gun àrdan, gun mhoit,
 'S tu 'n curaidh gun ghaise, gun fhiamh,
 20 'S tu 'n gallan dh' fhàs sgiamhach le toirt,
 Gu deas, dìreach o d' mhullach gu d' bhonn,
 'S deagh spiorad neo-throm ann ad chorp,
 Aghaidh shoilleir, tha seirc ann do ghnùis,
 Sùil smiorail an diunlaoich fo d' roisg.



- 25 Nuair théid Achnacairaidh air dòigh,
 'S a ni thu ann còmhnuidh le sìth,
 Thig cleachdan do shìnnsearachd beò,
 'S freagraidh creagan na mòintich do 'n phìob ;
 Bidh toil-inntinn aig t' uaislean, is spòrs,
- 30 Théid mì-ghean air fògradh, is sgìos,
 Bithidh fùdar 'ga losgadh gu leòir,
 'S daimh chròic air an leònadh 'san fhrìth.
- Gu meal thu nis t' fhearann, is t' inbhe,
 Gach urram, gach brìogh, is gach àgh,
- 35 'S do phòsadh ri maighdean dheas ghrinn
 Dha 'm bi maise le aoidh, is le gràdh,
 Dha 'm bi gliocas le fiosrach, 's le céill,
 Dha 'm bi càirdean bhitheas treun an deagh ainm,
 Dha 'm bi urram gach subhailc, is beus,
- 40 Dha 'm bi foghlum le ceutaidh gun mheang.

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. What is the English equivalent of the bard's bye-name? Give, if you can, his full name. 2
2. Name and locate the district referred to. 2
3. Summarise his opinion of the people he met there. Which line do you consider best sums up this opinion? 4
4. (a) What evidence is there to show that the chief had newly succeeded to his title? 4
- (b) What advice does the bard give him?
5. Describe the appearance of the chief, and summarise his moral qualities. Explain "gasan" (17). 5
6. Explain the place-name Achnacairaidh (25). What changes are likely to be brought about there by the chief? 5
7. What good fortune does the bard wish him to enjoy? Translate into English lines 35 to 40. 5
8. Analyse the formation of crìne (4), diunlaoch (24), mì-ghean (30), gliocas (37). 2
9. Comment on the versification of the poem. 1

GAELIC

HIGHER GRADE—(FIRST PAPER (b))

AURAL COMPREHENSION TEST

Tuesday, 23rd 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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.
 - (iii) After the second reading you will write your answers on the sheet provided for this purpose.
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 sheet provided for the answers.
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):—

Iain Brun

Dhùisg na leabhraichean an gaol air eòlas a bha 'na chridhe gu nàdurra; gun chuideachadh o mhaighstir-sgoile no o dhuine air bith eile dh' ionnsaich e leis fhéin Laideann agus Gréigis agus Eabhra a leughadh.

Cha robh a thuarasdal mór, ach chuir e mu seach beagan thasdan a cheannach an Tiomnaidh Nuaidh an Gréigis, agus a' cheud chothrom a fhuair e, agus gun e ach sia bliadhna deug, choisich e a h-uile ceum o Obair-neithe, am Peairt, gu Cill-rimhinn, am Fìobh (còrr agus fichead mìle) a dh' iarraidh an leabhair.

Thachair do fhear de na h-àrd-sgoilearan anns an Oilthigh a bhith anns a' bhùth aig an am; an uair a chual e am balach peallagach ud ag iarraidh an Tiomnaidh Nuaidh an Gréigis dh' fhaighnich e dheth, "An téid agad air Gréigis a leughadh?" "Théid" ars' am balach; "beagan".

Thog am Professor an leabhar agus chuir e 'na laimh e, ag ràdh ris, "Ma leughas thu dhomh crioman as an leabhar so gheibh thu e a nasgaidh mar thiodhlac bhuam-sa."

Leugh am balach rann no dhà ann an soisgeul Eoin. "Ni sin an gnothuch," ars' am Professor; "is leat an leabhar."

Thug Iain Brun taing dha is ghabh e a chead, cho sona ris na h-eoin.

GAELIC

HIGHER GRADE—(FIRST PAPER (b))

AURAL COMPREHENSION TEST

Tuesday, 23rd March—12.15 P.M. to 12.45 P.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

	Marks
1. What inspired the love for knowledge in the lad's heart ?	2
2. What foreign languages did he acquire ?	2
3. Did he receive any help ?	1
4. How did he set about buying a Greek New Testament ?	1
5. How did he carry out his journey ?	1
6. Who happened to be in the bookseller's shop at the time ?	2
7. What astonished him ?	1
8. What did he ask the lad ?	2
9. What did the Professor say, and how did Iain Brun feel ?	3

15

GAELIC

HIGHER GRADE—(SECOND PAPER)

Tuesday, 23rd 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) “ Tha ’m fraoch fo bhlàth air an tulach
Is boltradh cùbhraidh mu ’n cuairt,
Ach càit a bheil òigridh a’ chlachain
A thadhail an innis le ’m buar ” ?

(b) Fionnghal NicDhomhnaill.

(c) Air chéilidh anns na tighean tughaidh.

(d) “ Tha nise cainnt ar dùthcha
A’ tòiseachadh air dùsgadh.”

(30)

2. Translate into Gaelic :—

I was anxious to explore as much of the ground as I could in the two hours allowed to me, so I left my companions and started up the rough path leading over the narrow isthmus to the west harbour. The path climbed steeply over a ridge of rock, from the top of which I looked across the neck of the island to the sea beyond. Almost joining the narrow inlet of the west harbour to the east bay where we had anchored was a fresh-water loch dotted with white water lilies, and with a tree-covered island at its centre. The near bank was grown with oak, alder, and birch, whose bark shone silver in the sunlight ; on the other side of the loch the hill that forms the east half of the island rose round and purple against a blue sky, the pink rock showing everywhere through its sparse covering of peat. The whole had an intensity of colour that I had never seen on the mainland.

(30)

SECTION II

3. Answer question (1) and any two of the others. The answers may be in Gaelic or in English.

(1) “Elegies and eulogies predominate in Gaelic poetry.” Consider this statement and illustrate your answer by reference to some noteworthy examples.

OR

Show your acquaintance with twentieth century prose compositions which you consider of lasting merit.

(8)

(2) The eighteenth century is regarded as the Golden Age of Gaelic literature. Discuss this view.

(6)

- (3) Locate and give the English equivalent of any **four** of the following :—
 Allt Eireann, Coille Chnagaidh, Sliabh a' Chlamhain, Gairbheach,
 Gleann Fhionghuin, An Eaglais Bhreac.

Write a short note on any incident in Highland History associated with **one** of them. (6)

- (4) Comment on the contribution to Gaelic literature of any **one** of the following :—

John F. Campbell, John Mackenzie, Alexander Carmichael. (6)

RUSSIAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Monday, 22nd 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 :—

бубны (plur.) = a tambourine. обедня = (church) mass.
 калач = ring shaped roll.

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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.
 - (iii) After the second reading you will write your answers on the sheet provided for this purpose.
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 sheet provided for the answers.
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 peasant boy's account of his first trip to the city of Tula

Когда я ещё был мал, мне было лет пять, то я слышал, что люди ходили в какую-то Тулу, и я сам не знал, что такое Тула. Вот я спросил отца : „Батюшка, в какую это Тулу ты ездишь, хороша ли она?“ Отец говорит : „Хороша.“ Вот я говорю : „Возьми меня с собой, я посмотрю Тулу.“ Отец говорит : „Ну что ж, пусть придёт воскресенье, я тебя возьму.“ Я обрадовался, стал по лавке бегать и прыгать. После этих дней пришло воскресенье. Я только встал утром, а отец уже запрягает лошадей на дворе ; я как можно скорее стал обуваться и одеваться. Как только я оделся, я вышел на двор, а отец уже запряг лошадей. Я сел в сани и поехал. Мы ехали, ехали, проехали четырнадцать вёрст. Я увидел высокую церковь и закричал : „Батюшка ! вон какая высокая церковь.“ Отец говорит : „Есть другая церковь ниже, да красивее.“ Я стал его просить : „Батюшка, пойдём в эту более красивую церковь, я помолюсь Богу.“ Мы с батюшкой пошли. Когда мы пришли, то вдруг ударили в колокол ; я испугался и спросил отца, что это такое, играют ли в бубны. Он говорит : „Нет, это начинается обедня.“ Потом мы пошли в церковь молиться Богу. Когда мы помолились, мы пошли на рынок. Вот я иду, иду, а всё спотыкаюсь, так как смотрю по

сторонам. Вот мы пришли на рынок. Я увидел, что продают калачи, и хотел взять их без денег. А мне батюшка говорит: „Не бери, а то шапку снимут.“ А я говорю: „За что снимут?“ А батюшка говорит: „Не бери без денег.“ Я говорю: „Ну дай мне деньги, я куплю себе калачика.“ Отец мне дал, я купил три калача и съел и говорю: „Батюшка, какие хорошие калачи.“ Когда мы закупили всё, мы пошли к лошадям и напоили их, дали им сена; когда они поели, мы запрягли лошадей и поехали домой. Я вошёл в избу и разделся и начал рассказывать всем, как я был в Туле, и как мы с батюшкой были в церкви, молились Богу. Потом я заснул, и видел во сне, будто отец едет опять в Тулу. Тотчас я проснулся и видел, что все спят. Скоро я опять заснул.

RUSSIAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Monday, 22nd March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

Marks

1. How old was the boy when the event described took place? What question did he first put to his father and why? On what day was the proposed trip to take place? How did the boy visibly demonstrate his excitement at the prospect?

5

2. On what kind of vehicle did they travel to Tula? How far was it?

2

3. What did the boy hear as he went into the church, and how did he react to the sound?

2

4. Where did they go on leaving the church? Why did the boy stumble on the way? Why did the father have to warn the boy when they saw the rolls?

3

5. What preparations for the homeward journey are mentioned? What did the boy dream after his return?

3

15

RUSSIAN

LOWER GRADE—(PAPER (b))

Monday, 22nd 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.****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 :—

An uneasy conscience

Нина Карнаухова не приготовила урока и решила не идти в школу. Но чтобы знакомые случайно не увидели, как она во время рабочего дня болтается с книгами по городу, Нина украдкой прошла в городской сад. Положив пакет с завтраком и связку книг под дерево, она побежала догонять красивую бабочку и заметила маленького мальчика, который смотрел на неё добрыми, доверчивыми глазами. А так как в руке он держал школьную тетрадку, то Нина догадалась, в чём дело и решила над ним подшутить.⁽¹⁾

Несчастный прогульщик!⁽²⁾ — строго сказала она. — И это с таких юных лет ты уже обманываешь родителей и школу? — Нет! — удивлённо ответил мальчик. Я просто шёл на урок. Но тут по лесу ходит чья-то большая собака. Она залаяла, я испугался, побежал и потерял дорогу. — Нина нахмурилась. Но этот мальчик был такой смешной и добродушный, что ей пришлось взять его за руку и повести через сад.

А связка Нининых книг и завтрак так и остались лежать под деревом, потому что поднять их на глазах у мальчика теперь было бы стыдно. Он сразу бы догадался, кто из них двоих прогульщик. Тут выскочила из-за деревьев собака, книг не тронула, а завтрак скоро весь съел.

Вернулась Нина, села и заплакала. Нет! Не жалко ей было украденного завтрака. Но слишком хорошо пели над её головой весёлые птицы. И очень тяжело было у неё на сердце: её грызла.⁽³⁾ беспощадная совесть.

⁽¹⁾ make fun of.⁽²⁾ truant.⁽³⁾ (literally) gnawed.

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

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

Пётр Первый.

Пётр, младший сын царя Алексея Михайловича, вступил на престол в конце 17го века. Великан ростом, Пётр всюду выделялся из толпы. Сильный от природы, он развил свою силу, работая постоянно топором и молотом. К 25 годам он знал 14 ремёсл⁽¹⁾. Захотел Петр посмотреть на чужие страны. Он взял с собой нескольких молодых людей и отправился в путешествие, побывал в Голландии, Англии и немецких землях. Молодой царь всем интересовался и всему учился. Особенно усердно изучал он строение морских кораблей. В одежде простого плотника, с топором в руках, он работал на верфи⁽²⁾. Он мог сам построить весь корабль. Иноземцы с любопытством окружали то место, где работал царь-плотник.

Возвратившись в Россию, Пётр решил у себя завести всё то полезное, что увидел на Западе. Он стал посылать за границу молодых людей для обучения, вызывал в Россию иностранцев. При Петре в Москве стала издаваться первая русская газета „Ведомости“. В ней печатались не только русские, но и иностранные известия. Первый номер был просмотрен и исправлен самим царём.

Пётр много сделал для сближения России с Западной Европой. Для торговли с Англией, Данией, Францией и другими странами нужно было иметь морские гавани на Балтийском море. Когда-то часть этого моря принадлежала России, но потом отнята была шведами. Русские цари пытались возвратить эти земли, но безуспешно. Пётр решил добиться выхода к морям — к Балтийскому и Чёрному.

В 1700 году началась Великая Северная Война со шведами, которая продолжалась более двадцати лет. Русская армия сперва потерпела неудачу, но в 1702 году она перешла в наступление и взяла крупную шведскую крепость на реке Неве. Как только русские овладели устьем Невы, Пётр заложил новый город. Место было глухое,⁽³⁾ болотистое, поросшее сосновым лесом и мелким кустарником. Сырой туман расстилался кругом. Шумел ветер. На реке вздымались волны. На правом берегу Невы было несколько деревень. Жители занимались рыболовством. Вот здесь-то и началась работа под присмотром царя. Глухая местность вдруг оживилась, наполнилась народом. Были выписаны тысячи рабочих со всей России. С треском падали деревья. Далеко слышны были стук топоров и шумный говор. Постройки росли.

На одном из островов Невы Пётр велел срубить себе для жилья простую избу. Две комнаты этой избы он усталил простою мебелью и плотничьими инструментами; все знали этот домик царя. Пётр употреблял все меры, чтобы скорее застроить город, переселял жителей: дворянские семьи и даже целые деревни. Постройки были деревянные, но в то же время строились и каменные здания с колоннами, большими окнами. Были построены верфи, на которых строили корабли.

Царь назвал новый город Санкт-Петербург, что значит город святого Петра. Он стал новой столицей России. Пётр создал большой военный и торговый флот. Началась торговля с иностранцами. Царь с большим почётом встречал иностранных торговцев. В конце концов шведы подписали мир, по которому к России отошли земли у берегов Рижского и Финского заливов. В настоящее время Петербург переименован в Ленинград.

(1) ремесло: профессиональное занятие; изготовление изделий ручным способом.

(2) место, где строят и ремонтируют морские суда.

(3) глухой: безлюдный, пустынный, девственно дикий, удалённый от центров культурной жизни.

QUESTIONS

Marks

A. Answer in English:—

(1) State as concisely as possible what can be learned from this passage about

(a) Peter's appearance and physical qualities;

(b) his mental abilities and practical skill;

(c) his interests.

6

(2) Three things are mentioned that Peter did on his return to promote knowledge of the West. What are they?

3

(3) Are we told anything about the nature, weather and climate, and general appearance of the site of the city of Petersburg before building operations began, and if so, what?

5

(4) What three sounds does the author imagine would have been heard during the construction of the city? Where was the labour obtained?

4

(5) Describe the types of constructions mentioned, and the building material.

3

B. Answer in Russian:—

(1) Зачем Пётр I решил построить морской порт на севере?

3

(2) Чем кончилась война со шведами?

3

(3) Каково было жильё у Петра на Неве во время постройки новой столицы?

3

3. Write, in Russian, a continuous story based on the following summary:—

Your story should be written in the past tense, and should be approximately two thirds the length of your answer to question 1.

Заблудился.

Мальчик зашёл далеко в лес, а выйти не мог. Пришла ночь. Стало темно. Мальчик влез на дерево и увидел вдали огонёк. Он пошёл в ту сторону. Скоро он пришёл к домику. Там жили добрые люди. Накормили его. Мальчик там переночевал. Утром его отвели домой.

(25)

RUSSIAN

HIGHER GRADE—(FIRST PAPER)

Monday, 22nd 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:—

(a) Школьные годы Володи.

В гимназию Володя поступил девяти с половиной лет, в первый класс. Учился он легко и охотно. И способности у него были хорошие, да и отец приучал его, как и старших брата с сестрой, к усидчивости⁽¹⁾ и к точному и внимательному исполнению заданного. Ещё, помню, учителя говорили, что Володе очень помогает то, что он внимательно слушает объяснения урока в классе. При своих прекрасных способностях он запоминал обыкновенно в классе новый урок, и ему приходилось лишь немного повторить его дома.

Он очень любил своего старшего брата и подражал ему во всём до мелочей. О чём бывало ни спросят Володю: как хочет он играть, пойдёт ли на прогулку, с маслом или с молоком положить ему каши за стол, — он не ответит сразу, а смотрит на Сашу. А тот нарочно

⁽¹⁾ perseverance.

медлит ответом, лукаво⁽¹⁾ поглядывая на брата. И мы оба посмеиваемся над ним. Но и насмешки не отучали Володю, и он отвечал: „Как Саша „. Так как Саша был на редкость серьёзный, вдумчивый и строго относящийся к своим обязанностям мальчик, то подражание ему было очень полезно для Володи: он видел перед собой постоянно пример сосредоточенности⁽²⁾, точного и внимательного исполнения заданного, большой трудоспособности.

(25)

(1) slyly.

(2) concentration.

(b) Убитая птичка.

Был светлый, тёплый майский день. В воздухе слышались звонкие песни птиц. Вдруг мимо меня очень близко пролетела небольшая серенькая птичка, пролетела и опустилась метрах в восьми от меня на покрытую красным песком дорожку. Внезапно во мне проснулся охотничий инстинкт, я схватил лежавший на дорожке камень, и . . . через момент птичка лежала на песке дорожки мёртвой. В восторге от меткого удара, я бросился к ней, да так и замер на месте.

Передо мною лежала с разбитой головкой хорошенькая нежная птичка. Чёрненькие глазки её были полуоткрыты; из маленького ротика, по временам медленно ещё раскрывавшегося, текла кровь. „Несчастная птичка . . . Что я сделал? Может быть, у неё уже есть маленькие дети. Будут ждать свою мать . . .“ А солнце ярко светило, птицы пели, цветы благоухали⁽¹⁾ . . . Я стоял, как преступник.

Сбежать в угол сада, вырыть под деревом могилку, положить в неё мёртвую птицу — было делом двух-трёх минут.

На балконе раздавался уже голос отца. Сейчас позовут. Скорее, скорее насыпать над могилкой маленький холмик, обровнять⁽²⁾ его лопатой, вот так . . .

Через несколько минут я уже сидел между отцом и матерью в экипаже. — Отчего ты так бледен? Что с тобой? — Так, ничего. И тайны моей никто не узнал. С тех пор прошло много, много лет, но убитая птичка с кровавым ртом, как живая, стоит у меня и сейчас перед глазами.

(30)

(1) were fragrant.

(2) smooth over.

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

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

Землетрясение в Ялте.

В городе Ялте, расположенном на берегу Чёрного моря, есть детский санаторий. Летом тысяча девятьсот двадцать седьмого года он был полон больных ребят. Одиннадцатого сентября на побережье разразилась гроза. Ребята сидели у окон и любовались на закат солнца. Такой зари они ещё не видали: темнокрасное зарево охватило полнеба, трудно было поверить, что это не огонь.

Дети долго не могли уснуть. Им всё казалось, что после грозы и необыкновенного заката ещё что-нибудь должно случиться. К тому же мешал шум; всегда спокойная собака Жучка словно взбесилась; она то лаяла, то выла у своей конуры и гремела цепью, стараясь её разорвать. Где-то неподалёку надоедливо кричал осёл. Хозяин выходил, бил и ругал его, но не мог унять⁽¹⁾. Потом ребят напугала кошка. Она прыгала на кровати и не хотела уходить. Странно! Кошка была раскормленная и ленивая и всегда спала в это время. — Все звери что-то расстроились, — говорили ребята. Наконец дети уснули.

Около двух часов ночи все сразу проснулись. Кругом творилось что-то необыкновенное и страшное. Оглушительно гремел гром. В окне луна отплясывала какой-то дикий танец. Кровати катались по полу на своих колёсиках. Они налетали на тумбочки⁽²⁾; стаканы с водой и вазочки с цветами падали и разбивались. С потолка что-то сыпалось; некоторых детей больно ушибли куски штукатурки⁽³⁾. Со всех сторон сразу раздались отчаянные крики и плач. В палату вбежали дежурная сестра и няня. Они шатались, потому что пол двигался у них под ногами. — Ребята, — крикнула сестра. — Не пугайтесь, а скорее завёртывайтесь в одеяла и выбегайте на двор.

Многие дети были серьёзно больны и не могли бежать. Сестра и няня брали их на руки и относили в сад, на скамейку. Находиться в доме было очень опасно: дом весь потрескался⁽⁴⁾, башенка и трубы попадали. Толчки повторялись, и каждый раз появлялись новые трещины, рассыпались печи. Казалось, вот-вот рухнет потолок. Но служащие — от главного доктора до дворника — не думали о себе. Они снова и снова вбегали в здание, пока не вынесли всех детей.

В саду расставили кровати. Но разве можно было уснуть в эту ночь? Когда страх прошёл, начались рассказы, кто как проснулся, кого чем ушибло . . . Хвалили собаку и кошку: — Они уже чувствовали, что начинается землетрясение, и хотели нас предупредить, а мы не поняли!

Взошедшее солнце застало Ялту в самом жалком виде: десятки домов были разрушены, все остальные так растрескались, что в них страшно было войти! Раненые переполнили больницы, были и убитые. Толпы испуганных людей ютились в парках и на площадях.

- (1) успокоить, заставить замолчать.
- (2) небольшой, невысокий шкафчик, ставящийся у кровати.
- (3) вещество, которым покрывают стены и потолки.
- (4) трескаться: образовывать трещину, щель на своей поверхности, или раскалываться на части.

QUESTIONS

A.—Answer in English:—

Marks.

- (1) What thoughts hindered the children from sleeping after the storm? What was unusual about the behaviour of the cat? Is anything said about its normal habits by way of explanation? 4
- (2) List in order the sounds heard by the children, as described by the author, throughout the period covered by the passage. 5
- (3) What instruction did the nursing sister give the children when she entered the ward? Why did some of the children not follow this instruction? What happened to these latter? 5
- (4) Does the writer offer any appraisal of the conduct of the staff on duty? On what does he base it? 3
- (5) State three *visible* signs of disturbance affecting the building or its contents during the earthquake. 3

B.—Answer in Russian:—

- (1) Каков был закат солнца перед землетрясением? Видели Вы когда-нибудь такой закат? 2
- (2) В котором часу приблизительно началось землетрясение? 2
- (3) Какова была Ялта на следующее утро? Почему парки и площади были полны людей? 3
- (4) Почему дети не могли спать после землетрясения? О чем они разговаривали? 3

RUSSIAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Monday, 22nd 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 :—

зрелище = spectacle, sight

кочегар = stoker

выручка = takings, receipts

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 sheets provided for the answers. 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 paper 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 paper and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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.)

An early passenger steamer service on the Hudson River.

Одиннадцатого августа тысяча восемьсот седьмого года чуть не все жители города Нью-Йорка столпились на набережной реки Гудсона. Перед ними стояло судно с трубой, из которой шёл дым и сыпались искры. „Пойдёт или не пойдёт?“ — об этом шли разговоры и споры. Большинство решило, что не пойдёт, и приготовилось смеяться и свистать.

Но вот раздался свисток. Пароход снялся с места и, ворочая колёсами, двинулся вверх по реке. Толпа сначала онемела от изумления, потом раздались восторженные крики и слились в настоящий рёв. Люди бежали по берегу вслед за пароходом, чтобы подольше насладиться невиданным зрелищем. Но куда! Пароход шёл всё быстрее и быстрее и скоро скрылся из глаз.

Через неделю в нью-йоркских газетах появилось объявление о том, что пароход будет ходить по реке два раза в неделю из Нью-Йорка в Альбани и обратно и будет перевозить желающих за шесть долларов в один конец. Опять собрались толпы народа глазеть на отплытие парохода, но желающих сесть не нашлось ни одного. Все увидели, что пароход движется, но зато стали опасаться, не сидит ли в машине нечистая сила. Люди боялись парохода, как непривычные лошади боятся паровоза.

Пароход стоял у пристани в Альбани и готов был двинуться в обратный путь. Хозяин парохода, господин Фультон, одиноко стоял на палубе; кроме него, на пароходе были одни кочегары да прочие служащие. Толпа народа глазела на берегу. И вдруг — Фультон не верил своим глазам — сквозь толпу пробивается человек с дорожным мешком в руке и входит на пароход. „Что вам угодно?“ — спрашивает Фультон. „Как что угодно? Ведь вы же объявляли в газетах, что возите пассажиров в Нью-Йорк? Получите деньги!“ Фультон смотрел на серебряные монеты, положенные ему

в руку, и от волнения не мог сказать ни слова. „Тут шесть долларов, — сказал пассажир. — Быть может, этого мало?“ — „Нет! — вскричал Фултон, трясая американца за руку. — Понимаете ли, ведь это — первая моя выручка с парохода, а вы — первый человек, который решился мне довериться. Хотелось бы мне выпить с вами вина по этому случаю, но теперь я так беден, что у меня нет даже бутылки вина. Надеюсь, мы ещё с вами встретимся, когда мои дела поправятся, и выпьем в память этого дня“.

Скоро американцы перестали бояться парохода. Завелись пароходы и на других американских реках. Стали строить пароходы и в Великобритании. Пароходы стали плавать не только по рекам, но и по морям.

RUSSIAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Monday, 22nd March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

Marks

1. On what date did the incident described at the beginning of the passage occur? What was the crowd discussing and what were most people ready to do as they awaited the departure of the boat on this occasion? 3
2. What three things are we told the crowd did immediately after the departure of the boat? 3
3. How soon after the incident described was a regular service advertised? How frequent was the service? 2
4. Was the first regular trip to Albany well patronized? Give the reason for your answer. 2
5. What did the man with the travelling bag give Mr. Fulton at Albany? What would Fulton have liked to do together with the man? Why? What hope did Fulton express? 5

15

RUSSIAN

HIGHER GRADE—(SECOND PAPER (b))

Monday, 22nd 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.**Marks will be deducted for writing that is difficult to read.**

1. Translate into Russian :—

Long ago there lived in England a widow. She had a son, who was a sailor. Once he went to China. When he returned he brought his mother a pound of tea. She was very pleased, because she had heard that tea was very nice, but she did not know how to prepare it. She told her friends about it and invited some of them to come and try it with her. They talked a great deal about this, for it was the first time they were gathering together for a tea-party.

At last the day came, and they all arrived in good time. There were cakes and bread and butter on the table, and in the middle was one dish upon which all eyes were soon directed. The lid was soon raised, and the hopeful guests beheld a dish of tea-leaves. These were served out in small quantities to all the guests, who began to eat them with pepper and salt, just as they ate cabbage or other vegetables.

A little later the son came in. When he saw his mother and her friends eating tea-leaves, he began to laugh merrily. "Where is the tea, mother?" he asked. "Here, my son," she replied. "Sit down with us, and I'll give you some too." "Those are only the leaves," said he and laughed again, "where is the water in which they were boiled?" "The water!" exclaimed the mother,—"I threw it away, of course!"

* (infin.) заварить.

(50)

2. Write an essay in Russian on **one** of the following themes :—

(a) Мои летние каникулы.

(b) Зима.

(c) Наша школа.

(25)

ITALIAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Wednesday, 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. 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 sheets provided for the answers. 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 paper 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 paper, and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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 Libraio

Mi ricordo sempre della prima volta che andai da Marco, il libraio, per fargli certe domande intorno al suo commercio, pochi minuti avanti che s'aprisse la scuola, che è l'ora in cui i compratori s'affollano. Gli dissi :

—“ E una vitaccia, non è vero ?

Il pover uomo non ebbe bisogno di rispondermi : tre ragazzetti risposero per lui, tre piccoli avventori impertinenti, che si presentarono col mento al banco, e cantarono tutti e tre a una voce, come se avessero concertato il terzetto sul marciapiede :

—“ Mi dia un foglio di carta a righe azzurre, senza margine, e un quaderno con la copertina rossa, e subito perchè ho fretta,” disse il primo ragazzo. E il secondo :

—“ Voglio un quaderno di rigatura numero due con la copertina gialla, e un foglio di carta da disegno più pulito di quello dell'altra volta, e una matita da disegno di due soldi, ma buona.”

—“ A me,” disse il terzo, “ un pezzo di gomma da dieci soldi, ma che non si rompa subito come quello della settimana passata, che mio padre ha detto :— Pare impossibile, son birbonate.”

Il libraio incrociò le braccia sul petto, soffiò, e disse :

—“ Dite le vostre impertinenze uno alla volta.”

Ricominciarono tutti e tre insieme.

Allora secondo la sua abitudine, egli mise fuori un fischio lungo e sottile, che voleva dire : domine, aiutami !—ultima espressione della sua pazienza. Poi chiamò in soccorso la moglie, la quale tirò indietro per le spalle due dei ragazzi, perchè il terzo potesse parlar da sè solo ; e dopo che li ebbe serviti tutti e tre, il pover uomo si rivolse a me, e ricominciò le sue lamentazioni. Il comico era come parlava dei ragazzi, usando lo stesso linguaggio che s'usa per gli uomini.

—“ Sono gente piena di pretese e senza scrupoli. A casa e a scuola saranno bambini, ma, in commercio, dimostrano tutti quarant'anni. Un commercio da cani, sono cani,”—continuò. “ In parola d'onore preferirei d'aver bottega da libraio in mezzo a una prigione.”

ITALIAN

LOWER GRADE—(PAPER (a))

AURAL COMPREHENSION TEST

Wednesday, 24th March—9.15 A.M. to 9.45 A.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

Marks

- | | |
|---|---|
| 1. At what time of day did the incident described take place, and why is this time important for Marco ? | 2 |
| 2. How does the story-teller indicate the size of Marco's customers ? | 1 |
| 3. (a) How did the boys make it difficult for Marco to serve them ? | 1 |
| (b) In what other ways did they show discourtesy to Marco ? | 4 |
| 4. Apart from his actual words how did Marco show his impatience ? | 2 |
| 5. How did his wife help him on this occasion ? | 2 |
| 6. What opinion does Marco express about his schoolboy customers, and what does he feel about the kind of life he himself leads ? | 3 |

15

ITALIAN

LOWER GRADE—(PAPER (b))

Wednesday, 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.**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 :—

Fra le memorie della mia infanzia tiene un posto di principessa, accanto a mia madre regina, una vecchia serva, uno dei cuori più buoni e più dolci ch'io abbia conosciuto al mondo ; della quale ho davanti agli occhi, lucidissimo, il piccolo viso sorridente, vero specchio dell'anima, e sento ancora la sua voce chiara. Si chiamava Maddalena. Era come una seconda madre per me : nascondeva le mie piccole malefatte, si rallegrava come una bambina d'ogni mia gioia, s'affannava d'ogni mia lieve ferita come d'una grande disgrazia, e mi dava dei santi consigli dalla mattina alla sera ; ed io le volevo bene come un figliuolo, le stavo appiccicato alle sottane ore intere a farmi raccontar cento volte le stesse storielle. M'è rimasta impressa così addentro nel cuore quella buona donna, che anche al presente, quando sogno qualche mio grande dolore, vedo qualchevolta lei con la rocca¹ nella cintura del grembiule, che mi guarda con viso ansioso, come faceva nel rialzarmi da una caduta, e sento la sua voce dolce che mi dice parole confuse di compassione e di conforto. Ah ! se la rivedessi viva, quando mi risveglio da quei sogni, come darei ancora il capo bianco alle sue braccia, con che dolcezza piangerei ancora sulle ginocchia della mia vecchia Maddalena !

(30)

¹ rocca = distaff (used in spinning).

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

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

Nel suo insieme, la vita non era comoda, quattrocento anni fa : alla peste non era infrequente si unisse la carestia, come quella paurosa del 1583, e il clima, a quanto pare, era più capriccioso di quello attuale. Le inondazioni si susseguivano in Italia con un ritmo disastroso ; nel 1594 gelarono tutti i corsi d'acqua toscani, e nel 1599 ci fu in Europa la neve fino alla fine di giugno ; poi, da giugno a dicembre, non cadde dal cielo una sola goccia di acqua, mentre da quel mese si aprirono nuovamente le cateratte celesti.

In queste condizioni, come si viaggiava nel bacino del Mediterraneo ? Anzitutto ci si poneva in viaggio quasi soltanto d'estate : anche la navigazione commerciale cessava praticamente nei mesi invernali, durante i quali funzionavano unicamente le staffette postali e i corrieri diplomatici. Per viaggiare non si usavano ancora le vetture, a causa della impraticabilità o della inesistenza delle strade : la carrozza faceva la sua comparsa soltanto in città e talvolta nei dintorni. Infatti in alcuni grandi centri come Napoli e Palermo le maggiori vie urbane avevano un modesto prolungamento fuori delle mura per permettere qualche passeggiata in carrozza a chi la possedeva. Per i viaggi, il cavallo o la mula erano gli unici mezzi di trasporto : soprattutto la mula era la regina delle comunicazioni europee del '500 e a dorso di mula perfino Papi e sovrani visitavano i loro Stati. Si comprende che in tal modo non si poteva far molta strada in breve tempo : da Venezia ad Anversa,¹ una distanza di mille chilometri, non si andava in meno di venti giorni.

Un po' più velocemente si viaggiava per mare : il record di velocità dell'epoca era detenuto da una galera di don Giovanni d'Austria che nel 1572 coprì il percorso da Messina alla costa catalana in sei giorni, con una media di più di duecento chilometri al giorno.

Avventurosissimi erano in quell'epoca i pellegrinaggi in Terrasanta, pure assai frequenti perché imposti da un sentimento religioso più forte dell'attuale : partendo da Venezia i pellegrini raggiungevano la Palestina via mare in un mese e mezzo circa, mentre per il ritorno (a causa dei venti e della stagione) occorreivano spesso più di tre mesi.

¹Anversa = Antwerp.

QUESTIONS

A. Answer in English :—

Marks

- | | | |
|---------|---|---|
| (1) | "Nel suo insieme, la vita non era comoda, quattrocento anni fa." | |
| (a) | What general climatic and other conditions adversely affected human life towards the end of the 16th century? | 2 |
| (b) | What particular disasters does the author mention in illustration of his point? | 4 |
| (2) | State how travel was affected by the climatic conditions. | 3 |
| (3) | To what extent were carriages used in those days? Why was their use so restricted? | 3 |
| (4) | "La mula era la regina delle comunicazioni."
Explain what the author means by this statement. What examples does he quote to show the truth of it? | 2 |
| (5) (a) | From the point of view of speed, how did sea-travel compare with land-travel? What two examples does the author give in this connection? | 4 |
| (b) | How does the author illustrate the effect of climatic conditions on the speed of sea-travel? | 3 |

B. Answer in Italian :—

- | | | |
|-----|---|---|
| (6) | Come si può definire un clima 'capriccioso'? | 3 |
| (7) | Perché cessava la navigazione nei mesi invernali quattrocento anni fa? | 3 |
| (8) | Spiegare il significato di (a) 'corrieri diplomatici'.
(b) 'galera'. | 3 |

30

3. Write in Italian, a continuous narrative based on the following summary :—

Past tenses must be used, and your story should be of approximately the same length as your answer to Question 1.

Due ragazzi passeggiano sulla spiaggia—vedono una caverna—decidono di esplorarla—quando escono l'alta marea impedisce il loro ritorno—passano la notte nella caverna e tornano a casa il giorno seguente. (25)

ITALIAN

HIGHER GRADE—(FIRST PAPER)

Wednesday, 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.**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:—

(a) Parecchi anni or sono, laggiù lungo il Simeto, davano la caccia a un brigante, certo Gramigna, se non erro, il quale da un capo all' altro della provincia s'era lasciato dietro il terrore della sua fama. Carabinieri e soldati a cavallo lo inseguivano da due mesi, senza esser riusciti a mettergli le unghie addosso : era solo, ma valeva per dieci, e la mala pianta minacciava di radicarsi. Inoltre si approssimava il tempo delle messe, il fieno era già steso pei campi, le spighe chinavano il capo e i mietitori avevano già la falce in pugno, e nonostante nessun proprietario osava affacciare il naso al disopra della siepe del suo podere, per timore di incontrarvi Gramigna che se ne stesse sdraiato fra i solchi, col fucile fra le gambe, pronto a sparare sul primo che venisse a guardare nei fatti suoi—di modo che le lagnanze erano generali. Allora il prefetto si fece chiamare tutti quei signori della questura, dei carabinieri, e dei compagni d'armi, e disse loro due paroline di quelle che fanno drizzar le orecchie. Il giorno dopo un terremoto dappertutto ; pattuglie per ogni fossato, e dietro ogni muricciolo ; se lo cacciavano dinanzi come una mala bestia per tutta una provincia, di giorno, di notte, a piedi, a cavallo, col telegrafo. Gramigna sfuggiva loro di mano e rispondeva col fucile se gli camminavano un po' troppo sulle calcagna. (30)

(b) Verso le undici del mattino, egli scese, giù, per la via Toledo, salutando con garbo le amiche che incontrava, fermandosi un momento a discorrere con gli amici. Fu specialmente gaio con Gaetano, un carissimo amico, quasi un fratello ; si diedero convegno per la sera. Sarebbero andati insieme a San Carlo, per una delle ultime rappresentazioni. Era la primavera già calda, già profumata di rose : ed essi si lasciarono, allegri come la primavera.

Alla strada di Chiaia, dal tabaccaio, egli scelse lungamente cinque sigari di Avana, lagnandosi col tabaccaio medesimo delle perfidie del Governo. Comprò anche una scatoletta di fiammiferi. Si fermò a guardare i fiori di Lamarra, come se volesse comprarne ; ma si strinse nelle spalle e tirò innanzi, con un passo elastico e leggero, succhiando il suo sigaro, fermandosi a guardare le mostre delle botteghe, i cappelli delle modiste. Più giù, una donnina vestita di raso nero, con un cappello nero dalla piuma bianca, lo guardò, passando rapidamente : egli guardò lei, un secondo solo, come trasognato, come smarrito.

Il passo dello sconosciuto si allentò un poco, e gli si spese due volte il sigaro. Allora una bambinetta lacera, con uno scialletto di lana incrociato sul petto, gli offrì una scatola di fiammiferi. (25)

2. Carefully read the poem given below, and then answer the questions which follow.

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

Dante, a Scuola

Un giorno, al chiuso, un insegnante fiacco¹
m'impose il fastidio del commento
alternato alla presa di tabacco.

Mi rammento la classe, mi rammento
la scolaresca muta² che si tedia
al comentare lento sonnolento ;

rivedo sobbalzare sulla sedia
il buon maestro, per uno scolare
che s'addormenta su di te, Comedia !

Attento ! Attento !—Ah ! più dolce sognare
con la guancia premuta al frontispizio
e l'occhio intento alle finestre chiare !

Ad ora ad ora un alito propizio
alitava un effluvio di ginestre³
sul commento retorico e fittizio.

La Primavera, l'esule campestre,
conturbava la gran pace scolastica
pel vano azzurro delle due finestre.

Io fissavo gli attrezzi di ginnastica,
gli olmi gemmati, l'infinito azzurro
in non so che perplessità fantastica ;

e tendevo l'orecchio ad un sussurro,
ad un garrito di rondini gaie,
in alto in alto in alto, nell' azzurro.

Volavano, da presso, l'operaie
affaccendate in paglia in creta in piume,
rifacendo le case alle grondaie.⁴

Con gli occhi abbarbagliati da quel lume
primaverile, mi chinavo stracco,
ripremevo la guancia sul volume.

E riudivo il pedagogo fiacco
alternare al commento d'ogni verso
la consueta presa di tabacco.

Ah ! non al chiuso, ma nel cielo terso,
nel fiato novo dell'antica madre,
nella profondità dell'universo,
nell'Infinito mi parlavi, o Padre.

¹ fiacco

= tired.

² muta

= pack (as of dogs).

³ ginestra

= broom (the plant).

⁴ grondaie

= eaves.

QUESTIONS

A. Answer in English :—

- | | <i>Marks</i> |
|--|--------------|
| 1. What do you know about the teacher in this poem ? | 2 |
| 2. Explain why one boy attracts the teacher's attention, and what the teacher's reaction is. | 2 |
| 3. How does the poet describe the teacher's commentary on Dante ? | 2 |
| 4. Do you think that the phrase "scolaresca muta" is aptly used ?
Why ? | 2 |
| 5. Describe the poet's posture at his desk during the lesson. | 2 |
| 6. What is the poet's criticism in the last stanza of the poem ? To whom does "o Padre" refer, and what does the poet mean by "antica madre" ? | 4 |
| 7. Do you notice any repetition in the poem ? What purpose does this serve ? | 3 |
| 8. What indications have you of the time of the year ? | 3 |

B. Answer in Italian :—

- | | |
|--|---|
| 9. Che cosa è un frontispizio ? | 3 |
| 10. Spiegare la frase, "rifacendo le case". Perchè facevano così ? | 4 |
| 11. Il poeta aveva "gli occhi abbarbagliati" dal lume. Perchè ? | 3 |

—
30
—**ITALIAN****HIGHER GRADE (SECOND PAPER (a))****AURAL COMPREHENSION TEST**

Wednesday, 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. 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 sheets provided for the answers. 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 paper 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 paper, and you will have three minutes in which to study the questions.

(iii) After the second reading you will write your answers on the sheet provided for this purpose.

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 sheet provided for the answers.

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) :—

L'arresto di Mussolini

Mussolini ha esposto la sua propria versione del suo ultimo colloquio col re prima dell'arresto, ma il re, parlando con i suoi intimi, ha narrato le cose un po' diversamente. Mussolini cominciò a guardare il libro della legge del Gran Consiglio,* citando articoli, dimostrando che il voto di censura pronunciato dai Consiglieri contro lui, Mussolini, il loro proprio Presidente, non aveva nessun valore deliberativo; parlava con sforzata disinvoltura con l'aria di essere sicuro di sé e del fatto suo, faceva gli occhi feroci. Ma il re gli disse che per lui il Gran Consiglio, creato da Mussolini stesso ed approvato legalmente dalla Camera e dal Senato, era un organo di stato costituzionale, e che per lui il voto del Gran Consiglio aveva un significato profondo, essendo indice della volontà del paese. Quando il re continuò che un altro ministro doveva prendere il suo posto, Mussolini perdette subito coraggio, e mormorò, come invocando :

"Allora tutto è finito."

Lo ripeté ancora due volte. Poi chiese con tono umile e querulo :

"E che sarà di me ? e della mia famiglia ?"

Il re lo assicurò che avrebbe preso a cuore la sua incolumità personale, e quella dei suoi : ed il colloquio finì così.

Fu riaccomagnato sulla soglia, alle diciassette e venti. Il re strinse la mano a Mussolini, poi rivolto all'ufficiale di servizio, chiese :

"Dov'è la macchina del presidente ?"

E Mussolini si guardò intorno, cercandola. Poi la vide ai piedi della rampa, collocata di fianco, e si avviò verso di essa. Il capitano Vigneri si avvicinò, si mise sull'attenti :

"Duce, ho l'ordine di Sua Maestà il Re di accompagnarvi per proteggervi dalla folla."

Mussolini fa un gesto, fra il seccato e il meravigliato :

"Non ce n'è bisogno. Ma venite pure."

E fece per salire nella sua automobile. "Non in questa," disse il capitano dei carabinieri, "in quest'altra." Ed accennò ad una grossa ambulanza che era ferma poco discosto. Mussolini non si oppose. Si avviò verso l'ambulanza. Dentro vi erano alcuni uomini armati di moschetto mitragliatore. Il capitano Vigneri lo afferrò per il gomito e, con l'aria di sorreggerlo, lo spinse dentro. Lo sportello fu chiuso, e l'ambulanza partì a grande velocità.

* il Gran Consiglio = the Fascist Cabinet (or Grand Council).

ITALIAN

HIGHER GRADE—(SECOND PAPER (a))

AURAL COMPREHENSION TEST

Wednesday, 24th March—1.30 P.M. to 2.0 P.M.

Answers are to be written on the sheet provided for the purpose, on which are also to be written any notes made between the readings.

QUESTIONS

- | | <i>Marks</i> |
|---|--------------|
| 1. What was Mussolini's official, constitutional title, and what governmental decision deprived him of it ? | 2 |
| 2. How did Mussolini and the King differ in their interpretation of this decision ? | 3 |
| 3. How did Mussolini's bearing change during the interview ? | 3 |
| 4. What was Mussolini's concern on learning of his dismissal ? | 1 |
| 5. Explain the part played by Captain Vigneri in the arrest. | 4 |
| 6. What precautions were taken to see that Mussolini did not escape ? | 2 |

ITALIAN

HIGHER GRADE—(SECOND PAPER (b))

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

1. Translate into Italian :—

Roland was standing in front of the fire, trying to remember where he had put his pen, when the door was suddenly flung open and a mysterious stranger appeared. He was wearing a long black overcoat and a hat which concealed most of his face, and he had a newspaper grasped in his hand.

"Did you write this?" the stranger demanded abruptly, pointing to a letter on the first page.

"Er . . . What's it about?" asked Roland, looking nervously around for something with which to defend himself.

"About my dog being a nuisance to the public. He *never* barks, not unless someone hurts him," said the stranger in a threatening tone.

"Well," said Roland, "I didn't mean your dog in particular. I meant any dog which is allowed to run round the streets at night without being kept under proper control, and actually I was thinking of a big brown dog at the bottom of the road, which wakes me up at midnight every night with its barking."

"That *is* my dog," shouted the stranger, "and the reason why he barks is that someone is trying to climb into the house and steal my valuable collection of stamps. And if I hadn't taught that dog to bark at the slightest noise, the thief would have had the lot by now. So don't interfere in other people's business!"

(50)

To bark = abbaiare.

2. Write an essay in Italian on one of the following subjects:—

Your essay should not be shorter than your answer to Question 1.

(a) Il giorno più felice della mia vita.

(b) Il denaro è utile, ma pericoloso.

(25)

SCIENCE

LOWER GRADE

Wednesday, 17th 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.

- | | <i>Marks</i> |
|---|--------------|
| 1. A mixture of iron and sulphur is heated strongly. How would you test the residue for the presence of (i) uncombined iron, (ii) uncombined sulphur, (iii) a compound of iron and sulphur ? | 5 |
| Describe an experiment in which calcium sets free hydrogen from water. How would you identify the two products of the reaction ? | 6 |
| How would you show that water and carbon dioxide are formed when a candle burns ? What information does this action give you about the composition of the candle ? | 5 |
| 2. How would you show experimentally— | |
| (i) the currents set up in water when it is gently heated (explaining briefly why this movement takes place), | 4 |
| (ii) the relation between the weight of a body floating in turpentine and that of the displaced turpentine, | 6 |
| (iii) the relation between the electric current flowing in a conductor and the potential difference between the ends of the conductor ? | 6 |
| 3. State briefly what you understand by (i) transpiration, (ii) photosynthesis, (iii) respiration. | 3 |
| Make a sketch of the seedling of a named plant and state how each part is concerned with the transpiration current. | 5 |
| Where and under what conditions does photosynthesis take place ? | 3 |
| Describe an experiment to show respiration in plants. | 5 |
| 4. Name two fish which live in salt water, two which live in fresh water, and two which spend part of their lives in salt water and part in fresh water. State four ways in which a fish is adapted to its environment. | 8 |
| How does the frog, at the various stages of its life history, obtain (i) nourishment, (ii) oxygen ? | 8 |

PART II

Only *THREE* questions from this part should be attempted—see instructions on page 1 of this paper.

Section 1.—Physics

	Marks
5. When is work done by a force and how is the work measured ?	3
Calculate the work done when a one hundredweight bag of coal is (i) carried 10 feet up a vertical ladder, (ii) dragged 10 feet across a floor by means of a horizontal force when the coefficient of friction between floor and bag is 0.5.	3
Make a sketch of a block and tackle of velocity ratio 4.	
How would you determine the efficiency of the machine for various loads ? Sketch the graph showing the relation between efficiency and load, and explain why the efficiency varies as it does.	11
6. (a) Define latent heat of fusion.	2
Describe in detail how you would find the latent heat of fusion of ice. State two special precautions you would take during this experiment.	9
(b) A motor tyre has a constant capacity of 2 cu. ft. and is filled with air at atmospheric pressure, 15 lb. per sq. in. A pump with a cylinder holding 36 cu. in. of air is used to pump air into the tyre. Assuming that all the air in the cylinder is delivered to the tyre at each stroke find the number of strokes needed to raise the pressure in the tyre to 25 lb. per sq. in. at the same temperature.	6
7. Describe how you would find the refractive index of glass and explain the theory of your method.	8
A beam of light emerges from a pin-hole in an opaque screen and is focussed on another screen distant 30 cm. by placing a spherical lens 10 cm. from the pin-hole. Calculate the focal length of the lens.	3
An object is placed 40 cm. in front of (i) a convex spherical mirror of focal length 10 cm., (ii) a convex spherical lens of focal length 10 cm. Find either by calculation or by drawing the position of the image and the magnification in each case.	6
8. Given a coil of resistance wire how would you use a Wheatstone's metre bridge to determine the length of this wire required to make a 10-ohm resistor ?	9
When a 5-ohm resistor and an ammeter were connected in series with a cell of e.m.f. 1.5 volts, and internal resistance 1.5 ohms a current of 0.2 amp. was recorded on the ammeter. What was the resistance of the ammeter ?	3
If, by mistake, the ammeter and the 5-ohm resistor were connected in parallel, what would their combined resistance be ? What current would be recorded on the ammeter ?	5

Section 2.—Chemistry

Answers to questions in this section should, wherever possible, be supplemented by equations.

APPROXIMATE VALUES OF ATOMIC WEIGHTS WILL BE FOUND IN THE BOOK OF MATHEMATICAL TABLES.

9. Make a labelled sketch of the apparatus used to prepare and collect sulphur trioxide. Write the equation for the reaction.

Marks

6

Describe and explain what happens when (i) hydrogen sulphide is bubbled through concentrated sulphuric acid, (ii) oxalic acid (or sodium formate) is heated with concentrated sulphuric acid.

6

1 gm. of pure anhydrous sodium carbonate is dissolved in water and the solution made up to 100 c.c. If 25 c.c. of this solution are neutralized by 30 c.c. of sulphuric acid, calculate the normality of the acid.

5

10. Make a labelled sketch of the apparatus used to prepare and collect nitric acid. Write the equation for the reaction.

6

State briefly the steps you would take to convert copper to cupric chloride by means of nitric and hydrochloric acids.

8

Calculate the weight of copper required to produce 1.5 gm. of cupric chloride.

3

11. Give two chemical tests to distinguish the following pairs of substances :—

(i) Carbon and manganese dioxide.

4

(ii) Potassium bromide and potassium iodide.

4

(iii) Hydrogen chloride and sulphur dioxide.

4

(iv) Ammonium sulphate and sodium nitrate.

5

Section 3.—Botany

12. List the main characters of the family Rosaceae.

4

Make fully labelled drawings to show the structure of the fruits of apple, strawberry, and dog rose. What information regarding the flower of each of these plants can be deduced from an examination of its fruit?

13

13. Make labelled diagrams to show as simply as possible the disposition of the principal tissues in a transverse section of (i) the stem, (ii) the leaf of a young dicotyledon.

10

Write illustrated notes on the appearance and function of (i) xylem vessels, (ii) sieve tubes.

7

14. By means of large labelled diagrams, show the structure of (i) a named bulb, and (ii) the grain of either wheat or maize. In each case state briefly the functions of the various parts.

13

Discuss the properties of a heavy clay soil which affect its fertility.

4

Section 4.—Zoology

15. Write notes on the position, appearance, and functions of the following as found in earthworm :—clitellum, pseudohearts, spermathecae, setae, typhlosole.

17

Marks

16. Describe how (i) amoeba, (ii) hydra captures its food. The green hydra provides an example of symbiosis. Explain this statement.

7

Make a sketch of a fully extended hydra and label the main regions and tissues. How does hydra extend itself and how does it contract?

10

Either

17. (a) (*For candidates professing Zoology.*)

Make a large clearly labelled diagram of the heart and main arteries of a frog, and state the parts of the body which receive blood from these arteries.

10

State five functions of the blood in a frog. Explain how the blood is kept moving round the body.

7

Or

17. (b) (*For candidates professing Zoology and Human Physiology.*)

Why is it possible for a baby to exist on milk alone? Describe clearly what happens to the milk on its passage through the food canal.

11

Why is milk alone an insufficient diet for an active healthy adult?

What is the value of orange juice and cod liver oil in a baby's diet?

6

SCIENCE

HIGHER GRADE—(BOTANY)

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

FIVE questions in all should be attempted.

Answers should, where 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 labelled drawing of a representative part of a dicotyledon leaf as seen in transverse section under a microscope.

7

Explain the ways in which the structure of the leaf is related to its function of photosynthesis.

8

Describe an experiment with an aquatic plant to show that oxygen is liberated during photosynthesis.

5

Marks

2. Distinguish between pollination and fertilization.

2

With reference to named plants, describe three methods by which self-pollination may be prevented. List the differences between insect-pollinated and wind-pollinated flowers.

11

Select one named member of either the Leguminosae or the Scrophulariaceae and give an illustrated account of the structure of its flower, showing how it is specially adapted for insect-pollination.

7

3. By reference to a named plant in each case, explain the following terms :—

epigynous flower, capitulum, apocarpous pistil, false fruit, bract, axile placentation.

Illustrate your answer by labelled drawings.

Assign each of the named plants to its family.

20

4. Why are water and oxygen necessary for germination ?

4

Choose a named dicotyledonous seedling whose cotyledons come above ground and describe its development from the beginning of germination until the appearance of the first foliage leaves. Make labelled drawings of the seedling at three of the stages described, including the last stage as one of the three.

9

State four respects in which this seedling differs from that of maize (or wheat).

4

Discuss the effects of keeping a seedling in darkness.

3

5. With reference to fern, write notes on the position, appearance, and functions of :—

rhizome, indusia, archegonia.

10

Explain why, at one stage of the fern's life history, it is necessary to have dry atmospheric conditions, and, at another stage, damp atmospheric conditions.

5

Explain the statement that the fern shows alternation of generations.

5

6. With an explanation of the results in each case, describe experiments (one experiment for each) :—

(i) to show that heat is produced during respiration,

5

(ii) to discover the regions of most active growth in the root and shoot of a young plant,

6

(iii) to demonstrate plasmolysis.

5

State briefly how you would determine the water content and the humus content of a soil ?

4

Either

7. (a) Discuss the effects of external conditions on the rate at which plants transpire. Write an account of some of the adaptations which help certain plants to withstand drought, mentioning examples.

20

Or (b) From each of the following pairs choose one plant. In each case state where you would expect to find it growing and draw attention to those features which are related to its mode of life or which assist its establishment in that habitat.

Wild hyacinth or lesser celandine.
 Rosebay willowherb or poppy.
 Bramble or cleavers ("Sticky Willie").
 Fucus or mushroom.
 Butterwort or bladderwort.

20

SCIENCE

HIGHER GRADE—(CHEMISTRY)

Wednesday, 17th March—1.45 P.M. to 3.45 P.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.

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.

APPROXIMATE VALUES OF ATOMIC WEIGHTS WILL BE FOUND IN THE BOOK OF MATHEMATICAL TABLES.

Marks

1. Establish the relation between the molecular weight and the vapour density of a compound.

Describe in detail an experiment to determine the vapour density of a volatile compound.

13

A volatile compound of hydrogen, carbon and oxygen has a vapour density of 37. When 1.11 gm. of this compound was passed through heated copper oxide, 1.35 gm. of water and 2.64 gm. of carbon dioxide were formed. Calculate the molecular formula of the compound.

7

2. Discuss the action of sulphuric acid in the preparation of (i) sulphur dioxide, (ii) carbon monoxide, stating in each case the other substance used, the conditions for the reaction, and the method of collection of the gas.

10

How would you demonstrate that each of these gases can act as a reducing agent? Your demonstration should include experimental proof of the identity of one of the products in each reaction.

10

3. Name the substances used to prepare nitric oxide. State the conditions for the reaction and the method of collection. (No diagram is required.)

5

Describe an experiment to find the volume of nitrogen in a given volume of nitric oxide. 4

Describe and explain the test for a nitrate. 6

Write the equation for the effect of heat on lead nitrate. If, in such an action, the constant weight of the solid residue was 2.5 gm., what weight of lead nitrate had been decomposed? 5

4. Given pure anhydrous sodium carbonate and concentrated hydrochloric acid (approximately 10 N) describe how you would prepare and standardize an approximately decinormal solution of the acid. 9

A sample of washing soda ($\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$) was exposed to the air for some time and part of it was converted to the monohydrate ($\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$). If 2.5 gm. of the mixture were neutralized by 22 c.c. of N hydrochloric acid, calculate the percentage weight of sodium carbonate in the mixture and show that approximately 20 per cent. of the mixture is monohydrate. 11

5. A small crystal is thought to be iodine. Describe two tests, either of which could be applied to verify this. 3

Compare the actions of chlorine and iodine on (i) water, (ii) potassium bromide solution, (iii) hydrogen. 8

Describe how you would prepare and collect hydrogen iodide in the laboratory. Explain why it cannot be prepared in a manner similar to that used for the preparation of hydrogen chloride. 9

6. Give **two** chemical tests to distinguish each of the following pairs:—

(i) Calcium carbonate and calcium hydroxide.

(ii) Cuprous oxide and mercuric oxide.

(iii) Ammonium sulphate and sodium sulphite.

(iv) Manganese dioxide and ferrous sulphide.

(v) Oxygen and ozonized oxygen. 20

7. **Either** (a) A solution of common salt coloured with litmus is placed in a U-tube with a carbon electrode in each limb. Describe and explain what would happen during the electrolysis of the solution. 8

Outline the manufacture of aluminium from one of its ores. 12

Or (b) State Graham's Law of Diffusion and describe experiments which show that the rates of diffusion of gases depend on their densities. 8

How may diffusion be used to prove that ammonium chloride dissociates on heating? 4

How would you show that the reaction between red-hot iron and steam is a reversible one? 8

SCIENCE

HIGHER GRADE—(PHYSICS)

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

$g = 32 \text{ ft. per sec. per sec. or } 981 \text{ cm. per sec. per sec.}$

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 **two** conditions that must be satisfied for three co-planar non-parallel forces to be in equilibrium.

How could these conditions be verified experimentally?

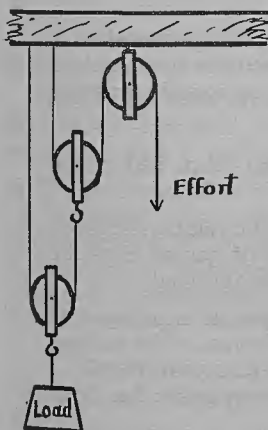
11

A uniform beam AB of length 8 ft. and mass 24 lb. is hinged at A to a vertical wall CA and held at an angle of 60° to the wall by a rope BC of length 8 ft. Find the magnitude and direction of the reaction at A.

5

2. Sketch **either** a screw **or** a wheel and axle and explain how you would determine its velocity ratio. Describe how you would investigate the relation between load and mechanical advantage for the machine you have chosen and state, with reasons, the conclusion you would expect to reach.

8



Three pulleys, each of mass 8 lb., are arranged as shown. An effort of 125 lb. wt. is required to raise steadily a load of 400 lb.

For this particular load calculate (i) the efficiency of the system; (ii) the work wasted in overcoming friction when the load is raised 2 ft.; (iii) the magnitude of the resultant force on the supporting beam.

8

3. What is meant by the *centre of gravity* of a body?

Show, by means of diagrams, what happens to the centre of gravity of a cone which is given a slight displacement when it is in (i) stable, (ii) unstable, (iii) neutral equilibrium.

5

A body consists of three uniform rods joined together in the form of a right-angled triangle. The rods are of the same material and thickness and their lengths are 6 cm., 8 cm., and 10 cm. respectively. Explain how you would find the centre of gravity of the body experimentally.

Show on an accurate sketch the position of the centre of gravity of :—

(a) each of the rods ;

(b) the combination of the 6 cm. and 10 cm. rods in their given position ;

(c) the combination of the three rods.

In (b) and (c) indicate very briefly how the position of the point is determined.

4. Define the *pound weight* and state, with reasons, its relation to the *poundal*.

How does the acceleration produced by a given force vary with the mass moved ? Describe in detail an experiment by which you could establish the result.

A parachute and load of combined mass 160 lb. fall vertically from rest through a height of 484 ft. and reach the ground with a velocity of 15 m.p.h. Calculate in lb. wt. the average resistance of the air to the fall of parachute and load.

SECTION II (HEAT AND HYDROSTATICS)

5. Define *pressure at a point* in a liquid. On what factors does it depend, and how would you establish the relations experimentally ?

State Archimedes' Principle and give a theoretical proof of it for the particular case of a solid floating in a liquid.

A hydrometer of mass 30 gm. consists of a bulb attached to a cylindrical stem of cross-section area 1 sq. cm. Calculate the length of stem between the graduation marks corresponding to specific gravities 1.00 and 1.25.

6. State Boyle's law and Charles' law and from them deduce the general gas equation.

Describe in detail an experiment to investigate the relation between the pressure and the temperature of a fixed mass of gas at constant volume. Show graphically the result that would be obtained.

A cylinder when newly supplied contains oxygen at a pressure of 10 atmospheres and a temperature of 22° C. After some of the gas has been used the pressure is 4 atmospheres and the temperature 12° C. What fraction of the mass of gas originally in the cylinder has been used ?

7. Define the *coefficient of real expansion* of a liquid and establish a relation between it and the *coefficient of apparent expansion* of the same liquid.

Describe, with a full explanation of the method of calculation, an experiment to find the coefficient of real expansion of a liquid.

Marks

At 0°C . the length of stem between the marks 0°C . and 100°C . on a thermometer is 20.0 cm. and the area of cross-section of the mercury thread is 0.0006 sq. cm. Find the mass of the mercury in the thermometer.

5

Coefficient of real expansion of mercury = 0.00018 per C. degree.

Coefficient of linear expansion of glass = 0.000009 per C. degree.

Density of mercury at 0°C . = 13.60 gm. per c.c.

8. Describe an experiment to determine the latent heat of fusion of ice, stating the precautions essential for accuracy.

7

Having found this latent heat, how would you proceed to determine experimentally the specific heat of ice?

4

A block of ice of mass 5 kgm. crashes from an aeroplane at a height of 2,000 m. on to more ice at ground level. Neglecting air resistance and assuming the temperature of the air is constant at 0°C . throughout the fall, calculate the maximum mass of ice that can be melted by the impact.

6

Latent heat of fusion of ice = 80 cal. per gm.

Mechanical equivalent of heat = 4.2 joules per cal.

SECTION III—(SOUND AND LIGHT)

9. Describe one form of siren and explain its method of working. Derive an expression for the frequency of the note emitted.

7

Explain how a siren may be used to find the frequency of the note emitted by an organ pipe, stating the practical difficulties of this method.

4

Calculate the frequency of the first overtone of an organ-pipe of length $1\frac{5}{8}$ ft. when the organ-pipe is (a) open at both ends, (b) closed at one end.

6

Velocity of sound in air = 1,100 ft. per sec.

10. In what respects do the waves in vibrating strings differ from the sound waves produced in the air by the vibrating strings?

4

What is the relation between the frequency of vibration and the diameter for stretched strings? Explain in detail how you would verify the relation experimentally.

7

The fundamental note emitted by a steel wire is an octave higher than that emitted by a gut string of the same length and subjected to the same tension. The density of steel is eight times that of the gut. Find the ratio of the diameters of the steel wire and the gut string. How would the frequency of the fundamental note of the steel wire be affected if the sounding length were halved and the tension doubled?

6

11. State the laws of refraction of light. Sketch the path of a ray of light through a glass prism and show the angle of deviation.

6

You are asked to draw a graph showing the variation of angle of deviation with angle of incidence. How would you obtain the data experimentally? Sketch the graph you would expect to get.

7

Calculate the angle of minimum deviation produced by a glass prism of refracting angle 60° .

4

Refractive index of glass = 1.5.

12. Establish a formula which expresses the focal length of a convex lens in terms of the distances of object and image from the lens.

How would you verify the formula experimentally?

Two convex lenses are used to form a compound microscope which gives a magnification of 58. The focal length of the eyepiece is 4 cm. Calculate the magnification produced by the eyepiece alone. Find also the distance of the object from the objective if the lenses are 20 cm. apart.

Least distance of distinct vision = 25 cm.

SECTION IV—(MAGNETISM AND ELECTRICITY)

13. Define *unit magnetic pole*. What do you understand by a *line of force* in a magnetic field?

A solenoid is used to magnetise a steel knitting needle. Show by a diagram the relation between the direction of the current and the polarity induced in the needle.

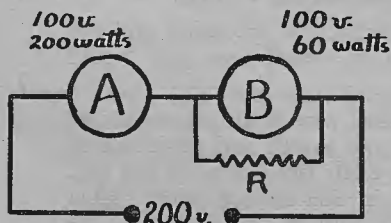
A second and identical needle is magnetised in the same way. How would you verify experimentally that the needles were of the same pole strength?

A magnet is of length 10 cm. and pole strength 100 units. Calculate from first principles the field intensity due to the magnet at a point, P, distant d cm. from each pole.

How would you place the magnet so that one such point would be a neutral point. If $H = 0.18$ dynes per unit pole, calculate d for the neutral point.

14. A cell passes a current through a resistor. What do you understand by (i) the e.m.f., and (ii) the potential difference of the cell? Why do they differ?

How would you use a potentiometer to compare the e.m.f. of a cell with its potential difference when passing a current through a 4-ohm resistor?



Two lamps, A marked 100 v. 200 w. and B marked 100 v. 60 w., and a resistor of R ohms are connected across a 200-volt supply as shown. Calculate the value of R to ensure that each lamp is working at its proper voltage.

15. One expression for the energy dissipated in a conductor is VIt . Name the unit in which each symbol is expressed and define the unit of potential difference. Name and define the unit of energy involved.

Describe an experiment by which you could verify this expression for two sets of values of V , I , and t .

A heater, rated 240 v. 500 w. and working at its proper voltage, takes 15 minutes to raise the temperature of 1,000 gm. of water from 15°C . to boiling point. What is the efficiency of the heater?

1 calorie = 4.2 joules.

Marks

16. State Faraday's laws of electrolysis.

4

In testing an ammeter electrolytically the following results were obtained :—

Average reading on ammeter = 1 amp.

Time for which current flowed = 24 min.

Mass of copper deposited = 0.462 gm.

If the electro-chemical equivalent of copper is 0.00033 gm. per coulomb, find the correct value for the current.

Sketch the circuit you would use to test the ammeter readings at 2, 3, and 4 amps. Describe the procedure you would follow, detailing precautions to secure accuracy.

9

A lead accumulator is being charged. State what is formed on each plate and what happens to the electrolyte.

4

SCIENCE

HIGHER GRADE—(ZOOLOGY)

Friday, 19th 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 large labelled diagrams of the urinogenital systems of the male and female frog and state the functions of the different parts.

14

Describe the changes in the structure and habits of a tadpole which occur in the first two weeks after it emerges from the jelly.

6

2. Describe the position, appearance, and function of each of the following in an insect such as cockroach :—

spiracles, mandibles, heart, ovaries, elytra, malpighian tubules.

20

3. Assign the following animals to their respective groups :—

mussel, paramoecium, hydra, lizard, deer, crab.

3

List the main characteristics of the groups to which the hydra, deer, and crab belong.

17

4. With reference to the honey bee, answer the following :—

(i) What types of bee are found in the hive, and how are these different types produced ?

(ii) By what differences in external appearance would you distinguish between them ?

- (iii) Why are bees termed "social insects"?
- (iv) What is meant by the swarming of bees?
- (v) How is pollen conveyed from flowers to a cell in the hive?
- (vi) What is the economic importance of bees?

20

5. Give a fully-labelled diagram of the alimentary canal of a rabbit or other named mammal.

6

In which organs of a mammal do the following substances occur and what is their significance in the metabolism of the body:—

glycogen, pepsin, urea, insulin, adrenalin?

14

6. Give a brief account of the circulation of blood in a named fish, illustrating your answer with a labelled diagram of the heart and the main arteries in the anterior part of the body. Indicate by arrows the direction of flow of the blood.

14

Where would you expect to find (i) the spawn of salmon (or trout), (ii) the spawn of eels, (iii) elvers?

Name **three** peculiarities shown by adult eels.

6

Either

7 (a). What do you understand by "parasitism"?

2

Give a brief outline of the life-history of any **two** parasites selected from different phyla. Show in each case how a knowledge of the life-history has helped in devising methods of control.

18

Or

7 (b). The following animals may be found in a garden:—

snail, lady-bird, song thrush, earthworm, mole, crane-fly, toad.

Describe briefly the ways in which each is beneficial or harmful to plant life.

12

Write short notes on the appearance, method of formation, and functions of (i) the cocoon of earthworm, and (ii) the shell of snail.

8

SCIENCE

HIGHER GRADE—(ZOOLOGY AND HUMAN PHYSIOLOGY)

Friday, 19th 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 large labelled diagrams of the urinogenital systems of the male and female frog and state the functions of the different parts. 14
Describe the changes in the structure and habits of a tadpole which occur in the first two weeks after it emerges from the jelly. 6
2. Describe the position, appearance, and function of each of the following in an insect such as cockroach :—
spiracles, mandibles, heart, ovaries, elytra, malpighian tubules. 20
3. Assign the following animals to their respective groups :—
mussel, paramoecium, hydra, lizard, deer, crab. 3
List the main characteristics of the groups to which the hydra, deer, and crab belong. 17
4. With reference to the honey bee, answer the following :—
(i) What types of bee are found in the hive, and how are these different types produced ?
(ii) By what differences in external appearance would you distinguish between them ?
(iii) Why are they termed "social insects" ?
(iv) What is meant by the swarming of bees ?
(v) How is pollen conveyed from flowers to a cell in the hive ?
(vi) What is the economic importance of bees ? 20

SECTION II—HUMAN PHYSIOLOGY

5. Describe the following parts of the human skeleton, stressing particularly the ways in which each is fitted for its special function :—
pelvic girdle, atlas vertebra, rib, humerus. 16
What factors in the diet are necessary for building sound bones, and which foods would supply these essentials ? 4
6. Describe experiments (one experiment for each) which you would perform :—
(i) to show the digestive action of a named enzyme ; 5
(ii) to demonstrate reflex action ; 2
(iii) to demonstrate the existence of a blind spot on the retina of the eye. 3
Explain the mechanism by which air enters and leaves the lungs.
Describe, as fully as you can, the fate of the oxygen thus brought to the lungs. 10

Either

- 7 (a) Write notes on the distinctions between :—
(i) blood and lymph ;
(ii) cerebellum and cerebral hemispheres ;
(iii) hormones and vitamins ;
(iv) excretion and defaecation ;
(v) tricuspid valves and semi-lunar valves in man ;
(vi) small intestine and large intestine. 20

Or

7 (b) Write notes on the following :—

- (i) the middle ear ;
- (ii) the lens of the eye ;
- (iii) taste buds ;
- (iv) the sense organs in the skin of the hands.

10

Make fully labelled diagrams to show the structure of the kidney.
Explain clearly how this organ functions.

10

SCIENCE—ENGINEERING

HIGHER GRADE—(APPLIED MECHANICS AND HEAT ENGINES)

Monday, 22nd 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 $\pi = \frac{22}{7}$, 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

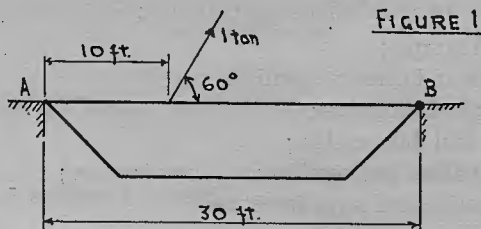
1. (a) Draw typical graphs for a hand-lifting machine showing the relationship between load and effort and between load and efficiency. Use a common base to represent the load for the two graphs.

(b) The girder shown in Figure 1 is of symmetrical construction, weighs 4 tons, and is hinged at B.

The end A is to be raised 2 in. by means of a screw jack, which has a spindle screwed 5 threads per inch and a handle of 14 in. effective length.

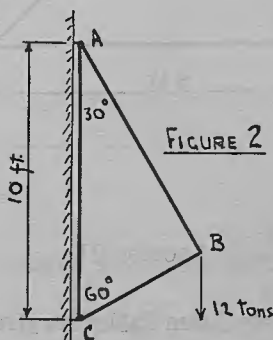
Assistance in lifting the girder is provided by a crane which gives a pull of 1 ton on the wire rope as shown.

If the tangential force required on the handle of the screw jack is 24 lb., find the efficiency of the screw jack by comparing the work done by the jack in lifting the girder with that done in the same time by the effort applied to the handle.



2. The triangular pin-jointed frame shown in Figure 2 carries a load of 12 tons at B. The member AB is to be a solid steel bar of circular cross-section, and the member BC is to be tubular with an external diameter of 3 in.

- (a) Calculate the forces in AB and BC.
 - (b) If the stresses in these members must not exceed 5 tons per sq. in. in tension and 2 tons per sq. in. in compression, find suitable sizes for the diameter of AB and the internal diameter of BC.
- (You may leave these two answers in the form of square roots.)
- (c) Determine the extension of member AB under load if Young's modulus of elasticity for the material is 13,000 tons per sq. in. and the effect of the end fixings is neglected.



3. (a) A wagon of 5 tons weight and with a tractive resistance of 12 lb. per ton runs freely from rest down a gradient of 1 in 50. The gradient is 300 ft. long.

Determine—

- (i) the potential energy of the wagon at the top of the gradient ;
- (ii) its kinetic energy at the foot of the gradient ;
- (iii) its speed at the foot of the gradient.

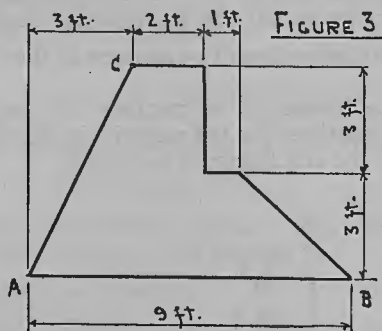
(b) At the foot of the gradient, where the track becomes level, an external force of 120 lb. is applied to the wagon in the direction of motion while it runs a further 224 ft.

If the tractive resistance is the same as before, find the kinetic energy of the wagon at the end of this distance.

(c) If the 120 lb. force is now withdrawn and the track continues level, find the further distance the wagon will run by itself before stopping.

4. Find the position, with reference to the corner A, of the centre of gravity of the thin steel plate shown in Figure 3.

If the plate be lifted vertically by a chain attached to a swivel joint at C, determine the angle which the base AB will make with the ground when the plate is lifted clear.



SECTION II

(Extracts from the Steam Tables are given at the end.)

5. A steamship is fitted with boilers supplying turbines developing 2,500 I.H.P.

Steam is generated at a pressure of 350 lb. per sq. in. from feed-water at 160° F., and is then superheated to a temperature of 700° F.

The calorific value of the oil fuel used is 18,000 B.Th.U. per lb.

If the thermal efficiency of the boilers (including the superheaters) is 78 per cent. and the indicated thermal efficiency of the turbines is 16 per cent., calculate the consumption of fuel-oil in lb. per hour.

6. What do you understand by the terms *liquid heat*, *latent heat*, *superheat* and *heat drop*?

Steam is admitted to an engine at a pressure of 250 lb. per sq. in. and a temperature of 650° F.

It is exhausted at a pressure of 10 lb. per sq. in. and it is then 3 per cent. wet.

If 2,800 lb. of steam are used per hour, calculate—

(a) the heat drop ;

(b) the theoretical I.H.P. developed by the engine.

7. What is meant by a *spark-ignition engine* and by a *compression-ignition engine*?

Particulars of a four-cylinder motor car working on the four-stroke cycle are—

cylinder bore	..	..	$3\frac{1}{2}$ in.
stroke	..	..	$4\frac{3}{4}$ in.
mean effective pressure	..	..	90 lb. per sq. in.
top-gear ratio	..	..	4 to 1 (<i>i.e.</i> , 4 turns of the engine shaft to 1 turn of the back axle).
diameter of road wheels	..	..	24 in.
petrol consumption	..	..	12.5 miles per gallon at a speed of 50 miles per hour.
calorific value of petrol	..	..	19,000 B.Th.U. per lb.

(A gallon of petrol weighs 8 lb.)

Calculate—

- (a) the I.H.P. ;
- (b) the indicated thermal efficiency.

Extracts from Steam Tables

p	t	h	L
lb. per sq. in.	temp. °F.	B.Th.U.	B.Th.U.
10	193	161	982
250	400	376	831
350	432	410	801

Mean specific heat of superheated steam = 0.55.

TECHNICAL SUBJECTS

LOWER GRADE—(APPLIED MECHANICS)

Monday, 22nd March—9.15 A.M. to 10.45 A.M.

Not more than **FOUR** questions should be attempted.

25 marks are assigned to each question.

When candidates use a formula they must explain each symbol. Units must always be stated.

$$\text{Take } \pi = \frac{22}{7}.$$

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

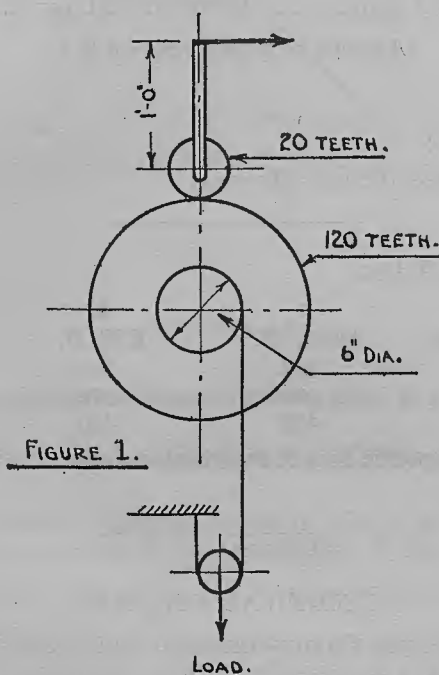
N.B.—Write legibly and neatly, and leave a space of about half an inch between the lines.

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

1. A single-purchase winch is shown in Figure 1.

Calculate—

- (a) the lifting speed of the load in ft. per minute when the handle rotates at 60 r.p.m. ;
- (b) the velocity ratio ;
- (c) the mechanical advantage when the efficiency is 75 per cent.



2. Define *power* and *efficiency*.

A rotary pump is used to empty a sump which is filled to capacity with fuel oil. The sump is 10 ft. in diameter and 28 ft. deep as shown in Figure 2.

The delivery pipe of the pump is 2 ft. above the top of the sump and the oil flows out at a uniform rate.

Find—

- (a) the work done in emptying the sump ;
- (b) the average horse-power of an engine to drive the pump if the overall efficiency is $66\frac{2}{3}$ per cent. and the sump is emptied in 40 minutes.

Draw the appropriate work diagram. It need not be drawn to scale.
(The oil weighs 50 lb. per c. ft.)

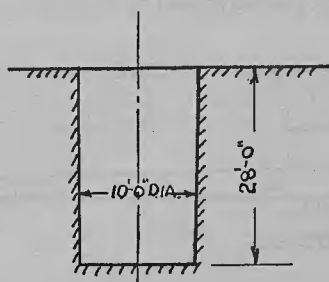


FIGURE 2.

3. A uniform beam is raised by means of a sling attached to a crane as shown in Figure 3. The tension in each supporting chain of the sling is 400 lb.

Calculate the weight of the beam.

Determine graphically the forces in the members AB and BC (Scale, 1 in. represents 200 lb.)

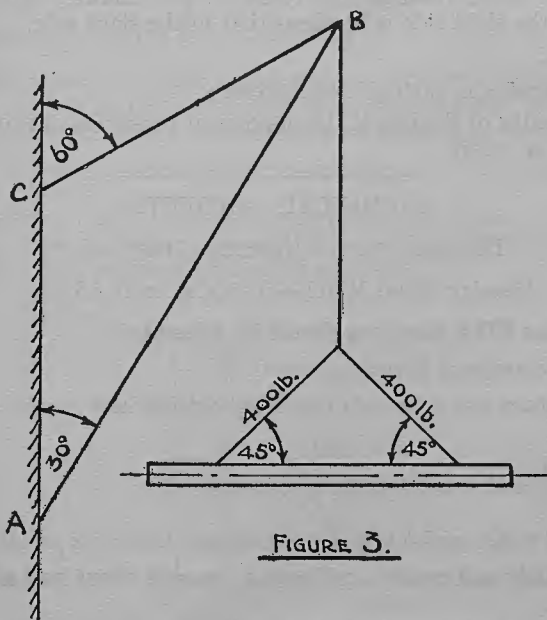


FIGURE 3.

4. Figure 4 shows the outline of a lever safety valve which is just on the point of blowing off steam.

Diameter of valve $2\frac{1}{2}$ in.

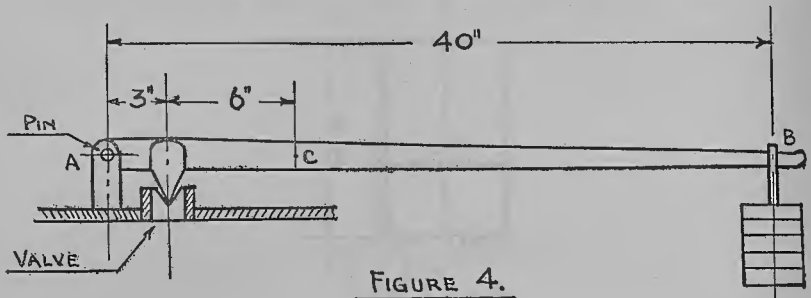
Weight of valve 2 lb.

Centre of gravity of lever is at C.

Weight of lever 6 lb.

Weight at B 60 lb.

The pin at A is $\frac{1}{2}$ in. diameter and is in double shear.



Determine—

- the pressure in the boiler (to the nearest whole number) ;
- the force on the pin ;
- the shear stress in the pin.

5. Draw free-hand sketches of open and crossed belt drives.

Explain why a crossed belt drive is used.

A conveyor belt, running at 1,000 ft. per minute, transmits 30 h.p. The tension in the tight side is $2\frac{1}{2}$ times that in the slack side.

Calculate—

- the tension in each side of the belt ;
- the width of the belt if the maximum tension is not to exceed 100 lb per in. width.

TECHNICAL SUBJECTS

HIGHER GRADE—(APPLIED MECHANICS)

Monday, 22nd 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 $\pi = \frac{22}{7}$, 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.

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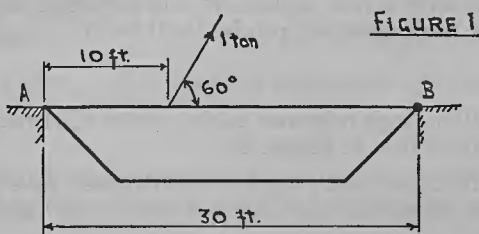
1. (a) Draw typical graphs for a hand-lifting machine showing the relationship between *load* and *effort* and between *load* and *efficiency*. Use a common base to represent the load for the two graphs.

(b) The girder shown in Figure 1 is of symmetrical construction, weighs 4 tons, and is hinged at B.

The end A is to be raised 2 in. by means of a screw jack, which has a spindle screwed 5 threads per inch and a handle of 14 in. effective length.

Assistance in lifting the girder is provided by a crane which gives a pull of 1 ton on the wire rope as shown.

If the tangential force required on the handle of the screw jack is 24 lb., find the efficiency of the screw jack by comparing the work done by the jack in lifting the girder with that done in the same time by the effort applied to the handle.



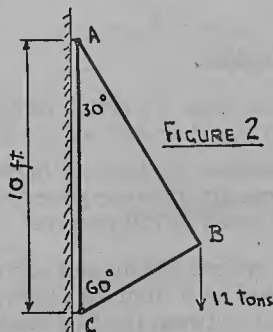
2. The triangular pin-jointed frame shown in Figure 2 carries a load of 12 tons at B. The member AB is to be a solid steel bar of circular cross-section, and the member BC is to be tubular with an external diameter of 3 in.

(a) Calculate the forces in AB and BC.

(b) If the stresses in these members must not exceed 5 tons per sq. in. in tension and 2 tons per sq. in. in compression, find suitable sizes for the diameter of AB and the internal diameter of BC.

(You may leave these two answers in the form of square roots.)

(c) Determine the extension of member AB under load if Young's modulus of elasticity for the material is 13,000 tons per sq. in. and the effect of the end fixings is neglected.



3. (a) A wagon of 5 tons weight and with a tractive resistance of 12 lb. per ton runs freely from rest down a gradient of 1 in 50. The gradient is 300 ft. long.

Determine—

- (i) the potential energy of the wagon at the top of the gradient ;
- (ii) its kinetic energy at the foot of the gradient ;
- (iii) its speed at the foot of the gradient.

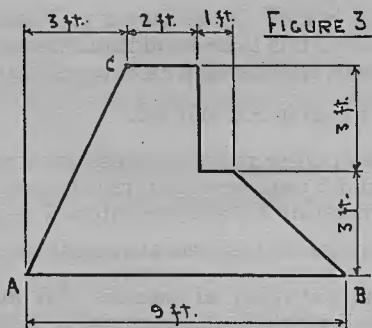
(b) At the foot of the gradient, where the track becomes level, an external force of 120 lb. is applied to the wagon in the direction of motion while it runs a further 224 ft.

If the tractive resistance is the same as before, find the kinetic energy of the wagon at the end of this distance.

(c) If the 120 lb. force is now withdrawn and the track continues level, find the further distance the wagon will run by itself before stopping.

4. Find the position, with reference to the corner A, of the centre of gravity of the thin steel plate shown in Figure 3.

If the plate be lifted vertically by a chain attached to a swivel joint at C, determine the angle which the base AB will make with the ground when the plate is lifted clear.



5. Define coefficient of friction.

- (a) The two friction surfaces of a clutch have a mean diameter of $13\frac{1}{2}$ in. and are pressed together with an axial force of 320 lb.

If the coefficient of friction between the surfaces is 0.35, determine the maximum horse-power which can be transmitted by the clutch at a speed of 750 revs. per minute.

- (b) A shaft 3 in. dia. weighs 400 lb. and rotates at 140 revs. per minute. The resultant load on it from the pulleys is $1\frac{1}{4}$ tons acting vertically upwards midway between the two bearings supporting the shaft.

Calculate—

- (i) the length of each bearing if the pressure on it is limited to 240 lb. per inch length ;
- (ii) the heat generated in each bearing in B.Th.U. per hour if the coefficient of friction between the shaft and the bearings is 0.05.

6. Describe **briefly** with the aid of sketches the cycle of operations in a four-stroke petrol engine, and sketch a typical indicator diagram.

A motor-car engine working on the four-stroke cycle has four cylinders, each of $3\frac{1}{2}$ in. bore and $4\frac{3}{4}$ in. stroke. Under test the following results were obtained :—

Speed	2,560 revs. per minute
mean effective pressure	90 lb. per sq. in.
brake torque	84 lb. ft.

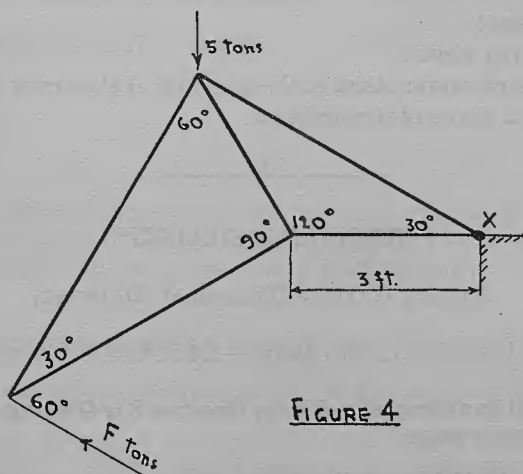
Calculate the I.H.P., B.H.P. and the mechanical efficiency.

7. The pin-jointed frame shown in Figure 4 is hinged at the joint X and is in equilibrium when loads of 5 tons and F tons are applied to it as indicated.

Determine graphically—

- (a) the magnitude of the force F tons and the magnitude and line of action of the reaction at X ;
- (b) the magnitude and nature of the force in each member of the frame—
write your answers alongside each member in your space diagram.

(Scales : 1 in. represents 2 ft. and 1 in. represents 2 tons.)



TECHNICAL SUBJECTS

LOWER GRADE—(TECHNICAL DRAWING)

Wednesday, 24th March—1.0 P.M. to 3.0 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 should be used.

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

1. Figure 1 shows two views of a bracket.

Draw, full size :

- (a) the front elevation, showing clearly the construction for obtaining the centres of the large arcs ;
- (b) a sectional end elevation on the line A-B, taken in the direction of the arrows X.

Hidden parts should be shown dotted.

Fillets may be drawn freehand.

(60)

2. Fig. 2 shows two elevations of a casting.

Draw, full size :

- (a) the given front elevation ;
- (b) a plan ;
- (c) an auxiliary elevation projected from (b) taken in the direction of the arrow R.

(40)

3. Fig. 3 shows two views of a shaped block.

Draw, full size :

- (a) the given views ;
- (b) an end elevation taken in the direction of the arrow P ;
- (c) the true shape of the surface S.

(40)

TECHNICAL SUBJECTS

HIGHER GRADE—(TECHNICAL DRAWING)

Wednesday, 24th 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 should be used.

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

1. Figure 1 shows the component parts of a check valve through which feed-water is delivered to a boiler.

Draw, full size, the following views of the valve with the parts assembled—

- (a) the outside elevation (show hidden parts dotted) ;
- (b) a sectional end elevation, taken on the centre line AA and looking in the direction of the arrow X (omit hidden parts) ;
- (c) a sectional plan, projected from the end elevation (b), taken on the centre line BB (show hidden parts dotted).

Show the screw thread as indicated in Figure 1.

Do not give dimensions.

N.B.—The base line of the elevation should be $7\frac{3}{4}$ in. from the top of your paper and the centre line AA for the outside elevation (a) should be 15 in. from the left-hand edge. (60)

Either

2. Figure 2 shows incomplete the elevation and plan of the forged base of a pillar having a recessed portion in the shape of a spherical headed cone.

Draw, full size—

- (a) the complete elevation showing the curve of intersection ;
- (b) the complete plan ;
- (c) a sectional end elevation taken on the vertical plane AA and looking in the direction of the arrow.

Show hidden parts dotted in each view.

(40)

Or

3. Figure 3 shows incomplete the elevation of a circular duct system made of sheet metal. One duct of 21 in. dia. is carried round a bend of 2 ft. 8 in. radius in three straight segments ; another duct of 18 in. dia. joins the centre segment as shown.

Draw, to a scale of one-eighth full size—

- (a) the complete elevation showing the curve of intersection ;
- (b) the true shapes of the sheets to form segments A and B as cut ready for bending and welding. The welds are at the shortest longitudinal dimensions, i.e., along PQ and QR.

(40)

MUSIC

LOWER GRADE

Wednesday, 17th March—9.30 A.M. to 11.30 A.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. Write in staff notation the whole of **one** of the following tunes. Insert the key and time signatures. The words need not be added.

The oak and the ash (G minor).

A rosebud by my early walk (D major).

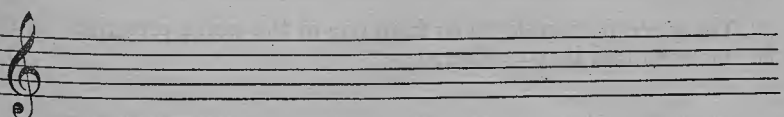
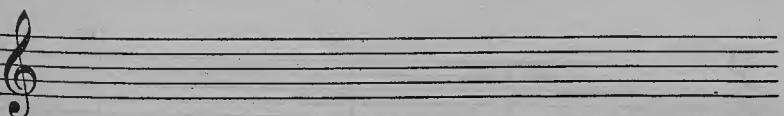
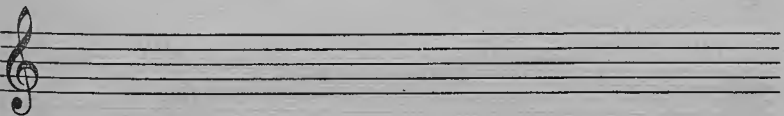
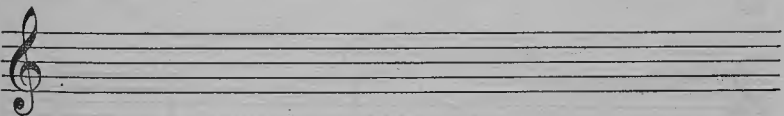
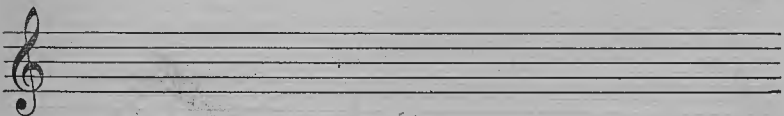
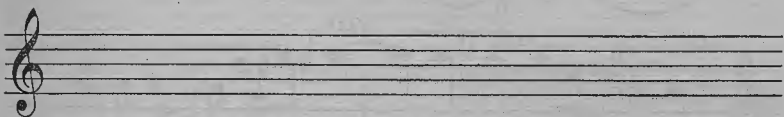
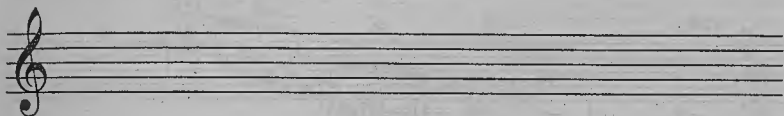
Polly Oliver (E flat major).

The minstrel boy (F major).

Flow gently, sweet Afton (F major).

The psalm tune "Glasgow," usually sung to the words "Behold! the mountain of the Lord" (F major).

The psalm tune "Old 124th," usually sung to the words "Now Israel may say, and that truly" (A major). (12)



2. (a) The following extract is written for clarinet in B flat. Rewrite it as it would sound (that is, a tone lower than it is written here). Use the appropriate key signature, and add the time signature. Use the treble clef for bars 1 to 8, the alto clef for bars 9 and 10, and the treble clef again for bars 11 to the end.

(10)

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15)

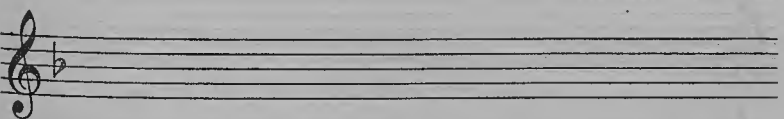
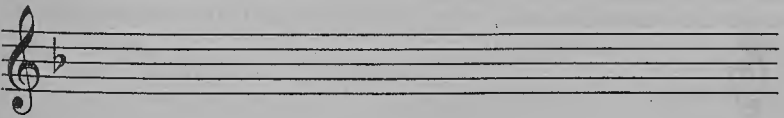
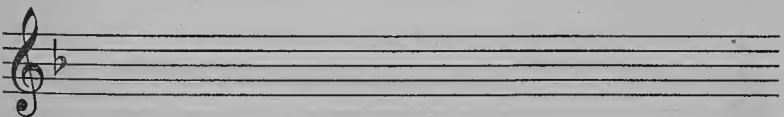
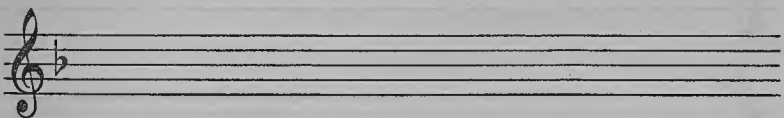
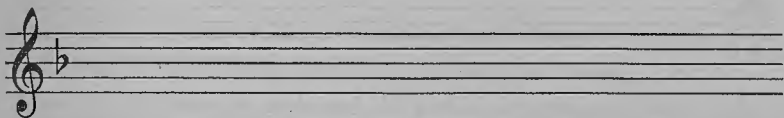
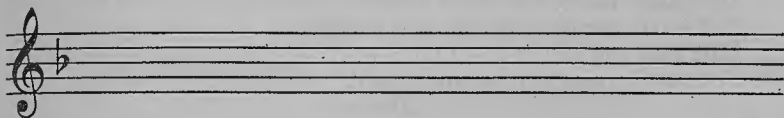
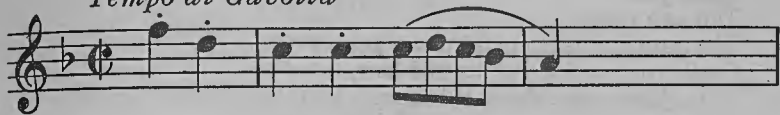
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15)

(b) The given passage is taken from one of the works prescribed for study. Name the work and its composer.

(2)

3. Continue the following to make a melody in simple binary form not less than eight bars in length, ending on the tonic.

(22)

Tempo di Gavotta

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 where necessary. 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. (24)

" Jane, Jane,
Tall as a crane,
The morning light creaks down again !
Comb your cockscomb-ragged hair,
Jane, Jane, come down the stair."

Edith Sitwell.

OR

" The sun is warm, the sky is clear,
The waves are dancing fast and bright.
Blue isles and snowy mountains wear
The purple noon's transparent light."

Shelley.



SECTION II

Answer question 8 and **ONE** other question from this section.

5. Write brief but comprehensive notes on *three* of the following :—

dorian mode ; minuet and trio ; leit-motif ; spinet ; pentatonic ;
English horn ; motet. (15)

6. (a) Name *four* arias which you have heard, or have sung at school.

(b) Name the composer of each and the period in which he lived.

(c) Name the works from which *two* of your chosen arias are taken.

(d) Write in staff notation a few bars from any *one* of these arias. (15)

7. (a) Name the four basic dances of the 18th century suite.

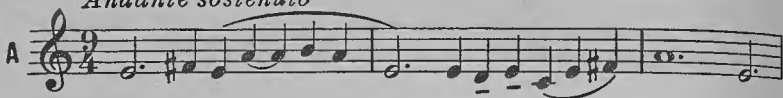
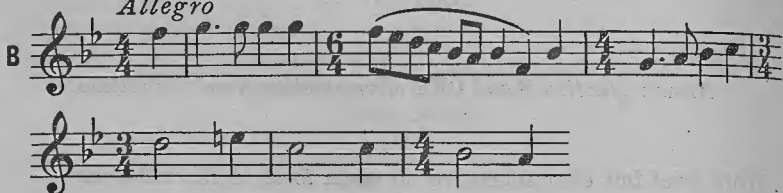
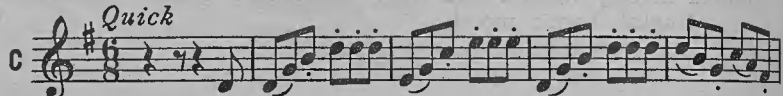
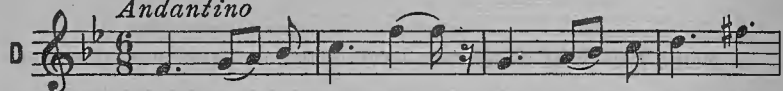
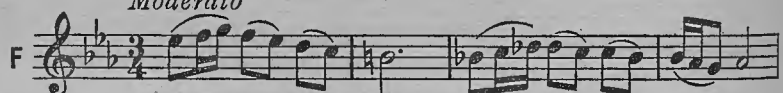
(b) Describe briefly the form and characteristics of any *one* of these dances.

(c) Name two composers of suites.

(d) Write in staff notation a few bars of any suite you have heard or played.
Name the dance and the suite (stating the composer) from which your quotation is taken. (15)

8. Identify *three* of the following extracts from the works prescribed for study. 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 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)

Andante sostenuto*Allegro**Quick**Andantino**Allegro**Moderato*

MUSIC

HIGHER GRADE—(FIRST PAPER)

Wednesday, 17th March—9.30 A.M. to 11.15 A.M.

N.B.—Write in ink, clearly and legibly. Care must be taken to make the notation clear ; notes indistinctly placed will be regarded as wrong.

All the answers to this paper are to be written in the spaces provided in this examination paper, which must be given up with all sheets of manuscript music paper used for rough working attached to it.

In order to obtain a pass in the whole examination, candidates must satisfy the examiners in this paper.

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.....

PAPER I

All candidates should attempt from this paper THREE questions 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.

“ Come bring with a noise,
My merry, merry boys,
The Christmas log to the firing;
While my good dame, she
Bids you all be free,
And drinks to your heart’s desiring.”

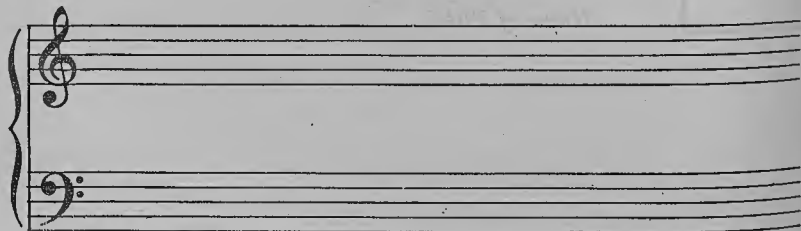
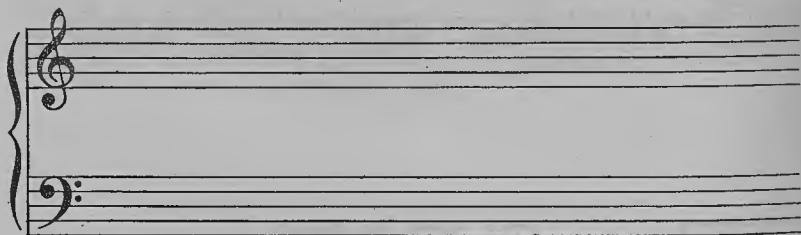
Herrick.

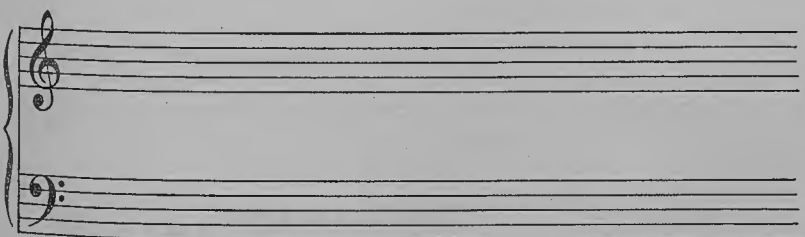
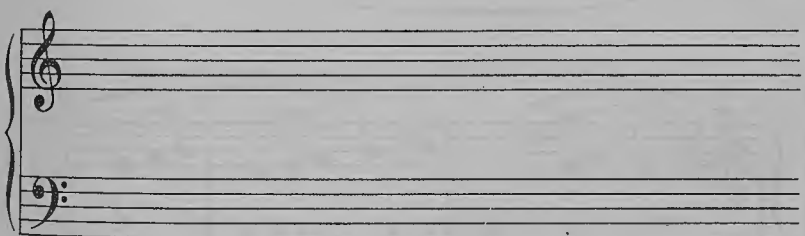
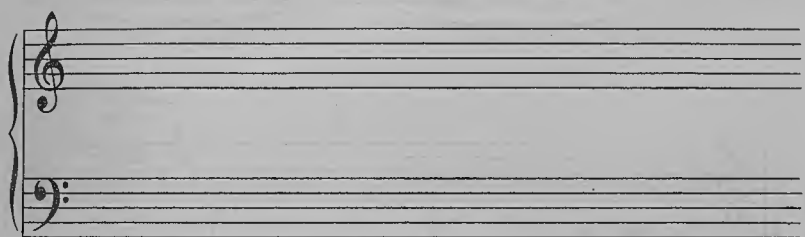
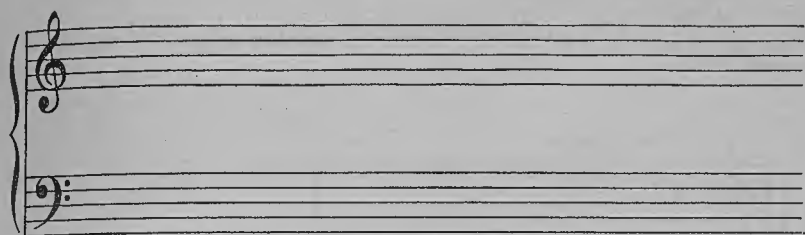
OR

“ The Frenchmen saw him a-coming there
With the one-piece eye and the valentine hair,
With the safety-pin sleeve and the occupied air
Aboard the Victory, Victory O.
Now you all remember the message he sent
As an answer to Hamilton’s discontent—
There were questions asked about it in Parliament
Aboard the Victory, Victory O.”

Durrell.

(22)





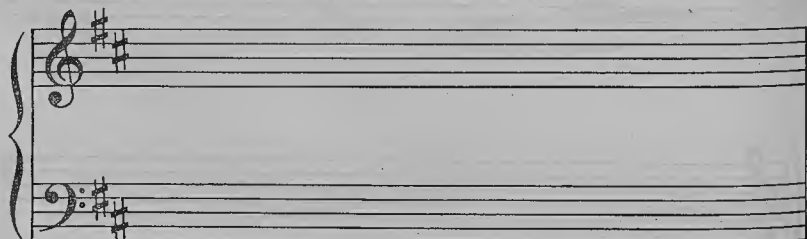
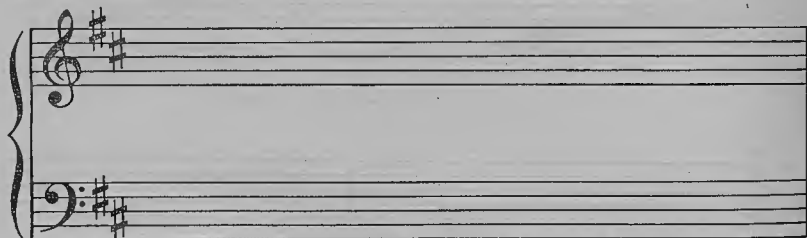
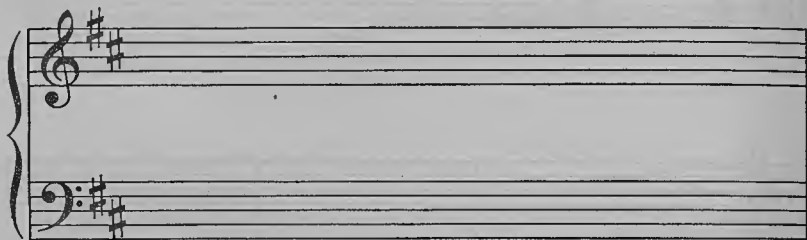
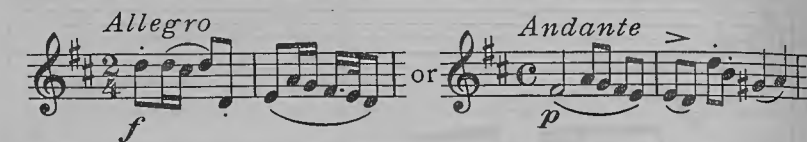
3. To the given bass part add a freely moving and melodious treble part in a similar style, to make an interesting and complete piece of two-part music for the pianoforte. Begin at * with a point of imitation. (20)

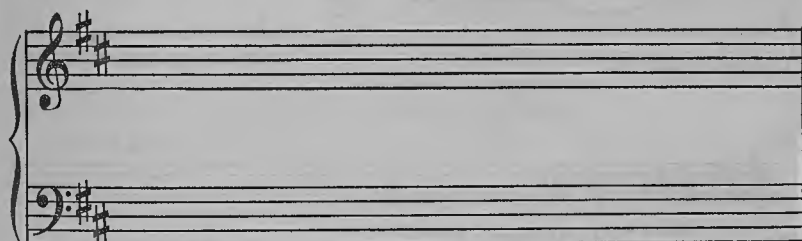
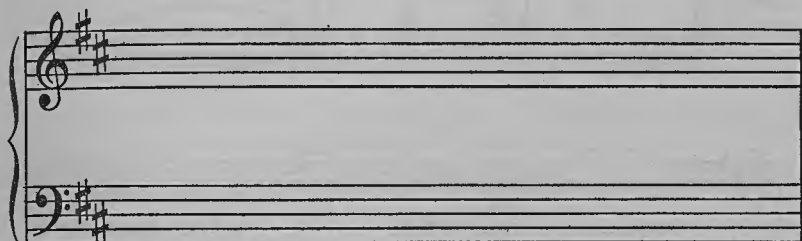
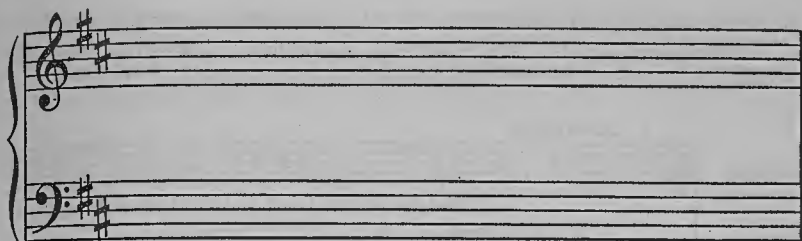
Allegro

*

4. Expand *one* of the following phrases 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 there should be at least one modulation. Phrase it and harmonize the cadences.

(20)





5. Read, and try to hear mentally, the following excerpt from Mozart's aria "Unglückliche Liebe," for voice and pianoforte; then give the information required below. The bars are numbered for purposes of reference

Andante

Voice

But he whose hand had trac'd the writing, Shall

Piano

p

①

②

long — in mem'-ry warm my heart, Shall long in

③

④

mem'-ry warm my heart!

⑤

⑥

(a) Mark with the letters "I.C." below the appropriate chords an example of an interrupted cadence.

(b) Name the two basic chords in bar 1, stating the key.

(Answer)

(c) Name the two basic chords in bar 2, stating the key.

(Answer)

(d) Put a cross above the harmony (essential) notes in the accompaniment part on the treble stave in bars 1 and 2.

(e) The first four notes on the treble stave of the accompaniment part (marked by $\boxed{\quad}$), form a rhythmic figure which recurs frequently throughout. Indicate the recurrences by marking all such with a similar bracket ($\boxed{\quad}$).

(f) Somewhere in bars 3 and 5 you will find an example of the chord of the "Italian sixth," and of the chord of the "German sixth." Mark them "It. 6," and "G. 6" respectively. Describe the chord upon which each resolves.

(Answer)

(g) What means does the composer use to suggest the plaintive despair of the lover burning the letters of the faithless loved one?

(Answer below.) (20)

MUSIC

HIGHER GRADE—(SECOND PAPER)

Wednesday, 17th March—11.45 A.M. to 12.30 P.M.

N.B.—Write in ink, legibly and neatly. Marks will be deducted for bad spelling and bad punctuation, and for writing that is difficult to read.

All answers 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.....

PAPER II

Answer Question 4 and ONE other question from this paper.

1. Write briefly what you know of **four** of the following. Select two from column I and two from column II. Illustrate the answers to subjects in column I by examples in staff notation. Illustrate the answers to subjects in column II by mentioning actual examples and naming the composer :—

I	II	
whole-tone scale	divertimento	
tritone	sonatina	
enharmonic chord	musette	
appoggiatura	song-cycle.	(16)

2. Compare the lives of either

(a) Brahms and Wagner,

OR

(b) Bach and Handel,

showing how their circumstances and individual experience influenced them in the choice of the type (or types) of composition which they wrote. Illustrate your answer by referring to specific works, and quote in staff notation a theme from a work by each of them (two themes in all). (16)

3. (a) Explain briefly what is meant by "binary form," and "ternary form."

(b) The first movement of a sonata, commonly described as being in "first movement form" or "sonata form," can be an elaboration of either the binary or the ternary idea, or of both. Explain briefly how this may be. Refer to specific works if you can. Quote in staff notation a theme from the first movement of a sonata. (16)

4. Identify **four** of the following excerpts from the list of pieces prescribed for study. 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)

ART

HIGHER GRADE—(FIRST PAPER)

Tuesday, 9th March—1.0 P.M. to 2.0 P.M.

ONE question only should be answered 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. The Florentine, Umbrian and Venetian Schools of Painting have distinctive characteristics. Tell what you know of them and include in your answer the names of the prominent artists and their works.

2. Scotland has produced portrait painters, painters of landscapes, and painters of genre and of historical genre. Write a short appreciation of the work of a painter in each group.

3. Give an account of seventeenth century Dutch painting, and state what factors influenced it. Include in your answer the names of different artists who painted portraits, interiors and landscapes.

4. What do you understand by the terms "Impressionism" and "Realism"? Illustrate your answer by reference to well-known French painters.

Architecture

5. Name the periods into which English architecture of the Middle Ages may be divided, and describe briefly but fully the chief characteristics of each.

6. Trace the development of architecture in Scotland up to the end of the eighteenth century, and show (with the aid of sketches) the various changes that took place.

7. What are the essential differences between Greek and Roman architecture? Add sketches to supplement your answer.

8. How would you identify Romanesque buildings? Include in your answer the names of any outstanding examples in Scotland.

ART

HIGHER GRADE—(SECOND PAPER)

Tuesday, 9th March—2.15 P.M. to 4.15 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) At the Station Bookstall.

- (b) In the Café.
 - (c) The Bathing Pool.
 - (d) Spring in the Park.
- Due credit will be given to preliminary rough sketches.

SECTION II—Design

2. Illustrate by a sketch a design suitable for **one** of the following :—
- (a) Block-printed repeat pattern, half drop, for window curtains for a small bedroom facing North.
(Draw at least four repeats and colour sufficiently to show what the whole design would look like.)
 - (b) Decorative paper to be used for wrapping packages of **one** of the following :—
Cosmetics ; Toys ; Scottish Souvenirs.
 - (c) A coloured stick-on label for the “ Marine Hotel—Sandby.” The name of the hotel and the town must be included in the design. The label may be of any shape and should be drawn actual size.
 - (d) Embroidered tea-cosy. Design your own shape of cosy and make your sketch 7 inches (base), by $4\frac{1}{2}$ inches (height). Show the embroidery stitches clearly and name them.
 - (e) Membership card for a “ Youth Club.” Include the words “ Youth Club ” in your design, and limit your colours to two plus black and white. Size of card to be 5 inches by 3 inches, long side upright.

BOOK-KEEPING

LOWER GRADE

Friday, 19th March—9.15 A.M. to 11.15 A.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. Explain—Partner's Current Account ; bank reconciliation statement ; current assets. (15)

2. On 1st December, 1953, R. Brown and J. Grey agreed to combine their businesses and to enter into partnership.

R. Brown's position was as follows :—cash, £25 ; bank, £665 ; stock of goods, £1,245 ; sundry debtors, £213 ; sundry creditors, £441 ; provision for rent, £22 ; motor vehicles, £776 ; buildings, £2,218.

J. Grey's position was as follows :—cash, £20 ; bank overdraft, £244 ; stock of goods, £784 ; furniture and fittings, £593 ; sundry debtors, £864 ; bills payable, £185 ; sundry creditors, £497.

The terms of the agreement included the following :—

- (a) The goodwill of R. Brown's business was valued at £540 ;
- (b) Of J. Grey's sundry debtors, £214 was irrecoverable and was to be written off as bad. A provision for doubtful debts at the rate of 5 per cent. of the remainder was to be made.

Prepare the balance sheet of the new firm at 1st December, 1953. (18)

(Note.—Journal entries are not required.)

3. Explain why it is necessary to make "adjustments" at the close of the trading period; give illustrative examples. (15)

4. On 1st January, 1954, the position of M. Parker and W. Locke, who traded in partnership, was as follows:—

Assets: cash, £40; bank, £253; stock of goods, £998; bills receivable (No. 26, on J. Dunn, due 8/1/54, £64; No. 29, on W. Clare, due 16/3/54, £185), £249; furniture and fittings, £432; machinery and plant, £1,842; sundry debtors (B. Landis, £128; J. Dunn, £74), £202; investments, £1,755.

Liabilities: Bills payable (No. 81, to J. Thomson, due 18/1/54, £226; No. 83, to D. Fell, due 26/2/54, £115), £341; sundry creditors (C. Eliot, £97; J. Delane, £143), £240; R. Bernard, loan, £1,200; general reserve, £1,850; M. Parker, capital, £1,300; W. Locke, capital, £840.

Open the necessary books of account and record therein the above and the following transactions. Bills books are to be kept. Balance off the bank cash book. Make up the ledger account of J. Dunn *only*. No other transactions are to be posted to the ledger.

All payments were made by cheque unless otherwise stated and all receipts were paid into bank on the days they were received.

1954.

- Jan. 2. Sold job lot of goods, value £38 10s., to B. Fowler, who paid for them by cheque.
- " 4. Bought on credit from Office Suppliers, Ltd., new cash register, £54.
- " 7. J. Dunn informed us that he would be unable to meet bill No. 26 when it became due; agreed to extend payment of one half for 60 days, including £2 interest, provided he paid the other half forthwith. Cheque and acceptance duly received.
- " 9. Paid, on behalf of M. Parker, seedsman's bill for work done at his private house, £45 16s. 6d.
- " 14. Sold to B. Landis goods value £40, less 10 per cent. trade discount.
- " 15. Discounted at bank bill No. 29; amount received £182 15s.
- " 16. Received invoice for goods bought on credit from J. Delane, £135.
- " 18. Duly met at bank bill due to-day.
- " 18. B. Landis returned goods value £5 gross, and settled his indebtedness by a payment of £75 by cheque and a bill for £80 at one month.
- " 19. Informed J. Delane that he had omitted to allow on goods bought on 16th January the 15 per cent. trade discount to which we were entitled.
- " 20. Bought of C. Eliot goods value £55.
- " 21. J. Dunn paid on account £30 and was allowed £1 10s. cash discount.
- " 25. Received dividends on investments, £38 4s. 9d.
- " 26. Accepted C. Eliot's bill for £150 at 30 days in full settlement of amount owing to him.
- " 28. Bought national insurance stamps for cash, £1 16s.
- " 28. Paid wages in cash, £24 6s. 6d.
- " 29. Paid W. Locke his salary for month, £40.
- " 29. Agreed that R. Bernard should become a partner and that his capital should be made up to £1,300 by a cash payment of £100 and his existing loan of £1,200.
- " 30. Cash sales for month, £364 15s. 6d. (52)

BOOK-KEEPING AND COMMERCIAL ARITHMETIC

HIGHER GRADE

Friday, 19th March—9.15 A.M. to 12.15 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.

COMMERCIAL ARITHMETIC

FOUR questions are to be attempted. Answer **QUESTION 1** and any **THREE** others.

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.

Four-place logarithmic tables are provided.

All the working must be shown in its proper position in the answer and, when necessary, the different steps of the calculation should be shortly indicated in words.

Algebraical symbols may be used if properly explained.

1. A salesman is paid a fixed salary of £420 per annum and commission on his monthly sales at the following rates:—on the first £100, 1 per cent.; on the next £300, 3 per cent.; and on all further sales, 6 per cent. If his sales for the months of October, November and December are £750, £1,080, and £360 respectively, what is his average monthly income for the quarter? (26)

2. (a) A rectangular bar of metal, measuring $2\frac{1}{4}$ metres by 50 centimetres by 20 centimetres, is melted down and cast into solid spherical balls, each 5 centimetres in diameter. How many balls (correct to the nearest hundred) will be produced?

(b) If one cubic centimetre of the metal weighs 10.5 grammes, what is the weight of one ball?

$$(\pi = 3.14) \quad (26)$$

3. What sum (correct to the nearest pound) must a firm put aside at the end of each year in order that, at the end of ten years, it may be in a position to repay a loan of £1,500, if the money accumulates at $3\frac{1}{2}$ per cent. per annum compound interest? (26)

4. What price should an investor pay for 6 per cent. £1 preference shares so that he may obtain the same yield as on a $4\frac{1}{2}$ per cent. stock which is quoted at 95? (Ignore brokerage.) (26)

5. When selling a patented article, a manufacturer allows 20 per cent. trade discount and 5 per cent. cash discount. Further, he has to pay the patentee a royalty of 10 per cent. of the list price on the first 3,000 articles sold each year and 5 per cent. on the remainder. The cost of production of each article is £1 8s. If he expects to sell 15,000 articles annually, what should be the list price so that he may have a profit of 25 per cent. on his cost price? (26)

BOOK-KEEPING

Answers to these questions must be written in a separate book.

1. Explain clearly the meaning and advantages of “*columnar book-keeping*”; and prepare a form of columnar cash book to illustrate your answer. (16)

2. Distinguish clearly between "*capital expenditure*" and "*revenue expenditure*", and state why the distinction is important. (16)

3. The following statement, which he calls a balance sheet, has been prepared by W. Ross, a merchant.

Balance Sheet for year ending 31st December, 1953.

Capital Account	£	9,000	Bank Overdraft	£	684
Sundry Creditors	£	643	Cash in Hand	£	45
Add Discounts received	£	86	Sundry Debtors	£	1,435
		729	Add Discounts Allowed	£	284
Stock at 31st Dec., 1953	£	3,174			1,719
Provision for Doubtful Debts	£	75	Loan from S. Cassell	£	2,000
Provision for Taxes	£	348	Drawings for year	£	480
Investments	£	2,330	Interest due on capital	£	360
Bills Receivable	£	145	General Reserve	£	2,360
Current Account (Credit)	£	623	Goodwill	£	1,760
Interest due on loan from S. Cassell	£	45	Bills Payable	£	209
Profit for year	£	935	Buildings at 1/1/53	£	5,970
Suspense Account	£	822	Motor Vehicles at 1/1/53	£	1,560
			Furniture and Fittings at 1/1/53	£	632
			Depreciation on Motor Vehicles for year	£	312
			Dividends received on investments	£	135
		£18,226			£18,226

After examining the books you are satisfied that, subject to the following, the actual figures given above are correct :—

(a) The balance of Suspense Account represents the difference between the two sides of the statement.

(b) Included in stock at 31st December, 1953, are goods valued at £250, which were actually sold on credit for £325 on 29th December, 1953 : no record had been made of this transaction.

(c) The cost of a new delivery truck, £220, had been charged to Purchases Account. Depreciation amounting to £45 should have been written off the value of this vehicle.

(d) No record had been made of interest amounting to £24, which had been charged by the bank on the overdraft.

You are required (a) to find the actual profit for the year, and (b) to draw up a corrected balance sheet in proper form. (24)

(N.B.—Journal entries are not required.)

4. On 1st January, 1954, the position of W. Allan was as follows :—Cash in hand, £25 ; cash at bank, £86 ; stock of goods, £1,563 ; stock of advertising materials, £104 ; sundry debtors (B. Young, £47 ; R. Henly, £63), £110 ; sundry creditors (R. Blake, £427 ; D. Short, £174), £601 ; bills receivable (No. 23, on D. Breck, due 15/2/54, £141 ; No. 24, on R. Henly, due 18/1/54, £154), £295 ; bill payable (No. 11, to H. Morton, due 5/1/54), £345 ; provision for rent, £40 ; insurance paid in advance, £17 ; furniture and fittings, £686 ; capital, £1,900.

On the same day he agreed to admit his manager, L. Dyer, into partnership on the following terms :—

Dyer was to contribute £1,740, of which £1,400 was to be regarded as his capital and £340 as a premium for admission ; no goodwill account was to be opened. Dyer was to receive, in addition to a salary of £45 per month, one-third share of the profits.

The sum of £1,740 was duly paid into the firm's bank account on 2nd January, 1954.

Open the necessary books of account and record therein the above and the following transactions. Bills books are to be kept. Balance off the bank cash book.

All payments were made by cheque unless otherwise stated and all receipts were paid into bank on the days they were received.

Do **not** post any transactions to the ledger.

1954

- Jan. 2 Consigned to W. Longman for sale on our behalf goods value £260; paid in cash forwarding expenses £6 15s. and drew bill at one month for £250.
- „ 5 Duly met at bank bill due to-day.
- „ 6 Discounted at bank bill No. 23; amount received, £140 7s. 6d.
- „ 8 Bought goods of R. Blake value £63, and paid by cheque total amount owing.
- „ 11 Bought of D. Short goods value £115, less 10 per cent. trade discount.
- „ 13 Received letter from R. Blake stating that we were entitled to 2½ per cent. cash discount on the payment made on 8th January, and that he was crediting our account with the amount.
- „ 15 Sold to B. Young goods value £90.
- „ 18 Bill due to-day dishonoured by non-payment: paid noting charges in cash £1 5s.
- „ 20 Returned to D. Short goods value £7 10s. gross, and accepted his bill for £265 at thirty days in full settlement.
- „ 22 Sold to M. More on credit for £125 surplus fittings which were valued in the books at £95.
- „ 23 Made B. Young an allowance on goods purchased on 15th January, £3 15s., and received his acceptance for £60 at two months and his cheque for £70 in settlement of his indebtedness.
- „ 25 R. Henly is insolvent: received composition of 15s. in the £.
- „ 29 Paid W. Allan for the use of his private car for the firm's business £8 10s.
- „ 29 Paid Dyer his salary for month.
- „ 30 Cash sales for month, £163. (44)

COMMERCIAL SUBJECTS—SHORTHAND

Thursday, 25th March—9.15 A.M. to 11.15 A.M.

This paper must not be seen by any candidate

Instructions to the Teacher

1. The twenty minutes immediately preceding the beginning of the tests should be used to make yourself thoroughly familiar with the passages to be read.

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

3. The short practice passage of approximately eighty words which is printed on page 3 is to be used for practice reading to the candidates. The passage may be read once only.

4. Then read the passages to the candidates clearly and naturally. Punctuation will be indicated by appropriate pauses and the inflection of the voice, and will in no case be dictated.

5. Tests should be read in ascending order from the lowest to the highest speed required.

6. An interval of two minutes is to be allowed between the reading of the passages.

7. Phrasing according to any particular system of shorthand is not permitted.

8. Tests, or parts of tests, must not, *under any circumstances*, be read more than once.

9. The reading of each passage should occupy exactly five minutes.

10. Figures should be read in full, e.g., £164,300 (one hundred and sixty-four thousand, three hundred pounds).

11. Errors made in reading will be noted by the supervising officer and taken into account by the examiners. Corrections must not be made by the teacher after the passage has been read.

12. No test paper may be taken from the room by you or by any other person until the conclusion of the examination.

13. When all the passages required have been read you will immediately withdraw from the examination room.

Instructions to Candidates

The procedure will be as follows :—

1. A short practice passage will be read. This must not be transcribed. The shorthand notes must be handed in at the end of the examination.

2. Tests will be read in ascending order from the lowest to the highest speed required.

3. An interval of two minutes will be allowed between the reading of the passages.

4. The shorthand notes may be taken with either pen or pencil, but transcripts must be written in ink.

5. You may take down the passages dictated at more than one speed, but you may submit a transcription of only one passage.

6. On no account may alterations be made to the original shorthand notes. Any alterations which you wish to make should be indicated by a circle round the wrong outline or phrase and the correct one written above.

7. Candidates on the higher grade must not take down passages read at speeds lower than eighty words per minute.

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

9. All writing during subsequent readings, as well as in the intervals between readings, is strictly forbidden.

10. You will be told by the supervising officer when transcription may be commenced.

11. The shorthand notes of the passage transcribed should be attached to the transcript and should be handed to the supervising officer, together with all other shorthand notes made by you.

S H O R T H A N D

Practice Passage for Dictation

The passage may be read **once only** at an appropriate speed. Candidates should not make a transcription of the passage, but must hand in their shorthand notes at the close of the examination.

The oblique lines, / , mark the divisions into sections of ten words each. The reader should not make a pause when they occur, unless the sense requires it.

The year under review has been notable in the history / of the company, and much has happened since I last / addressed you. I propose, however, to confine myself to two / general matters on which my position enables me to speak / with knowledge and experience, and which appear to me to / be of great importance for the future.

First, I consider / it of the greatest importance that the control of financial / affairs should rest in the hands of those qualified by / ability and experience to exercise such control.

Sixty Words per Minute

(Fifty minutes allowed for transcription)

The oblique lines, / , mark the division of time, but the reader must not make a pause when they occur, unless the sense requires it. The double line, // , marks the completion of each minute.

Dear Sir,

$\frac{1}{4}$ I have been thinking over the remarks you made at our last meeting /
 $\frac{1}{2}$ about the important part played by the insurance companies in the
 $\frac{1}{2}$ business of this country. /

$\frac{3}{4}$ There is no doubt that, owing to the high level of taxation, many
 $\frac{1}{4}$ people find / it difficult to save regularly and that, for the majority, the
 $\frac{1}{4}$ most satisfactory way is / / by means of insurance policies. In con-
 $\frac{1}{2}$ sequence, much of the capital which industry requires to / meet the cost of
 $\frac{3}{4}$ new factories and new machinery has to be provided by the / insurance
 $\frac{2}{4}$ companies. It is obvious that the way in which these companies invest
 $\frac{1}{4}$ their funds / will have a great influence on the development of industry.
 $\frac{1}{4}$ It is not surprising, / / therefore, that much attention is given by the
 $\frac{1}{2}$ public to the investment policies of insurance / companies. Comment
 $\frac{1}{2}$ has been generally favourable, although to some people it is not right
 $\frac{3}{4}$ that / so much power should be in the hands of a few.

$\frac{3}{4}$ Such people suggest that / insurance companies may hold so high a
 $\frac{3}{4}$ proportion of the shares of manufacturing and trading / / companies that
 $\frac{1}{4}$ they obtain undesirable powers of control over British industry. I do not
 $\frac{1}{4}$ believe / that this is true, since the money which these companies have to
 $\frac{1}{4}$ invest is really / the property of their policy-holders and it is unlikely that
 $\frac{1}{4}$ they will invest more / than a small part of it in any one company.
 $\frac{1}{4}$ Spreading the risk is a / / very sound policy, both for the individual and
 $\frac{1}{4}$ the institution.

$\frac{1}{4}$ A further consideration is that / no company invests much of its
 $\frac{1}{4}$ funds in any one type of stock. A proper / balance has to be maintained
 $\frac{1}{4}$ between the different classes and, as a rule, over sixty / per cent. of an
 $\frac{1}{4}$ insurance company's holdings are of government or similar securities.

5

Yours faithfully, / /

Seventy Words per Minute

(Fifty minutes allowed for transcription)

The oblique lines, / , mark the division of time, but the reader must not make a pause when they occur, unless the sense requires it. The double line, // , marks the completion of each minute.

$\frac{1}{4}$ The twenty-second annual general meeting of the company was held at the registered office of the / company on Wednesday.

$\frac{1}{2}$ The secretary having read the notice convening the meeting and the report of the auditors, / the Chairman said :—

$\frac{3}{4}$ Ladies and Gentlemen.—As is customary on these occasions I propose, with your permission, / that the directors' report and the accounts of the company for the year ended 30th June, 1953, // be taken as read.

$\frac{1}{4}$ I am glad to report that the results in respect of the / year again show improvement. The profit of £92,000, after charging depreciation and a sum of / £10,000 for repairs and after providing for taxation in one form or another, is some / £18,000 higher than a year ago.

$\frac{1}{2}$ You will note from the report that your directors propose // to transfer this year to general reserve the sum of £25,000, and in addition / they have thought it advisable to recommend that a sum of £30,000 be set aside to / a new fixed assets reserve in order to meet to some extent the high costs of extensions / which they have at present in hand. It is hoped that future profits will enable the company to // increase this reserve as long as capital costs remain at their present high level, so that the / value of the fixed assets in the balance sheet may not become unduly inflated.

$\frac{1}{2}$ Your directors have decided / again to recommend a dividend in respect of the year under review of $17\frac{1}{2}$ / per cent., less tax, on the ordinary shares of the company.

$\frac{4}{4}$ As far as the balance sheet is // concerned there is little that calls for comment, but it is satisfactory to note that the excess / of current assets over liabilities has increased during the year by £45,000 to the substantial / figure of £570,000.

$\frac{1}{2}$ I would like to take the opportunity of informing / you that during the year we have made certain alterations to the company's pension scheme for our employees. //

Eighty Words per Minute

(Sixty-five minutes allowed for transcription)

The oblique lines, / , mark the division of time, but the reader must not make a pause when they occur, unless the sense requires it. The double line, // , marks the completion of each minute.

$\frac{1}{4}$ The thirty-eighth ordinary general meeting of the company was held yesterday at the registered offices of the company, the / Chairman presiding.

$\frac{1}{2}$ The Secretary having read the notice convening the meeting and the report of the auditors, The Chairman said : /

$\frac{3}{4}$ Gentlemen, I am glad to report that the confident note in my speech last year and the optimism then expressed / regarding the company's prospects have been fully justified.

From the directors' report and accounts submitted for your approval you will // observe that the net profit for the year amounts to £190,000. In addition to this / profit there has become available an amount of £10,000, being the amount due to your company in respect / of income tax relief on additions to buildings, plant and machinery. This year we have transferred a sum of / £50,000 to general reserve, bringing the total of this reserve up to £250,000.

Your // directors recommend the payment of a final dividend of 7 per cent. free of income tax, making a total distribution / for the year of 10 per cent. free of tax, the same distribution as for last year. The dividend for / the year will absorb a total of £130,000. After payment of the dividend and the / transfer to general reserve, there will remain a balance of £150,000 on profit and loss // account to carry forward to next year, thus increasing the balance of this account by £14,000.

There are / certain items in the balance-sheet to which I should like to draw your attention. The figure for provisions which / stands at £200,000 includes not only sums set aside to complete deferred repairs, as well as the / alterations to factory departments caused by the extension schemes, but also amounts set aside for other trading losses, some of // which, however, may not be required. The reserve set aside for taxation is considered ample to meet all liabilities for / taxes on profits earned up to the end of the year.

Looking at the assets side of the balance-sheet, / you will see that there have been additions to plant during the year of £200,000. Although we / have still much to do, we are already reaping the benefits of this policy in increased output at lower costs. //

Ninety Words per Minute

(Sixty-five minutes allowed for transcription)

The oblique lines, / , mark the division of time, but the reader must not make a pause when they occur, unless the sense requires it. The double line, // , marks the completion of each minute.

Ladies and Gentlemen,

The practice that we have followed for some time of enclosing a statement with the Accounts, instead of reading / a speech at the Annual Meeting, is being continued this year. Experience shows that this is liked by the great majority of the / shareholders.

Your Board is glad to recommend that the dividend shall be at the rate of 3 per cent. and that the / bonus shall be increased to $6\frac{1}{2}$ per cent. There are two reasons why we feel justified in proposing this increase. // In the first instance, it is due in no small measure to efforts made in former years, which are now bearing fruit. / I made reference to this in my statement last year. Secondly, it is due to the fact that last year our sales increased / considerably. Our turnover, both abroad and at home, of goods produced in this country was something like £1,000,000 more than / in 1952.

I must now tell Shareholders, however, that your Board has decided that next year they will not recommend any // further increase in either dividend or bonus. We do this in the National interest.

It should be noted that, taking our true / capital into account, the real rate of dividend is only $5\frac{1}{2}$ per cent.

I regret that for various reasons it / has not been possible this year to conform to the new method of presenting accounts which is now required under the Companies / Act of 1947. In any event this does not become operative, in so far as this Company is concerned, before we / / present our next accounts to you.

We propose strengthening the financial position of the Company by transferring the sum of £35,000 / to General Reserve. This brings all Reserves to a total of £450,000.

Shareholders will have seen / that we propose allocating £5,000 to an Employees' Benevolent Fund. It is intended that this amount, which we hope will / be added to in future years, shall be used for the benefit of any members of our Staff whom we should like to / / help. This is in addition to our existing schemes.

Shareholders can be assured that, in view of the vital importance to this / country of exports, your Company is endeavouring to sell as many goods as possible, in both Empire and Foreign markets.

This, however, is / not always an easy task. Where goods are in great demand, in most cases insufficient supplies are available, and many of / our former markets have, for one reason or the other, been closed completely, or are only willing to take relatively small quantities of goods. / /

One Hundred Words per Minute

(Seventy minutes allowed for transcription)

The oblique lines, / , mark the division of time, but the reader must not make a pause when they occur, unless the sense requires it. The double line, / / , marks the completion of each minute.

The twenty-seventh annual general meeting of the Company was held yesterday in London, the Chairman presiding.

The notice convening the meeting and the auditors' / report having been read, the Chairman said : Ladies and Gentlemen,—As I warned you at the last annual general meeting, our financial year which ended / on September 30, 1953, has been full of difficulties and uncertainties. We have been obliged to operate at a smaller margin of profit / owing to successive reductions in sale prices of our products, which were only partially offset by lower prices for raw materials. As a result, particularly / / during the second half of the year, demand fell away owing to the natural reluctance of buyers to purchase except for immediate requirements. General operating / costs continued to rise and these could not be offset by increased production.

In comparing this year's results with those of the previous year it / must be borne in mind that in 1952 the results, as I stated at the last meeting, were exceptional and their repetition this / year could not have been expected. In fact they would have been worse if it had not been for the benefits derived from our continued / / capital expenditure.

Trading profits of the group for the year before charging taxation amounted to £910,000, approximately / £560,000 less than the previous year. As a result of these lower profits the charges for taxation, which in our accounts are calculated / on the profits of the year, are also reduced so that the net consolidated profits are approximately £200,000 less at /

3 £390,000. One special factor which influenced this year's results was the
 1/4 dislocation at the mill owing to the changeover to our new // power plant
 which, however, was successfully accomplished towards the end of the
 financial year. Although reconstruction of the mill is still continuing, it
 is now / showing improved results.

1/2 After deducting the proportion of profits due to outside shareholders
 3/4 of subsidiary companies, the net profit payable to the holding company
 amounted / to £345,000. It will be seen, therefore, that in spite of the
 reduced profits it has been possible, after / providing over half a million
 pounds for taxation, to maintain the total distribution of 15 per cent. on
 4 the ordinary stock of the Company with / / a margin to strengthen our
 reserves.

1/4 The book value of the fixed assets has increased by about £138,000,
 1/2 being / the difference between the capital expenditure for the year of
 about £163,000 and the depreciation of £25,000 / on the mill. We now
 3/4 have at this mill one of the most modern power plants in the paper trade
 in this country, which / is working very satisfactorily and has produced
 the expected reduction in power costs. Our investments have been
 5 increased slightly by the purchase of additional shares. //

COMMERCIAL SUBJECTS

LOWER GRADE—ECONOMICS GROUP

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

Not more than EIGHT questions should be attempted. FOUR, but not more than four, of these should be taken from each of the TWO branches studied.

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.

Candidates should enter in the space provided on the front cover the names of the subjects in which questions have been attempted.

COMMERCE

Candidates who have studied this branch should attempt FOUR questions, namely, questions Nos. 1 and 2 and any TWO of the others.

1. Discuss the advantages and disadvantages of the limited liability company as a form of business organization. (15)

2. Describe and explain the main services rendered by a commercial bank to a business man. (25)

3. What is the part played by the wholesale merchant in the distribution of manufactured goods? (30)

4. Compare the main categories of imports in the British balance of trade with the main categories of exports. (30)

5. If you were engaged in business, what considerations would you take into account before you decided whether to employ rail or road transport? (30)

6. Give an account of the chief functions of the Money Market. (30)

ECONOMICS

Candidates who have studied this branch should attempt **FOUR** questions, namely, questions Nos. 1 and 2 and any **TWO** of the others.

1. How would you explain the demand curve to someone who knows nothing of economics? Why does the demand curve slope downwards from left to right? (15)

2. What are the chief functions of money? (25)

3. Explain carefully the meaning of the words "land," "labour," and "capital," as they are used by economists. (30)

4. Discuss the chief factors which have determined the concentration of our major industries in particular parts of the country. Illustrate your answer by reference to **one** major Scottish industry. (30)

5. Why are the wages paid in dirty and unpleasant jobs usually lower than the incomes earned in pleasant occupations? (30)

6. Explain briefly how an index number is constructed. Can such a device be used to measure changes in the value of money? (30)

ECONOMIC GEOGRAPHY

Candidates who have studied this branch should attempt **FOUR** questions, namely, questions Nos. 1 and 2 and any **TWO** of the others.

In any question, credit will be given for appropriate sketch maps and diagrams.

1. What are the factors which foster the growth of an entrepôt port? Give illustrative examples. (15)

2. In which parts of the world is the Mediterranean type of climate found? Explain the influence of climate on the characteristic products of those regions. (25)

3. Draw a sketch map to show the distribution of the coalfields of Great Britain; and indicate the economic importance of any **two** important coalfields. (30)

4. Compare the geographical features of the world's chief tea-producing areas with those of the main coffee-producing areas. (30)

5. Discuss the factors which have contributed to the growth of industry in **one** of the following: the Lower Rhine; the Po Valley; California; Honshu. (30)

6. What are the chief mineral-oil-producing regions of the world? Indicate the relative importance of each region as an exporting area. (30)

ECONOMIC HISTORY

Candidates who have studied this branch should attempt **FOUR** questions, namely, questions Nos. 1 and 2 and any **TWO** of the others.

1. What were the outstanding features of the Agrarian Revolution which began about the middle of the 18th century? (15)
2. Outline the main events in the growth of the British iron and steel industries before 1900. (25)
3. Describe the development of Trade Unionism between 1799 and 1850. (30)
4. Write a short account of the domestic system of industry. (30)
5. Outline the development of social insurance in the British Isles since 1909. (30)
6. Indicate the main features in the progress of the co-operative movement in Great Britain. (30)

COMMERCIAL SUBJECTS

HIGHER GRADE—ECONOMICS GROUP

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

Not more than **EIGHT** questions should be attempted. **FOUR**, but not more than four, of those should be taken from each of the **TWO** branches studied.

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.

Candidates should enter in the space provided on the front cover the names of the subjects in which questions have been attempted.

COMMERCE

Candidates who have studied this branch should attempt **FOUR** questions, namely questions Nos. 1 and 2 and any **TWO** of the others.

1. In what type of industry would you expect to find vertical combinations? Give reasons. (15)
2. Describe the chief ways in which British industry obtains its long-term capital. (25)
3. Why are marketing boards more suitable for the distribution of agricultural produce than any other type of selling organisation? Refer to the advantages and disadvantages of any marketing board with which you are familiar. (30)
4. Discuss the advantages of "future" dealings to a cotton manufacturer. (30)
5. Outline the main features of a cartel. Illustrate your answer by referring to any well-known cartel. (30)
6. Explain the effects of a depreciating exchange rate on the activities of exporters and importers in the country concerned. (30)

ECONOMICS

Candidates who have studied this branch should attempt **FOUR** questions, namely questions Nos. 1 and 2 and any **TWO** of the others.

1. How do you explain the meaning of the term "want" as it is used by economists? (15)
2. "The balance of payments must balance." Why then has the Government since 1945 interfered to make it balance in a particular way? (25)
3. What do you understand by "varying degrees of monopoly"? In your answer indicate the causes of the different types of monopoly. (30)
4. Explain the significance of the term "incidence of taxation." Under what circumstances would you expect the incidence of a tax to fall on (a) the manufacturer, and (b) the consumer of a product? (30)
5. What do you understand by the term "Bank Rate"? Explain how the Bank of England is able to regulate the quantity of money in the country by changing the Bank Rate. (30)
6. What methods for increasing the productivity of labour would you suggest? (30)

ECONOMIC GEOGRAPHY

Candidates who have studied this branch should attempt **FOUR** questions, namely questions Nos. 1 and 2 and any **TWO** of the others.

Where appropriate, sketch maps should be used.

1. What are the chief obstacles to the economic development of either Central Africa or Northern Australia? (15)
2. Explain how geographical factors affect the economic importance of the world's chief oil-producing areas. (25)
3. Analyse the geographical influences which contributed to the economic predominance of Germany in Western Continental Europe. (30)
4. Show how geographical factors are reflected in the export trade of one of the following: South Africa, New Zealand, Argentina. (30)
5. Discuss the distribution of the British iron and steel industry; and comment on recent developments. (30)
6. Comment on the economic importance of two of the following rivers:—Indus, Volga, Mississippi, Yang-tse-kiang, Amazon. (30)

ECONOMIC HISTORY

Candidates who have studied this branch should attempt **FOUR** questions, namely questions Nos. 1 and 2 and any **TWO** of the others.

1. Explain the provisions of the Bank Charter Act of 1844, and indicate the main object of this statute. (15)
2. Discuss the effects of the first World War on the industrial structure of the British Isles. (25)
3. What were the causes and consequences of the Enclosure Movement of the late 18th and early 19th centuries? (30)
4. What were the economic causes of the Highland "clearances"? Indicate the consequences of those changes on Scotland as a whole. (30)
5. Discuss the importance of the principle of limited liability in the development of British industry and commerce. (30)
6. Describe the attempts which were made to solve the problem of transport in the period immediately preceding the railway era. (30)

AGRICULTURE

LOWER GRADE

Tuesday, 23rd March—9.30 A.M. to 12 NOON.

Not more than FIVE questions should be attempted.

$$O = 16, \quad P = 31, \quad Ca = 40$$

Answers should, wherever possible, be illustrated by suitable diagrams.

Mathematical tables are supplied.

The value attached to each question, or to each 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.

- | | <i>Marks</i> |
|--|--------------|
| 1. (a) Describe the origin and the nature of igneous rocks . | 5 |
| (b) Explain what is meant by the weathering of rocks . | 3 |
| (c) Describe how weathering processes take place. | 12 |
| 2. (a) State the chemical formulae of (i) monocalcic phosphate , and (ii) tricalcic phosphate , and calculate from the formula the percentage of phosphoric acid (P_2O_5) in pure tricalcic phosphate. | 8 |
| (b) What chemical substance of manurial value occurs in rock phosphate? | 2 |
| (c) Describe the action of sulphuric acid on rock phosphate and explain how this action affects the manurial properties of the phosphate. | 10 |

Marks

3. State as fully as you can (a) the **position** and (b) the **function** of four of the following organs in the cow :—

- | | |
|-----------------------------|---|
| (i) heart , | 5 |
| (ii) kidney , | 5 |
| (iii) ovary , | 5 |
| (iv) incisor teeth , | 5 |
| (v) mammary gland . | 5 |

4. Give a detailed description of the 4-stroke cycle in one of the cylinders of an internal combustion engine. 20

5. (a) State where heavy infestations of the following weeds are likely to be found :—(i) **Ragwort**, (ii) **Bracken**, (iii) **Creeping Thistle**, (iv) **Charlock**, (v) **Sheep's Sorrel**. 10

(b) Describe how **Charlock** may be kept in check. 10

6. (a) Describe the conditions under which (i) **finger and toe** and (ii) **wireworm** thrive. 10

(b) Suggest suitable control measures for **one** of these pests. 10

7. Give an account of :—

(a) the origin, 2

(b) the appearance, and 6

(c) the special qualities of the **British Friesian** breed of cattle. 12

AGRICULTURE

HIGHER GRADE—(FIRST PAPER)

Tuesday, 23rd 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.

The value attached to each question, or to each 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. (a) Explain what is meant by the following terms :—

(i) **colloid**, 4

(ii) **flocculation**, 4

(iii) **humus**. 4

(b) Describe the effects which humus has on soils. 8

	Marks
2. (a) Explain the meaning and significance of the following :—	
(i) the availability of nutrients in the soil, and	4
(ii) the residual values of fertilizers.	4
(b) Discuss the factors which affect the residual value of :—	
(i) nitrogenous, and	6
(ii) of phosphatic manures after one or more crops.	6
3. (a) (i) What is nitro-chalk ?	3
(ii) What are the special properties and uses of this fertilizer ?	7
(b) Describe qualitative laboratory tests for the presence of :—	
(i) nitrate ,	3
(ii) ammonia , and	3
(iii) calcium in a fertilizer.	4
4. (a) Explain the meaning of :—	
(i) protein ,	2
(ii) crude protein , and	2
(iii) protein equivalent .	3
(b) (i) What is meant by carbohydrate ?	2
(ii) Give a classification of carbohydrates.	3
(c) Name :—	
(i) four foodstuffs which are commonly fed to farm animals and which have a high protein equivalent; and	4
(ii) four which have a high starch equivalent.	4
5. (a) Define :—	
(i) the mechanical advantage of a machine,	2
(ii) the velocity ratio of a machine,	2
(iii) coefficient of friction ,	2
(iv) horse-power ,	2
(v) mechanical equivalent of heat .	3
(b) State the normal timing of the valves in a 4-stroke petrol engine and explain how the timing of the exhaust valve is affected by wear of the valve gear.	6

	Marks
6. Describe in detail any make of two-furrow tractor plough.	20
7. (a) Describe :—	
(i) an aneroid barometer, and	3
(ii) a wet and dry bulb thermometer ;	3
explain what properties of the atmosphere are	2
measured by each of these instruments.	4
(b) Explain how a synoptic weather chart is prepared.	8

AGRICULTURE

HIGHER GRADE—(SECOND PAPER)

Tuesday, 23rd 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 are supplied.

The value attached to each question, or to each 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. Write an essay on Respiration in Plants.	20
2. Describe the effects on crops of deficiencies of the following :—	
(i) nitrogen,	4
(ii) phosphorus,	4
(iii) potassium,	4
(iv) boron,	4
(v) manganese.	4
3. Compare mangolds and swedes under the following headings :—	
(i) suitable climatic conditions,	3
(ii) suitable soil conditions,	3
(iii) place in the rotation,	3
(iv) manurial treatment,	5
(v) harvesting,	3
(vi) storage.	3
4. Make a labelled sketch of the alimentary system of the fowl and state the function of each part.	20
5. Make a list of the precautions which you consider should be taken to ensure clean milk production, explaining why each of these precautions is necessary.	20

Either*Marks*6. (a) Describe **Leaf Roll** in potatoes under the following headings :—

- | | |
|------------------------|---|
| (i) cause, | 2 |
| (ii) incidence, | 2 |
| (iii) symptoms, | 8 |
| (iv) control measures. | 8 |

Or(b) Describe the **Cabbage Root Fly** under the following headings :—

- | | |
|--|---|
| (i) description of the insect at different stages, | 4 |
| (ii) plants attacked, | 3 |
| (iii) conditions under which severe attacks may be expected, | 4 |
| (iv) life-history, | 4 |
| (v) control measures. | 5 |

7. Make a detailed comparison of the **Galloway** and the **Aberdeen Angus** breeds of cattle.

20

SCOTTISH EDUCATION DEPARTMENT—1954

1. STATUTORY INSTRUMENTS—*contd.*

(f) *Miscellaneous*

- Children and Young Persons (Scotland) Employment of Children in Entertainments. S.R. & O., 1947, No. 1660, S.67. 2*d.* (3½*d.*).
 The School Meals Premises (Reimbursement of Minister of Works) (Scotland) Regulations, 1950. S.I. 1950, No. 576, S.39. 1*d.* (2½*d.*).
 The Meals Service (Scotland) Regulations, 1953. S.I. 1953, No. 65, S.7. 3*d.* (4½*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 (Form of Court Record) (Scotland) Regulations, 1949. S.I. 1949, No. 1637, S.114. 1*d.* (2½*d.*).
 The Approved Schools (Contributions by Education Authorities) (Scotland) Regulations, 1953. S.I. 1953, No. 466, S.43. 2*d.* (3½*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.*).
 The Education (Scotland) Advisory Council Order, 1952. S.I. 1952, No. 637. 2*d.* (3½*d.*).
 The Exemptions (Potato Lifting) (Scotland) Regulations, 1952. S.I. 1952, No. 1147, S.52. 3*d.* (4½*d.*).

2. CIRCULARS

- Circular 30 (1952) (Relating to the Scottish Leaving Certificate Examination of 1953) (October, 1952). 1*s.* 0*d.* (1*s.* 1½*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 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 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 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.*).
 Circular 235 (Scottish Leaving Certificate Examination—Additional Mathematical Subjects) (March, 1952). 4*d.* (5½*d.*).
 Circular 239 (Scottish Leaving Certificate—Technical Subjects) (June, 1952). 4*d.* (5½*d.*).
 Circular 247 (Scottish Leaving Certificate—Proposed Changes in the Examination in Commercial Subjects) (August, 1952). 1*s.* (1*s.* 1½*d.*).
 Circular 249 (Scottish Leaving Certificate—Science) (October, 1952). 9*d.* (10½*d.*).
 Circular 262 (Scottish Leaving Certificate Examination) (March, 1953). 9*d.* (10½*d.*).
 Circular 268 (School Building) (June, 1953). 6*d.* (7½*d.*).
 Circular 268(a) (School Building) (October, 1953). 2*d.* (3½*d.*).
 Circular 270 (The Further Education (Scotland) Code, 1952) (June, 1953). 6*d.* (7½*d.*).
 Circular 277 (Education Authority Bursaries (Scotland) Regulations, 1953) (November, 1953). 4*d.* (5½*d.*).
 Circular 282 (The Teachers' Salaries (Scotland) Regulations, 1954) (March, 1954). 2*d.* (3½*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 1952 (Cmd. 8813). 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.*).
 Supply of Teachers. Second Report of the Departmental Committee appointed by the Secretary of State. (Cmd. 8721). 1*s.* (1*s.* 1½*d.*).

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1954

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Commercial Subjects

LOWER GRADE—TYPEWRITING

Thursday, 25th March—1 P.M. to 3 P.M.

INSTRUCTIONS TO CANDIDATES

1. Read carefully the instructions at the head of each exercise.
2. Any defect in the machine should be pointed out to the supervising officer who will send to the examiners a certificate giving particulars of the defect and of the loss of time caused thereby.
3. Each exercise should be begun on a fresh page.
4. Any spoiled work should be cancelled by drawing a line through it.
5. The tests are to be worked in the following order :—
 - (1) The Copying Test.
 - (2) The Accuracy Test.
 - (3) The remaining exercises.
6. At the close of the examination you will receive from the supervising officer your typescripts of the Copying and Accuracy Tests. These must then be inserted in your examination book, along with your other typescripts, and handed to the supervising officer.
7. The value attached to each question is shown in brackets after the question.

QUESTION 1. COPYING TEST

Instructions. (Not to be typed)

Type your name, school and grade at the top of a quarto sheet.

Set the marginal stops for a 60-space line.

Make one copy, in **double** line-spacing, of the passage printed below.

No credit will be given for completing this test in less than the time allowed.
No part of the test is to be re-typed.

The use of an eraser is **not** permitted.

At the conclusion of this test, your typescript is to be handed to the Supervising Officer.

The unfortunate captain and the greater portion of his remaining men were slain, and but a straggling handful reached the settlements. This seems to have been the last incursion made by the Portuguese in Paraguay until, in later days, the Paulistas raided the Jesuit settlements for slaves.

Whilst Gaboto was still in the River Paraguay continuing his explorations, news reached him that a fleet had arrived in the River Plate, under the command of Diego Garcia, with superior powers to those Gaboto held.

Garcia, accompanied by the pilot Rodrigo de Cerca, had set out with three ships from the Port of La Coruna on 15th August, 1526. He had received orders from the Spanish crown to continue the explorations of Solis. From one cause or another his expedition had encountered various delays, and so had given time to Gaboto to slip off in April of the same year (1526) and be beforehand with him. Upon the news of his arrival, Gaboto set off downstream, taking a strong contingent of his men. (15)

QUESTION 2. ACCURACY TEST

Instructions. (Not to be typed)

Type your name, school and grade at the top of a foolscap sheet.

Set the marginal stops for a 60-space line.

Set the line space lever for double spacing.

The whole of the passage printed below may be attempted, but no additional marks will be gained by typing any part of the passage a second time.

The use of an eraser is **not** permitted.

At the conclusion of this test your typescript is to be handed to the Supervising Officer.

	<i>Strokes</i>
For everything looms pleasant through the softening haze of time.	67
Even the sadness that is past seems sweet. Our boyish days look very	137
merry to us now, all nutting, hoop, and gingerbread. The snubbings and	209
toothaches and the Latin verbs are all forgotten—the Latin verbs especially.	288
And we fancy we were very happy when we were hobbledehoy, and loved ;	357
and we wish that we could love again. We never think of the heartaches, or	433
the sleepless nights, or the hot dryness of our throats, when she said she	508
could never be anything to us but a sister—as if any man wanted more	579
sisters !	588
Yes, it is the brightness, not the darkness, that we see when we look	659
back. The sunshine casts no shadows on the past. The road that we have	732
traversed stretches very fair behind us. We see not the sharp stones. We	807
dwell but on the roses by the wayside, and the strong briars that stung us	882
are, to our distant eyes, but gentle tendrils waving in the wind. God be	956
thanked that it is so—that the ever-lengthening chain of memory has only	1031
pleasant links, and that the bitterness and sorrow of to-day are smiled at on	1109
the morrow.	1121
It seems as though the brightest side of everything were also its highest	1197
and best, so that, as our little lives sink back behind us into the dark sea	1274
of forgetfulness, all that which is the lightest and the most gladsome is the	1352
last to sink, and stands above the waters, long in sight, when the angry	1425
thoughts and smarting pain are buried deep below the waves and trouble	1496
us no more.	1508
It is this glamour of the past, I suppose, that makes old folk talk too	1581
much nonsense about the days when they were young. The world appears	1651
to have been a very superior sort of place then, and things were more like	1726
what they ought to be. Boys were boys then, and girls were very different.	1802
Also winters were something like winters, and summers not at all the	1871
wretched things we get put off with now-a-days. As for the wonderful	1942
deeds people did in those times, and the extraordinary events that happened,	2019
it takes three strong men to believe half of them.	2070
I like to hear one of the old boys telling all about it to a party of	2141
youngsters who he knows cannot contradict him. It is odd if, after a	2211
while, he doesn't swear that the moon shone every night when he was a	2281
boy, and that tossing mad bulls in a blanket was the favourite sport at	2353
his school.	(35) 2364

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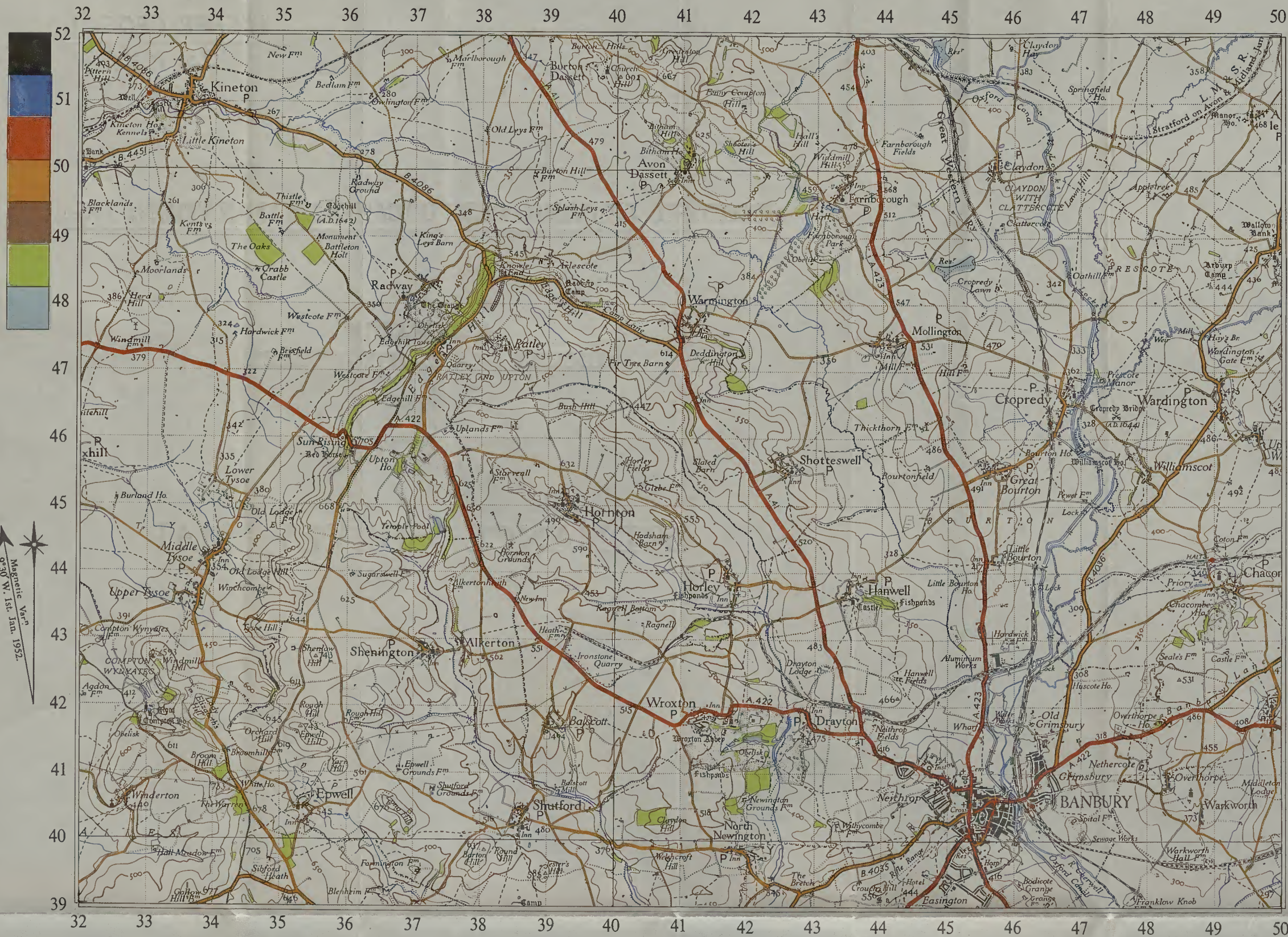
HIGHER GEOG. I.
(O.S. Map)

SCOTTISH LEAVING CERTIFICATE EXAMINATION, 1954

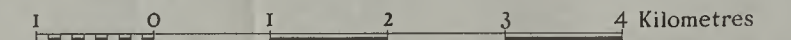
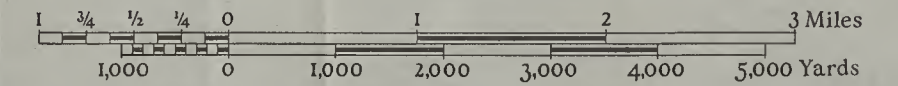
GEOGRAPHY
HIGHER GRADE—(FIRST PAPER)

ORDNANCE SURVEY MAP

(O.S. Stk. 145)



Scale: One Inch to One Statute Mile = $\frac{1}{63360}$



THE NATIONAL GRID

TO GIVE A GRID REFERENCE CORRECT TO 100 METRES

EXAMPLE Bourtonfield			
See diagram below for Grid Letters.		They are SP	
East		North	
Take west edge of kilometre square in which point lies and read the large figures printed opposite this line on north or south margins.	44	Take south edge of kilometre square in which point lies and read the large figures printed opposite this line on east or west margins.	45
Estimate tenths Eastwards	7	Estimate tenths Northwards	6
	447		456
Full 100 Metre Reference SP 447456			

The above Full Reference is unique. For many purposes the first grid letter can be omitted, giving a reference, P 447456 which recurs at intervals of 500 Kilometres. If both grid letters are omitted, the resulting reference 447456 recurs at intervals of 100 Kilometres. When the area concerned is sufficiently restricted, as will usually be the case with maps on scales of one inch to the mile and larger, both the grid letters are normally omitted.

The incidence of grid letters and numbers on this sheet

SP
(42)

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 $0^{\circ}22'08''$ W. of Grid North.

Annual change in Magnetic Variation is about $8' E.$

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3665/A

ORDNANCE SURVEY 1952.

HIGHER GEOG. I
(MAP)

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1954

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.**

[OVER

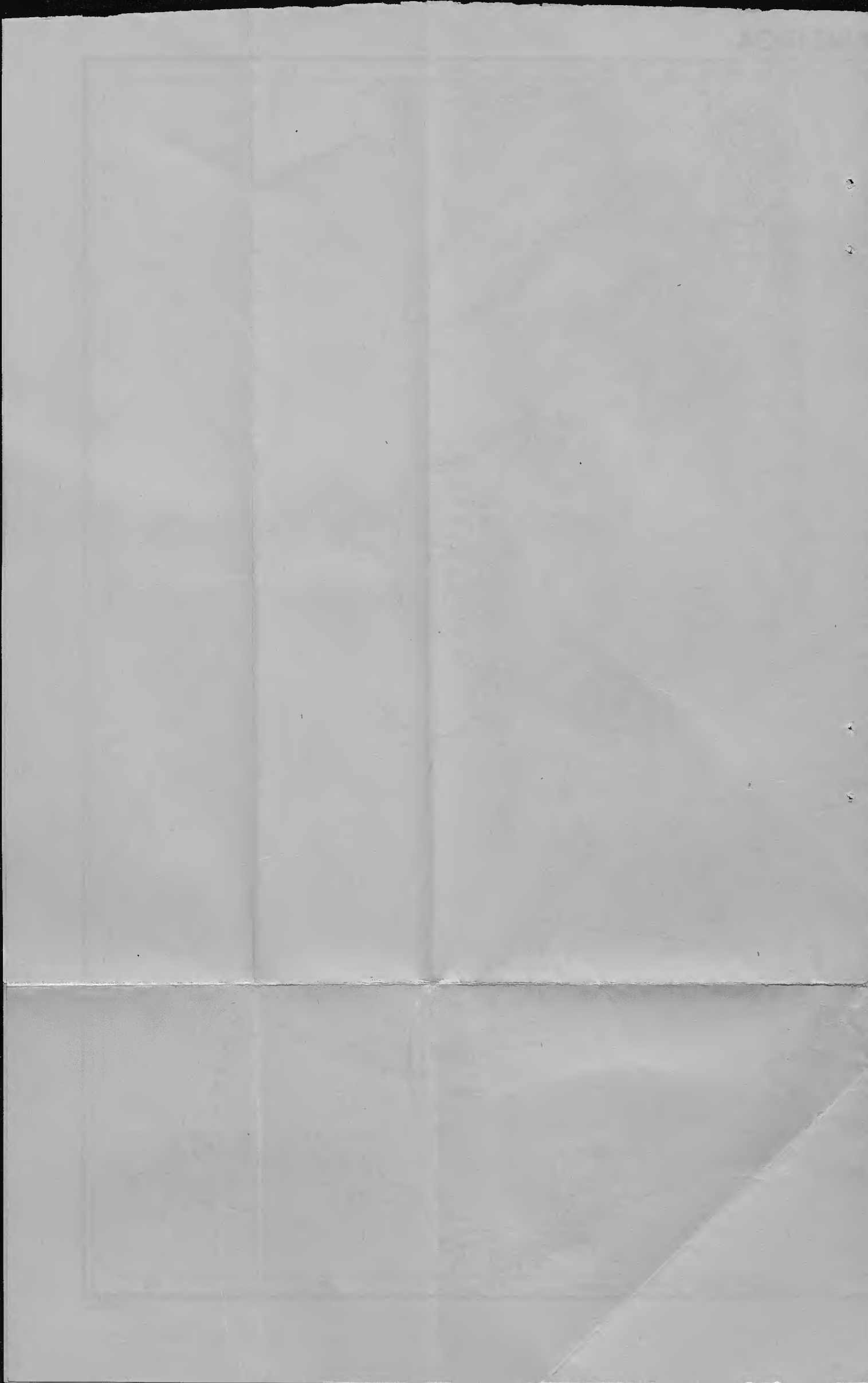
NORTH AMERICA



Matthem,

Edin.





LOWER GEOG.
(MAPS)

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1954

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

THE WORLD



Matthew,

Mercator's Projection

Edin.





CONTOUR MAP OF A REGION

Scale
1:100,000

Towns and Villages 

Main Roads 

Sea Routes 

Contours are at 100
feet intervals

Submarine contours
are at intervals of
10 fathoms

Placenames - Features
of relief, Towns and
Villages are lettered.



Matthew,

Edin.

SCOTTISH LEAVING CERTIFICATE EXAMINATION

1954

HISTORY

LOWER GRADE

Thursday, 11th March—9.30 a.m. to 12 noon

SECTION I

(To be attempted by all candidates)

FILL THIS IN FIRST

Name of School

Name of Pupil

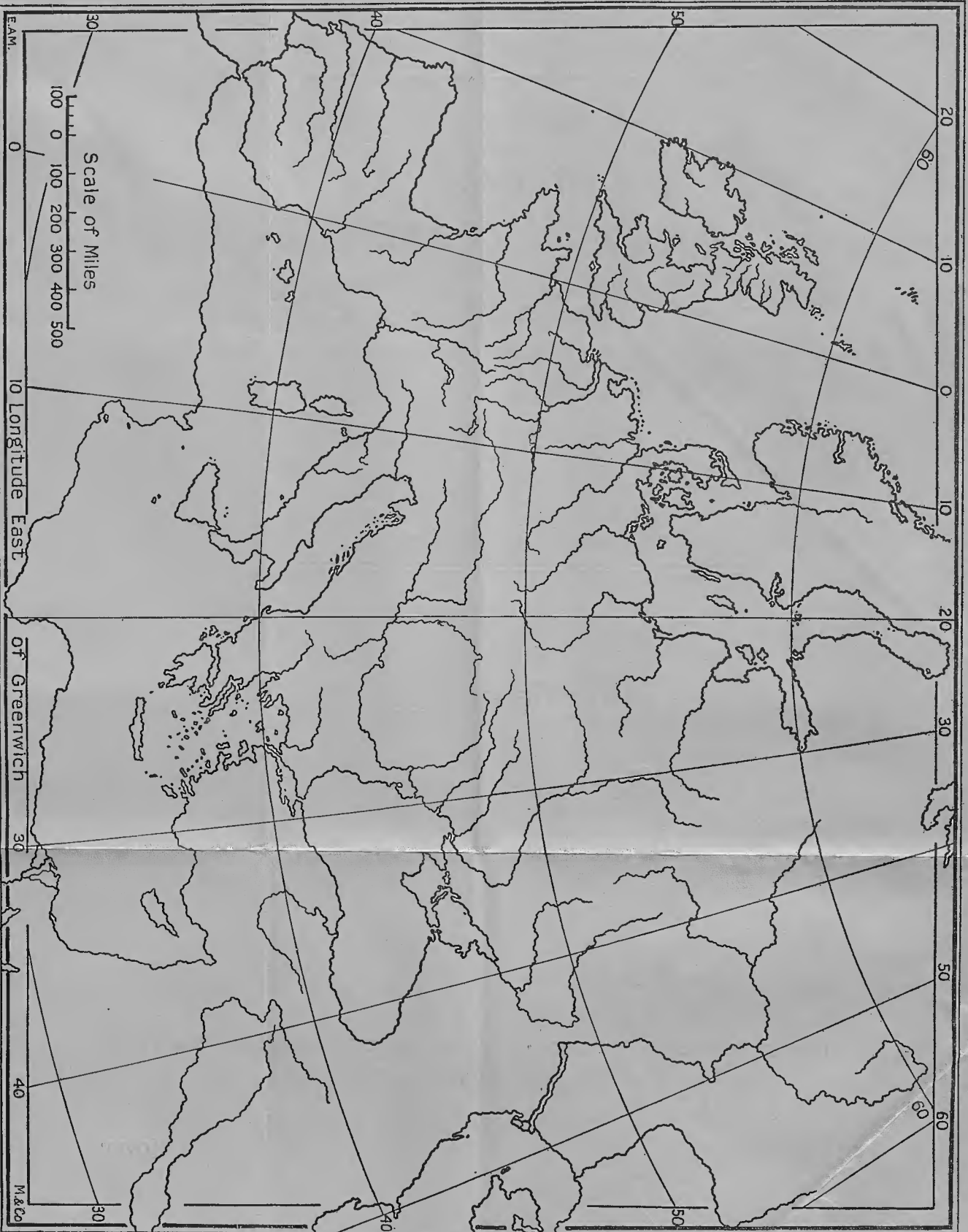
TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.

[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) Athelney.
- (2) Berlin.
- (3) Carlisle.
- (4) Crete.
- (5) Hastings.
- (6) Holyrood.
- (7) Largs.
- (8) Limerick.
- (9) Newcastle.
- (10) Sparta.
- (11) Trieste.
- (12) Waterloo.



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) Julius Agricola (century).....

.....

.....

(2) Alexander the Great (century).....

.....

.....

(3) St. Augustine of Canterbury (century).....

.....

.....

(4) Galileo (century).....

.....

.....

(5) The Hampton Court Conference (century).....

.....

.....

(6) Hannibal (century).....

.....

.....

(7) James I of Scotland (century).....

.....

.....

[TURN OVER

(8) Charles Martel (century)

.....
.....

(9) Sir Thomas More (century)

.....
.....

(10) The Model Parliament (century)

.....
.....

(11) The Trial of the Seven Bishops (century)

.....
.....

(12) The Battle of Worcester (century)

.....
.....

To face page 14].

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1954

HISTORY
HIGHER GRADE—II

Thursday, 11th March 1.30 p.m. to 4.0 p.m.

SECTION I

(To be attempted by all candidates)

FILL THIS IN FIRST

Name of School.....

Name of Pupil.....

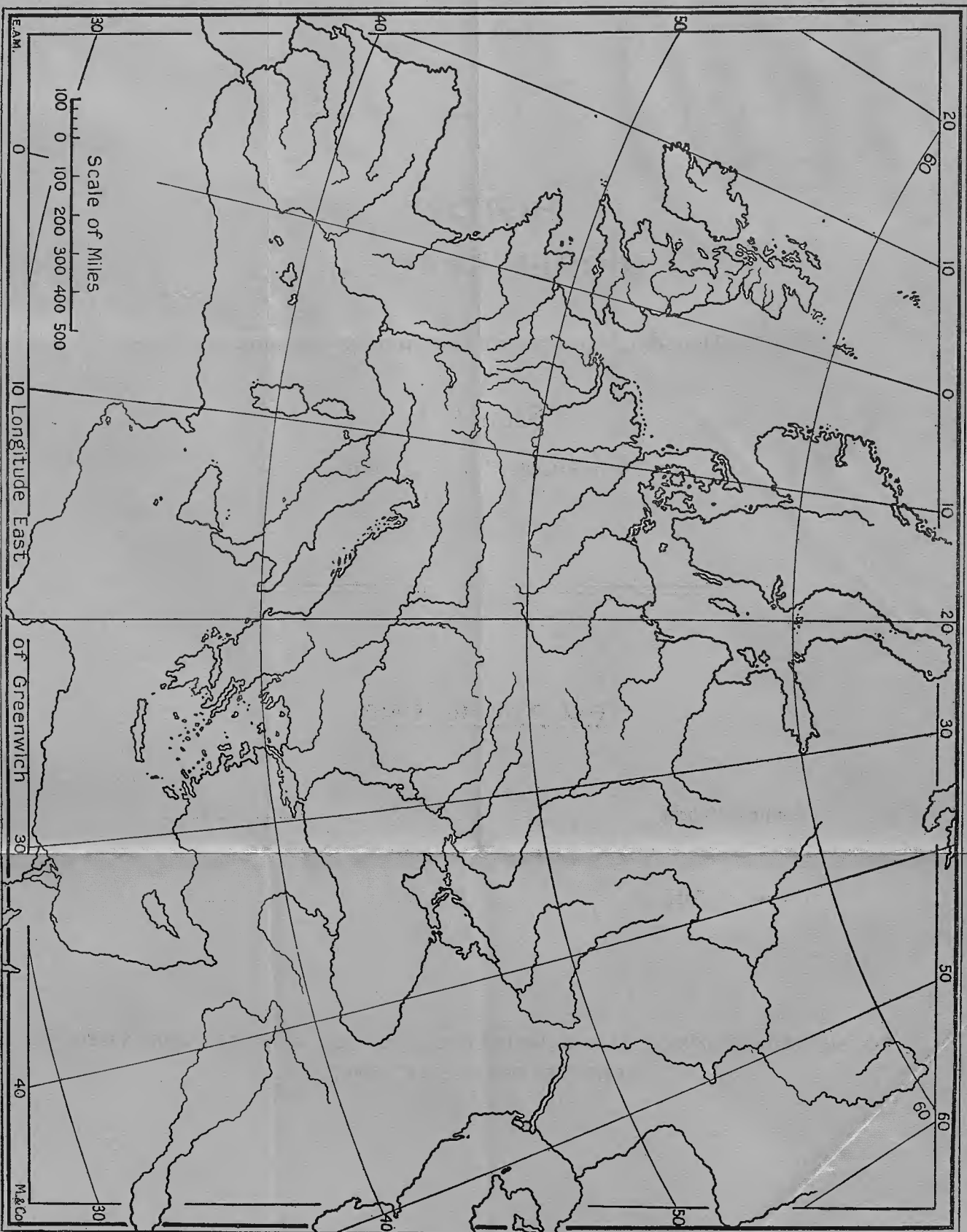
**TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.**

[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) Amsterdam.
- (2) Austerlitz.
- (3) Barcelona.
- (4) Carthage.
- (5) Constance.
- (6) Corinth.
- (7) Dresden.
- (8) Lyons.
- (9) Prague.
- (10) Sebastopol.
- (11) Sedan.
- (12) Strasbourg.
- (13) Syracuse.
- (14) Tours.
- (15) Venice.



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) St. Benedict (century).....

(2) Cicero (century).....

(3) The First Crusade (century).....

(4) The Turkish Capture of Constantinople (century).....

(5) Innocent III (century).....

(6) Louis Pasteur (century).....

(7) The Pragmatic Sanction (century).....

[TURN OVER

(8) Solon (century).....

(9) The Treaty of Tilsit (century).....

(10) The Diet of Worms (century).....

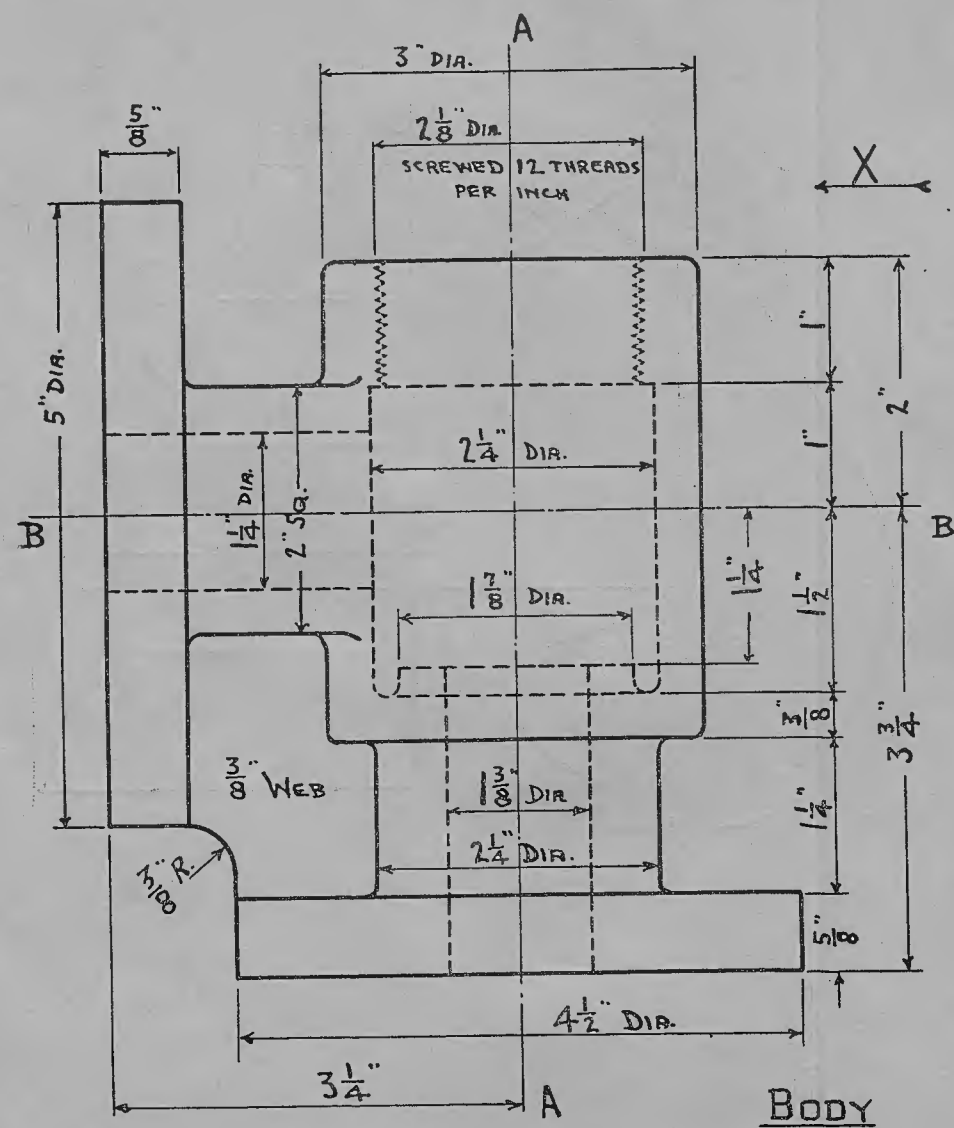
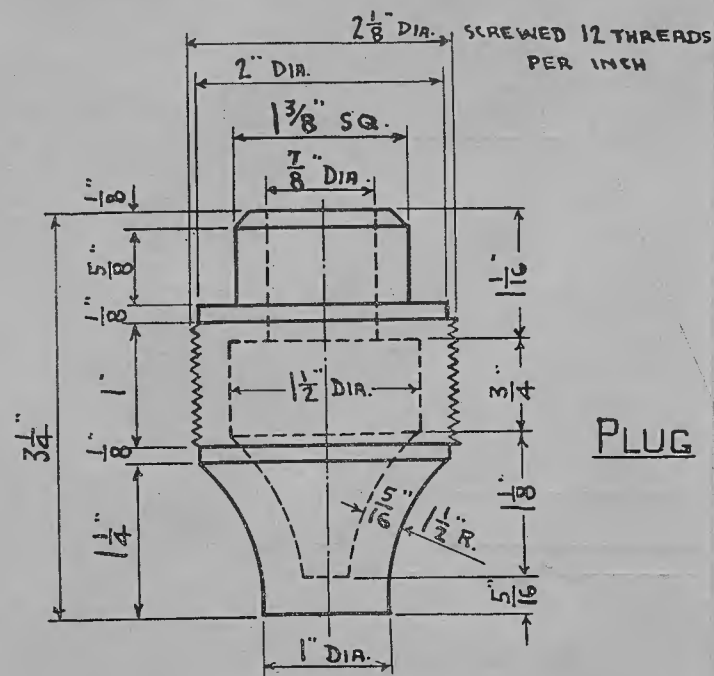


FIGURE 1



VALVE

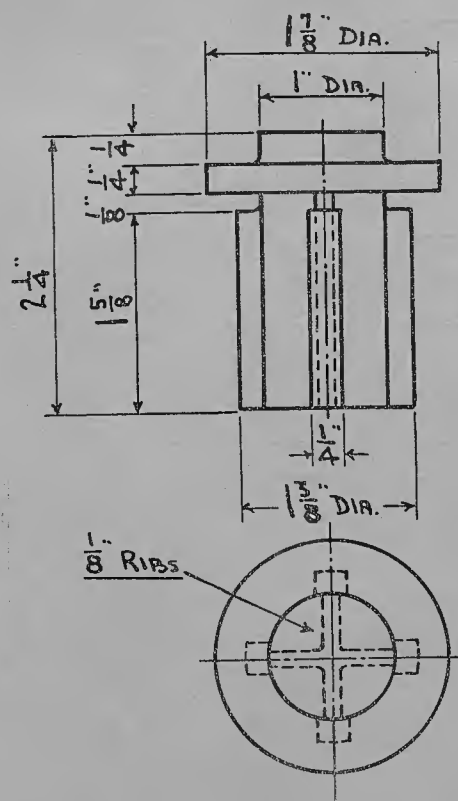


FIGURE 2

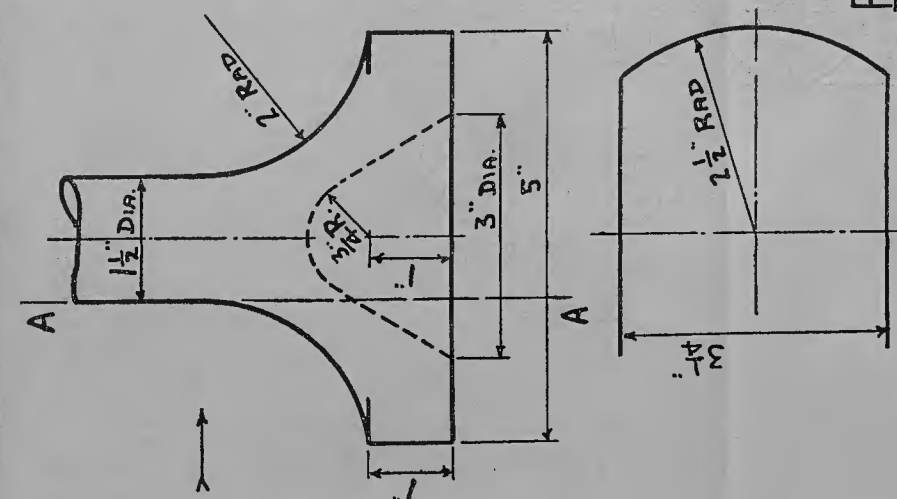


FIGURE 3

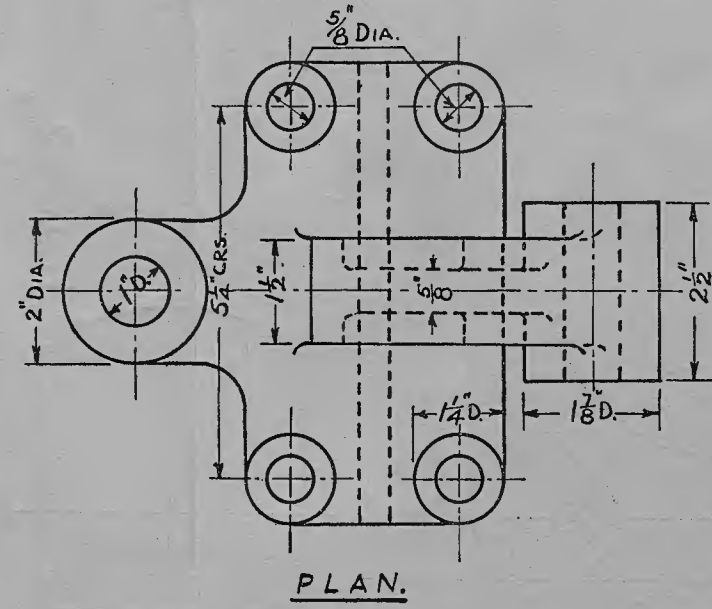
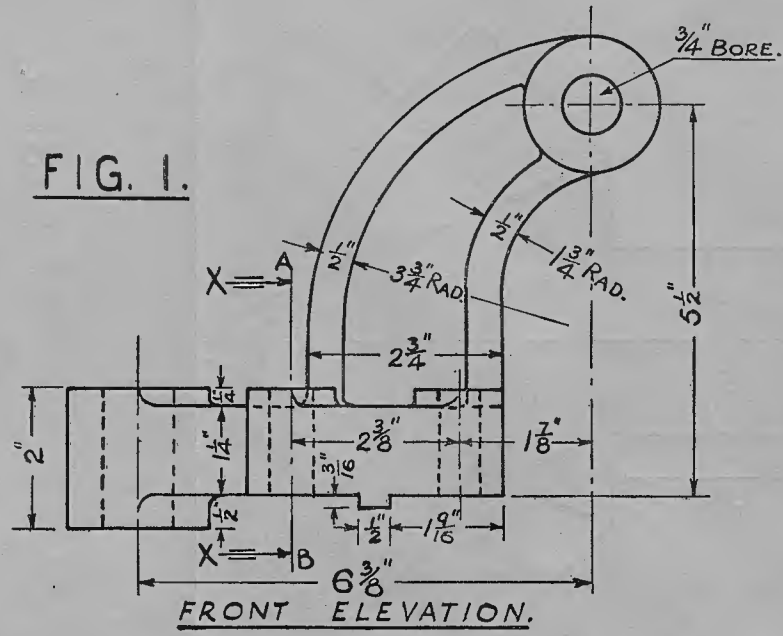


FIG. 2

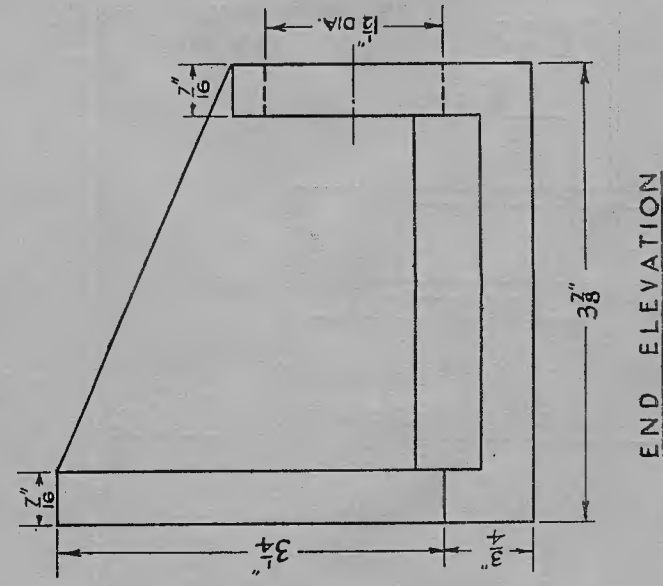
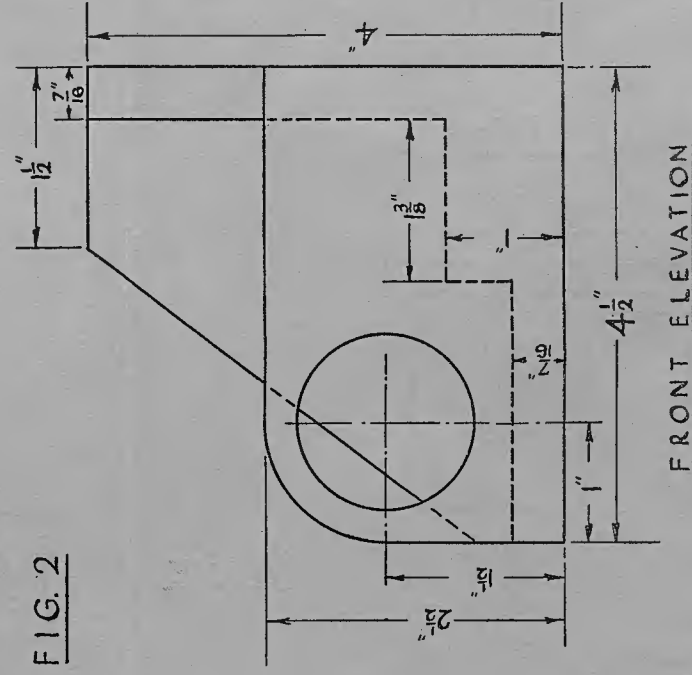
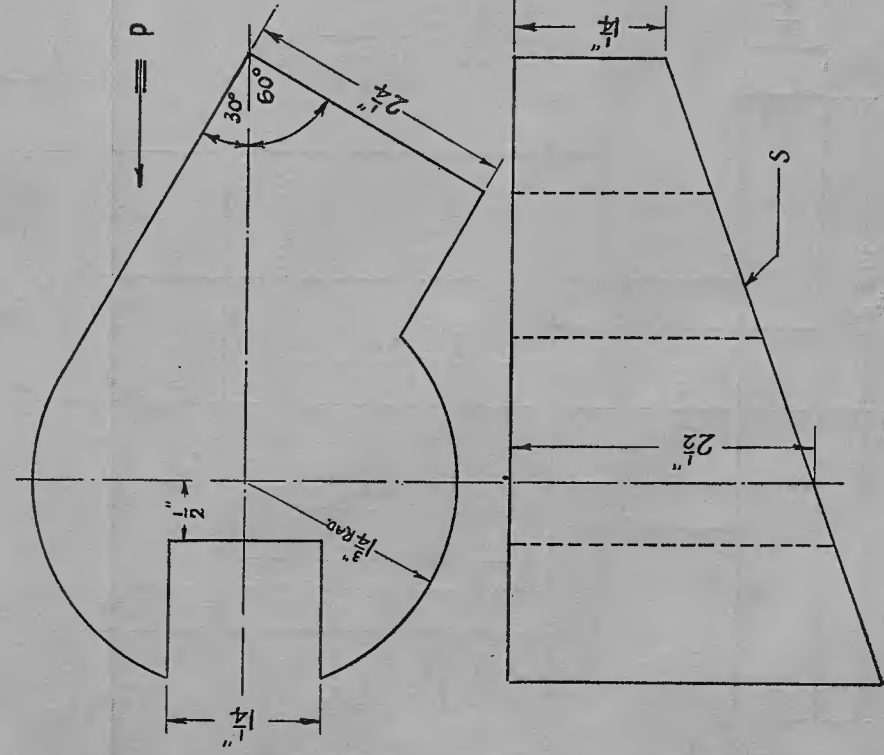


FIG. 3



Commercial Subjects

HIGHER GRADE—TYPEWRITING

Thursday, 25th March—1 P.M. to 3 P.M.

INSTRUCTIONS TO CANDIDATES

1. Read carefully the instructions at the head of each exercise.
2. Any defect in the machine should be pointed out to the supervising officer who will send to the examiners a certificate giving particulars of the defect and of the loss of time caused thereby.
3. Each exercise should be begun on a fresh page.
4. Any spoiled work should be cancelled by drawing a line through it.
5. The tests are to be worked in the following order :—
 - (1) The Copying Test.
 - (2) The Accuracy Test.
 - (3) The remaining exercises.
6. At the close of the examination you will receive from the supervising officer your typescripts of the Copying and Accuracy Tests. These must then be inserted in your examination book, along with your other typescripts, and handed to the supervising officer.
7. The value attached to each question is shown in brackets after the question.

QUESTION 1. COPYING TEST

(Turn to other side for actual test.)

Instructions. (Not to be typed.)

Type your name, school and grade at the top of a foolscap sheet.

Set the marginal stops for a 60-space line.

Make one copy, in **double** line-spacing, of the passage printed overleaf.

No credit will be given for completing this test in less than the time allowed.
No part of the test is to be re-typed.

The use of an eraser is **not** permitted.

At the conclusion of this test, your typescript is to be handed to the supervising officer.

Lord Althorp's Factory Act of 1833, which applied to textile factories, set legal limits to the working hours of children and young persons respectively, and its provisions were enforced by the appointment of factory inspectors, with power of entry into the factories.

Out of this children's charter of 1833 grew the Ten Hours Bill. This crisis of factory legislation came to a head in 1844-1847, contemporaneously with the repeal of the Corn Laws, and was heated with the fires of that great dispute. The Ten Hours Bill limited the daily work of women and youths in textile factories, and thereby compelled the stoppage of all work after ten hours, as the grown men could not carry on the processes alone.

This measure had for years been the aspiration of the employees and the storm-centre of a fierce controversy. In Parliament it produced curious cross-voting. Among the Liberals, Melbourne, Cobden and Bright were against it: Russell, Palmerston and Macaulay were for it. And the Conservatives were no less divided, Peel being strongly against the Bill, while a majority of the Protectionist squires voted in its favour. But the man who finally carried the Bill through the House of Commons was Fielden, "the largest cotton spinner in England, and the man who told with him in the lobby had passed from the position of worker to that of employer in the industry." (13)

QUESTION 2. ACCURACY TEST

Instructions. (Not to be typed.)

Type your name, school and grade at the top of a foolscap sheet.

Set the marginal stops for a sixty-space line.

Set the line-space lever for double spacing.

The whole of the passage printed below may be attempted, but no additional marks will be gained by typing any part of the passage a second time.

The use of an eraser is **not** permitted.

At the conclusion of this test your typescript is to be handed to the supervising officer.

	<i>Strokes</i>
And that winter a mighty storm arose, the like of which no man had	68
known before; for the sea was piled upon the dry land until the highest	139
tower of the town of seven towers was not more high; and the waters	207
moved forward over the dry land. And the men of the town of seven towers	279
fled from the oncoming of the waters, but the waters overtook them so that	356
not one of them escaped. And the town of the seven towers, and of the	427
four churches, and of the many streets and quays, was buried underneath	499
the waters; and the feet of the waters still moved till they came to the hill	577
whereon the Abbey stood. Then the Abbot prayed to God that the waters	648
might be stayed, and God heard, and the sea came no farther.	711
And that this tale is true, and not a fable made by the weavers of	779
words, he who doubts may know from the fisher-folk, who to-day ply their	852
calling amongst the reefs and sand-banks of that lonely coast. For there are	930
those among them who, peering from the bows of their small craft, have seen	1006
far down beneath their keels a city of strange streets and many quays. But as	1089
to this, I, who repeat these things to you, cannot speak of my own knowledge,	1162
for this city of the sea is only visible when a rare wind, blowing from the	1238
north, sweeps the shadows from the waves; and though on many a sunny	1308
day I have drifted where its seven towers should once have stood, yet for	1382
me that wind has never blown, pushing back the curtains of the sea.	1450
But this I do know, that the crumbling stones of that ancient Abbey,	1520
between which and the foam-fringe of the ocean the town of seven towers	1592
once lay, now stand upon a wave-washed cliff, and that he who looks forth	1666
from its shattered mullions to-day sees only the marshland and the wrinkled	1742
waters, hears only the plaint of the circling gulls and the weary crying of	1818
the sea.	1827
And that God's anger is not everlasting, and that the evil that there is	1901
in men shall be blotted out, he who doubts may also learn from the wisdom	1975
of the simple fisher-folk, who dwell about the borders of the marshland;	2048
for they will tell him that on stormy nights there speaks a deep voice from	2124
the sea, calling the dead monks to rise from their forgotten graves, and	2197
chant a mass for the souls of the men of the town of seven towers. Clothed	2272
in long glittering white, they move with slowly pacing feet around the	2343
Abbey's grass-grown aisles.	(35) 2370

QUESTION 3

Type your name, school and grade at the top of the sheet or sheets.

Answers to the following questions are to be typed on quarto paper.

Number your answers to correspond with the questions.

(a) Give what is, in your opinion, **the** best line-end divisions of the following words :—

Microphone ; character ; optimism ; economic ; swallows.

(b) Name **three** points which you would keep in mind when typing poetry.

(c) Indicate the steps you would take in making preparations for cutting a stencil, before you commence typing. (12)

QUESTION 4

1. Your name, school and grade are to be typed on the back of the sheet or sheets in the top left-hand corner.

2. Set out the following letter neatly and attractively on quarto paper, with one carbon copy. Insert to-day's date and your teacher's and your own initials as dictator and typist respectively. Make the necessary corrections as indicated.

J. Bunting and Sons Ltd.,
Alpha Works,
Baker Street,
Wembley, Mdx.

R. A. Whitehead, Esq., C.A.,
Warwick Street,
Victoria,
London, S.W.1

Dear Sir,

Increase in Share Capital

I enclose notice of an extraordinary general meeting of the company to be held in the White Hart Hotel, Valley Road, Wembley, on Thursday 15th April, 1954, for the purpose of considering and, if thought fit, of passing resolutions to increase the authorised ordinary capital of the Company from £500,000 to £750,000 by the creation of a further ^{500,000} ~~1,000,000~~ ordinary shares of 10/- each.

The Argos Investment ~~Company~~ ^{Trust} Ltd., at present holds all the Issued Ordinary Shares of the Company; in addition, there is an amount ^{of £200,000} due to them by the Company on loan account.

If the resolutions are duly approved, it is the Directors' intention immediately to issue to the Argos Investment Trust, Ltd., at par 350,000 Ordinary Shares of 10/- each in full satisfaction of the sum of £200,000 outstanding on loan.

The effect of these proposals on the capital structure of the Company is as follows:-

	As at present Authorised and Issued £	As proposed Authorised £	Issued £
5½% Cumulative Preference Stock	1,500,000	1,500,000	1,500,000
4% Cumulative Preference Guaranteed Stock	600,000	600,000	600,000
Ordinary Shares (10/- each)	500,000	750,000	675,000
	<u>2,600,000</u>	<u>2,850,000</u>	<u>2,775,000</u>

In accordance with the Articles of Association of the Company, the 5½% Cumulative Preference ~~Share~~ ^{Stock} holders and the Ordinary Shareholders are entitled to be present and vote at this meeting. A copy of the notice convening the meeting is also being sent to the 4% Cumulative Preference Guaranteed Stockholders for information.

Yours ffly.,
J. Bunting & Sons Ltd.,

Enc.

Director

QUESTION 5

1. Your name, school and grade are to be typed on the back of the sheet in the top left-hand corner.
2. Display attractively the following table and rule in red ink.

*Movements of the London Stock Market Indices
in 1952.
Price Indices*

	Government Securities		Industrial Ordinary Shares		Gold Prices	
	High	Low	High	Low	High	Low
January	96.34	95.32	121.5	113.2	100.93	97.48
February	96.14	94.62	114.8	110.3	105.64	97.50
March	95.15	92.73	113.9	105.5	104.23	96.21
April	94.89	93.76	114.1	108.1	96.58	87.54
May	94.91	91.35	113.4	104.7	93.02	87.74
June	92.05	90.22	105.5	103.1	93.65	87.74
July	92.28	90.39	111.0	105.6	97.95	93.58
August	95.19	91.60	117.5	110.6	99.49	96.98
September	95.32	92.90	117.6	113.2	96.54	91.71
October	95.04	93.76	115.2	112.9	93.20	89.02
November	95.26	94.86	117.3	112.9	90.84	86.48
December	95.32	94.38	117.8	115.2	94.56	89.83

Source: *Financial Times, London*

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Journal of the American Medical Association

Vol. 175
No. 1
July 1955

Original Article	Editorial	Book Review	Obituary
1-10	11-15	16-20	21-25
26-30	31-35	36-40	41-45
46-50	51-55	56-60	61-65
66-70	71-75	76-80	81-85
86-90	91-95	96-100	101-105
106-110	111-115	116-120	121-125
126-130	131-135	136-140	141-145
146-150	151-155	156-160	161-165
166-170	171-175	176-180	181-185
186-190	191-195	196-200	201-205
206-210	211-215	216-220	221-225
226-230	231-235	236-240	241-245
246-250	251-255	256-260	261-265
266-270	271-275	276-280	281-285
286-290	291-295	296-300	301-305
306-310	311-315	316-320	321-325
326-330	331-335	336-340	341-345
346-350	351-355	356-360	361-365
366-370	371-375	376-380	381-385
386-390	391-395	396-400	401-405
406-410	411-415	416-420	421-425
426-430	431-435	436-440	441-445
446-450	451-455	456-460	461-465
466-470	471-475	476-480	481-485
486-490	491-495	496-500	501-505
506-510	511-515	516-520	521-525
526-530	531-535	536-540	541-545
546-550	551-555	556-560	561-565
566-570	571-575	576-580	581-585
586-590	591-595	596-600	601-605
606-610	611-615	616-620	621-625
626-630	631-635	636-640	641-645
646-650	651-655	656-660	661-665
666-670	671-675	676-680	681-685
686-690	691-695	696-700	701-705
706-710	711-715	716-720	721-725
726-730	731-735	736-740	741-745
746-750	751-755	756-760	761-765
766-770	771-775	776-780	781-785
786-790	791-795	796-800	801-805
806-810	811-815	816-820	821-825
826-830	831-835	836-840	841-845
846-850	851-855	856-860	861-865
866-870	871-875	876-880	881-885
886-890	891-895	896-900	901-905
906-910	911-915	916-920	921-925
926-930	931-935	936-940	941-945
946-950	951-955	956-960	961-965
966-970	971-975	976-980	981-985
986-990	991-995	996-1000	1001-1005

To face page 30]

SCOTTISH LEAVING CERTIFICATE EXAMINATION
1954

MATHEMATICS

LOWER GRADE—II

GRAPH

SECTION I—QUESTION 4

Monday, 15th March—1.0 p.m. to 3.30 p.m.

FILL THIS IN FIRST

Name of School

Name of Pupil

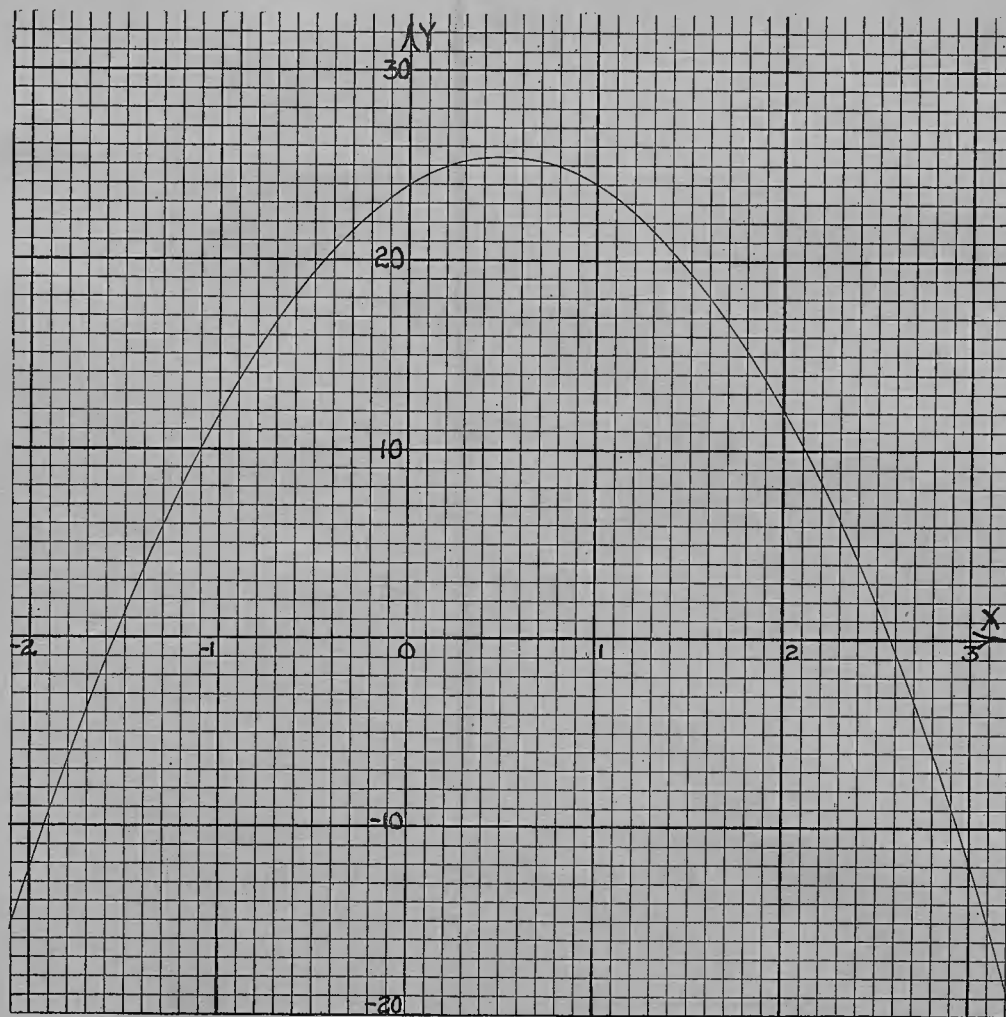
TO BE PINNED INSIDE THE CANDIDATE'S BOOK OF ANSWERS AND THUS
SENT TO THE DEPARTMENT.

[OVER

SECTION I, QUESTION 4—COMPULSORY

All the answers to this question must be written on this sheet.

The graph of the function $6(4 + x - x^2)$ is shown below for values of x from $x = -2$ to $x = 3$.



Reading values of x to the second decimal place and values of the function to the first decimal place, find from the graph:—

- (i) the maximum value of the function :
- (ii) the value of x for which the function has its maximum value :
- (iii) the value of the function when $x = 1.1$:
- (iv) the values of x for which the function has the value 17 :
- (v) the roots of the equation $6(4 + x - x^2) = -10$:

Rewrite the equation $29 + 6x - 6x^2 = 0$ in a form which allows the roots of the equation to be read directly from the graph, and so find the roots of the equation $29 + 6x - 6x^2 = 0$.

.....