

**METROPOLITAN REGIONAL EXAMINATIONS BOARD**

*for the Certificate of Secondary Education*

**REGULATIONS  
AND  
SYLLABUSES  
1966**

**Internationales Schulbuchinstitut**

Braunschweig

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H. BOARD, M.A.  
*Secretary to the Board*

29 Queen Anne's Gate, London, S.W.1.  
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GB Z-8(1,66)

Regulations and syllabuses 1966 / D. H. Board ; Metropolitan Regional  
Examinations Board for the Certificate of Secondary Education. - London :  
Metropolitan Regional Examinations Board, 1966. - 101 S.

21798

Georg-Eckert-Institut BS78



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Schulbuchbibliothek

21.798

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Where Notes of Guidance for Teachers have already been compiled by the Subject Panels these have been included. Any outstanding Notes of Guidance will be issued in duplicated form.

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Z-8(1.66)

## SECTION I

# REGULATIONS

## REGULATIONS

The Metropolitan Regional Examinations Board is one of fourteen regional Boards set up under the aegis of the Schools Council to conduct the examinations for the Certificate of Secondary Education in England and Wales. The region of the Metropolitan Board covers the areas of the Inner London Education Authority and of the London Boroughs of Croydon and Newham.

The Constitution of the Board has been approved by the Schools Council on behalf of the Secretary of State for Education and Science. (Copies can be obtained from the Secretary to the Board, price 1s.) The Board is governed by a Council consisting of teachers, representatives of the Local Education Authorities, of the Youth Employment Service, of the Institute of Education, of the Trade Unions and of Industry and Commerce. The members of the Council are as follows:

### *Chairman of the Board*

Sir Harold C. Shearman, M.A., CHAIRMAN, Greater London Council

### *Vice-Chairman of the Board*

J. T. Jones, B.SC., HEADMASTER, Davidson Secondary School

K. R. Bishop, B.SC.(ECON.), VICE-PRINCIPAL, Wandsworth and Battersea College of Further Education

Miss G. E. Ball, DEPUTY HEADMISTRESS, Ashburton Secondary School

S. J. Barton, J.P., NATIONAL OFFICER, National Union of Public Employees

A. G. R. Britten, M.A., LL.B., HEADMASTER, Catford Boys' School

J. Brosgall, B.SC., TRAINING ADMINISTRATION MANAGER, Unilever Limited

C. W. Arnold Brown, M.SC., STAFF INSPECTOR, Inner London Education Authority

D. L. Corder, ASSESSOR, Department of Education and Science.

G. J. Denis Dale, HEADMASTER, Glengall School

W. J. Evans, M.A., HER MAJESTY'S INSPECTOR

F. D. Flower, M.B.E., B.A., B.SC.(ECON.), PRINCIPAL, Kingsway Day College

A. T. Fowle, HEADMASTER, Lanfranc Secondary Boys' School

W. H. George, B.A., HEADMASTER, Rutherford School

P. Gillett, PRINCIPAL YOUTH EMPLOYMENT OFFICER, Inner London Education Authority

Miss M. G. Green, B.A., HEADMISTRESS, Kidbrooke School

S. G. Green, ASSESSOR, South East Regional Examinations Board

Miss V. F. Harrison, B.A., HEADMISTRESS, Rectory Manor Secondary School

F. C. Hayes, I.G.A.I.M., HEAD OF EDUCATION AND TRAINING DEPARTMENT, Council of Ironfoundry Associations

B. B. Holloway, B.SC.(ECON.), Burke County Secondary School

A. E. Howard, B.SC., HEADMASTER, Wandsworth School

E. Ivor Hughes, A.C.P., PRINCIPAL, Buckingham College

J. A. Hulett, B.A., HEADMASTER, West Greenwich School

Miss F. M. Hurst, M.A., HEADMISTRESS, Burges Manor Secondary School

M. Johnson, M.A., CHIEF INSPECTOR, Croydon

Miss O. Lambert, M.A., University of London, Institute of Education

M. G. Lee, M.A., PRINCIPAL, Hammersmith Day College

E. E. McCarthy, M.A., HEADMASTER, Malory School

Mrs. A. McMillan, HEADMISTRESS, Silverthorne School

G. E. Manning, B.A., HEADMASTER, Ashburton Secondary Boys' School

Miss M. Miles, B.A., HEADMISTRESS, Mayfield School

E. Mothew, Stratford Green County Secondary Boys' School

O. W. Munden, B.SC., HEADMASTER, South West Ham County Technical School

L. W. Payling, M.A., PH.D., CHIEF INSPECTOR, Inner London Education Authority

C. A. Pyle, DEPUTY HEADMASTER, Woolwich (Polytechnic) Secondary School

Miss S. E. Raison, B.A., HEADMISTRESS, The Deanery High School for Girls  
Mrs. M. I. Rawlings, B.A., VICE-PRINCIPAL, Paddington College of Further  
Education  
N. D. Richards, Hillcroft School  
R. Schofield, B.Sc., Forest Hill School  
A. J. Scott, HEADMASTER, Holbrook County Secondary School  
Mrs. R. Shaw, B.A., HEADMISTRESS, Dane Court Technical High School for Girls  
and ASSESSOR, Schools Council  
T. Smith, B.Sc., HEADMASTER, Bloomfield School  
F. W. Turner, M.A., M.Sc., SENIOR ASSISTANT EDUCATION OFFICER, Inner London  
Education Authority  
R. C. Turner, B.Sc., F.S.S., F.I.M.A., SENIOR LECTURER, Wandsworth Technical  
College  
J. S. Wilkie, M.A., Ph.D., DEPUTY CHIEF EDUCATION OFFICER, Newham  
Miss K. I. Williams, O.B.E., B.A., HEADMISTRESS, Lanfranc Secondary Girls' School

The Council has appointed an Examinations Committee, a Finance and General Purposes Committee, and a Publicity Committee which are responsible to it, and the Examinations Committee has established Subject Panels to prepare syllabuses and test papers and to advise it on all matters affecting the examinations for the subject with which the Panel is concerned.

The term of office of members of the Council, Committees and Subject Panels ends on 31st August, 1966. Thereafter, it will be open to schools to nominate to the Subject Panels of the Board. Nomination forms, etc. will be circulated by the Secretary.

## CORRESPONDENCE

All correspondence concerning the Certificate of Secondary Education in the Region should be addressed to the Secretary to the Board, Metropolitan Regional Examinations Board, 29 Queen Anne's Gate, S.W.1. As a general rule, the Secretary to the Board will communicate only with Heads of Schools but on procedural matters affecting the examination it is open to the Head of the School to nominate a Correspondent.

## MODES OF EXAMINATION

*Mode I*—The Mode I syllabuses contained in this handbook are common to the Region as a whole and have been formulated by the Subject Panels of the Board after consultation with the subject teachers in the Region. Examination papers will be set by the Board and the scripts marked by the Board's Examiners.

*Mode II*—It is open to a school to submit syllabuses for consideration by the Board and, if approved, for the school to request that the Board set examination papers on such syllabuses. The scripts will be marked by the Board's Examiners.

*Mode III*—The school may also submit a syllabus for consideration by the Board on condition that, if the syllabus is approved, the school shall set and mark its own examination papers. The marked scripts will then be moderated by the Board whose decision is final. The Board does not make payment for this initial marking by the teacher.

Candidates may be entered for different Modes in different subjects but not in the same subject. Schools will be given two years' notice of any change in a Mode I syllabus.

## SUBMISSION OF SYLLABUSES

Schools wishing to submit syllabuses under Modes II or III for consideration by the Board should send 30 copies to the Secretary of the Board on or before the 1st January two years before the year in which candidates will sit the examination, together with 30 copies of a specimen paper and 30 copies of a note of explanation.

The allocation of marks to each section of the examination and any special schemes of assessment of Practical Work, Course Work, Oral Work and Projects should also be submitted. A detailed marking scheme will be called for at a later stage.

The Head of the School (or his representative) submitting the syllabus will normally be asked to attend a meeting of the appropriate Panel to present the syllabus. The Secretary to the Board will inform the Head of the Panel's decision in writing as soon as possible after the meeting.

### **NEGOTIATIONS BETWEEN SCHOOL AND BOARD**

It is necessary to ensure that pupils have the full two years to follow the syllabus leading to the examination. In order to do this, final agreement on any Mode II or III syllabuses must be reached by the 31st May two years before the examination takes place. This will ensure that pupils will have the full two years to follow the syllabus leading to the examination. In the event of deadlock between school and Panel, the Chairman of the Examinations Committee will be asked to arbitrate. If the Board and the school are still unable to reach agreement, the school may appeal to the Schools Council. The Secretary to the Board will be pleased to assist in the preparation of the appeal if his help is needed. Copies of correspondence between the Board and the school will be made available if required.

### **ASSESSMENT**

For Practical Work, Course Work, Oral Work and Projects, etc. the Board will provide moderating services, either by sending Assessors to visit the school or by requesting the school to send a proportion of the work to the Board's Assessor. These conditions will apply to all three Modes of entry.

The Board's schemes of assessment will normally expect those teachers who have prepared the candidates to put the school's entry into an order of merit and, in most cases, will ask them to award marks. The teacher(s) is, therefore, being asked to judge his candidates in relation to one another. The Board's Assessor is responsible for ensuring that the marks awarded by the school are in conformity with the overall standards of the examination. As a general rule, the Assessor will, therefore, allow the order of merit to remain unchanged; he may, however, scale the marks up or down in the interests of standardisation.

An Assessor who visits a school may wish to discuss the candidates' work with the teacher who has prepared the candidates for the examination and also with some or all of the candidates themselves. An Assessor is not empowered to reveal the marks awarded; these are strictly confidential.

### **THE CERTIFICATE**

The certificate will make no distinction between Modes. The candidate's performance will be indicated in one of five Grades. The Schools Council has defined the Grades as follows:

"The performance of candidates in the C.S.E. examination is described in 5 grades, of which grade 1 is the highest:

**GRADE 4** describes a standard of performance expected from a candidate of average ability\* who has followed an appropriate course of study in the subject.

**GRADE 1** describes a standard such that the candidate might reasonably have secured a pass at ordinary level of the G.C.E. examinations had he followed a course leading to that examination.

**GRADES 2 AND 3** are given in approximately equal numbers to all candidates between grades 1 and 4.

GRADE 5 describes a standard within the scope of the C.S.E. examinations below that of grade 4.

Performances below grade 5 are unclassified and not recorded on certificates.

\* This refers to the whole of the 16 year age group."

Candidates who achieve at least one Grade 4 result will have all grades except the unclassified recorded on their certificate. No certificate will be issued to a candidate unless he has achieved at least one Grade 4 result.

### ISSUE OF CERTIFICATES

Certificates will be issued to the schools for distribution and not individually to candidates as soon after the examination as is practicable and it is hoped before the end of the Summer Term. The Board's certificates will be signed by the Chairman and Secretary to the Board and countersigned by a representative of the Schools Council on behalf of the Secretary of State for Education and Science. Duplicate certificates will not be issued but "letters of success" will be sent to certificate holders whose certificates have been mislaid, provided that the certificate holder informs the Secretary to the Board of (i) the year in which he sat the examination, and (ii) his examination centre. A fee of £1 will be charged.

### RESULTS

Any query from the Head of a School about the results should be addressed only to the Secretary to the Board. Inquiries by individuals either in writing or by telephone must not be made.

### CONDITIONS OF ENTRY

(i) Candidates must be attending a secondary school, either maintained or independent, or an establishment of further education within the region of the Board. Candidates who attend a school or college outside the region must take the examinations of the appropriate C.S.E. Regional Board.

(ii) Candidates who are entered for the examination must be in the fifth year of a course of secondary education, or if they are attending a college of further education they must be at least 17 on 1st September following the summer term in which the examination is taken.

(iii) Candidates can be entered only by the school or college they are attending and the decision of the Head is final.

### PAYMENT OF FEES

The fees of candidates attending maintained schools and colleges of further education will be paid by the Local Education Authority. Independent or private schools should send their candidates' fees with the entry form. *The Board's fees will be £1 7s. 6d. per subject entry.* No registration fee will be charged. If a school wishes to enter candidates for subjects which would involve the Board in costs over and above the normal costs, a special fee may be charged and entries will not be accepted without the approval of the Local Education Authority. It is not anticipated that special fees will be charged except for unusual subjects for which a very small number of candidates is entered. The Secretary to the Board will inform the Chief Education Officer where it is proposed to charge a special fee.

### TIMETABLE

A provisional timetable for the 1966 series of examinations can be found on Page 8. A final timetable will be issued by 30th November, 1965. Heads of Schools may, with good reason, conduct a Written Examination during the afternoon when the examination is fixed for the morning and vice versa provided

they inform the Secretary to the Board. Deviations from the timetable will not normally be permitted but in exceptional circumstances the Secretary is empowered to authorise any changes. Examination papers for Mode II and Mode III subjects must be taken on the days and times laid down for the Board's Mode I papers. Any outstanding papers in Mode II and Mode III subjects must be taken within three days of the completion of the timetable for Mode I.

### **ASSESSORS**

The Board will send Assessors to inspect Practical Work, Course Work, Oral Work and Project Work where this is specified in the schemes of assessment which are to be found with each syllabus.

For this reason, the Oral, Practical Examinations, etc. have been fixed for specific days in certain cases and within a given time for others. These times must be adhered to and Heads of Schools will be asked to inform the Board of the exact time when it is proposed to examine groups of candidates in examinations where latitude is permitted.

### **VISITORS**

The Board will also send Visitors to schools to ensure that the examinations are being conducted strictly in accordance with the Regulations. Where a Visitor's report suggests that the standard of conduct of the examination has been such that the candidates' performance may have been unduly affected, the Board reserves the right to withhold the issue of certificates. The Head of the School will be asked to certify that conditions will be improved before the Board will accept entries from that school for the next series of examinations.

### **EXAMINATION CONDITIONS**

The Board does not propose to lay down specific regulations as to the kind of room, etc. in which examinations should be conducted, but it is understood that, by and large, other than the invigilator, assessor (if any) and candidates, no other people should be present in the room. One invigilator should be on duty for approximately every forty candidates. Instruction about the invigilation of Oral and Practical Examinations will form part of the Notes of Guidance to be circulated to schools.

In the case of Written Papers, invigilators are permitted to draw the attention of candidates to the sections of the paper on those parts of the syllabus studied by the candidates. Invigilators are not permitted to direct candidates to specific questions nor to rephrase questions to make them intelligible to candidates who do not understand them. Candidates are not permitted to leave the examination until 30 minutes after the starting time. Candidates who arrive up to 30 minutes late may sit the paper. No extra time will be allowed.

### **ENTRY FORMS**

Heads of Schools will be asked to complete an estimated entry form giving the number of subject entries and the number of candidates by the 1st November in the year preceding the examination. The entry forms proper should be completed by the 1st March in the year of the examination. Late entries will not be accepted. The examinations may be taken only in those schools and other establishments which have submitted (i) an estimate of entries and (ii) the final entry form.

### **WITHDRAWAL**

Fees will not be refunded in any circumstances for candidates who are absent from individual subjects. Where a candidate entered for three or more subjects

has been unable, for the following reasons, to take all the subjects for which he has entered £1 per subject will be refunded.

- (i) Illness, in which case a Medical Certificate must be submitted;
- (ii) removal from the region of the Board.

The Board will not amend its records if a duly entered candidate is withdrawn from the examination at any time, whether in whole or in part, and it will be the responsibility of the Head of the School to show any such candidate as an absentee from each paper concerned.

#### **DESPATCH OF SCRIPTS AND OTHER MATERIAL**

(i) Schools will be supplied with envelopes for the despatch of scripts to the Board's Examiners and Moderators. Scripts should be sent in examination number order. These must be despatched by letter post and by Recorded Delivery by the first available post.

(ii) Schools must supply wrappings for Projects, Course Work and tape recordings, etc. In subjects where examples of work are to be sent to Assessors mark lists in order of merit should be sent immediately to the Secretary to the Board who will inform the school which examples are to be sent. The examples should be despatched to the Board's Assessor by letter post and by Recorded Delivery immediately.

#### **OBSERVATIONS ON THE EXAMINATION**

Any observations on the question papers or any aspect of the examinations should be sent to the Secretary to the Board before the 1st October after the examination.

#### **COPIES OF REGULATIONS AND PAST PAPERS**

The Board will provide each school with two copies of its Regulations and Syllabuses. Further copies may be obtained on request by Heads of Schools. Copies of the Regulations and Syllabuses may otherwise be obtained price 5s., post free. Separate sections of the Regulations and Syllabuses may be obtained price 1s., post free.

# EXAMINATION SESSION—1966

## PROVISIONAL - TIMETABLE

|          | <i>Morning</i>  | <i>Afternoon</i>  |
|----------|---|---|
| March 16 | Dress—Planning  |   |
| March 17 | Embroidery & Design—<br>Planning  |   |
| March 18 | Embroidery & Design   | Embroidery & Design   |
| <hr/>    |   |   |
| March 21 | Metalwork Practical<br>Housecraft—Planning  | Metalwork Practical   |
| March 22 | Dress<br>Metalwork Practical  | Dress<br>Metalwork Practical  |
| March 23 | Commerce Oral<br>Social Studies Oral<br>Dress   | Dress   |
| March 24 | Housecraft Practical<br>Woodwork Practical  | Housecraft Practical<br>Woodwork Practical  |
| March 25 | Housecraft Practical<br>Woodwork Practical  | Housecraft Practical<br>Woodwork Practical  |
| <hr/>    |   |   |
| March 28 | Housecraft Practical<br>Building Studies Practical                                      | Housecraft Practical<br>Building Studies Practical                                      |
| March 29 | Physics Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment)         | Physics Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment)         |
| March 30 | Biology Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment)         | Biology Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment)         |
| March 31 | Chemistry Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment)       | Chemistry Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment)       |
| April 1  | Natural Science Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment) | Natural Science Practical<br>Needlecraft (assessment)<br>Technical Studies (assessment) |
| <hr/>    |   |   |
| April 27 | French Oral   | French Oral   |
| April 28 | German Oral   | Spanish Oral  |
| April 29 | Music — I (Sight-reading and<br>Prepared Performance<br>Shorthand                       | Typewriting with Office<br>Practice   |
|          | 1½ hrs.   | 2½ hrs.   |
| <hr/>    |   |   |
| May 2    | Art   | Art   |
| May 3    | Music II<br>Art (assessment)  | Music III<br>Art (assessment)   |
| May 4    | Art (assessment)  | Art (assessment)  |
| May 5    | Art (assessment)  | Art (assessment)  |
| May 6    | English I   | English II  |
|          | 1½  | 2   |

|        |                        |    |  |      |
|--------|------------------------|----|--|------|
| May 9  | English III            | 1½ | Religious Knowledge                      | 2½   |
| May 10 | Principles of Accounts | 2½ | Social Studies                           | 2    |
| May 11 | Technical Drawing      | 3  | Basic Science                            | 1    |
| May 12 | Biology                | 2  | Chemistry                                | 2    |
| May 13 | Natural Science        | 2  | Physics                                  | 2    |
| May 16 | Mathematics I          | 2  | History                                  | 2¼   |
| May 17 | Commerce               | 2  | Mathematics II                           | 2    |
| May 18 | French I               | 1  | Metalwork I                              | 2    |
|        | French II              | 1½ | Housecraft I                             | 1½-2 |
| May 19 | No examinations        |    |  |      |
| May 20 | German I               | 1  | Woodwork I                               | 2    |
|        | German II              | 1½ | Needlecraft I — Dress                    | 1½-2 |
| May 23 | Geography I            | 1½ | Building Studies I                       | 2    |
|        |                        |    | Needlecraft I — Em-<br>broidery & Design | 1½-2 |
| May 24 | Spanish I              | 1  | Geography II                             | 1½   |
|        | Spanish II             | 1½ |  |      |



## SECTION 2

# SYLLABUSES FOR ART MUSIC

# ART

The examination will be in two sections:

## I PRACTICAL WORK

## II COURSE WORK

The syllabus has been designed to encourage experiment and breadth of study, coincident with the normal course of work in the secondary school. Work will be equally admissible whether it includes a wide variety of art and craft media or subject matter, or stems from a specialised interest explored at greater depth.

It should not require any special deviation from curriculum or any regrouping of pupils for the purpose of passing the examination. It should encourage personal choice and vision and the individual development of the candidates and test imaginative awareness rather than technical competence alone.

The following general qualities in the candidates' work will be looked for: ability to express feelings through personal imagery; evidence of awareness of the world around and the world within—and sensitivity to react to them; ability to express these reactions in any art or craft medium of their own choice; clarity in communicating reactions and ideas through the created work; capacity for sustained effort, determination to continue from conception of idea to completed work, and sensitivity to—and understanding of—materials.

The examiners will attach great importance to the course work exhibited, but it will not be possible to pass the examination on this alone. Both course work and work done during the practical test will be assessed by visiting examiners on a date as soon as possible after the practical test. Schools will be given at least one week's notice of the visit of the examiners.

Candidates may offer both two-dimensional and three-dimensional work.

### (a) PICTORIAL COMPOSITION

This may be from imagination, from observation, as illustration, or as design for murals. Work will be accepted in any medium, for instance—the usual painting and graphic media, screen print, collage, lino-cut, ink, dyes, wax; any combinations of these are acceptable.

The examiners will look for work which expresses a personal reaction to the subject and for evidence of the candidates' ability to translate this reaction into pictorial form. Individual interpretation and comment will be as important as technical competence. They will also look for evidence of the candidates' awareness of visual relationships, their use of line, colour, rhythm, pattern, and texture, and their exploitation of the medium for the communication of the idea.

### (b) DRAWING FROM OBSERVATION

This means the study of visual relationships in any traditional medium such as reed pen, charcoal, brush, pastel, chalk, pencil, or any experimental medium of the candidate's own choice.

The examiners will look for evidence of visual awareness and of visual analysis; for a sense of pattern and design and of relationships between shapes, lines, and textures; and for evidence that drawing has been used as a means of discovery.

### (c) PATTERN AND DESIGN, INVENTED OR DISCOVERED

This section may include work in any medium—flat or three-dimensional—covering pattern and design from nature; invented abstract pattern and design; subjective, imaginative pattern and design; pattern and design suggested by environment.

The examiners will hope to see work which shows an awareness of pattern and structure in nature, and which may be derived from observation of rock and other land formations, beach, sea, and river patterns, markings of animals, birds, and

insects, plant and cell structures, or other natural phenomena; imaginative invention in creating patterns based on geometric or other abstract and inanimate forms; the use of pattern to express or evoke feeling or mood; and work which is inspired by the visual impact of things seen every day.

(d) LETTERING, CALLIGRAPHY, TYPOGRAPHY, ILLUMINATION, BOOK AND ALLIED CRAFTS

Candidates may submit examples of these crafts, alone or combined with illustration.

The examiners will look for clarity of presentation, good layout, good relationships between type-faces, areas and paper margins, legibility, suitability for purpose, and an awareness of values particular to the craft chosen. Drawn letters and calligraphy should show a sense of rhythm and spacing, and a sympathetic control of the medium.

(e) FABRIC CRAFTS

These may include dyed, printed, or woven fabrics. Decorative needlework may comprise machine and hand embroidery and appliqué.

The examiners will look for exciting and interesting work which shows the candidates' imaginative exploitation of the technique chosen, and their understanding of the use of colour, pattern, line and texture for the expression of their idea.

(f) POTTERY, MODELLING AND SCULPTURE

This work, which may be flat or three-dimensional, may include the following: thrown, built, and cast pottery; clay modelling, fired or cast; wire and plaster modelling; papier mâché; decorative panels in clay, plaster, mosaic, or other media; constructions in wire, wood, metal, or other media; carvings of wood, stone, plaster, or other media.

The examiners will attach importance to the imaginative content of the work, and will look for vitality in the expression of the idea, and for evidence of a sympathetic control of the tools and materials.

(g) DESIGN FOR DRAMA

Included in this section may be: designs for "sets" and backcloths, and built models of sets for full-scale stages or puppet theatres; designs for "props" as well as actual props may be offered. Designs for costumes and/or actual costumes made by candidates, and the making of puppets may also be submitted.

The examiners will look for originality of conception, vitality, apt use of colour, appropriateness of treatment, sense of drama, and sense of theatre.

(h) LARGE SCALE WORKS

Large scale compositions as designs for wall paintings or any other very large works will be accepted in any media.

## I. Practical

A choice of tests will be offered from all sections of the syllabus, and candidates will be required to attempt one test only.

The test papers should be given to the candidates not later than one school week before the date of the examination, to allow time for preparation. Sketches made during this time may be taken into the examination room. It will be the responsibility of the school authorities to see that the necessary materials and equipment are available on the date of the examination so that the candidates are not delayed in starting work.

## II. Course Work

Candidates may choose from any, or all, parts of the syllabus. They will be required to prepare ready for the examiners, a small individual exhibition of their work done in the two years prior to the examination. Six or more specimens of practical work should be selected; an illustrated note book, or folio, produced in the course of a special study of an aspect of Art History and/or Appreciation may count as one of the candidate's exhibits.

Candidates should, with the help of the teacher, display their work to the best advantage. Candidates should be available for questioning by the examiners on the work presented.

The examination itself must, normally, occupy not more than one whole school day, but candidates offering crafts under sections (d), (e), (f), (g), and (h) may start work one whole school day before the date set for the examination, and may thus present, for assessment, work in the state of completion reached at the end of two whole school days.

Candidates will be allowed to withdraw from the examination room as soon as they are satisfied that their work is complete.

### MARKING AND ASSESSING

I. PRACTICAL: 30% (approx.)

II. COURSE WORK: 70% (approx.)

The teacher(s) responsible for the preparation of the candidates for the examination will prepare for the Assessor a list of candidates in order of merit, based upon their performance in both sections of the examination. The teacher should be available during the Assessor's visit so that any points of difficulty may be discussed. The candidates should also be available so that the Assessor may discuss the work with him or her if necessary.

The Assessor will award marks to the candidates independently of the teacher's order of merit. The marks awarded by the Assessor are confidential to the Board. If there arises a serious discrepancy between the estimate by the teacher and that by the Assessor, the Assessor will report the circumstances without delay to the Chief Examiner so that the latter may decide to arrange for a second Assessor to visit the school. Exhibitions may be taken down but schools will be advised to hold the work for at least one week, no further work to be done on entries during this interval. The second Assessor shall receive a copy of the teacher's order of merit but shall not be informed of the first Assessor's rating. The decision of the Chief Examiner shall be final and his decision shall have regard to the teacher's order of merit and the two assessments.

The teacher(s) responsible for the preparation of the candidates for the examination will be entitled to advise the candidate in the exhibition of his course work and practical work.

### *Notes of Guidance to Teachers*

These notes should be read in conjunction with the syllabus and the specimen paper.

Many aspects of Art and Crafts are included in the syllabus, but schools are not expected to have covered all of these.

- (1) The candidates' work must be intelligibly exhibited though no additional marks will be awarded for display techniques.
- (2) In Section I, the teacher's help should be confined to advising the candidate to make a wise choice of question. No advice on technical or aesthetic matters should be given.

- (3) In Section II teachers should advise on the choice of work for display. Homework may be exhibited at the teacher's discretion, provided the teacher is satisfied that the work is the pupil's own.
- (4) Teachers must ensure that Section I is clearly labelled "Section I".
- (5) In b and c, where possible, a separate specimen should be provided for each candidate
- (6) Time Allowed—d, e, f, g, h. The intention behind these instructions is that, at the end of the second, fixed day, candidates' work should be available immediately for assessment by the external examiners. In general, two whole single days are envisaged, but it is realised that, in certain special crafts, a more truly representative test of a candidate's ability will be given by a different apportionment of the ten permitted hours. Such re-apportionment, to be made at the discretion of the Art teacher, will always be permitted, provided that the total of 10 hours is not exceeded.
- (7) The examination paper should not be issued to the candidates before the stated time.

## MUSIC

The Syllabus will include the following sections, of which Sections I, II, and III are compulsory.

- I. PRACTICAL WORK—25 minutes maximum.
- II. AURAL SECTION TO INCLUDE THEORY—approximately 1 hour.
- III. GENERAL MUSICAL KNOWLEDGE—approximately 1½ hours.
- IV. AN OPTIONAL PROJECT (to be mentioned on the certificate but no mark will be given).

### Condition of Entry

Candidates must be able to produce evidence of having participated in a large group musical activity, e.g. choir or orchestra, for a minimum period of one year. It is also strongly recommended that all candidates entered for this examination will have had the opportunity of attending live performances.

### I. Practical Work

#### (a) SIGHT READING TESTS FOR VOICE OR INSTRUMENT

Progressive sight reading tests for voice, instrument or whistling, will be given. Candidates must attempt the first test and as many as possible of those that follow in numerical order.

A candidate's choice of instrument (if any) must be stated when the entry is submitted.

#### (b) PREPARED PERFORMANCE

Candidates will be tested alone or as part of a small group and will be required to sing or play two contrasted pieces. These pieces may be in the form of improvisation. The examiner may hear the whole or part of the pieces. They may both be sung or played, or one may be sung and the other played. If both are played they need not be on the same instrument. The prime consideration will be musical performance.

## II. Aural Section to include Theory

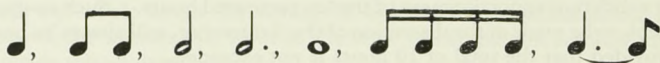
### (i) IDENTIFICATION OF INSTRUMENTS OF THE ORCHESTRA

Candidates should be able to identify:

- (a) a section of the orchestra
- (b) an instrument played on its own
- (c) an instrument played prominently in a group

### (ii) DICTATION OF RHYTHM

Candidates will be required to write down the rhythm of a melody of not more than four bars in length commencing on the first beat of the bar. There will be one test only in  $\frac{3}{4}$  or  $\frac{4}{4}$  and the following may be included:



### (iii) DICTATION OF MELODY

Candidates will be required to write down a melody of not more than four bars in length; the rhythmic pattern in simple time will be given. The following may include: major keys up to 3 sharps and 3 flats; stepwise movements with easy leaps. The tonic chord and the first note of the melody will be given and the piece will finish on the tonic.

### (iv) MUSICAL PERCEPTION

A single or two stave score of a recorded example will be presented to the candidates. The example will be played five times during which candidates must be prepared to insert any of the following:

- (a) dynamic markings
- (b) pace and alterations of pace
- (c) point reached in the performance
- (d) form (binary, ternary, rondo)
- (e) recognition of major and minor key
- (f) texture (e.g. hearing the melody in a lower part).

### (v) RECOGNITION OF STYLE

Recognition of the main national and period styles e.g. classical, romantic, impressionist, contemporary, national (Russian, French etc.). Candidates will be required to associate given examples with given styles.

### (vi) HARMONY

Candidates should be able to recognise the recurrence of chords heard in a short passage played on the piano. They will be expected only to recognise chords previously heard (and designated by a capital letter) in the passage. They will be required to ring appropriate letters as in the following example:

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| A | B | Ⓐ | Ⓐ | C | D | A |
|   |   | B | B |   |   | B |
|   |   |   |   |   |   | Ⓒ |
|   |   |   |   |   |   | D |

(vii) IDENTIFICATION OF THEMES

Candidates will be expected to identify the work and the composer of all the themes listed in Part 3—General Musical Knowledge Section.

### III. General Musical Knowledge

(i) (a) Twenty short questions on all aspects of the syllabus which may include questions on current musical life.

(b) Candidates will be expected to have made a study of the orchestra, which will include the orchestral instruments and various sections.

(ii) It is recognised that schools may wish to concentrate on particular aspects of the subject. Candidates will select THREE topics from the following list and will be asked:

- (a) general questions on their chosen topics
- (b) easy questions on the music listed for these topics.

#### TOPICS

- (1) *Programme Music*
  - (i) Dukas—L'Apprenti Sorcier.
  - (ii) Villa-Lobos—Tocatta—Little train of the Caipira (Bachianas Brasileiras No. 2).
- (2) *Opera*
  - (i) Britten—Old Joe has gone fishing (Peter Grimes).
  - (ii) Mozart—Papageno's Song (Magic Flute).
- (3) *National Music*
  - (i) Smetana—Vltava.
  - (ii) Kodaly—Intermezzo (Hary Janos).
- (4) *Symphony*
  - (i) Beethoven—7th Symphony (2nd Movement).
  - (ii) Brahms—1st Symphony (Last Movement).
- (5) *Variation Form*
  - (i) Brahms—St. Anthony (Haydn).
  - (ii) Rachmaninov—Paganini Variations.
- (6) *Choral Music*
  - (i) Bach—St. Matthew Passion (Last Chorus).
  - (ii) Orff—In taberna quando sumus (Carmina Burana).
- (7) *Suite*
  - (i) Bartok—Music for Strings, Percussion and Celesta (2nd movement).
  - (ii) Holst—Jupiter (Planets).
- (8) *Keyboard Instruments*
  - (i) Bach—Tocatta from Tocatta and Fugue in D Minor (Organ).
  - (ii) Liszt—La Campanella (Piano).
- (9) *Ballet*
  - (i) Stravinsky—Russian Dance (Petrouchka).
  - (ii) Tchaikovski—Introduction Act 2, Swan Lake.
- (10) *Song*
  - (i) Folk—Blow the Wind Southerly.
  - (ii) Schubert—The Erl King.

- (11) *Chamber Music*
  - (i) Mozart—Clarinet Quintet in A K.581 (Last Movement).
  - (ii) Ravel—String Quartet (2nd Movement).
- (12) *Overture*
  - (i) Wagner—Die Meistersinger.
  - (ii) Arnold—Tam O'Shanter.
- (13) *Concerto*
  - (i) Tchaikovski—1st Piano Concerto in B Flat Minor (1st Movement).
  - (ii) Mozart—Horn Concerto No. 4 in E Flat (Last Movement).
- (14) *British Music*
  - (i) Purcell—Trumpet Tune in D.
  - (ii) Elgar—Nimrod (Enigma Variations).
- (15) *Contemporary Music*
  - (i) Stockhausen—Gessange Des Junglinge.
  - (ii) Britten—1st Sea Interlude (Peter Grimes).

#### IV. Optional Project

Candidates will have the opportunity of submitting any project on music in which they are particularly interested. The scope of the project can be inside or outside the requirements of the syllabus, and although the individual project will not count in the final marks of the examination, the content and general presentation will be considered and the final certificate suitably endorsed. A candidate's choice of project must be stated when the entry is submitted.

##### EXAMPLES SUITABLE FOR PROJECT WORK

- (a) An original composition (solo, song, piano piece etc.) or an arrangement of music for the candidate's own choral group, handbell ringers, instrumental group etc.
- (b) A programme of specified length and scope, chosen, annotated and presented by the candidate.
- (c) Evidence of ability to train and conduct a group of singers or instrumentalists.
- (d) Keeping a musical diary, which should include:
  - (i) reports and criticism of concerts attended,
  - (ii) reports of music heard on the radio, or records,
  - (iii) reports of taking part in musical productions.
- (e) A study of local music activities.
- (f) An illustrated account (e.g. photographs etc.) of having made a musical instrument.

#### MARKING AND ASSESSING

##### I. PRACTICAL WORK: (a) Sight Reading; (b) Prepared Performance—33%

The teacher(s) responsible for the preparation of the candidates for the examination will prepare for the Assessor a list of candidates in order of merit, based upon the marks allotted at their performance in both parts of Section I.

The examination of each pupil should be tape-recorded. A mark list, giving a total mark as well as the marks for the various sub-sections, should be sent to the Board's Assessor, together with the tape-recording. The Assessor will accept the teacher(s) marks or he will scale them up or down in the interests of standardisation. As a general rule, the Assessor will not alter the teacher's order of merit. *The Board, however, reserves the right to alter the order of merit.* The tape-recording of the performance of every candidate in the school will be heard if this is done.

In the sight reading tests for vocalists, the tonic chord will be given before each test and the candidates will attempt as many of the progressive tests as possible.

For the instrumental sight reading tests, the candidates will attempt as many of the progressive tests as possible.

II. AURAL WORK—33%

This will be marked externally.

III. GENERAL MUSICAL KNOWLEDGE—33%

This will be marked externally.

IV. OPTIONAL PROJECT—No mark, endorsement only.

All projects except those of a practical nature—e.g. those under (b) and (c) in the syllabus—should be sent to the Board's Assessor.

In the case of practical projects, the teacher will be required to specify the nature of the project and to make a recommendation for endorsement. The Board reserves the right to arrange for any school submitting a project of a practical nature to be visited.

*Notes of Guidance to Teachers*

A special entry form for the Music Examination will be provided. On this form teachers will be required to indicate whether sight-reading will be vocal or instrumental. If instrumental, the name of the instrument and the clef preferred must be shown.

The examination will consist of a practical performance by the candidates lasting about 25 minutes, an aural test of about 1 hour and a written paper of 1½ hours. In addition candidates may submit an optional project on a musical subject of their own choice which can earn an endorsement on the final certificate if it has reached a required standard.

**I. Practical Work**

Both parts of the Practical Examination are to be tape-recorded. The work of *each* candidate should be preceded by the following:

- (a) school,
- (b) full name,
- (c) examination number.

e.g. Catford School, John Albert Smith, number 231. N.B.—This information should be spoken by the teacher.

All teachers should be familiar with the technique of using a tape-recorder, and before the examination should ensure that the machine is in working order. Tapes should be recorded at a speed of 3¼ i.p.s., and if a four track recorder is used only the outer tracks (1 and 4) should be employed. Schools will provide their own tapes which will be returned after the results have been published. The room chosen for the examination should be acoustically suitable and as free as possible from external noises. The examination of each candidate in both parts must be recorded in its entirety. The prepared performance of each candidate must follow his sight-reading test.

(a) SIGHT-READING

- (i) Time allotted—15 minutes maximum during which time the candidate may be permitted to study each test before performing it.
- (ii) Tests should be attempted in the numerical order as shown on the examination paper.
- (iii) Not more than one false start should be allowed for each test.

- (iv) Instruments should be tuned before the examination begins.
- (v) In the sight-reading tests for vocalists, the tonic chord will be given before each test. This chord may be transposed to suit the range of the candidate's voice.
- (vi) Any reasonable tempo will be accepted.

#### *Marking Instructions*

- (i) Teachers will complete the form provided by the Board.
- (ii) Credit should be given for accuracy of pitch and rhythm, intonation and observation of phrase-marks.
- (iii) The use of half-marks will be allowed only in tests 7 to 10.

#### (b) PREPARED PERFORMANCE

A maximum of 10 minutes will be allowed for the performance of both pieces or parts of both.

#### *Marking Instructions*

Each piece is awarded 35 marks.

- (i) Musical performance—expression, diction, intonation, bowing, tonal quality, breath control, etc.—25 marks.
- (ii) Accuracy—10 marks.

## **II. Aural**

This will be played on a disc which will conform to the arrangement in the specimen paper, and time will be allowed for writing the answers. Candidates must attempt all questions. Examination answer books and a sheet of manuscript paper for rough work will be supplied. Only the answer book need be handed in. The duration of the examination will be about 1 hour. All instructions will be included on the disc. The teacher will receive a copy of the questions in writing. The record should not be played before the time of the examination. Section II may be answered in pencil, and rubbers may be used.

## **III. General Music Knowledge**

The duration of the examination will be 1½ hours. A lined answer book will be provided together with a sheet of manuscript paper.

## **IV. Optional Project**

All projects except those of a practical nature (see (b) and (c) of the examples shown in the syllabus) must be sent to the Assessor. Where the projects are of a practical nature the teachers will be required to specify their nature and make a recommendation for endorsement. Projects and the teachers' recommendation of endorsement for practical projects must reach the Assessor by the 1st April in the year of the examination. The Assessor reserves the right to visit any school submitting a project of a practical nature.

## SECTION 3

### SYLLABUSES

FOR

### COMMERCE

PRINCIPLES OF ACCOUNTS

TYPEWRITING WITH OFFICE  
PRACTICE (AND SHORTHAND)

## COMMERCE

Two alternative syllabuses are offered in Commerce, but the form of the examination will be the same for both syllabuses:

- I. Written—2 hours
- II. Project
- III. Oral test

The written paper will consist of two parts, one requiring short answers and the other essay-type answers. Both parts will carry equal marks.

### Commerce 1

The Commerce 1 syllabus has been conceived as one of general education to cover the economic knowledge required by pupils in a highly industrialised society. No one can play his full part in such a society unless he understands the implications of the choices which he makes in spending his income, and this syllabus is developed around this concept of teaching the pupil to be a wise and efficient consumer.

#### (a) THE ECONOMIC SYSTEM

Elementary treatment of how the economic system operates: how consumers' needs are met; the chain of production to consumption and the place of the manufacturer, wholesaler, retailer and consumer; mass production and the division of labour; kinds of ownership; sole trader, partnership, limited liability company, co-operative society, communal or state enterprise; types of retail businesses; the individual as producer and consumer; interdependence of individuals in modern communities; the interdependence of countries and Great Britain's dependence on imports.

#### (b) BUYING WISELY

(i) Money management: planned and impulse buying; the advantages of an individual budget, estimating income and expenditure; the constituent parts of the expenditure of the individual and the family, necessities and luxuries, budget records.

(ii) Planned shopping: ascertaining needs; comparison of price, quality and value; the effect of changes in supply and demand; the use of advertising and publicity, branded goods, resale price maintenance, indications of quality, trade marks and quality labels, British Standards Institution, consumer protection organisations; seasonal and other "sales"; using the advice of the sales assistant; after-sales service.

(iii) Buying on credit: the meaning of credit and its function in the economic system; credit as a loan requiring payment of interest; opening an account with a retailer, the different types of customers' accounts; the invoice and statement of account; credit trading clubs; buying on hire purchase and by instalments, calculating the rate of interest; loans, security for loans, borrowing from money-lenders, banks, insurance companies, building societies.

(iv) Savings and investment: the need for saving; importance of degree of safety, speed of withdrawal and rate of interest earned; methods of saving such as National Savings, Post Offices, Savings Banks, bank deposits, insurance policies, building societies; investing in shares, dividends, investing in a house, comparison of buying and renting, methods of buying a house; capital gains and losses.

(c) MONEY AND BANKS

Why money is essential in a modern community, variations in the value of money; cheque system and other banking facilities, opening an account, making deposits and drawing cheques; Post Office facilities for the transfer of money.

(d) INSURANCE

Kinds of personal risks, insurance as the pooling of risk; how insurance protects the individual and his property; accident and fire insurance; main varieties of life assurance, effecting insurance and making claims.

(e) TRANSPORT AND TRAVEL

Reasons for the importance of easy and rapid movement of persons and goods; comparison of passenger transport by land, water and air; reasons for the difference in regularity and frequency of services, and in comfort and cost of transport.

The planning of a journey, use of transport time-tables, reservation of accommodation, use of travel agencies.

Factors affecting the sending of freight by land, sea and air.

(f) COMMUNICATIONS

The importance of rapid communication; written and oral communication; communication by letter, telephone and telegram and other facilities of the Post Office (candidates may be required to compose a suitable communication from information provided); the use of the telephone directory, Post Office Guide; technique of using the telephone.

(g) PUBLIC SERVICES

The principles of public ownership; names and chief functions of nationalised industries and public corporations for the supply of coal, gas, electricity, water, transport, and communications; Consumer Councils.

(h) PROTECTION OF THE CONSUMER

A general treatment of the law in relation to the consumer: contracts, "guarantees"; importance of reading and understanding documents before signing; free legal aid; principles of minimum food standards; weights and measures. Rights and responsibilities of (a) passengers, (b) hotel guests.

## Commerce 2

### *(Alternative Syllabus)*

All candidates will be required to take Section A together with ONE of Sections B (Trade & Finance), C (Retail Distribution) or D (Commerce & Government). The short answer questions will be largely drawn from Section A, but while most of the other questions will be on the material of the alternative section, further questions may be set at a somewhat deeper level on the material of Section A.

### SECTION A (Compulsory)

*(To be studied by all candidates)*

#### INTRODUCTION

Production as the response to consumer demand. This response is a social effort and we contribute to it when we take part in:

- (i) the manufacture of goods,
- (ii) the distribution of those goods to the consumer,
- (iii) the provision of finance for the means of production and payment for the goods themselves,
- (iv) the provision of direct services.

The object of this social effort is to improve the standard of living of the community. To this end, everyone contributes skill, energy etc. towards the Social Product and is rewarded with wages which enable him to obtain his share of the Social Income, but he has to do this in such a way that the interests of the others in the community are safeguarded. Thus each individual can be considered from three points of view: as producer, as consumer and as citizen.

As producers, we should endeavour to find an occupation where our special abilities may develop; as consumers, we need knowledge and skill if we are to derive the maximum benefit from the use of our wages; as citizens, we need to appreciate our responsibilities and rights and exercise them properly.

(a) THE ECONOMIC SYSTEM

Elementary treatment of how the economic system operates; how consumers' needs are met; primary and manufacturing production and the channels of distribution to the consumer which are in general use; types of retail businesses and reasons for diversity; mass production and the problems of distribution it creates; resale price maintenance; influence of specialisation. Labour and how it is organised.

(b) MONEY AND BANKS

Why money is essential in a modern community; variations in the value of money; cheque system and other banking facilities, opening an account, making deposits and drawing cheques; Post Office facilities for the transfer of money.

(c) COMMUNICATIONS

The importance of rapid communication; written and oral communication; communication by letter, telephone and telegram and other facilities of the Post Office (candidates may be required to compose a suitable communication from information provided); the use of the telephone directory, Post Office Guide; technique of using the telephone.

(d) PUBLIC SERVICES

The principles of public ownership; names and chief functions of nationalised industries and public corporations for the supply of coal, gas, electricity, water, transport and communications.

(e) INSURANCE

Kinds of personal risks; insurance as the pooling of risk; how insurance protects the individual and his property. Accident and fire insurance, main varieties of life assurance; effecting insurance and making claims.

(f) TRANSPORT AND TRAVEL

Reasons for the importance of easy and rapid movement of persons and goods. Comparison of the advantages and disadvantages of various forms of transport for them.

(g) INTERNATIONAL TRADE

Our survival depends on international trade. Chief imports and exports; visible and invisible trade; the balance of trade and the balance of payments; necessity for co-operation between countries.

SECTION B (Alternative)

*(Trade and Finance)*

(a) TRADE

The exchange of goods arising from surplus and increasing possibilities of exchange. The diversity of methods of distribution and sale of foodstuffs;

textiles (including ready-made clothing, boots and shoes); producers' durable goods and raw materials; consumer durable goods (refrigerators, T.V., etc.). Wholesale food markets and produce exchanges. Modern methods of marketing and sales promotion adopted by large-scale businesses, e.g. the elimination of independent wholesale firms; market research. The reasons for their growth and development in a modern industrial community.

(b) INSURANCE

The statistical basis of insurance; the insurance contract; insurable interest; utmost good faith; indemnity. Types of insurance commonly met with in business, e.g. fire, including loss of profits; accident, with special reference to theft of goods or money from business premises; fidelity guarantee; plate glass insurance; credit insurance.

(c) TRANSPORT

The work of the Port of London or London Airport.

(d) FINANCE AND ORGANISATION

Sources, i.e. savings via the banks, insurance companies etc. Description and comparison of the methods of raising capital, disposal of profits and control and organisation in small trading and manufacturing businesses with a single proprietor or as a partnership; unlimited liability; business advantages of such firms. The limited liability company, private and public; reasons for the formation of private limited liability companies; meaning of the term "limited liability"; reasons for the growth of the public limited liability company. Organisation of typical large-scale manufacturing and trading firms. The Stock Exchange as a capital market; its importance to firms and investors. The capital structure and organisation of the wholesale and retail co-operative societies and the distribution of their profits. Hire purchase; its finance and influence on trade.

(e) BANKING

The importance of credit in business. The work of the commercial banks and the services provided to businessmen. Loans and overdrafts; Banker's Clearing.

SECTION C (Alternative)

*(Retail Distribution)*

(a) RETAIL OUTLETS

Importance of shops as the last link in a long chain starting with the raw materials. Types of retail outlet including a study of local retailing. Consumer service establishments, e.g. cleaners, garages, restaurants etc. Current trends, e.g. increase in scale of operation, self-service, direct selling, mail order, pre-purchase, "gift" trading, hire purchase, advertising.

(b) THE RETAILER AND SOCIETY

Consumer safeguards; weights and measures, minimum food standards, quality marks, inspection and analysis, British Standards Institution, consumer advisory organisations. The work of trade unions as it affects retailing; conditions of work.

(c) SHOP MANAGEMENT

Specific examples (taken from the locality) of ownership and control of retail establishments; unit retailer, multiple, departmental, co-operative society. Stock control and storage, need for records. The importance of salesmanship, display and window dressing, sales promotion, follow up of advertising campaigns. Build-up of goodwill; complaints; delivery service; credit facilities; appearance and behaviour of staff.

(d) THE WHOLESALE TRADE

The functions of the wholesaler; elimination of the wholesaler. Warehouses, travellers, trade exhibitions, trade papers, trade discounts, purchases in bulk; wholesaler promoted associations of retailers. Commodity markets and London wholesale produce markets; brokers and agents.

(e) COMMODITIES

Sources, uses, processing or manufacture of typical commodities and merchandise for any two of the following trades.

- (i) Groceries (tea, sugar, butter, etc.),
- (ii) Clothing (woollen, cotton, rayon and nylon textile garments, leather and rubber footwear),
- (iii) Greengroceries (apples, oranges, potatoes, lettuce and tomatoes),
- (iv) Hardware (nails, paint, furniture).

SECTION D (Alternative)

*(State and Commerce)*

(a) HOW THE NATIONAL INCOME IS PRODUCED, EARNED AND SPENT

(b) CONTRIBUTION OF PRIVATE ENTERPRISE TO THE NATIONAL ECONOMY

Business organisation by owner-manager; partnership; private and public companies; co-operative society. Comparison of methods of raising capital, disposing of profits; control and organisation in each case. Different kinds of shareholder.

The significance of joint-stock organisation as a factor in raising capital for large-scale production and distribution. The work of the Stock Exchange as a market for transferring ownership of securities.

The decline of competition through amalgamation of firms, the activities of trade associations, and survival of the smaller firm.

(c) SATISFACTION OF COLLECTIVE WANTS BY THE STATE

Provision of defence; education; welfare and health; "transfer" payments: family allowances, pensions, sickness and unemployment benefits.

Filling the gaps left by private business: recreation, housing, libraries, national insurance.

(d) CONTRIBUTION OF STATE TO THE NATIONAL ECONOMY

Creation of an "economic climate" whereby productivity can be increased; protection of infant and essential industries; maintenance of full employment; protection of the public; control of monopoly; volume of government spending; public corporations; maintenance of commercial attachés abroad; sponsorship of trade fairs and exhibitions; advice and assistance in trade negotiations with overseas countries; contributions to international organisations.

(e) FINANCING GOVERNMENT ACTIVITIES

Purpose of taxation; principal taxes and duties; borrowing; other sources of revenue.

(f) LOCAL GOVERNMENT

Rates, grants, loans.

## II. Project

Each candidate will be required to submit a piece of work dealing with a topic related to the syllabus and approved by the teacher. It should have been carried out under the general supervision of the teacher during the twelve months immediately preceding the examination.

The greatest possible latitude will be given to the form and content of the project. It may be the work of a single individual or a group of pupils, provided that the individual contributions are clearly shown. The material may be either handwritten or typewritten and may be illustrated by cuttings, pictures, charts and other materials.

Some of the activities related to topics which teachers may wish to consider are listed below, but it is emphasised that these are by no means exhaustive.

Activities which may arise from project work:

- (i) Local surveys, e.g. distribution of consumer outlets, investigation of local shopping habits.
- (ii) Use of libraries and other sources of information, e.g. historical topics, compilation of literary references, transport problems.
- (iii) Collection and presentation of literature, e.g. office machinery, manufacturers' literature, advertising.
- (iv) Visits to, e.g. exhibitions, commercial organisations, local government offices, local public figures.

## III. Oral Test

This section of the examination will be conducted and assessed by a teacher in the school presenting candidates. Each candidate will be interviewed for about ten minutes. The teacher will be provided with a list of topics related to the syllabus together with a list of specific questions on each topic. He will be expected to encourage the pupil to discuss the chosen topic with him, leading the pupil to answer the individual questions if such answers do not arise spontaneously.

### MARKING AND ASSESSING

#### I. WRITTEN PAPER: 60%

The written paper will be marked externally.

#### II. PROJECT: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A copy of this list on the form provided should be sent to the Secretary to the Board on or before 1st April in the year in which the examination is to be taken. (It is suggested that Projects be collected from the candidates by the teacher about 1st March.)

The Secretary to the Board will then inform the school of the candidates whose Projects are to be sent to the Board's Assessor. These should be despatched immediately.

The Secretary to the Board should be informed if it is not possible to send through the post any of the Projects called for. He may require the school to send another Project to the Assessor. Alternatively the Board may decide to send an Assessor to the school.

The Assessor will not normally alter the order of merit but he may change the marks awarded in the interests of standardisation. *The Board, however, reserves*

*the right to scrutinise the work of all candidates and to alter the order of merit.* Projects should be preserved in the school until the end of the Summer Term.

### III. ORAL 20%

The oral examination should be conducted by the teacher(s) responsible for preparing the candidates for the examination on the date indicated in the timetable which will be fixed about a week before the written examination is taken.

A list of questions and answers together with a detailed marking scheme will be sent to schools. The teacher(s) responsible for preparing the candidates for the examination should conduct the oral examination in accordance with the instructions given.

## PRINCIPLES OF ACCOUNTS

(Written—2½ hours)

The examination paper will be divided into three sections as follows:

SECTION A will contain questions to be answered by a word or a short phrase or sentence, and multiple choice questions.

SECTION B will contain questions calling for the preparation of accounts, or their interpretation in a simple and straightforward manner to test whether the candidates have the basic understanding of the subject and the ability to keep simple accounts.

SECTION C will contain questions of a similar nature to those in Section B, but they will be of a more searching nature and call for a more intelligent application of basic knowledge.

In all sections there will be an adequate choice of question.

### THE SYLLABUS

The object of the syllabus is to enable the candidates to gain an understanding of the purpose and use of accounting records and the basic principles on which they are based. Particular importance is attached to the ability to read accounts intelligently because far more people have accounts of various kinds presented to them than ever have to prepare accounts for themselves. It is suggested that the treatment should be broad and simple and should not include techniques best left to accountancy students. The order of items in the syllabus is not intended to indicate the order in which they should be taught.

The compilation and interpretation of: the accounts of small businesses owned by sole traders, and of partnerships engaged in manufacturing, wholesaling and retailing of goods and in providing services; the accounts of clubs, societies and other non-trading concerns.

The basic principles of double entry book-keeping. The documents, vouchers and other sources from which the accounting records are compiled. Books of original entry and ledger accounts necessary to record assets, liabilities, expenses, purchases, sales and returns. Analysed petty cash book and the imprest system. Bank accounts and bank reconciliation statements. The trial balance and its uses.

Simple manufacturing, operating, trading, profit and loss accounts and balance sheets of trading concerns. Receipts and payments accounts, income and expenditure accounts and balance sheets of non-trading concerns and the records leading to them. Simple columnar accounts for departments. Very simple treatment of payments in advance, items outstanding, provision for bad debts, bad debts recovered and depreciation.

The understanding, interpretation and simple criticism of: the concept of profit and loss as an increase and decrease in the value of net assets. Very simple

cases of profit and loss from incomplete records. Capital and revenue expenditure, Current and fixed assets, current and long term liabilities, working capital, importance of sufficient working capital, capital employed and capital invested. Ratio of profit, loss and expenses to turnover and capital. Rate of stock turnover. Cost of goods sold. Comparison of the results of a business over several financial periods and the results of several businesses. Simple company balance sheets. The need for frequent internal checks and regular auditing, the functions of the independent auditor and reasons for his appointment.

Although the basic assumption is that accounting records will be presented in the traditional handwritten form, candidates will be expected to be familiar with the form of ledger account and statements commonly adopted for mechanised accounts.

Exclusion Questions will not be set on the correction of errors, amalgamation or dissolution of partnership, or on involved schemes for the allocation of profits among partners. No knowledge will be expected of the detailed provisions of the Partnership Acts or the Companies Acts.

## **TYPEWRITING WITH OFFICE PRACTICE**

(Time—2½ hours)

The aim of the examination will be to test the candidate's ability to combine typewriting skill with knowledge of Office Practice in a practical way.

An examination in typewriting alone will not be offered, but a certificate in typewriting—grade 3 or 4—will be given to those candidates who satisfy the examiners in Part 1 of the paper. The examination will be in two parts:

- (a) To test the candidate's skill on the typewriter.
- (b) To test knowledge of Office Practice and ability to apply this knowledge in a practical way.

### **PART 1—TYPEWRITING**

Candidates should have complete mastery of the keyboard, be able to operate the machine at an average speed of 25 w.p.m., and be able to sustain their output during the period of the examination. In addition candidates will be expected:

- (a) To be able to type a fair copy from manuscript notes in which corrections appear.
- (b) To be able to select the necessary details from information given and complete a printed or duplicated form.
- (c) To be able to display a business letter and type the accompanying envelope.
- (d) To be able to take carbon copies.
- (e) To have knowledge of tabulation.

Special attention should be paid to the attractive display as well as the accuracy of the work. Candidates will be expected to correct their work by any acceptable method, but overtyping and poor corrections will be heavily penalized.

### **PART 2—OFFICE PRACTICE**

Candidates will be required to have a knowledge of:

- (a) Up-to-date methods of communication and services provided by the Post Office.
- (b) The purpose of filing, indexing and the up-to-date methods used.
- (c) To be able to extract information from reference books in every day use.

- (d) To be able to recognise, complete, and know the purpose of documents in common use for:
  - (i) The ordering, dispatch and receipt of goods.
  - (ii) The payment arising from such a transaction.
- (e) Procedures and machinery applicable to the duties of a junior typist or clerical work.

#### SHORTHAND

(Time—1½ hours)

Shorthand will not be offered as an individual examination subject but an endorsement can be obtained for which the candidates will be required:

- (a) To take down in Shorthand, and subsequently carry out instructions dictated at the beginning of the examination.
- (b) To take down and transcribe on the typewriter, in accordance with instructions, continuous matter dictated at 50 w.p.m. The total number of words will not exceed three hundred and fifty. These may relate to several questions and will be dictated in several short periods of time separated by half minute intervals. No period will be less than one minute, nor exceed three minutes.

The style, legibility and accuracy of the Shorthand notes will be taken into consideration.

Any recognised system of Shorthand will be accepted but schools will be required to give notice if they wish their candidates to be examined in any system other than Gregg, Pitman or Speedwriting.

SECTION 4

SYLLABUSES  
FOR  
HOUSECRAFT  
NEEDLECRAFT — DRESS  
NEEDLECRAFT — EMBROIDERY  
AND DESIGN

# HOUSECRAFT

The examination will be in four sections:

- I. WRITTEN PAPER
- II. PRACTICAL TEST
- III. INDIVIDUAL WORK
- IV. ORAL

Candidates should reach a reasonable standard in all sections of the examination.

## I. Written Paper

Time—1½ hours. Candidates may be allowed up to 30 minutes extra. The first question is compulsory and carries most marks. This is followed by a choice of more difficult questions.

## II. Practical

Time—(i) 1½ hours for Planning Period; (ii) 2½ hours for Practical Test.

Recipe books, notebooks and textbooks may be referred to during both the planning period and the practical test. Candidates should normally be examined in groups of not more than ten.

## III. Individual Work

The range of topics should be as wide as possible and liberally interpreted. The work should be discussed at the end of the fourth year and be ready for assessment during the last two weeks of the spring term of the fifth year.

The individual work can take the form of:

- (a) Folder—e.g. a study of any aspect of Homemaking; another country; juvenile delinquency; child care etc.
- (b) Practical Work supported by folder—e.g. dressing windows; floor coverings; camping etc.
- (c) Written Record of sustained social service covering a period of not less than six months—e.g. Darby and Joan Club; consistent work for a special cause such as Freedom from Hunger, Pestalozzi etc.

## IV. Oral

This will consist of a discussion of the Individual Work by the candidate with the teacher responsible for the preparation of the candidate for the examination or with another teacher in the Department.

## THE SYLLABUS

It is assumed that candidates will have already acquired the basic skills of housecraft—cookery, laundry, housewifery.

The course is designed for the fourth and fifth years at school, and is therefore an extension and development of their previous work.

It can be taken by pupils of both sexes.

- (1) Finding a Home: comparison of local housing and living conditions, including site, renting, purchasing, social amenities and problems.
- (2) Family Spending: the division of responsibility for household budgeting; individual spending; a knowledge of hire purchase, budget accounts, mail orders etc., savings, insurances.
- (3) Setting up a Home: simple planning, design and colour; choice and care of furniture, furnishings and equipment.
- (4) Maintaining the Home: household routines and use of time; laundry; simple repairs; home improvements and replacements.

- (5) The Family: parental responsibility and contribution of each member of the family unit; care of all members of the family including the young and elderly; safety in the home—simple first aid and home nursing.

The maintenance of positive health through personal and food hygiene—simple nutrition planning, preparation, cooking and serving of meals for all occasions including budgeting, shopping and storage; use of packaged, tinned and frozen foods; quick methods versus traditional methods.

- (6) The World Outside: adjustments from school to work; responsibilities to employer and fellow workers; good grooming; health and nutrition; use of leisure; public and social services.

As many outside contacts as possible should be made throughout the course.

## MARKING AND ASSESSING

### I. WRITTEN PAPER: 25%

The written paper will be marked externally.

### II. PRACTICAL: 45%

Candidates should normally be examined in groups of not more than ten. The teacher responsible for conducting the examination should award marks to the candidates based upon the performance in this section of the examination. If an Assessor is present she will stay for the whole of the examination and the final mark list should be given to her at the end.

As a general rule, the Assessor will not alter the order of merit but she may change the marks in the interests of standardisation.

### III. INDIVIDUAL WORK: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A mark list should be available for the Board's Assessor if and when she visits the school to assess the Practical Work. She may ask to see the work of any candidate.

As a general rule, the Assessor will not alter the order of merit but she may change the marks awarded in the interests of standardisation.

When there is serious disagreement between teacher and Assessor over a candidate's place in the order of merit a second Assessor will visit the school within a day or two. In this interval the work as exhibited should not be altered in any way. The second Assessor will wish to see the work of all the candidates seen by the first Assessor. The second Assessor will not be informed of the first Assessor's evaluation of the candidate's work. She will also require from the teacher a list of the candidates placed in the teacher's order of merit together with the marks awarded for this section of the examination. Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board.

The Chief Examiner's decision, which will have regard to the teacher's assessment and the two subsequent assessments, will be final.

*The Board reserves the right to inspect and assess the work of all candidates and to alter the order of merit.*

### IV. ORAL: 10%

The Oral Examination will be conducted by the teacher responsible for the preparation of the candidates for the examination or by another teacher in the department. She will conduct the examination as suggested in the Notes of Guidance and will award a mark to each candidate. The Oral Examination

should take place before the Easter Holiday, when the Individual Work has been submitted and marked by the teacher and, in any case, before the Practical Examination is taken. Schools will be informed of the week in due course and are permitted to hold the examination at any time during the week. The Board must be informed of the date and time at which the examination will take place.

Candidates should be available for questioning by the Assessor when she visits the school to assess the Practical Work.

*Notes of Guidance to Teachers*

**III. Individual Work**

(i) **SUBJECT:** this should be the candidate's own work carefully guided in its early stages. Candidates are permitted to submit individual work related to any section of the Syllabus which has been approved by their class teacher. In approving subjects, teachers should be able to relate the individual work *directly* to a *definite* section or sub-section of the Syllabus.

(ii) **CONTENT:** two ingredients should be present in a good example of individual work:

- (a) evidence of personal research or personal observation;
- (b) evidence that personal conclusions on that research have been reached by the candidate.

Teachers should help to suggest topics for this individual work and give guidance about some ways each topic can be started or developed.

(iii) **TEACHER'S ROLE:** the work should be reviewed by the teacher after about eight weeks to see how the trend is developing. Help with the development should be given if considered necessary at this stage but direct intervention by the teacher in the sense of telling candidates what to write should be avoided. Candidates should be reminded frequently of the final date for submission of individual work.

(iv) **PRESENTATION:** candidates should be helped in the logical presentation of their individual work which should include sections headed: index, contents—covering introduction, development, conclusion—bibliography or sources; illustrations should be relevant.

When individual work based upon active social service has been undertaken, a diary and other records should be kept and presented with other relevant material, e.g., statutory help available to old people, local voluntary organisations, knitted blankets and other comforts for old people.

**SUGGESTED MARK SCHEME**

|   | <i>Marks</i> |
|---|--------------|
| (1) Early trend of individual work  | 5            |
| (2) Final coverage of subject (originality and width of field could be considered)              | 10           |
| (3) Actual information contained in topic   | 10           |
| (4) Illustration—either by hand, wall-mounted pictures, displays, written records of happenings | 5            |
| (5) Layout and presentation   | 5            |
| (6) Conclusions and final summary   | 5            |
| (This total should be halved to give final mark)  | 40 = 20%     |

A list of sources of information, bibliography, etc. should be given.

#### IV. Questioning on Individual Work

This should take approximately 10 minutes.

Suggested pattern of test:

Introductory questions to gain candidate's confidence—to include reasons for development of individual work and sources of information. *This should not be marked.*

|  |                       |
|--|-----------------------|
| (1) Random questioning on whole topic              | Marks                 |
| (2) Detailed questioning on one aspect of the work | 4                     |
|  | 6                     |
|  | $\frac{6}{10} = 10\%$ |

#### II. Practical Examination

This is divided into two parts:

- planning period—time allowed  $1\frac{1}{2}$  hours,
- practical test—time allowed  $2\frac{1}{2}$  hours.

##### (a) PLANNING PERIOD

During the planning period the candidate will plan her work with the use of textbooks and notes.

*Sheet 1* should be headed by the given test, followed by: *Interpretation* of the question—selection of work to be done and reasons for choice.

*Sheet 2*—carbon copy of Time Plan and Food Order. Exact quantities of basic ingredients need not be given; extra ingredients should be given in detail. Extra equipment required should be listed.

All this work should be handed in at the end of the planning period. Carbon copies should be returned before the practical test. This part of the examination should be marked before the practical test.

##### (b) PRACTICAL TEST

- Tests will be allocated according to the instructions supplied with the test.
- The test should be like a normal Housecraft session in the provision of food and protective clothing.
- If a candidate has asked for reasonable extra equipment, this should be provided if possible.
- Display space for finished work should be provided. (Some finished work could be marked before the end of the test.)

#### MARKING PRACTICAL WORK

(From preparation time)

|  |                       |
|--|-----------------------|
| (1) Interpretation of the question—selection of clothes to be laundered, food preparation and household tasks to be done | Marks                 |
| (2) Time plan—simple guide to enable candidate to cope with an amount of work in a set time                              | 10                    |
| During the practical test the following aspects of the work can be watched and marked:                                   |                       |
| (3) Use of oven and other large equipment  | 10                    |
| (4) Manipulative skill   | 10                    |
| (5) Method and general approach  | 10                    |
| (6) Timing   | 10                    |
| (7) Presentation and clearing  | 10                    |
| (8) Finished results   | 20                    |
| (This mark should be halved)   | $\frac{90}{2} = 45\%$ |

The total should then give a comprehensive mark of the standard. Any final half marks should be taken to the next whole number.

## NEEDLECRAFT—DRESS

The examination will be in four sections:

- I. WRITTEN PAPER
- II. PRACTICAL
- III. PREPARED WORK
- IV. ORAL

Candidates should reach a reasonable standard in all sections.

### I. Written Paper

Time—1½ hours; candidates may be allowed up to 30 minutes extra.

### II. Practical

Time—3 hours prior to the test; the test itself will be 2½ hours. Textbooks and notebooks may be referred to during the practical test. Candidates should normally be examined in groups of not more than fifteen.

### III. Prepared Work

- (i) A finished garment or article made in the final year.
- (ii) An individual study written and/or practical showing the interest of the candidate in any aspect of this subject.

### IV. Oral

This will consist of a discussion of the Prepared Work by the candidate with the teacher responsible for the preparation of the candidate for the examination or with another teacher in the department. Marks for the Oral will be included in the Prepared Work marks.

### PROVISION OF PATTERNS AND MATERIAL

(i) The Board will provide a normal commercial pattern. Schools can apply direct to the pattern firm concerned for the range of sizes required. The account should be sent to the Board.

(ii) Materials should be provided by the school or the candidates, with as wide a selection as possible. Candidates may see a sketch similar to the examination garment a week before the preliminary part of the Practical examination to help in the choice of fabric.

## THE SYLLABUS

An elementary study of the origin and characteristics of textiles in daily use, to include a knowledge of relative costs and different widths of these fabrics. Planning and budgeting for personal clothing including wise choice in ready-made clothing and accessories.

Economics of home dress-making.

The appreciation of style, design and texture.

A knowledge of tools of the craft; the use, care and maintenance of the sewing machine.

The choice and use of commercial patterns with simple adaptations of style and fit.

Simple processes in everyday use needed for garments in a personal outfit excluding tailored coats and jackets.

Modern methods of care, repair and maintenance of clothes.

## MARKING AND ASSESSING

### I. WRITTEN PAPER: 30%

The written paper will be marked externally.

### II. PRACTICAL: 30% AND III. PREPARED WORK: 30%

Candidates should normally be examined in groups of not more than fifteen. The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in the Practical Work, Prepared Work and Oral Test.

The marks awarded by the teacher(s) for each of the three (Practical, Prepared Work and Oral) separate sections of the examination to be assessed should be clearly shown. The marks should be totalled.

If an assessor is to make a visit the school will be informed of this at least two days beforehand; schools will not be told whether the Assessor is to visit until the Practical Examination has been completed. The teacher should be present during the Assessor's visit so that any points of difficulty may be discussed. Wherever possible the candidates should be available so that the Assessor may discuss a candidate's work with her if necessary. The Assessor will not visit the school *until all candidates have concluded sections II, III and IV.*

A duplicate mark list should be available for the Board's Assessor when she visits the school. She may ask to see the work of any candidate.

As a general rule, the Assessor will not alter the order of merit but she may change the marks awarded in the interests of standardisation.

Where there is a serious disagreement between teacher and Assessor over a candidate's place in the order of merit a second Assessor will visit the school within a day or two. In the interval the work as exhibited should not be altered in any way. The second Assessor will wish to see the work of *all* the candidates seen by the first Assessor. The second Assessor will not be informed of the first Assessor's evaluation of the candidates' work. She will also require from the teacher a list of the candidates placed in the teacher's order of merit together with the marks awarded by the teacher for the separate sections of the examination and the total mark. Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board. The Chief Examiner's decision, which will have regard to the teacher's assessment and the two subsequent assessments, will be final.

The teacher(s) responsible for the preparation of the candidates for the examination will be entitled to advise the candidate in the exhibition of her work.

*The Board reserves the right to inspect and assess the work of all candidates and to alter the order of merit.*

The practical Examination will be taken on the date(s) fixed by the Board. The school should inform the Board of the actual time of the examination.

### IV. ORAL: 10%

The Oral Examination will be conducted by the teacher responsible for the preparation of the candidate for the examination or by another teacher in the department. She will conduct the examination as suggested in the Notes of Guidance and will award a mark to each candidate. The Oral Examination should take place before the Easter Holiday when the prepared work has been submitted and marked by the teacher, and, in any case, before the Practical Examination is taken. Schools will be informed of the week in due course and are permitted to hold the examination at any time during the week. The Board must be informed of the date and time at which the examination will take place and may send a Visitor to ensure that the examination is being conducted properly.

Candidates should be available for questioning by the Assessor when she visits the schools to examine the Practical Work.

### *Notes of Guidance to Teachers*

#### II.—THE CONDUCTING OF THE PRACTICAL TEST

Prior to the test, time allowed THREE hours.

*Equipment:* tape measure, tailor's chalk, scissors, tacking cotton (more than one colour), pins, ruler. A card with the candidate's personal measurements.

The candidate should make any necessary alterations to the pattern before laying the pattern on to the material.

The teacher will check that the pattern is pinned correctly before the candidate is allowed to cut out.

If the teacher has to correct the layout then the fact should be noted and marks deducted accordingly.

The candidate will then cut out and mark as necessary by the method to which she is most accustomed.

The pattern should then be removed and the work put into a container and handed in to the teacher. It should remain on the school premises.

(Time allowed  $2\frac{1}{2}$  hours.) *It is hoped that a quiet relaxed atmosphere will be encouraged rather than one of a strict examination nature. This should enable candidates to give of their best.*

#### MAKING UP

*Equipment:* Not more than two candidates to one sewing machine. The correct shade of sylko. Needles, pins, scissors, thimble. Tape measure, tailors chalk. Tacking cotton. Pressing facilities.

#### III. (i)—FINISHED GARMENT OR ARTICLE

Candidates should be encouraged to choose a garment which shows a reasonable range of needlecraft skills. The candidate should be given guidance upon the choice of suitable pattern, material and haberdashery, including fastenings and trimmings.

In making up the garment or article these points should be taken into consideration and marked as follows:

|   | <i>Marks</i>          |
|---|-----------------------|
| (1) Care in cutting out, i.e., grain of fabric, layout, etc.  | 6                     |
| (2) The width, finish and suitability of seams, etc.  | 6                     |
| (3) Hems—suitability for garment and material—care in execution   | 6                     |
| (4) The appearance both outside and inside and the general finish—no loose ends of cotton, thread marks removed and careful pressing. | 6                     |
| (This mark should be halved)  | $\frac{6}{24} = 12\%$ |

#### (ii)—INDIVIDUAL WORK

Most candidates will require guidance in the choice of subject matter for their individual study. This guidance should be extended to cover possible sources of information and methods of presentation. The teacher is advised to check the progress of this work from time to time.

The marks should be allocated as follows:

|   | <i>Marks</i> |
|---|--------------|
| (1) Originality and individual approach to the subject. | 4            |
| (2) Selectivity and depth of content.                   | 4            |

|   |   |            |
|---|---|------------|
| (3) Quality and use of good, simple English                         | } | 6          |
| (4) The use of illustration, diagrammatic, pictorial and practical. |   | 4          |
| (5) Good presentation of finished work.                             |   | <u>18%</u> |

#### IV—ORAL TEST

Nervous tension will often govern the use of language; relaxation will give ability to answer freely. The test may well be a conversation between the candidate and the teacher showing the interest of the candidate in the work she has been doing and leading questions from the teacher may help the inarticulate candidate.

The following are illustrations of the type of question which could be asked and are in no way intended as a directive to the teacher. At least one question should be asked to test the candidate's comprehension of the subject matter of her topic.

- (1) Why did you choose this pattern/fabric/design?
- (2) Did you make any alteration for length, etc. before buying the material? (Possibility of saving.)
- (3) How much did you spend on the haberdashery requirements? What were they?
- (4) What accessories would you wear with this garment?
- (5) What care would be needed when laundering this article?
- (6) Why did you choose this topic?
- (7) Where did you obtain most of your information? (Use of library.)
- (8) Which part of the work gave you most pleasure and why?
- (9) Did you find any part of the information difficult to obtain? How did you overcome this difficulty?
- (10) Do you think you could improve on the layout if you were to do it again?

## NEEDLECRAFT—EMBROIDERY AND DESIGN

The examination will be in four sections:

- I. WRITTEN PAPER
- II. PRACTICAL
- III. PREPARED WORK
- IV. ORAL

Candidates should reach a reasonable standard in all sections.

### I. Written Paper

Time: 1½ hours; candidates may be allowed up to 30 minutes extra.

### II. Practical

Time: 2 hours prior to the test; the test itself will be 3 hours. The candidate's collection of templates and/or sketches may be used during the examination. Candidates should normally be examined in groups of not more than fifteen.

### III. Prepared Work

- (i) A finished garment or article.
- (ii) An individual study written and/or practical showing the interest of the candidate in any aspect of this subject.

#### IV. Oral

This will consist of a discussion of the Prepared Work by the candidate with the teacher responsible for the preparation of the candidate for the examination or with another teacher in the department at the time of presentation. A collection of templates, sketches and other information should be presented with the Prepared Work. Marks for the Oral will be included in the Prepared Work marks.

##### *Provision of Material*

Material should be provided by the school or candidate. Candidates may be told the nature of the article to be made a week before the preliminary part of the Practical Examination.

#### THE SYLLABUS

An elementary knowledge of the background of traditional embroidery.

Embroidery design and preparation.

Arrangement of stitches to form simple borders and units; building up of embroidered decoration on simple-patterned fabrics; drawn and painted designs and designing with cut paper shapes; methods of transferring a design on to fabrics of different texture.

Stitches: knowledge of basic stitches and variation of these in the following groups—chain, flat, knotted and looped stitches.

Special methods: knowledge of following methods—appliqué methods in relation to different types of fabric; simple drawn-thread work and work by counted thread; shadow work; smocking; quilting by hand and machine; use of domestic sewing machine for decorating purposes.

Making-up and finishing: the making-up of embroidered articles; making of cords and tassels; pipings; treatment of hems and edges.

#### MARKING AND ASSESSING

##### I. WRITTEN PAPER: 30%

The written paper will be marked externally.

##### II. PRACTICAL: 30% AND III. PREPARED WORK: 30%

Candidates should normally be examined in groups of not more than fifteen. The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in the Practical Work, Prepared Work and Oral Test.

The marks awarded by the teacher(s) for each of the three (Practical, Prepared Work and Oral) separate sections of the examination to be assessed should be clearly shown. The marks should be totalled.

If an Assessor is to make a visit the school will be informed of this at least two days beforehand; schools will not be told whether the Assessor is to visit until the Practical Examination has been completed. The teacher should be present during the Assessor's visit so that any points of difficulty may be discussed. Wherever possible the candidates should be available so that the Assessor may discuss a candidate's work with her if necessary. The Assessor will not visit the school *until all candidates have concluded sections II, III and IV.*

A duplicate mark list should be available for the Board's Assessor when she visits the school. She may ask to see the work of any candidate.

As a general rule, the Assessor will not alter the order of merit but she may change the marks awarded in the interests of standardisation.

Where there is a serious disagreement between teacher and Assessor over a candidate's place in the order of merit a second Assessor will visit the school within a day or two. In the interval, the work as exhibited should not be altered

in any way. The second Assessor will wish to see the work of *all* candidates seen by the first Assessor. The second Assessor will not be informed of the first Assessor's evaluation of the candidates' work. She will also require from the teacher a list of the candidates placed in the teacher's order of merit together with the marks awarded by the teacher for the separate sections of the examination and the total mark. Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board. The Chief Examiner's decision, which will have regard to the teacher's assessment and the two subsequent assessments, will be final.

The teacher(s) responsible for the preparation of the candidates for the examination will be entitled to advise the candidate in the exhibition of her work.

*The Board reserves the right to inspect and assess the work of all candidates and to alter the order of merit.*

The Practical Examination will be taken on the date(s) fixed by the Board. The school should inform the Board of the actual time of the examination.

#### IV. ORAL: 10%

The Oral Examination will be conducted by the teacher responsible for the preparation of the candidate for the examination or by another teacher in the department. She will conduct the examination as suggested in the Notes of Guidance and will award a mark to each candidate. The Oral Examination should take place before the Easter Holiday when the Prepared Work has been submitted and marked by the teacher, and, in any case, before the Practical Examination is taken. Schools will be informed of the week in due course and are permitted to hold the examination at any time during the week. The Board must be informed of the date and time at which the examination will take place and may send a Visitor to ensure that the examination is being conducted properly.

Candidates should be available for questioning by the Assessor when she visits the schools to examine the Practical Work.

### *Notes of Guidance to Teachers*

#### II. THE CONDUCTING OF THE PRACTICAL TEST

*Preparation Time:* approximately TWO hours.

Candidates will work out the design and transfer the design to the material. The teacher should know in advance the method of transfer which each candidate is going to use and she should make sure that the necessary equipment is available.

If time permits, the candidate may make any preparations necessary for the examination other than starting the actual embroidery.

The work should be put into a container and handed in to the teacher. The work must remain on the premises. The design sheet must be handed in with the examination work.

*Examination Time:* approximately THREE hours.

The teacher should check in advance that sufficient materials are available for every candidate to be able to finish her work if time permits.

*It is hoped that a quiet relaxed atmosphere will be encouraged rather than one of a strict examination nature. This should enable candidates to give of their best.*

#### *The Marking of the Practical Test*

|  | <i>Marks</i>       |
|--|--------------------|
| Design and choice of material.                       | 10                 |
| Preparation of material and transferring the design. | 5                  |
| Choice of stitches and skill in execution.           | 10                 |
| Making up and final appearance.                      | 5                  |
|  | <hr/> 30%<br><hr/> |

### III. (i) FINISHED GARMENT OR ARTICLE

|  | <i>Marks</i> |
|--|--------------|
| Design and Choice of material.                       | 10           |
| Preparation of material and transferring the design. | 5            |
| Choice of stitches and skill in execution.           | 10           |
| Making up the final appearance.                      | 5            |
| (This mark should be halved)                         | 30 = 15%     |

The design must fit the shape but not necessarily fill it. It should have good proportion and symmetry. There should be balance of weight in the construction, light and dark, thick and thin, contrasting textures. The finished work should show a lively and imaginative use of materials and techniques.

### (ii)—INDIVIDUAL WORK

The marks should be allocated as follows:

|   | <i>Marks</i> |
|---|--------------|
| (1) Originality and individual approach to the subject.               | 3            |
| (2) Selectivity and depth of content.                                 | 3            |
| (3) Quality and use of good, simple English.                          | 6            |
| (4) The use of illustration, diagrammatic, pictorial and practical. } | 3            |
| (5) Good presentation of finished work.                               | 3            |
|   | 15%          |

### IV. ORAL TEST

The following are illustrations of the type of question which could be asked and are in no way intended as a directive to the Examiner. At least one question should be asked to test the candidate's comprehension of the subject matter of her topic.

- (1) What influenced your choice of design for this article?
- (2) What method did you use for transferring the design and why? (Texture of material.)
- (3) What influenced you to study this particular aspect of embroidery/design?
- (4) Did you have difficulty in obtaining all the information? How did you overcome this difficulty?
- (5) What is the value of embroidery to the individual? (Leisure, therapeutic.)
- (6) If you did this section again, would you be able to improve on it?
- (7) Are you satisfied with the colour scheme now that the work is finished?
- (8) How will you make use of the knowledge you have acquired from this study in the future?
- (9) Do you know anything about the historical background of any of the stitches which you have used?

## SECTION 5

# SYLLABUSES

## FOR

## ENGLISH

## HISTORY

## GEOGRAPHY

# ENGLISH

## *Preamble*

1. In this examination English will be considered as one subject and there will be no division as between "English Language" and "English Literature". All candidates will be expected to have read and will be questioned on four books from the list set, one at least of which must be drama. There will be no set poetry anthology but questions will be set on an unseen poem or passage from a poem.

2. The basis on which books will be included in the list of prescribed texts will be literary merit and appropriateness to the age group and ability range of the candidates. The majority of books chosen will be contemporary, but suitable non-contemporary works may be included. Books which satisfy the criteria of literary merit and appropriateness may be included even though they may cause adverse minority reaction on the grounds of vocabulary, theme, etc., but there will be a wide choice of books. Works in translation will not be excluded.

In order to save some schools unnecessary expense in 1966 the list will be basically the same as that for the 1965 London County Council Secondary Schools Certificate Examination, but further alterations may be made for 1967 and subsequent years.

3. Set books may be taken into the examination, but dictionaries may *not* be used.

4. The candidate's final grade will be determined by his performance in three written papers, an oral test, and course work done during his final year as assessed by the school.

5. In the written papers, although a time is specified, candidates may be allowed up to, though not more than, 30 minutes extra. No great store will be set by length of answer, but it is hoped that the extra time may relieve the pressure that some candidates might otherwise feel and which might inhibit them from giving of their best.

6. The ability to handle sentence structures, vocabulary, punctuation and spelling appropriate to the particular answer will be taken into account in the marking of all written papers.

The examination will be in five sections:

- I. WRITTEN PAPER: 1½ hours
- II. WRITTEN PAPER: 2 hours
- III. WRITTEN PAPER: 1½ hours
- IV. ORAL TEST
- V. COURSE WORK

## **I. Written Paper**

### PART A—PERSONAL/CREATIVE WRITING

Candidates will be asked to write on one or, if they prefer, two subjects. The subjects will be varied and may be suggested by the traditional means of language or via other stimuli such as pictures or objects. The examiners will seek to "involve" the candidate by choosing subjects which allow him to draw on first-hand experience, which are relevant to the life he lives, or which stimulate and release his imagination to a lively and sincere response.

Although with some subjects some suggestions may be given to set a candidate's pen in motion, these suggestions may be ignored at will, and the candidate will be free to treat the subject in any way he chooses and in any form. It is expected, however, that the candidate will produce a sufficient quantity of writing for a

reliable assessment of his command of language to be made. The organisation of subject matter, syntax and punctuation will be expected to be appropriate to the mode of treatment.

#### PART B—POETRY

An unseen poem or passage from a poem will be presented to the candidate and questions will be set which are designed to test response to the poem. They will be framed in such a way as not to focus on verbal difficulties but to elicit the significance and spirit of the passage as a whole. Candidates who have read widely in poetry will be at the greatest advantage in answering the questions.

### II. Written Paper

#### PART A—FACTUAL COMPREHENSION

The candidate will be presented with a passage of prose of the kind conveying factual material.

Every effort will be made to choose a passage which will engage the interest of the candidate.

Questions set on the passage will be designed to elicit information contained in it, the association and relation of ideas, the train of thought, and may include elementary summary of some of the material or questions on the nature of the passage as a whole, its purpose and implications. The type of question or task set will be only such as is related to a response to the meaning of the passage and will not refer to isolated words or phrases removed from their context in the passage.

The form of the answers demanded should be appropriate to the questions and may not always involve writing complete sentences.

#### PART B—READING: PROSE AND DRAMA

The aim in setting prose and drama texts for study is that there should be experience of good and appropriate literature in English.

Questions set will generally be central to the book and designed rather to test response and the ability to relate the matter of the book to the candidate's own experience than memory and the ability to re-tell the story. They will not be concerned with literary abstractions.

Questions on drama will where possible give candidates an opportunity to show their response to the work as a play. Questions on prose and drama may be of a type in which a passage of central importance in the work is printed and questions are set leading from the passage outward to the experience of the book as a whole.

### III. Written Paper

#### PART A—IMAGINATIVE COMPREHENSION

A passage of good imaginative prose will be presented to the candidate and every effort will be made in the choice to engage his interest.

Questions set will not be too formal, may explore wide implications and will be designed to evoke an intelligent and sensitive response. They will develop deliberately from simple questions to questions requiring a deeper understanding of the passage, and, where possible, the simpler questions will prepare for the more difficult. The candidates will be given an indication of the length of answer required and the form of the answer should be appropriate to the question and may not always involve writing complete sentences. The type of question or task set will be only such as is related to a response to the meaning of the passage and will not refer to isolated words or phrases removed from their context in the passage.

## PART B—IMPERSONAL/FACTUAL WRITING

The purpose of this section is to test the candidate's ability to use language objectively. The candidate will be required to produce a piece of continuous writing, which may take the form of a letter, requiring the organisation of factual material or involving an explanation or description of a process or activity.

### IV. Oral Test

The Board will divide schools into groups (possibly 4 or 5 in a group) and the members of each group will co-operate to establish standards for the oral test.

The test itself of up to 15 minutes' duration for each candidate, will then be conducted by teachers in the Schools presenting candidates. Each candidate may be examined either in an individual or group test on the lines indicated below, but not in both. The choice of type of test will rest with the school, and candidates will be assessed on a six-point scale (1–5 and U for Ungraded). The Board may conduct its own assessment of the oral standards of any school.

Candidates will be expected to be capable of natural, clear and well-articulated speech and will not be penalised for dialectal peculiarities, provided that the quality of speech is not thereby impaired. Suitable allowance will be made for candidates with organic speech defects.

No reference will be made on a candidate's certificate to his performance in the oral test, but his assessment will be taken into account by the examiners in determining his final grade in the examination as a whole. *In this process, however, a candidate's final grade may be raised but not lowered by his performance in the oral test.*

(a) *Individual test*—(in which the examining teacher and the individual candidate alone take part).

The test will consist of:

- (i) A passage to be read aloud by the candidate sitting in front of the examiner; the passage should last about 2 minutes and be chosen by the candidate from one of the set texts, the class poetry anthology, or from the candidate's own writing. (The class teacher may advise the candidate previously on his choice of passage but may not coach him in his reading of it.)
- (ii) A conversation with the examiner which may be based on such topics as the passage that was read aloud, the candidate's written work in English during the year, or school or other activities.

(b) *Group test*—(in which the individual candidate is assessed by the examining teacher in the presence of a group of candidates).

The test will consist of:

- (i) A 3-minute prepared talk to be given by the candidate on some school or other activity, followed by questions and discussion stemming from the talk and controlled by the speaker. Questions may be asked by the examiner as well as by the other candidates.
- (iii) A passage to be read by the candidate to the group and chosen as in the individual test. The reading will be followed by questions and discussions with a second reading of the passage by the candidate at the end.

### V. Course Work

The candidate's Course Work during the final year will be assessed by the school on a six-point scale (1 to 5 and U for Ungraded). Schools will work together in groups as for the oral test to determine a common standard for the assessment by comparing specimen work. The assessment will be of Course Work done and should not be a prediction of performance in the examination.

Oral work during the year may be taken into account. *The assessment, as with that for the Oral test, will be taken into account for purposes of up-grading only in determining the candidate's grade for the examination as a whole.*

*Mark Weighting of Written Papers*

|            |                            |    |   |     |
|------------|----------------------------|----|---|-----|
| PAPER I:   | Personal/Creative Writing  | 75 | } | 100 |
|            | Poetry                     | 25 |   |     |
| PAPER II:  | Factual Comprehension      | 20 | } | 100 |
|            | Reading: Prose and Drama   | 80 |   |     |
| PAPER III: | Imaginative Comprehension  | 70 | } | 100 |
|            | Impersonal/Factual Writing | 30 |   |     |

The books set for study in 1966 are as follows:

DRAMA

- Shaw: *Pygmalion* (Penguin Books or Longmans Green).
- Dylan Thomas: *Under Milk Wood* (Dent)
- Arnold Wesker: *Roots* (Penguin Books).

PROSE

- William Golding: *Lord of the Flies* (Faber and Faber or Penguin Books).
- Nevil Shute: *A Town Like Alice* (Heinemann or Pan Books).
- Wolf Mankowitz: *A Kid for Two Farthings* (Deutsch or New Windmill Series—Heinemann).
- Thor Heyerdahl: *Kon Tiki Expedition* (Allen and Unwin).
- George Orwell: *Animal Farm* (Secker and Warburg or Penguin Books or Bridge Series—Longmans Green).
- John Steinbeck: *Of Mice and Men* (Penguin Books).
- John Wyndham: *The Day of the Triffids* (Michael Joseph or Penguin Books).
- C. S. Forester: *The African Queen* (Michael Joseph or Penguin Books).
- Gavin Maxwell: *Ring of Bright Water* (Longmans Green).
- F. Spencer Chapman: *The Jungle is Neutral* (Queen's Classics—Chatto and Windus).
- Barnes and Egford: *20th Century Short Stories* (Harrap)

*Notes for Examining Teachers*

ORAL

These notes are intended to explain and to expand the syllabus and should be read in conjunction with it. It is hoped that they will be of value to examining teachers in establishing a desirable common standard both within their groups and throughout the Metropolitan area. The examination will succeed where examiners interpret these suggestions sympathetically in the spirit of the whole syllabus and in schools in which candidates have had regular practice in speaking, reading aloud and discussion as a normal part of their school work.

The purpose of the oral examination is to give the candidate an opportunity to demonstrate his powers of personal communication and his command of Spoken English, the importance and usefulness of which is at least as great as that of Written English. It is accepted that within the Metropolitan area are to be found wide differences in accent and speech habits largely due to social differences and to the presence of children from overseas. It is not intended that any candidate should be penalised because of his variation from an almost indefinable norm; nor because of any speech defect, provided communication is effective; it is intended that candidates whose speech is audible, clear, vigorous, lively, accurate and rich in vocabulary should be encouraged and rewarded.

## CHOICE OF TYPE OF TEST

This rests with the school. A group should be about twelve in number, and it is recommended that all members of the group should be candidates in the examination. Either test may be conducted at any time, prior to the written examination, during the final year of the course.

## THE INDIVIDUAL TEST

### *General*

The period of fifteen minutes prescribed in the syllabus may be interpreted flexibly. It should be possible to assess most candidates in about ten minutes but in some cases examiners may feel that they need more time.

### *The Reading*

1. The candidate should present himself before the examining teacher with the text of the passage he has chosen in whatever forms he finds most convenient. Since he will have had ample time to prepare his reading during the year he will not need time to do so immediately before the examination.

2. He should be put at his ease and encouraged to explain and introduce what he is going to read—to relate his chosen passage to its context or to give to a poem any necessary background.

3. The passage chosen by the candidate should be such as to enable him to demonstrate in about two minutes his ability to read clearly and intelligently. It should be reasonably self-contained, should have a clearly-defined structure and should give scope for interpretation rather than for mere mechanical reading. If it becomes obvious that the candidate's choice of passage was unwise, allowance should be made.

4. The examiner should bear in mind the tone of the passage read—whether it is informative or is intended to convey attitudes or feelings. The candidate should be assessed on his audibility, fluency and distinctness and on his ability to interpret and convey the intention of the writer.

## THE CONVERSATION

(1) The examiner may choose to use the reading as a starting point for discussion. The candidate will have prepared it himself and should have views to express about its quality, its relation to the rest of the book, or, if it is his own work, its origins and composition.

(2) Other suggested topics which may encourage conversation are:

- (a) the candidate's school work during the year,
- (b) his general reading,
- (c) his youth club or youth organisation,
- (d) his possible future career,
- (e) his family and friends,
- (f) his hobbies,
- (g) his favourite television programmes,
- (h) the films he enjoys,
- (i) the school societies he belongs to,
- (j) his sporting interests.

(3) Questions should be so framed and presented as to encourage the candidate's confidence and to elicit continuous speech rather than short answers. If possible, the examiner should provide an opportunity for the candidate to express himself without interruption or prompting.

(4) The examiner should then assess the ease and degree of fluency, the appropriateness of language and the general effectiveness of the candidate's communication.

## FINAL ASSESSMENT

This will be in the form of a six-point scale (1 to 5 and U for Ungraded).

## THE GROUP TEST

### *General*

(1) This may be arranged at any time prior to the written examination during the final year of the course preceding the examination. It is not required that all candidates be examined on the same day. For example, if a group of the recommended number of twelve candidates be assembled at the school's convenience, each candidate can be allowed his ten to fifteen minutes during a session of two and a half hours. Alternatively, the test could be conducted during normal lessons (three or four candidates being tested per lesson) over a period of a few weeks. If the period is much longer than this the earlier candidates may be at a disadvantage. The school may, if it wishes, use a panel of examining teachers.

(2) The aim should be to place the candidate in a speech situation which is as normal as possible. Thus the more familiar the subject, the room, the audience and the examining teacher the better.

(3) Candidates should be assembled in a room in which there are (a) adequate space between speaker and audience; (b) room for the examining teacher to sit comfortably and to address and to observe both speaker and audience; he should sit to the side and towards the front rather than at the back of the room.

(4) Candidates are called from the group in turn, give their talks and readings and then return to the group. The examining teacher conducts the proceedings and unobtrusively assesses each candidate.

## THE TALK

(1) Each candidate should have prepared a three-minute talk on a subject of his own choice (e.g., a school subject, a technical subject, a game or a hobby, a personal experience). This he delivers, using brief notes if he wishes, but for reference only, and, if necessary, visual aids.

(2) The examiner should assess the candidate's ability to inform or to explain clearly and concisely. Interesting content, a relaxed manner and fluent discourse rather than a studied essay in speech should be looked for.

(3) The candidate should then for a few minutes invite questions from or discussion with the group. The examiner should assess the candidate's powers of personal communication and his ability to speak impromptu.

## THE READING

(1) The passage to be read should be of the same kind as that used in the individual test and the remarks under "The Individual Test, Reading 2, 3 and 4" above apply. The candidate should, of course, be able to hold the attention of the audience.

(2) Questions may be asked or comments made by the audience. The examiner should as before assess the candidate's handling of these questions and comments.

(3) The candidate should then re-read his chosen passage or poem. It may be that he will modify his reading in the light of the group's reaction to it and that this second attempt will be better than the first in which case this is the reading which should count for assessment.

(4) The examiner should then consider the four assessments he has made and decide upon an overall assessment for the whole test.

#### FINAL ASSESSMENT

This will take the form of a six-point scale (1 to 5 and U for Ungraded).

In both individual and group tests the examining teacher's assessment will inevitably be subjective. It is hoped that time, experience, discussion and exchange visits will help to establish acceptable standards throughout the area. Meanwhile, examining teachers should bear in mind the purpose and spirit of both the oral test and the examination as a whole.

#### COURSE WORK

Course Work may consist of an individual project carried out during the year preceding the examination or of the pupil's own contribution to a group project or of a notebook or folder of work done by the pupil in the course of his studies. Each school should decide for itself the Course Work appropriate to its pupils and whatever is considered appropriate will be accepted as the Course Work for that school. The assessment may be made when the course is completed and the work can be seen as a whole or it may be arrived at by a process of continued assessment throughout the year.

#### FINAL ASSESSMENT

This will take the form of a six-point scale (1 to 5 and U for Ungraded).

### HISTORY

The examination will be in two sections:

I. WRITTEN PAPER—2½ hours

II. TOPIC WORK

The syllabus broadly covers the period since 1760. This has been chosen as it covers a fairly wide period within which most of the work of the fourth and fifth years of secondary schools will fall.

The subjects suggested in Part A of the syllabus, confined to British History, are admittedly and designedly selective. Deliberately omitted are large sections of the traditional syllabus for the period which include subjects beyond the understanding of most 16-year olds (e.g. details of foreign policy in the 19th century, problems of international trade, etc.) or subjects of more academic than relevant interest such as the detailed study of various ministries in the 19th century. Subjects have been chosen largely because of their relevance to a developing economy or to the existing social, cultural and economic framework.

Again, in Part B (British and the world), some emphasis is attached to Commonwealth history and the development of self-governing dominions, with European and American development, and also an introduction to some extra-European history.

It is hoped that schools will choose freely within the syllabus—that, for instance, some may attempt certain parts of Part A in combination with Commonwealth History, or European History or World History. Therefore, a wide choice of questions will be offered to give adequate coverage to all aspects of the syllabus.

The introduction of project work as part of the examination is considered essential in order to assess the candidate's ability to collect, collate, and express facts relating to the study undertaking, without the handicap of an examination time limit.

## I. Written

The examination paper will be in two parts:

- (A) BRITAIN FROM 1760 TO THE PRESENT DAY.
- (B) BRITAIN AND THE WORLD.

*Questions may be chosen from either or both Parts.* Candidates will be required to answer 5 questions, all of which carry equal marks.

### PART A—BRITAIN FROM 1760 TO THE PRESENT DAY

#### *The Industrial and Agricultural Revolutions:*

Changes in industry; agriculture; communications, including transport; scientific developments; population.

(Some knowledge of well-known inventors, scientists and industrialists will be expected.)

#### *Social and Political Changes:*

Parliamentary reform and the growth of political parties; living and working conditions, growth of Trade Union Movement, reforms in relation to health, education, welfare services; development of local government.

(Some knowledge of leading personalities will be expected.)

#### *The Social Scene:*

This is intended to be a general survey of everyday life during the last 200 years covering the changes in man's existence and environment. The following are indications of the general lines to be studied and credit will be given to those candidates who show knowledge of literature and the arts of the period:

Changes in Taste and Design, e.g. architecture; furniture; dress. Communications, e.g. press; radio; television; books; postal services; telephones. Leisure.

### PART B—BRITAIN AND THE WORLD

The development of the British Commonwealth. The development of the U.S.A. from 1783. The French Revolution—background, events and consequences. Unification of Germany and Italy. Events leading to the First World War. Aftermath—League of Nations. Background to the Second World War. The U.N.O. Russia in the 20th century. China in the 20th century. The New Africa.

## II. The Topic

This will consist of the preparation, during not more than the two years immediately preceding the examination, of a book or file devoted to the study of the chosen topic. Marks will be awarded numerically subject to a maximum of 20% of the total marks for the examination.

### MARKING AND ASSESSING

#### I. WRITTEN PAPER: 80%

The written paper will be marked externally.

#### II. TOPIC: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A copy of this list on the form provided should be sent to the Secretary to the Board on or before 1st April in the year in which the examination is to be taken. It is suggested that topics be collected from the candidates by the teacher about 1st March.

The Secretary will then inform the school of the candidates whose topics are to be sent to the Board's Assessor. These should be despatched immediately.

The Secretary should be informed if it is not possible to send through the post any of the topics called for. He may require the school to send another topic to the Assessor. Alternatively the Board may decide to send an Assessor to the School.

The Assessor will not alter the order of merit but he may change the marks awarded in the interests of standardisation. *The Board, however, reserves the right to scrutinise the work of all candidates and to alter the order of merit.*

#### *Notes for Guidance on the Topic*

1. The purpose of introducing project work is to provide opportunities for *individual work* to be presented without the artificial limits imposed by examination conditions. It is not expected that large groups in one school will do the same topic and the Board hopes that the choice of topics by individual candidates will be as wide as possible. The assessors should take into account:

- (a) the facilities available for simple individual research both in school and in local libraries, museums, etc.,
- (b) the individual achievement of the candidate measured against his general ability in more formal work,
- (c) any particular local circumstances, e.g. the character of the district from which the school draws its pupils, the size of the school (to allow for the problems of a small group within a heterogeneous fifth year in a small school), home background, etc.

#### 2. *Method of presentation*

- (a) The topic should preferably be in a file.
- (b) There should be a "contents" list. The work should be logically arranged in chapters or sections.
- (c) There should be also a fairly comprehensive bibliography, a list of all sources consulted—museums, official literature and pamphlets, and visits, etc. Any comments on the sources used should be encouraged.
- (d) Illustrations, both original and printed, and diagrams should be used wherever possible. Much will obviously depend upon the topic chosen, since some will lend themselves more obviously to presentation in map, chart or pictorial form. There should, however, be a reasonable balance between script and illustration.
- (e) Neatness of presentation will be as important in this as in all other subjects. Typescript could be acceptable, although no additional credit will be given, and the staff must be confident that the typing is the candidate's own work.

#### 3. *Suggested criteria on which assessors will mark projects*

A reasonable amount of unaided written work, as far as possible *in the candidate's own words*. Direct quotations should be acknowledged as such. It is impossible to advise either on the length of the project or the time which should be devoted to it. As an estimate perhaps 10–15% of the time allocated to history in the school might be devoted to topic work, although it is expected that candidates will devote some of their own spare time to the work. The topic work may be prepared over not more than the two years preceding the examination. This is intended to allow for a more leisurely approach and for the fact that topic work may have to be assessed early in the examination year.

#### 4. Possible sources for books and information books

The school library and local branch libraries will obviously be used, but it is worth noting that some local libraries will make books available to schools on long loan or arrange for study lessons to be taken on the library premises. The Chief Librarian in the area will tell you about these services.

If you need to order more books for your own school library especially in a fairly new school, it is often worth asking to visit the library of a well-established school in the area. The Book Room at the London Supplies Division, Kennington Lane, London, has large stocks of fairly recent books which can be inspected by teachers—present prices are given in each book, and there are ample facilities for study. For more specialist and/or staff use, there is the Inner London Education Authority's Library at County Hall. If funds are available more than one copy of books widely used, e.g. Quennell's "Everyday Things" or the "Then and There" series at a cheaper level would obviously be useful.

#### *Visits and other sources*

An extensive guide to Museums and Galleries is the "Guide to London Museums and Galleries" H.M.S.O. 3s. which gives names, addresses, "how to get there" instructions, hours of opening, history of the building, some outline of the type of work each museum or gallery specialises in, and a short guide. (Examples given—British Museum. Sir John Soane's Foundling Hospital Art Treasures, etc.)

A further list of places of historic or artistic interest in or near London (including private homes open to the public) may be obtained from the British Travel Association Tourist Information Centre, 64-65 St. James's Street, S.W.1. The Department of Extension Services, Victoria and Albert Museum, London, S.W.7 (KEN 6371).

The Records Office of the Greater London Council, County Hall, S.E.1, of the Essex and Surrey County Records Offices at Chelmsford and Kingston-on-Thames, are not only accessible but will often put out special work for a school if given advance notice. In some areas, private firms have small museums that could be visited. In cases of general interest, e.g. the British Transport Commission Museum, Clapham, a form visit might be considered, but candidates should be encouraged to make these visits their own personal effort.

Other official bodies and business firms will often supply free literature and background material, e.g. U.N.E.S.C.O., Australia House, the National Coal Board.

### SUGGESTED TOPICS

These suggestions are for guidance only. There are innumerable possibilities both within and outside the period of the written paper.

Care should be taken with more unusual topics that their history is covered adequately.

In advising the candidates teachers should ensure that the topic is specific enough and that reference material is available.

The history of one or more aspects of the following :

Heraldry.

The history of nursing.

The history of medicine, public health, sanitation.

Famous people in their setting (e.g. famous engineers).

The Press.

Transport and communications.

Space travel.  
 Homes: architecture: famous buildings.  
 Costumes and changes in dress.  
 Entertainment (e.g. the history of ballet).  
 The Arts (furniture, famous artists or musicians, etc.).  
 The history of individual countries, towns or villages.  
 The history of government.  
 International organisations.  
 Working-class movements.  
 Agriculture.  
 Naval or military history, including weapons of a particular period (e.g. medieval armour).  
 Emancipation of women.  
 Children through the ages.  
 Famous events (e.g. the Fire of London).  
 Archaeology.  
 Astronomy.  
 Food and nourishment.  
 Exploration.  
 Humanitarian movement (e.g. penal reform the abolition of slavery, the Red Cross).

## GEOGRAPHY

The examination will consist of three sections:

- I. WRITTEN PAPER—2 hours
- II. WRITTEN PAPER—2 hours
- III. Either (a) FIELD STUDY or (b) SPECIAL STUDY  
to be selected by the candidate and approved by the school.

### I. Written Paper

#### PART A—MAP WORK

Knowledge of and ability to interpret maps, with special reference to 1 in. and 2½ in. Ordnance Survey maps. Relationships between maps and photographs of a given area.

#### PART B—BRITISH ISLES

(a) A study of the Greater London Council area to include such topics as site, growth, port, wholesale food markets, industries, transport network.

Credit will be given for examples based on direct observation.

(b) (i) Agricultural studies in their regional settings to include East Anglia, S.E. England (Kent, Surrey, Sussex), S.W. England.

(ii) Industrial studies in their regional settings to include N.E. England, the Midlands, S. Wales.

(iii) Studies of life in highland areas to include Highlands of Scotland, Lake District, Central and North Wales.

(iv) *One* general study selected from: the fishing industry, textile manufacturing, distribution of population, power resources.

Candidates will be expected to answer questions from *both* parts.

## II. Written Paper

### WORLD STUDIES EXCLUDING THE BRITISH ISLES

(Candidates will be expected to answer questions from *two* parts.)

#### PART A

Studies of certain examples of man in his geographical environment. Attention should be given to everyday aspects of life, such as food, clothing, tools, housing and transport; climatic details; activities in different seasons of the year; products, their marketing and use.

- (a) A plantation worker or village farmer in the equatorial forest.
- (b) A cattle herder of the African savannah.
- (c) A rice cultivator in a tropical monsoon land.
- (d) A fruit farmer in a Mediterranean region.
- (e) A farmer in either the prairies or the steppes.
- (f) A lumberjack in the northern coniferous forest.

#### PART B

Studies of present day problems and developments.

- (a) Population problems in monsoon Asia.
- (b) Modern developments in Brazil.
- (c) Soil erosion.
- (d) The importance of the Middle East.
- (e) The polar lands.
- (f) Important developments in irrigation and hydro-electric power.

#### PART C

Regional Studies. A study of *one* of the following:

- (a) Britain's neighbours; France, Holland, Belgium, Denmark, W. Germany, Norway. A detailed knowledge of the sub-regions will not be expected.
- (b) The Great Lakes, St. Lawrence Lowlands and North East U.S.A.
- (c) The U.S.S.R. west of the Urals.

## III. Field Study or Special Study

The submission of either a field study or special study is an integral part of the examination, *and an entry without it will not be valid*. It will carry 20% of the marks. The special study should include maps, diagrams, illustrations and a list of references (places visited and books).

### MARKING AND ASSESSING

I. WRITTEN PAPER: 40%

II. WRITTEN PAPER: 40%

The written papers will be marked externally.

### III. FIELD STUDY OR SPECIAL STUDY: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A copy of this list on the form provided should be sent to the Secretary of the Board on or before 1st April in the year in which the examination is to be taken. (It is suggested that studies be collected from the candidates by the teacher about 1st March.)

The Secretary will then inform the school of the candidates whose studies are to be sent to the Board's Assessor. These should be despatched immediately.

The Secretary should be informed if it is not possible to send through the post

any of the studies called for. He may require the school to send another study to the Assessor. Alternatively the Board may decide to send an Assessor to the school.

The Assessor will not normally alter the order of merit but he may change the marks awarded in the interests of standardisation. *The Board, however, reserves the right to scrutinise the work of all candidates and to alter the order of merit.* Studies should be preserved in the school until the end of the Summer Term.

#### *Notes for Guidance of Teachers on Special Studies*

The introduction of topic-work represents a departure from traditional school examination practice. It is suggested that the topic-work should be undertaken during the two years preceding the examination. Most of the work will be undertaken in the pupil's own time but some class time will need to be set aside for the teacher to give individual and collective guidance. This guidance is essential if the pupils are to produce a worth-while piece of work. If the teacher keeps an eye on the development of the topic, the final marking will not be such a burden. The following notes suggest a method of approach to topic-work.

- (1) *Choice of Special Study.* It is intended that each candidate chooses a different topic. Some guidance is given in the syllabus but clearly the choice is very wide. Availability of books and material is an important consideration.
- (2) *Planning the Special Study.* The pupil should prepare a provisional plan. For a country, the traditional geographic headings might be used while for a product, the headings might be: methods of production, geographic conditions which influence production, world distribution and trade.
- (3) *Collection of Material.* This will be mainly from books but visits to museums are to be encouraged. The pupils will collect a file of notes, pictures, pamphlets, maps and diagrams arranged under the appropriate headings.
- (4) *Selection and Arrangement of Material.* This is the writing-up stage which the pupils will find most difficult. The importance of selection cannot be stressed too strongly. Without it, the Special Study becomes a scrapbook. Only material of significance should be included and the maps, sketches, diagrams and pictures should be used. The hallmark of a good Special Study is the integration of the maps and pictures with the text.
- (5) *Finishing touches.* A brief introduction stating the aims of the Special Study together with a list of contents, should appear at the beginning while it is most important to have a full bibliography at the end.
- (6) *Marking.* The Special Study is to be marked out of 40 (i.e. 20% of the total for the examinations as a whole).

SECTION 6

SYLLABUSES  
FOR  
MODERN LANGUAGES

# MODERN LANGUAGES

## GENERAL PRINCIPLES

The syllabus is intended to allow considerable liberty to the teacher. Emphasis is laid on the basic patterns of the language and on words and constructions which are in common use. Great importance is attached to the language as a living means of communication and in particular to the spoken language; the question papers will contain no translation tests.

The papers set will be designed to test basic knowledge and accuracy in its use.

In the first instance, the Board offers the examination in French, German and Spanish. For the sake of convenience the word French is used in the following section; this should be read as German or Spanish where appropriate.

## THE EXAMINATION

The following tests will be set:

- (1) Conversation in French.
- (2) Reading aloud a short passage of French.
- (3) Comprehension of a passage of French read aloud to the candidates. The candidates will be required to write answers to questions based on the passage which they hear twice but do not see. The questions will be printed in English and answered in English. Candidates will see the questions after the first reading.
- (4) Dictation.
- (5) Free composition in French. 100–120 words. A choice of subjects will be given.
- (6) Comprehension of a printed passage of French. Questions on the passage will be set in French and answered in French.

### Vocabulary (All Languages)

Candidates will be expected to know only common words associated with the following topics or topics allied to these.

The family, the street, people (age, profession, relationships), travel, the human body, clothes, routine of daily life, meals, work, shopping, weather, countryside, seasons, months, days, the time, numbers, dates.

### Grammatical Content

The grammatical content of the examination will be limited to the following:

#### FRENCH

*Verbs*—Only the present, imperfect, perfect and future tenses will be required. The perfect tense with *avoir* and *être* will be required, but the “agreement with the preceding direct object” rule will not be required.

Neither the subjunctive mood nor the passive voice will be required.

*Nouns*—The principles of gender and number. Less common plurals (e.g. *travaux*) will not be required.

*Adjectives*—The principle of agreement with the noun. Gender, number and position of adjectives.

Possessive and demonstrative adjectives.

*Quel* (all forms).

Numerals; cardinal and ordinal.

*Adverbs*—The formation of the adverb from the adjective. Common adverbs such as *vite*, *bien*, *demain*. Negative expressions such as *ne jamais*, *ne plus*.

*Pronouns*—Personal pronouns (including *on*). Relative, demonstrative and interrogative pronouns.

*Lequel* and *dont* will not be required.

## SPANISH

*Verbs*—*Ser* and *estar* in simple applications.

*Haber* as an auxiliary verb only.

The present, perfect, imperfect, preterite and future tenses will be required.

The subjunctive mood will be required only in simple applications of the present tense.

*Nouns*—The principles of gender and number. Less common exceptions to gender rules will be avoided, but a knowledge of basic spelling rules will be assumed.

*Adjectives*—The principle of agreement with the noun.

Gender, number and position of adjectives.

Apocopation of adjectives.

Possessive and demonstrative adjectives (excluding *ese*).

Numerals: cardinal and ordinal.

*Adverbs*—Regular formation of the adverb from the adjective.

Common negative expressions and double negatives.

*Pronouns*—Personal, possessive, demonstrative (excluding *ese*), interrogative and relative pronouns.

*El cual* will not be required.

*Tú* and *vosotros* are to be recognised, but *Vd.* and *Vds.* will be acceptable in all written contexts.

## GERMAN

1. The present, perfect and imperfect tenses. In the case of the perfect tense recognition only will be required.

2. The form and usage of the four cases. For the genitive case recognition only will be required.

3. The pattern of word order in main clauses, and subordinate clauses introduced by *wenn*, *daß*, *weil* and *als*. Relative clauses should be recognized but candidates need not use them.

Declension of definite article, *dieser*, *welcher*, *jeder*, *ein*, *kein*.

Possessive adjectives, *mein*, *dein*, *sein*, *ihr*, *unser*.

Declension of adjectives after *der* etc., *ein* etc.

Adjective endings in the plural without a preceding article are required.

Common nouns in singular and plural.

Comparison of adjectives (used predicatively only).

Personal pronouns, including *man*. The familiar plurals *ihr* and *euch*, not required.

Interrogative pronouns (*wer? wen? wem?*).

*Was? wie? wann? wo? wohin? woher? warum?* etc., and *wo* + preposition as interrogative.

Common prepositions governing accusative and/or dative also *da* + preposition.

Common verbs. Indicative and imperative moods only.

Modal verbs. Use of these verbs with following infinitive.

*Mögen* is not required except for *ich möchte* and *möchten Sie?*

Common verbs with separable prefixes, (main clause only).

## ASSESSMENT OF ORAL EXAMINATION

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based on the candidates' performance in this section of the examination. A mark should be awarded to each candidate.

The examination of each pupil should be tape-recorded. A mark list giving the total mark as well as the marks for the various sub-sections should be sent to the Board's Assessor together with the tape-recording. The Board's Assessor will assess the work of not less than 30% of the candidates from each school.

As a general rule, the Assessor will not alter the order of merit but he may change the marks awarded in the interests of standardisation. *The Board, however, reserves the right to assess the work of all candidates and to alter the order of merit.* The work of all candidates from the school will be considered if this is done.

The other papers will be marked externally.

### THE ORAL EXAMINATION

#### *Notes of Guidance to Teachers*

#### CONTENT

The examination will consist of two parts: (a) READING, (b) CONVERSATION.

#### READING (7 marks)

The purpose of the reading passage will be to judge intonation and pronunciation only. No questions will be asked to test the candidates' comprehension of the passage.

There will be only one reading passage of prose in which direct speech may occur. Candidates will be allowed a preparation period of five minutes. Allocation of marks will be according to the grade achieved. These grades are as follows: Very good—7-6; Good—5-4; Satisfactory—3-2; Poor—1-0.

A sample reading passage appeared in the specimen paper.

#### CONVERSATION

This will consist of three parts.

- (i) Talk on prepared subject.
- (ii) Questions on prepared subject.
- (iii) Varying questions of a general nature.

#### (i) *Talk on prepared subject* (7 marks)

This part of the examination will provide an opportunity for the candidate to talk for two minutes, at the most, on a simple prepared subject, the candidate having previously prepared *three* subjects of his own choice.

A method will be devised whereby the examiner will select *one* of the subjects at random.

The candidate will be expected to speak unaided without using notes.

The candidate should be judged by his oral proficiency and not by the content of his talk. In awarding the marks the same principles should be adopted as those in the reading section.

#### (ii) *Questions on prepared subject* (4 marks)

After the prepared talk the examiner will ask four questions on what the candidate has said, in order to enable the candidate to continue the conversation in a natural way.

#### (iii) *Questions of a general nature* (12 marks)

The final part of the examination will consist of eight questions selected from a set of questions provided by the Board. The questions will be in sections, and a specified number of questions will be asked from each section.

Certain questions will require a short answer and others a longer answer, the latter allowing the better candidates to show their ability. All tenses mentioned in the syllabus will be included in these questions.

#### CONDUCT OF THE EXAMINATION

A teacher in the school will examine the candidates, and it would be advantageous if the teacher who has taught the candidates regularly conducted the oral examination.

The oral examination of *all* candidates will be tape recorded, and a sample, in accordance with the requirements of the Board, will be assessed by assessors appointed by the Board.

#### RECORDING

The work of *each* candidate should be preceded by the following:

- (a) school
- (b) full name
- (c) examination number.

E.g. Catford School, John Albert Smith, number 231. N.B. This information should be spoken by the teacher.

All teachers should be familiar with the technique of using a tape-recorder, and before the examination should ensure that the machine is in working order.

Tapes should be recorded at a speed of  $3\frac{3}{4}$  i.p.s., and if a four-track recorder is used only the outer tracks (1 and 4) should be employed.

Schools will provide their own tapes which will be returned after the results have been published.

The room chosen for the examination should be acoustically suitable and as free as possible from external noises.



SECTION 7

SYLLABUSES  
FOR  
RELIGIOUS KNOWLEDGE  
SOCIAL STUDIES

## RELIGIOUS KNOWLEDGE

There will be one paper of 2½ hours.

The examination paper will be in three parts and candidates will be required to answer questions from any two.

The examiners will use the Authorised Version or the Revised Standard Version in setting questions. Candidates will receive equal credit for quoting from any translation.

### Part 1—Old Testament

#### *God's relationships with his chosen people*

This section should be presented in such a way as to bring out that the kind of relationship which people had in Old Testament times with God is still possible today, and that, as they faced the problems of their time from the ground of that relationship, so can we today also. Many of the responses, therefore, given by the prophets to their own situation are still relevant to some similar situations today.

(1) *The Choosing of a people for a special relationship with God*

The Story of Abraham—his call, the covenant, the sacrifice of Isaac.

(2) *The Training of the people*

The story of Moses—God's call and training of Moses, his deliverance of his people from Egypt and their training in the wilderness; the Covenant, the giving of the Law, the Tabernacle and the Ark.

(3) *The Unifying of the people*

(i) The work of the Judges illustrated by Gideon.

(ii) The work of the monarchy, illustrated by David's capture of Jerusalem and Solomon's building of the Temple. Some psalms used in temple worship: Psalms 24, 27, 95, 121.

(4) *The Dividing of the people*

(i) The division of the Kingdom illustrated by the stories of Rehoboam and Jeroboam.

(ii) The failure of the monarchy illustrated by the story of Elijah and Ahab.

(5) *The Teaching of God's people by the prophets*

(i) Of his righteousness by Amos.

(ii) Of his loving mercy by Hosea.

(iii) Of his majesty and holiness by Isaiah—his vision in the temple and the story of the deliverance of Jerusalem.

(6) *The Disciplining of God's people*

The fall of Jerusalem and the going into exile.

(7) *The Gathering of the Remnant and preparation for the coming of Messiah*

(i) The worshipping community in Babylon.

(ii) Ezekiel's teaching about the Valley of Dry Bones.

(iii) Jeremiah's teaching about the New Covenant.

Teachers using an Agreed Syllabus will find more detailed information about each of these topics.

### Part 2—New Testament

A. *"The Word became flesh and dwelt among us"*

This section is based on the Gospel according to St. Mark, together with selected additions from the other gospels, dealing mainly, though not entirely, with the

teaching of Jesus. It should be studied in relation to the historical and geographical background.

The section should be presented in such a way that it will show, not only that the life and teaching of Christ were a challenge in his day, but also that they are a challenge in our own time. Many contemporary problems such as the danger of wealth, the sanctity of marriage, personal and social relationship should be seen through the Gospel background. Thus our Lord's answers to the attitudes of the people of his day, to true and false religion and kindred problems can be related to the generation we teach.

Passages for study:

St. Mark's Gospel, omitting Chapter 13.

St. Matthew, 4, 1-11; 5, 1-7; 29; 25; 28, 16-20.

St. Luke 3, 7-18; 7, 18-35; 10, 25-42; 11, 5-13; 12, 13-21; 15; 18, 9-14; 24, 13-53.

St. John 20, 1-29.

Teachers using an Agreed Syllabus will find more detailed information about many of these passages.

### ALTERNATIVE FOR JEWISH CANDIDATES

#### B. *Scripture History from the Patriarchs to the Death of David*

A knowledge of the Geography of the Holy Land, in relation to this Biblical period, and of recent archaeological discovery which throws light on this period, will be required.

The following is a list of general events and personages:

- (a) The Patriarchs. Abraham, his call by God from Ur to found a nation. Isaac and Jacob.
- (b) Joseph. Bondage in Egypt. The life of the Israelites in Egypt.
- (c) The Liberation. The Emergence of Moses. The impact of this bondage upon the Israelites. Moses—his education and his call to liberate the Israelites.
- (d) The Wilderness. The Giving of the Ten Commandments and of the Torah. The nature and contents of the Five Books of Moses.
- (e) The entry into Canaan. The problems confronting the people and their leaders in the new environment.
- (f) Joshua. The Conquest and division of the land.
- (g) Samuel—his birth and upbringing. The menace of the Philistines. The unifying of the monarchy.
- (h) Saul—his military exploits—his weaknesses.
- (i) David. The wars of David and the capture of Jerusalem. The prophet Nathan.
- (j) The Story of Ruth.

### Part 3—Faith, Life and Worship

#### A. *The Christian in the New Testament and the 20th century*

Candidates will be required to study *Theme I* and *one* other Theme in this section. Since the teaching may start from the Bible, from theology, from pupils' problems or from worship, questions will be set which can be dealt with from any of these approaches.

#### THEME I—CHRISTIANS AT WORSHIP AND PRAYER

In the New Testament

- Prayer: St. Luke 5, 16 and 9, 18—Our Lord Praying.  
St. Luke 18, 9-14—Pharisee and Publican.  
St. Matthew 6, 5-6—Sincerity.  
St. Mark 11, 23-4—Faith.  
The Lord's Prayer.

Worship: Places—Colossians 4, 15. Philemon 2. Acts 18, 7 and 19, 9.

Pattern—Acts 6, 1-6; 20. I Corinthians 11, 23-26; 16, 1-3; Romans 6, 3-4.

Unity—I Corinthians 1, 10-13; 12, 12-13; 13. John 17, 20-23.

Why we pray. The power of prayer. Why go to church?

(a) Patterns of worship. Some patterns of worship illustrated from the worship of the main Christian churches: Praise; Confession; Thanksgiving; Affirmation of faith; Instruction or Sermon; Fellowship or Communion; Petition; Oblation or Offering.

(b) The nature of worship—the outward and corporate expression by Christians of their faith in God.

(c) Days set apart for worship—the use of Sunday.

(d) Places set apart for worship—churches and chapels.

(e) Those set apart to lead in worship of God, e.g. priests, ministers (clerical and lay), choir, organist, officers.

## THEME II—THE BEGINNING OF THE CHRISTIAN CHURCH AND ITS MISSIONARY ACTIVITY

(1) The birth of the Church. Matthew 28, 16-20. Acts 1 and 2.

(2) To trace the spread of the Church in New Testament times and to examine the problems that the first missionaries faced.

(a) Palestine. The work of Philip, Peter and Cornelius. The Council of Jerusalem. The Church faces the problem of race, colour, class. Acts 8, 10 and 15.

(b) Paul's commissioning or ordination. Beginning of missionary work. Guidance of Paul by the Holy Spirit. Acts 13, especially 1-3; 16, 6-10; Ephesians 3.

(c) Asia—Paul at Ephesus. Christianity in conflict with pagan religion. Evil spirits and false gods. Acts 19, Ephesians 4, 17-6, 24.

(d) Europe—Paul at Philippi. Persecution of Christians. The Christian attitude towards the state. Acts 16. Philippians 1; 12-30. Romans 13.

(e) Europe—Paul at Corinth. Christian standards in contrast with worldly ones. Worldly wisdom and God's wisdom. Acts 18. I Corinthians 1, 17-31; 5, 6 and 8.

(3) The changing pattern of missionary activity today.

(a) Study the work of one missionary society or one modern missionary and examine the problems faced, and, where possible, relate them to those of the early church, e.g. problem of race, other faiths, persecution, difference of culture, service to the newly emergent countries, changing patterns of missionary organisations to meet new situations, the transition from mission to church.

(b) The Ecumenical movement in the missionary field—the Department of World Mission and Evangelism.

(c) Modern means of spreading the Christian faith, e.g. books S.P.C.K., U.S.C.L., B. & F. B.S., radio and television programmes.

## THEME III—THE ORGANISATION OF THE CHRISTIAN CHURCH IN ENGLAND

### *The Fellowship of Believers*

The crowds at Pentecost—Acts 2, 1-47.

Community of Goods—Acts 4, 32-37.

Admission of Gentiles—Acts 10, 11, 1-18. Galatians 2, 7-10.

Unity of the Church—I Corinthians 6, 12-14. Galatians 3, 28.

Collection for the Church in Jerusalem—Acts 11, 27. Romans 15, 25-26.

### *The Ministry of the Church*

The Apostles—Matthew 10, 2-4. Acts 1, 15-26.

The Deacons—Acts 6, 1-6.

Beginning of Missionary Work—Acts 13, 1-3.

The First Council—Acts 15.

Elders—Acts 20, 17.

Deaconesses—Romans 16, 1-2.

### *The Church in the Twentieth Century*

#### (1) *The Church of England*

The threefold ministry.

Territorial organisation and government.

The functions of the laity.

#### (2) *The Gathered Churches*

Congregationalists, Baptists and some Independent Churches, Matthew 18, 20.

Priesthood of all believers.

Sovereignty of local Church under Christ.

Ministers and deacons.

Area and national Unions.

#### (3) *The Methodist Church*

Ministers and local preachers.

Conference.

Classes and circuits.

#### (4) *The Roman Catholic Church*

The Papacy.

The sevenfold ministry.

#### (5) *Other worshipping Christian Communities*

Those established in the neighbourhood of the School especially. The Movement towards unity. The British Council of Churches.

## THEME IV—THE CHRISTIAN AND THE WORLD AROUND HIM

### (1) *The New Testament*

Candidates will be expected to have studied *one* of the three churches (Corinth, Ephesus or Philippi) for which we have evidence in the Acts and the Letters of St. Paul. The teacher may find the following passages helpful:

*Corinth*—Acts 18. I Corinthians 1, 6, 7, 8, 11, 17-34; 12, 13, 15. II Corinthians 5, 8, 11, 16-33. Candidates will be asked questions on the problems and St. Paul's advice.

*Ephesus*—Acts 18, 19, 20. Ephesians 2, 13-22; 4, 5, 6.

*Philippi*—Acts 16, 6-12, 12-20; 20, 1-6. Philippians 1-4 (especially the broad meaning of 1, 1-2; 2, 5-11; 2, 19-30; 3, 4-20).

### (2) *Today*

A wide choice of question will give opportunity to show how Christian principles may be applied to life in the twentieth century. The headings are meant not so much to raise "problems" as to suggest positive ways of treating issues which are important to the adolescent and which will be significant in the future.

- (a) Daily life.
  - (i) at home—family life, parents and children, contribution to home.
  - (ii) going to work—choosing a job (vocation), a good day's work, loyalties, wages, trades unions, disputes, language and conversation.
  - (iii) going out—use of leisure, friendships, use of money, the opposite sex (sex, marriage, divorce), right choices, some problems of mass-media, public property, the countryside.
- (b) the world in which we live
  - (i) group relationships—rich and poor, colour bar, Jew and Gentile, class relationships, toleration.
  - (ii) poverty and hunger in the world—(population and food problems), Christian Aid.
  - (iii) the ordering of society—law and order, crime and punishment, the use of force, problems arising from nuclear weapons.

THEME V—SOME PROBLEMS OF CHRISTIAN BELIEF

(1) *The nature of Belief*

Methods of arriving at truth (historical, scientific, artistic, religious inspiration).  
 How belief is acquired (study of endemic Christian thought, worship and witness, personal experience and conviction).

The origins, nature and authority of the Bible.

Belief involves conducts.

(2) *Some objections to Christian belief and the Christian answer*

Difficulties about miracles and the supernatural, and the ideas of heaven and hell.  
 Problems raised by scientific humanism and Marxism.

The challenge of other faiths.

(3) *Sin and Suffering*

Causes of sufferings, e.g. natural events, personal sin, the sin of society, the stand for righteousness.

Attitude to suffering in the Old Testament (particular attention to the suffering servant and the Book of Job).

The attitude of Christ to suffering (dealt with under the headings of types of suffering above).

Some examples of the experience of suffering and persecution and of the ministry of the suffering (moral responsibility).

ALTERNATIVE FOR ANGLICAN CANDIDATES

B. *The Faith and Practice of the Church of England*

NOTE—The text upon which questions will be based is that of the Book of Common Prayer (1662).

(1) *The Teaching of the Church of England* (as outlined in the Catechism).

(2) *The Order of Confirmation*

(3) *The Holy Communion*

(4) *Evening Prayer* (as an example of the Choir offices)

(5) *The Church of England:*

(a) Geography—The Parish, the Diocese, the Province, the Anglican Communion.

(b) The Clergy—Bishops, Priests and Deacons.

(c) The Laity—Their rights and duties.

(d) The Church's Year—Candidates will be expected to know the arrangement of the seasons and the purpose of the Propers, but detailed questions will be confined to the Red Letter Days.

(e) Buildings—The Parish Church, the Cathedral, and their furnishings.

(6) *Memory Work:*

Candidates will be given an opportunity of reproducing a passage from among the following, and answering questions based on the passage written:

*In the Catechism:*

The Apostles Creed. The Lord's Prayer. The Ten Commandments.

*In the Holy Communion:*

The Collect for Purity. The General Confession. The Prayer of Humble Access. The Gloria.

*In Evening Prayer:*

The Third Collect for Evening Prayer. The Magnificat. The Prayer of St. Chrysostom.

## ALTERNATIVE FOR JEWISH CANDIDATES

### C. *The Faith and Practice of Judaism*

The Torah as our inheritance. The Written and the Oral Law and of what they consist. The Bible—its constituent parts and the nature of the different books. The teaching of the Prophets.

Our Beliefs—Unity and fatherhood of God, the choice of Israel, God's Justice, the golden age of the Messiah, the resurrection of the dead.

Duties in daily life especially as to truth, honesty, purity, considerateness, charity, repentance, devotion in prayer, diligence in work and study, loyalty to the state.

Our distinctive observances. Outward signs—Tsitsith, Mezuzah, Tephillin, Milah. Dietary Laws.

The Calendar—Sabbath and Holy Days, Special Sabbaths, the minor fasts and their significance.

The Synagogue and its ritual. Congregational and private prayers. The arrangement of the Prayer Book. The main features of the different Services.

## SOCIAL STUDIES

The aim of the syllabus is to provide a practical course of study to help young people take their place in a changing, complex and highly industrialised society. It is based on the individual and attempts to give clear guidance on how the young individual can come to terms with the adult society of today and of tomorrow.

The syllabus is devised in such a way that teachers have the utmost freedom to make such use of visits, outside speakers, television, radio and any other media which may seem desirable.

The order of the syllabus does not necessarily indicate the best order of presentation. It is basically "concentric", beginning with the individual and working outward towards the world at large. Each topic is somehow, in greater or lesser degree, related to every other topic and this should help to give coherence to the course.

The syllabus lends itself in many sections to the development of the critical faculty and provides, by way of comparison, yardsticks by which a balanced judgement can be formed. It is hoped that the syllabus will also help young people to develop a responsible attitude towards society.

The examination will be in three sections :

- I. WRITTEN—2 hours
- II. PROJECT
- III. ORAL

## THE SYLLABUS

### A. *The Individual and Society*

#### (a) *The individual*

What am I? What makes me what I am? Man, the defenceless animal; fears, prejudice, instinct, inborn characteristics, survival. The need to live and co-operate with others.

#### (b) *Close relationships*

The family today; comparison with another type of family (e.g. abroad or in history). The changing role of men and women in society. Friendships, relationships with the other sex, marriage. Morals, rules of conduct within the family, loyalty, responsibility. The old and the very young.

#### (c) *Group relationships*

Tribe, clan, gang, club, neighbours; why we like to “belong”; individuality and conformity; mass thinking and “mob law”; class, snobbery, status symbols. Diversity of race, nation, language and religion. Customs, rules, courtesy, tradition. Systems of educations—our own and others.

#### (d) *Work*

Why work? A job for life? Technological changes in production method and its consequences on the individual and on society. The Youth Employment Service, starting work. Workfellows. Employer-employee relationships. Working conditions today and yesterday. Trade Unions and Employers' Associations. Unemployment, development areas. Mobility of labour, retaining schemes. National Health and Pensions.

#### (e) *The larger society*

- (i) *Local*—Local government—the Town Hall. Local elections. Local services: schools, police, libraries, etc. Community and voluntary service.
- (ii) *State*—Central government—our parliamentary system and how it works, alternative methods of government. Law and order—the legal system and why we have laws. The welfare state, welfare services. Taxation and other methods of raising money to pay for services.
- (iii) *World*—World problems; population, famine, under-development. Food supplies. World trade. International co-operation. Our European neighbours. Problems of independence. Voluntary and other world organisations, e.g.—U.N.O., U.N.E.S.C.O., V.S.O.

### B. *The Way Ahead*

#### (f) *Increasing prosperity*

How the proper use of money can enrich our lives—money the servant, not the master. Its importance as a claim to share in the nation's economy. Money as a source of social power—for good or evil. The need for planning and how to avoid waste by good management. Comparison of price, quality and value. The

critical evaluation of advertising, publicity and mass media. Consumer safeguards—British Standards Institute, Consumers Association, “Good House-keeping”. A simple treatment of the law relating to the consumer; contracts, Common Law rights and “guarantees”. The meaning of credit in the modern world; the responsible use of credit, with special reference to Hire Purchase. Hire Purchase and the law. Loans; borrowing from moneylenders, banks, insurance companies, building societies. Saving and investing money. Buying a house.

(g) *Increasing leisure*

The impact of science at work and in the home; labour saving devices. Less work, more money. Active and passive leisure. Challenge as the antidote to boredom.

Better living. Health—physical, mental and moral: individual and community responsibility. Accidents in the home. Design and its importance in the home and in dress. Good food. Entertainment, hobbies and pastimes, “Do-it-yourself”. Recreational and educational evening classes. Clubs, societies and social service.

(h) *The environment*

Better homes—design and architecture, town and country planning. Conserving natural amenities, National Parks. Noise abatement, air and river pollution. Transport problems, car and road design.

(i) *The shrinking world*

Transport and travel—widening horizons. Life in other countries, respecting other ways of life. How to go abroad. Migration. Communications and their use; the social impact of newspapers, magazines, radio and television on human understanding.

## II. Project

A pupil should have as much freedom as possible, under the guidance of the teacher, to choose his own project, so long as it is in some way related to the syllabus. The assessment of the projects will be done by the teachers of the schools presenting candidates.

As an alternative to the project, candidates may:

- (i) present proof of consistent voluntary service to any responsible organisation of not less than an average of one hour per week over a period of one term within the year prior to taking the examination, *together with a written report on such service.*

OR

- (ii) present proof of training in some form of social work, e.g. St. John's First Aid, R.L.S.S. Bronze Medallion, certain Scout or Guide Proficiency Badges connected with social work, Duke of Edinburgh's Award, Adventure Courses, *together with a written report on the nature of the work.* The taking of these awards and certificates to be within the year prior to taking the examination.

## III. Oral

The oral examination will be conducted by the teacher presenting the candidates for examination. It will last about 10 minutes and will be upon the material of the syllabus or about the project. The Board will issue instructions each year, so that consistency will be preserved between the schools.

## MARKING AND ASSESSING

### I. WRITTEN PAPER: 70%

The written paper will be marked externally.

### II. PROJECT: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A copy of this list on the form provided should be sent to the Secretary of the Board on or before 1st April in the year in which the examination is to be taken. (It is suggested that Projects be collected from the candidates by the teacher about 1st March.)

The Secretary will then inform the school of the candidates whose Projects are to be sent to the Board's Assessor. These should be despatched immediately.

The Secretary should be informed if it is not possible to send through the post any of the Projects called for. He may require the school to send another Project to the Assessor. Alternatively, the Board may decide to send an Assessor to the school.

The Assessor will not alter the order of merit but he may change the marks awarded in the interests of standardisation. *The Board, however, reserves the right to scrutinise the work of all candidates and to alter the order of merit.* Projects should be preserved in the school until the end of the Summer Term.

### III. ORAL: 10%

The Oral Examination will be conducted in accordance with the Notes of Guidance by the teacher who has prepared the candidates for the examinations. The examination of all candidates will be tape-recorded. A list of candidates in order of merit together with the marks awarded should be sent with the tape recording to the Board's Assessor.

The Board's Assessor will not alter the order of merit but may change the marks awarded in the interests of standardisation. *The Board, however, reserves the right to alter the order of merit.*

If this is done, the work of all candidates will be considered and the Chief Examiner's decision in this matter will be final.

## THE ORAL EXAMINATION

### *Notes of Guidance to Teachers*

#### *Conduct of the examination*

A teacher in the school will assess the candidates, and it would be advantageous if the teacher who has taught the candidates regularly conducted the oral examination.

#### *Tape Recording*

The oral examination of *all* candidates will be tape-recorded by the teacher who can then play back the tape in a different sequence of candidates before giving his final order of marks. This will help correct inconsistencies of marking which may take place during a protracted period of examining.

Tape-recording rehearsals should be conducted to reduce any possible inhibition at the actual time of examination.

The tape-recording of the whole examination should be sent to the offices of the Board.

The work of each candidate should be preceded by the following:

- (a) school,
- (b) full name,
- (c) examination number.

E.g., Catford School, John Albert Smith, number 231.

*N.B.*—This information should be spoken by the teacher.

All teachers should be familiar with the technique of using a tape-recorder, and before the examination should ensure that the machine is in working order.

Tapes should be recorded at a speed of  $3\frac{3}{4}$ , and if a 4-track recorder is used only the outer tracks (1 and 4) should be employed.

The room chosen for the examination should be acoustically suitable and as free as possible from external noises.

The oral examination is designed to give all candidates, including the less literate, a chance to score marks. Questions will be put on a topic chosen by the candidate and on his own work in the project folder.

### *The Topic*

Each candidate will be given a list of ten topics ten minutes before the actual oral examination. From this list he will choose *one* topic. He will then be questioned for five minutes on his chosen topic and for a further five minutes on his project.

The topics chosen have been selected from the content of the Social Studies syllabus as having some immediate relevance to the candidate's local environment. Questions should be designed to test the candidate's understanding and local knowledge of the topic chosen. *The candidate must not choose a topic which has formed the basis of his project.*

### *The Project*

The work in the project should be used as a starting point for a test of the candidate's method of work and of his understanding of the completed project.

*The following instructions should be given to the candidate:*

### *The Oral Examination*

From the list below choose one topic. You must not choose a topic which has formed the basis of your project folder. You have ten minutes to make your choice and think about it.

All the topics refer to the neighbourhood of your own school. You will be questioned on your chosen topic for about five minutes. You will then be asked to discuss for a further five minutes, the work contained in your project folder.

### *Topics—applicable to locality and conditions locally*

- (1) Opportunities for education—our school and local schools.
- (2) Youth Organisations—Scout and Guide Movements, Youth Clubs.
- (3) Voluntary social service—local hospitals and doctors; "good neighbours", helping old people; Freedom from Hunger Campaign and the work of Oxfam in the area.
- (4) Services available through the Welfare State.
- (5) Industry and work, the Youth Employment Service, unemployment, opportunities for jobs or careers in the area.
- (6) Use of leisure—cinemas and theatres or libraries and museums or church and chapel or playgrounds, parks and open spaces.
- (7) Local Government.
- (8) Highways and transport—road safety, transport problems.

(9) Housing and new building development—better homes, new housing estates and developments, shops and supermarkets.

(10) The Press—our local newspaper.

*General method of approach to the oral*

It is desirable that the candidate should be “led up” to the item of information required rather than that questions be *directly* posed. The Examiner (teacher) might bear in mind, that correct information may be given, though not necessarily phrased in manner outlined in the examples given; the sequence too may vary. The best method of approach might well be that used by the teacher in his own classroom. The teacher should be conversational and so put the child at ease. Whilst it may be desirable to elicit information from the viewpoint of the child’s own experience and environment, care should be taken against the indiscretions of too personal an approach in certain topics.

*Some examples from above list of topics*

TOPIC—SERVICES AVAILABLE THROUGH THE WELFARE STATE

*Item of information required*

Two ways in which the Government tries to safeguard people against want.

*Suggested approach:*

- (a) E.g. for Family Allowances—do you have sisters and brothers? How many of your friends have none? Does being an only child mean more advantages? More spending money? How many of your friends belong to large families? Point out strain on one (or two) incomes in very large families—how can the situation be assisted by outside organisations?
- (b) E.g. for National Assistance—what is the biggest threat to the survival of a very large family? Expect answer—Illness. What would happen if such a father, employed in a dangerous job, suffered accident preventing him from working? Could his family expect outside help?

TOPIC—INDUSTRY AND WORK

*Item of information required*

Two reasons why we go to work:

- for answers (a) to earn a living for ourselves and family,
- (b) to “sell” to the community a marketable product—our services.

*Suggested approach:*

What do you hope to do after leaving school? What will the chief difference be?—expect answer—“Wages”. What do you usually try to do in your final year at school?—“Extra qualifications”—“Good report”, etc. “Why?” Hope for suggestion from candidate of gradation of jobs available—why?—“More money” probable answer. Under what circumstances at work will you be likely to get more money?—hope for answer—“Because I have more to offer and my services will be more valuable to an employer”.

TOPIC—HIGHWAYS AND TRANSPORT

*Item of information required*

Assessment of relative advantages of road and rail travel on suggested journey from the candidate’s school.

*Suggested approach:*

Selection of example by teacher of visit to be made from school to given place of interest.

Appropriate to the region, questions to be designed to elicit knowledge of the different methods of transport involved, bearing in mind factors of:

convenience, time, cost, alternative routes, and suggestions for possible improvements.

TOPIC—HOUSING AND BUILDING DEVELOPMENT

*Item of information required*

Names of two recent Government Acts attempting to curb urban spread and provide adequate space for recreation in densely populated cities, and two methods of achievement.

*Suggested approach:*

People live very closely together in your district. Where do you and your family go for outdoor recreation, picnics etc.? Epping Forest, for example. How is it that this area remains always at Londoners' disposal? What other areas exist similarly for people in other parts of London?—parks, recreation grounds. And in suburbs? Hope for something approaching "*Green Belt*"—if actual words not used. Who decides that these spaces shall exist and remain? *Town and Country Planning Act*. What have been the main causes over the last few decades of over-crowding in our area? Expect answers—"War"—"Drift of population to S.E.", etc. Has there been any large-scale movement of families away from this or any other nearby area? Where?—(Harlow or Basildon in this case). What is special about these places? "*New Towns*." Why? Who provides this facility for habitation and work together? "*New Towns Act*."



SECTION 8

SYLLABUSES  
FOR  
MATHEMATICS  
SCIENCE (BIOLOGY,  
CHEMISTRY, PHYSICS,  
NATURAL SCIENCE)

# MATHEMATICS

I. WRITTEN PAPER—2 hours

II. WRITTEN PAPER—2 hours

There will be two separate papers, each of 2 hours. All candidates will have a choice of questions. The result will be based on the aggregate of marks for both papers. *Every candidate must be provided with a ruler graduated in inches and tenths of an inch and in centimetres and millimetres, a set square, a protractor, compasses, and a hard pencil; also a standard book of four-figure mathematical tables. Slide rules may be used.*

The aims of the syllabus may be expressed as being more concerned with principles than processes, more with ability to apply basic calculations appropriately and accurately to realistic situations than to carry out a great variety of complicated and artificial computations.

The syllabus has been designed to suit the mathematical studies of candidates of widely differing aptitudes and outlook. New topics are included but the treatment is fundamental, seeking the mathematical essence that tends to be lost or obscured in the formalised traditional approach.

The order is not intended to suggest or impose a sequence of treatment as there are many inter-connections between the various sections. Section (D) is included to meet the wishes of some schools.

*Candidates who have not been prepared for Section (D) will be able to obtain full marks.*

## SECTION A—NOTATION AND BASIC PROCESSES

Fundamental ideas of notation and use of basic processes involving:

- (a) whole numbers (including other scales such as the binary scale), fractions, decimals, percentages,
- (b) algebraic expressions,
- (c) quantities, British and metric, as met with in realistic situations.

*Candidates will be expected to be able to give reasonable estimates of answers to simple calculations.*

## SECTION B—NUMERICAL RELATIONSHIPS

Collection and treatment of statistical data, including the use of mean, median and mode; scope and limitation of simple statistical methods. Graphs—representation of statistics and of simple algebraic relationships, solution of equations and treatment of inequalities by graphical methods. Proportional relationships. Understanding and use of tables of squares, square roots, reciprocals, logarithms and trigonometric ratios. Construction, interpretation and use of formulae. Simple linear questions with one or two unknowns; use of such equations in solving problems. Odd, even and prime numbers; simple tests of divisibility based on properties of numbers and the notational systems.

## SECTION C—SPATIAL RELATIONSHIPS

Similarity. Symmetry. Angles, bearings, parallel lines. The circumference of the circle. The sphere and its circles, and the lines, planes and angles associated with solid figures. The nets of simple regular polyhedra. Regular figures—their circumcircles and angles. The exterior and interior angles of closed figures. Loci, tangents and envelopes. Angle properties of circles. Scale drawing; simple surveying and navigation. Application of Pythagoras' theorem. Use of sine, cosine and tangent in right-angled triangles. Area of triangle, rectangle and circle; volume of prism, pyramid, cylinder, cone and sphere.

## SECTION D—SETS AND OPERATIONS

Modulo Arithmetic. Elementary concepts of sets—to include subsets, universal set, empty set. Venn diagrams and notation—number of elements in a set.

Inclusion, union, intersection, complement. Notation— $\{ \}$ ,  $\subset$ ,  $\cap$ ,  $\cup$ ,  $\emptyset$ ,  $\mathcal{E}$  or  $U$ ,  $\bar{A}$ ,  $n(A)$ . Symmetry by reflection and rotation. Mapping—one set on to another, including points on the plane and graphs. Properties of operations: commutative, associative and distributive properties. Closure, Identity, Inverse operations. Counter examples should be considered. Interpretation and use of tables of operations. Inequalities (a) application to linear programming by graphical methods, (b) estimation (limit of accuracy).

## SCIENCE

Whilst recognising the several reasons leading to a desire for a qualification in a single branch of science, the syllabus reflects the need at school level for essential knowledge lying outside that branch.

Separate examinations will be held in the following:

BIOLOGY  
CHEMISTRY  
PHYSICS  
NATURAL SCIENCE

Candidates may enter for one or more of these as separate subjects and may be awarded a separate grading for each. All candidates offering a science subject, however, must take a common preliminary examination in basic science. There will also be a practical examination in the subject offered.

Thus the examination will be in three sections:

I. BASIC SCIENCE (written)—1 hour

Additionally for each subject offered:

II. (written)—2 hours  
III. (practical)

### I. Basic Science

The questions set will be simple and straightforward in character, designed to test a candidate's grasp of the essential ideas usually taught during the early years of a school science course, where a degree of integration of the separate branches of school science is envisaged. Single questions may, therefore, embrace more than one field of science study.

The marks obtained by a candidate on this paper will directly contribute to the total marks for the subject examination.

The syllabus for the Basic Science paper is arranged under the familiar headings of Biology, Chemistry and Physics, for ease of reference by schools in planning their own integrated patterns of work.

#### BIOLOGY

It is hoped that reference will be made to the work of some of the great biologists, including those whose contributions were to medical science. In this way, and through laboratory and field work, candidates should be acquainted with some of the simple elements of scientific method, e.g. controlled experiments, classification and normal variation. No attempt has been made to state set requirements in field studies, but it is expected that all candidates will have some experience of observing living things wherever possible under natural conditions.

- (a) Broad outlines of the structure, functioning and development of mammals with special reference to man, including: simple treatment of nutrition, respiration, the circulation and functioning of the blood, excretion, temperature regulation, the role of skeleton and muscle, nervous system, sense organs, hormones, reproduction and growth.
- (b) Broad outlines of structure, functioning and life history of a flowering plant, including: respiration, photosynthesis, transpiration, reproduction by seeds.
- (c) Some aspects of the inter-relation of plants and animals, including man. Food chains. Simple study of fungi and bacteria with special reference to their importance to man. The life history of one harmful and one beneficial insect. The importance of control of harmful organisms. Food preservation.
- (d) Cells as biological units as illustrated by cells from the lining of the human mouth and from onion skin.
- (e) The story of evolution resulting from a practical study of a few main groups of animals and plants.

## CHEMISTRY

Reference to atoms, molecules, protons and electrons should be made at an early stage. Representation of chemical reactions by word equations rather than by symbolic equations will not be penalised.

### (a) *Air:*

Composition of air (oxygen, nitrogen, water vapour, carbon dioxide, the inert gases). Burning and rusting; slow and rapid combustion. Work of Priestley and Lavoisier; increase of weight on burning and its interpretation. Conditions of rusting and rust-prevention. The bunsen burner; its flames and their nature. Laboratory preparation of oxygen by action of hydrogen peroxide on manganese dioxide; catalysis; properties of oxygen; reference to manufacture of oxygen from liquid air; common oxides.

### (b) *Hydrogen:*

Production: (i) by electrolysis of acidulated water, (ii) by passing steam over heated magnesium, (iii) by the action of potassium, sodium and calcium on water. Laboratory preparation, properties and uses of hydrogen. The synthesis of water by burning hydrogen in air as evidence of the composition of water.

### (c) *Carbon dioxide:*

Laboratory preparation; its properties and uses. Common forms of calcium carbonate. Burning of common fuels to produce carbon dioxide, water and energy; analogy with foods; carbon cycle.

### (d) *Water:*

Solvent properties; solubility and its variation with temperature. Methods of separation, including filtration, evaporation, distillation, and crystallisation. Dissolved substances in natural waters. Hardness of water (elementary treatment); its removal by boiling and use of water softeners (without chemical detail). The town water supply.

### (e) *Acids:*

Characteristic properties (excluding oxidising properties of nitric acid). Replacement of hydrogen by metals to form salts; neutralisation; indicators.

### (f) *Common metals and alloys:*

Use in everyday life and their resistance to corrosion.

## PHYSICS

Emphasis will be placed on a sound understanding of physical principles, although formal statements will not be required. Candidates should be familiar with simple experimental work to illustrate these principles, and with well known everyday applications. Questions requiring calculations will not be set, but candidates will be expected to be familiar with the scientific and practical units normally associated with the topics dealt with.

### (a) *Molecular nature of material substances:*

Behaviour of solids, liquids and gases involving notions of cohesion and density; and in the case of solids—hardness, malleability, ductility, elasticity; liquids—viscosity, surface tension; gases—diffusion, compressibility.

### (b) *Forces and their effects on matter:*

- (i) Force as a cause of movement; pushing and pulling, fall under gravity. Weight and weightlessness.
- (ii) Forces in balance including reaction: The lever. Centre of gravity in relation to balance. Detecting and comparing forces by spring, beam and lever balances. Other forces: magnetic, electrostatic, molecular (adhesion and surface tension), to be treated also from the point of view of movement and balance. In dealing with magnetic forces a simple treatment of magnetic materials and their properties, particularly as shown by soft iron compared with steel, will be expected.
- (iii) Forces at work: Starting and stopping (inertia). Friction and lubrication. Atmospheric pressure; simple and aneroid barometers. Pressure due to liquid columns; upthrust and flotation. Movement in space. A simple outline of the solar system; the orbiting of satellites.

### (c) *Forms of energy:*

Experiences of energy transformation in respect of mechanical energy (kinetic and potential), chemical energy, heat, light, sound and electricity.

Treatment of the above to include the following topics: Expansion of solids, liquids and gases, treated comparatively. Temperature; Celcius (Centigrade) and Fahrenheit scales put side by side; clinical thermometer. Change of state; simple descriptive treatment of melting, boiling, cooling by evaporation, atmospheric condensation. Electric current as manifested by its heating, magnetic and chemical effects. Resistance and the heating effect of a current. Fuses, earth connections and their place in the domestic circuit. The electric light bulb. The electromagnet. Structure and use of the dry type Leclanche cell and the lead acid accumulator.

### (d) *Transmission of energy:*

Conduction of heat and electricity. Convection of heat. Propagation of light in straight lines; shadows and eclipses; reflection at polished and matt surfaces; simple applications of single curved mirror and lenses; the composition of white light. Propagation of heat; reflection; absorption. Vacuum flask. Propagation and reflection of radio waves. Propagation of sound in air and water; reflection (echoes); pitch.

## BIOLOGY

A wide choice of questions will be given. Questions will cover the subject matter of the Biology section of the Basic Science syllabus treated more fully, together with the following topics:

(1) More detailed human and mammalian physiology. Candidates will be expected to have seen a simple dissection of a mammal.

(a) *Nutrition*

Classes of food; common sources and uses of food. Food tests. A balanced diet and a simple conception of calories. Elements present in carbohydrates, fats and proteins. Simple experiments. Alimentary canal including teeth, and the functions of salivary glands, liver and pancreas. The assimilation of digested food. Action of enzymes treated experimentally.

(b) *Respiration*

A form of energy release by oxidation. Breathing mechanism and organs. Internal, or tissue respiration.

(c) *Blood system*

Functions of blood and outline of the double circulation. A knowledge of changes in composition of blood in lungs, kidney and liver. Characteristics of arteries, veins and capillaries. Heart in more detail; dissection of sheep or ox heart.

(d) *Elimination*

(i) Defaecation—a process distinct from excretion, (ii) Excretion.

Need for elimination of metabolic waste. The kidneys, ureters, bladder and urethra; the kidney as a kind of filter. Excretion of carbon dioxide by the lungs. The skin as a help in excretion. The gross structure of the kidney. The structure and functions of the skin.

(e) *The skeleton*

Function of the skeleton as a whole. Outline of structure and function of the mammalian skeleton. Names of main bones only. Joints: ball and socket, hinge, gliding and immoveable. Structure of a typical joint.

(f) *Muscles*

Voluntary, involuntary and cardiac. Function. One simple example of action of muscles on bone. Distinction between tendons and ligaments.

(g) *Nervous system*

The brain and spinal cord; cranial and spinal nerves in outline; functions of the brain and spinal cord. A simple description of a voluntary action; meaning of reflex action. Simple treatment of sense organs of sight, hearing, taste, smell and touch. Defects of vision (long sight and short sight) and their correction.

(h) *Ductless glands*

Position in body and simple accounts of the functions of the thyroid, adrenals, pituitary, islets of Langerhans and the sex glands.

(i) *Reproduction*

Simple description of sex organs. Fertilisation. Implantation of embryo; its protection and nourishment; functions of placenta and umbilical cord; birth and parental care.

(2) Further study of a typical flowering plant. Further treatment of plant structure, including simple anatomy of stem root and leaf.

(a) *Plant nutrition*

Experimental treatment of photosynthesis, osmosis, diffusion and transpiration. Rise of water in stems. Energy relations of plants and animals. Simple knowledge of the building up of fats and proteins by plants. Use of foods by plants. Food storage in such organs as potato, onion, carrot and in wheat grain. Tests for food reserves in plants' food storage organs. Water culture.

(b) *Reproduction*

(i) Sexual—Structure and functions of parts of flowers of buttercup and a grass. Pollination by wind and insects. Fertilisation and results (detail of fertilisation not required). Differences between fruits and seeds. Dispersal of fruits and seeds by wind, animals, man and self-dispersal. Simple study of fruits. Germination. Structure of broad bean or pea; conditions necessary for germination and experiments on stages of germination. Structure and germination of wheat grain and sycamore seed.

(ii) Asexual—Structure and growth cycle of a tuber, bulb, runner and corm.

(c) *Perennation*

Meanings and examples of annuals, biennials, perennials. Perennials: herbaceous and woody. Leaf fall. Structure and development of a horse chestnut twig. Characteristic features of one type of deciduous tree, and one type of evergreen or coniferous tree.

(d) *The soil*

Formation of soil and its composition. Characteristics of sandy, clay, and chalk soils, loams and humus, treated experimentally. Soil fertility. Importance of earthworms, manures, and fertilisers; rotation of crops.

(e) *Plant responses*

Experimental treatment of geotropism, phototropism, and hydrotropism.

(3) *Maintenance of health and fight against disease*—Emphasis on positive attitude to health. Some account of research workers and their discoveries: Pasteur, Lister, Jenner and Fleming. Causes of disease. Bacteria-nutrition: parasitic and saprophytic. Reproduction and dormancy. Useful bacteria. Carbon and nitrogen cycles. Sewage purification. Pathogenic bacteria; some common diseases caused by bacteria. Action of white corpuscles and antibodies; natural immunity and artificial immunity by inoculation. Viruses, treated simply. Preservation of food and pasteurisation of milk. External features and life history of the tape worm. The life history of the house fly. Importance of good cooking and cleanliness. Life history of the mosquito; control of malaria. Exercise, rest and sleep. Clean water supply. Public health service. Personal and social hygiene.

(4) *Nature and nurture*—The basic notions, simply illustrated, that the characteristics of an individual are determined in varying degrees both by heredity and environment. A simple approach to some examples of inheritance in man and his domestic plants and animals. Mendel's work; dominant and recessive characters. Genes and chromosomes. A simple introduction to the notions of selection and hybridisation in plant and animal breeding.

(5) *Interdependence*—Interdependence of plants and animals. Some account of fundamental difference between the two groups.

(6) *Classification*—A general treatment of the major groups of plants and animals.

(7) *Observation of living organisms*—Animal keeping and plant growing.

(8) *Evolution*—A simple treatment of Darwin's and Lamarck's theories of evolution. Evidence for evolution. Simple explanation of natural selection. Significance of variation and mutation.

(9) *Field studies*—To include at least one type of environment which may be a park, garden, pond, aquarium, hedgerow or waste ground. Study of seasonal changes in plants and animals.

*Practical examination*—A simple practical test will be arranged in the school laboratory.

## CHEMISTRY

It is intended that the syllabus should illustrate the general ideas involved in:

- (a) the extraction of pure materials from natural sources using solution, filtration, distillation, sublimation, crystallisation, chromatography, reduction processes and electrolysis;
- (b) a simple notion of atomic structure and its bearing on the classification of the elements in the periodic table;
- (c) the orderly arrangement of atoms and molecules and its effect on properties such as tensile strength, hardness, malleability, ductility and allotropy;
- (d) a simple notion of the way atoms are bound together; ion-formation and electron-sharing, resulting in electrovalent and covalent compounds with their characteristic properties;
- (e) the activity series of the elements;
- (f) the use of symbols, formulae and equations.

Candidates will be expected to have covered the entire syllabus, but a wide choice of questions will be given. Questions will cover the subject matter of the Chemistry section of the Basic Science syllabus together with,

### (i) NON-METALS

*Carbon*—Allotropic forms, their structure and properties. The properties of carbon monoxide and its dangers; its presence in coal gas, water gas and producer gas.

*Nitrogen*—Importance of nitrogen compounds in nature. Nitrogen cycle. Synthesis of ammonia from nitrogen and hydrogen. Manufacture of nitric acid. Preparation, properties and uses of nitric acid. Preparation, properties and uses of ammonia, ammonium chloride, ammonium nitrate and ammonium sulphate.

*Silicon*—Occurrence in sand, clay and rocks. Glass.

*Sulphur*—Allotropic forms. Extraction by Frasch process. Manufacture of sulphuric acid by Contact process. Properties and uses of sulphuric acid.

*Chlorine*—Manufacture by electrolysis of sodium chloride. Preparation, properties and uses of chlorine. Sodium hypochlorite, bleaching powder and commercial bleaches, including hydrogen peroxide. Manufacture of hydrogen chloride by burning hydrogen in chlorine. Preparation properties and uses of hydrogen chloride and hydrochloric acid.

### (ii) METALS

General physical properties. Basic nature of metal oxides and hydroxides. General reactions of metals, their oxides and hydroxides with acids. Oxidation of metals. Reduction of oxides by hydrogen, carbon monoxide or carbon. Deposition of metals at the cathode during electrolysis.

The more important properties and uses of the following metals and of the compounds mentioned:

*Sodium*—(including extraction by electrolysis of sodium chloride). Sodium chloride. Sodium carbonate and bicarbonate. Sodium hydroxide. Sodium nitrate. Soap and detergents.

*Calcium*—Calcium oxide (including manufacture from limestone). Calcium hydroxide. Calcium sulphate. Cement and concrete. Causes of temporary and permanent hardness in water and its consequences. Removal of hardness by boiling, sodium carbonate or permutit.

*Copper*—(including purification by electrolysis). Cupric oxide, hydroxide, nitrate and sulphate.

*Iron*—The Blast Furnace. Steel. Ferrous sulphate. Oxides of iron.  
*Lead*—Oxides of lead. Lead chloride. White lead.  
*Magnesium*—Magnesium sulphate.  
Aluminium, Mercury, Tin and Zinc.  
Some common alloys, including British coinage, brass, duralumin and solder.

### (iii) SIMPLE ORGANIC CHEMISTRY

The ability of carbon to form compounds containing long chains or rings of atoms.

Preparation and properties of methane. Preparation and properties of ethylene.

The paraffins and olefins as examples of chain compounds (without reference to detailed chemistry).

Polyethylene (polythene) as an example of a commercial plastic. General nature of artificial fibres and plastics, with some reference to silicones.

Origins of petroleum. Fractionation of crude petroleum to give petrol, kerosene, oils, greases, waxes, etc. Uses of these fractions.

Origins of coal. Thermal decomposition, to give coal gas, coke, tar, ammonia and sulphur compounds.

Distillation of coal tar to produce benzene. Commercial uses of benzene. Other by-products.

Carbon compounds in living organisms. Photosynthesis. Sugars, starches, cellulose, proteins and fats. Fermentation of sugar to produce ethyl alcohol.

*Practical Examination.* A simple practical test will be arranged in the school laboratory.

## PHYSICS

The written examination question paper will be in two parts.

Part 1 will consist of questions requiring short answers, designed to test a greater depth of understanding of, and extension of certain ideas in the Physics section of the Basic Science syllabus. There will be no choice of questions in this part of the paper.

Part 2 of the paper will consist of more general questions based on certain suggested topics and requiring essay-type answers illustrated by diagrams.

The Part 1 section of the syllabus is arranged in paragraphs relating to the Physics section of the Basic Science syllabus. The Part 2 section of the syllabus should be taken as a guide to study rather than a rigid scheme of work. Questions will be so worded as to give scope to schools in devising their own individual approach to the subject matter in each topic. The aim of the questions will be to give candidates the opportunity to show their familiarity with the physical principles involved, with reference to practical applications in the laboratory, home and industry.

### PART 1

A study of the subject matter of the Physics section of the Basic Science syllabus in greater depth, with special reference to:

- (a) Density measurements for solids and liquids, using direct reading balances and measuring vessels. Simple calculations.
- (b) (i) Movement—instances of change of speed and direction. Acceleration, acceleration under gravity, and cornering.  
(ii) Simple calculations involving levers. Simple graphical problems involving three forces.  
(iii) Relative Density. Liquid manometers. Simple calculations on upthrust and flotation, including hydrometers.

- (c) Measurement of mechanical work. Simple calculations. Simple problems on linear expansion of solids. Conversion between Celsius (Centigrade) and Fahrenheit scales of temperature graphically and by calculation. Simple quantitative ideas of heat exchanges occurring during changes of temperature and state, and the units used. Simple calculations not involving mixtures. The practical units of current, resistance, potential difference and power. Simple calculations relating them. Use of ammeter and voltmeter in a simple circuit.

## PART 2

A study of not less than three, nor more than five of the following topics:

*Manpower and Horsepower*—Man-operated machines such as the lever, inclined plane, simple pulley systems and the screwjack. Advantages gained by their use and efficiency. Simple study of engines to replace man as prime movers by transforming energy, by reference to turbines, steam and internal combustion engines and electric motors. Application to machines by means of direct drives, belts and gears. These topics to bring out the basic concepts of work energy and power.

*The Energy of Motion*—Forms in which energy is stored. Linear motion, rotation and temperature rise. Simple study of linear motion and projectiles. Collision between elastic and inelastic bodies. The flywheel and its applications. Motion to and fro, as produced by the pendulum and camshaft. Temperature change due to rapid compression or expansion of a gas, as in a bicycle pump and refrigerator.

*Heat Energy and Motion*—The conservation of energy leading to the idea of the mechanical equivalent of heat. Comparative treatment of the main features and efficiency of steam engine, internal combustion engine, turbine and jet engine. Fairly detailed study of two-stroke and four-stroke petrol engines, with associated gears and transmission used in automobiles. The diesel engine. Rocket motors.

*Measuring and Controlling Heat Energy*—Various forms of temperature measuring device such as bi-metallic strip, thermoelectric and resistance thermometers. Maximum and minimum thermometers. Common temperature control devices. Domestic heating by town gas and electricity. How the householder pays for this energy. The domestic hot water system. The practical uses of thermal conductors, reflectors and insulators.

*Aids to Vision*—Simple measurements with prisms, spherical mirrors and thin lenses to illustrate the design and use of practical optical instruments such as the camera (including shutter speed and f number), telescopes, binoculars and microscopes. Simple treatment of ideas of magnification, resolution, aperture and the best position for the eye. The eye and defects of vision; correction by use of spectacles.

*The World of Colour*—Dispersion by a prism and/or diffraction grating. The spectrum. Simple explanation of colour vision; colour blindness. Mixing of coloured lights and pigments. Colour photography. Monochromatic light and colour filters. Simple ideas of the purpose and construction of achromatic lenses. Flame tests for the metallic elements leading to ideas of the various uses of the spectroscope.

*Sound and Music*—Simple treatment of waves and wave motion leading to ideas of loudness and pitch. Simple measurement of velocity of sound in free air. Production of sound from stretched strings and vibrating air columns, as in familiar musical instruments. The notes of the octave. Harmonics and beats giving character to a sound.

*Electricity and Magnetism Working Together*—Factors affecting the size of an induced current. Applications such as the transformer and simple dynamo. Alternating and direct current. Commutation. Advantages of the use of

alternating current and high voltage transmission. The motor effect; simple motors including one coil, two coil and polar motors. Direction rules for fields and currents in motors and generators.

*Electrical Devices and Instruments*—The electromagnet and its uses: electric bell and buzzer, telephone earpiece, moving coil loudspeaker, electromagnetic lifting and switching. Ammeters and voltmeters including moving coil, hot wire and moving iron types. Microphones including carbon granule, moving coil and crystal types. Gramophone pickup. Simple principles of sound recording including disc, magnetic tape and optical sound track.

*Energy in Space*—Descriptive treatment of electro-magnetic waves: radio, radar, ultra-violet, visible, infra-red, X-rays and Gamma rays. Properties and uses of these forms of radiation. Electron and ion movements in electric circuits leading to simple ideas of resistors, capacitors and valves in a radio circuit. Comparative treatment of the valve and transistor as amplifying devices. Rectification by diodes. Block diagram treatment of radio receiver. The cathode-ray tube. The radio-telescope.

*Practical Examination*—A simple practical test will be arranged in the school laboratory.

## NATURAL SCIENCE

It is hoped that those pupils who have studied natural science will understand something of the basic concepts of the universe—matter and energy. The content of this syllabus is intended to extend many of the topics in the basic science syllabus giving a wide view of the underlying unity of the various specialist fields.

This development should bring out the fundamental ideas of

- (i) matter and its great diversity in nature together with man's place in this material environment and his intelligent utilisation of it,
- (ii) energy manifested in biological, chemical and physical changes in material substances and in movement.

Candidates will have to satisfy the examiners in both parts of Paper II. The candidates will be expected to have covered all Part A of the syllabus and two topics from Part B. There will be a choice of questions in both parts of the paper.

### PART A

#### (i) *Food and Health*

Classes of food; common sources and uses of food.

A balanced diet and a simple conception of calories.

Carbohydrates, fats, and proteins. Vitamins and the results of deficiencies.

Scientific principles applied to the production, storage, preservation and the safe handling of foods.

Epidemic and wide spread ill-health caused by bacteria and moulds (simple experimental treatment to show growth, reproduction and prevention), viruses and diet deficiencies.

Transmission of disease and prevention.

The work of the World Health Organisation, World Food Organisation and U.N.E.S.C.O. in this connection.

#### (ii) *Energy from the Sun*

Solar System: the history of its discovery.

Major planets: simple comparative study of sizes, distances from the sun, temperatures and possible atmospheric conditions. The unique conditions on earth favourable to life as we know it.

The Sun as a prime source of radiant energy: (i) stored in food and fuels, (ii) causing movement on the earth's surface and atmosphere.

Weather: winds, cloud, mist, fog, rain; rainbow; lightning.

Measurement of time: Seasons, tides, eclipses.

(Simple experimental work on photosynthesis, convection, evaporation, absorption and concentration of radiant heat and light, simple weather observation.)

### (iii) *The Earth's Crust*

Simple ideas on the formation of the earth's crust: (i) volcanoes and earthquakes; (ii) weathering—erosion by wind and water and ice; (iii) sedimentary and alluvial deposits.

Types and ages of rocks (fossils).

Useful minerals including diamond, native gold and copper, iron ore. The principles of the extraction of common metals from their ores with simple experimental work to illustrate this.

Formation of soils and their composition: characteristics of sandy, clay and chalk soils; loams and humus; treated experimentally.

The effect of rocks and soils on our water supply. The causes of hard water and its effects: stalactites, stalagmites and limestone caves. Pervious and impervious rocks, the water table, the artesian basin and well.

The application of science to the maximum utilisation of the earth's resources such as, conservation and reclamation of land, the mineral and food resources of the oceans.

### (iv) *The History of Science*

The work of well known scientists in sufficient detail to illustrate

(i) the application of scientific methods,

(ii) the propounding of a theory and its testing.

(Pupils should have had some practical experience in devising and carrying out experiments to test their own suggested explanation to a scientific problem and so formulate a conclusion.)

In this section a detailed study of the work of four of the following should be covered, the choice being guided by the particular parts of the syllabus being studied:

|          |          |         |         |          |
|----------|----------|---------|---------|----------|
| Pasteur, | Jenner,  | Lister, | Harvey, | Galileo, |
| Banting, | Faraday, | Davy,   | Newton, | Rumford. |

The effects of scientific discovery and development on civilisation and population (e.g. conquering of disease, Industrial Revolution, transport, automation) and the problems arising therefrom.

## PART B

### (v) *The Materials of Home and Environment*

Fibres—natural and artificial—simple ideas on their manufacture and proper usage. Reference to flammability and safety in the home.

Cleansing agents—water with soaps and detergents; the alkalis; carbon tetrachloride ("Thawpitt"), benzene, turpentine, petrol; the dangers inherent in their use.

Bleaching agents—chlorine and hydrogen peroxide.

Common metals in and around the home (including plating).

Non-conductors and poor conductors (heat and electricity) (e.g. asbestos, fibreglass, lagging).

Other (constructional) materials with particular reference to absorption/reflection of light, heat and sound.

Plastics—thermoplastics and setting plastics; proper use of these materials in the home in relation to their physical properties.

(vi) *The Human Being*

Digestion—simple idea of the functions of digestive processes which occur in the mouth, stomach and small intestine.

Metabolism—ideas on the breaking down of food materials to give energy to build new cells and tissues.

Elimination—nitrogenous waste and water by the kidneys.

Excretion—by skin, lungs, large intestine.

The five senses and the organs of control.

General arrangement of the skeleton and names of the major bones.

The structure and working of typical joints and the part played by muscles, tendons, ligaments and cartilage in movement. The structure of the blood and its working in relation to its constituents. The structure of the heart, the general functions of the circulatory systems and their relation to the major organs of the body. A simple treatment of blood groups, rhesus factor, endocrine secretions and transfusion.

The human embryo—the general idea of development from conception to birth.

The effects of heredity and environment on the growing child.

(vii) *Converting and Using Energy*

Simple machines: the lever, inclined plane, pulley systems, screwjack.

Simple study of engines with reference to the internal combustion engine, the steam turbine, the electric motor and generator, to illustrate the energy conversions involved.

The electro-magnet and its uses—the electrical bell, buzzer, telephone earpiece, moving-coil loudspeaker, electro-magnetic lifting.

Domestic uses of electric motors, e.g. vacuum cleaner, washing machine, spin dryer and power drill. Proper and safe usage. The other physical principles utilised in these devices. Knowledge of the practical units of electric current, pressure, resistance and power involved in paying for electrical energy. The topics to bring out the basic concepts of work, energy, power and efficiency.

(viii) *Energy and Living Things*

The Carbon, Nitrogen and Water Cycles.

The Water Cycle—physical principles involved in evaporation, cloud formation, and precipitation. The absorption, movement and functions of water in living plants and animals involving ideas of osmosis, capillarity, transpiration, translocation, turgidity and water storage.

The Carbon Cycle—the interdependence of plant and animal life: the part played by energy from the sun in photosynthesis.

The Nitrogen Cycle—simply treated: the interdependence of plant and animal life on the work of bacteria.

Tropisms—response in plants to the stimuli of light, gravity and water.



## SECTION 9

# SYLLABUSES FOR WOODWORK METALWORK BUILDING STUDIES TECHNICAL DRAWING

# WOODWORK

The purpose of this examination is to test not merely the candidate's knowledge of materials, constructions and finishes and his skill in using tools, but also his ability to think constructively in the terms of his chosen craft.

He will be expected to be capable of planning simple jobs from first principles; to make modifications to given basic constructions in order to improve function and aesthetic appearance, and to assess the relative values of given solutions to technical problems.

The examination will be in three sections:

- I. DESIGN AND TECHNOLOGY—2 hours
- II. PRACTICAL—one school day
- III. COURSE WORK

## I. Design and Technology

The candidate will be expected to have a knowledge of accident prevention and the use and maintenance of the basic equipment in the workshop including the plough, the fillister and the router. Questions will be asked which will assume a general knowledge of the following:

- Simple properties of common timbers.
- Man-made timbers (e.g., ply and chipboard).
- Plastic surfacing materials used in the workshop.
- Glues (resin, scotch, contact).
- Finishes (polishes—paints and waxes, etc.).
- Fittings (hinges, stays, etc.).
- Joints and those including the use of nails, screws and dowels.
- Tests for accuracy.
- Fixings (wall plugs, etc.).
- Cramps and cramping.

Compulsory questions will be asked which will require an understanding of simple design, and the ability to sketch will greatly facilitate answering them.

It should be natural for a craftsman to express technical ideas and to explore their possibilities in diagrammatic or pictorial form and candidates will be encouraged to use such methods when answering questions.

## II. Practical

A drawing will be given on which certain dimensions only are indicated. Credit will be given for interpretation of the drawing and the design of details. It is, therefore, important that even the slower worker shall have time to finish and one school day will be allowed for the test.

The candidate should have had experience of the fundamental joints and processes.

Details of the materials and equipment to be provided by the school authorities will be supplied to Heads of Schools, under confidential cover, at least two months before the commencement of the series of examinations.

## III. Course Work

Work done during the final year of study will be assessed by the school and should include some evidence, in notebook and sketch form, of a personal study of the craft. When assessing course work schools should consider the following factors in addition to the actual standard of craftwork achieved:

- (i) Initiative.
- (ii) Perseverance.

In order to encourage general reading by the candidate, a study on the life, background and achievements of selected men who have made important contributions to technological, scientific and artistic development of society might be included. Unfinished work may be submitted.

All work submitted must be available for inspection if required.

## MARKING AND ASSESSING

### I—WRITTEN PAPER: 30%

The Written Paper will be marked externally.

### II—PRACTICAL: 50%

The Practical Examination will be subject to external assessment. The Board's Assessors will visit the school as soon as possible after the examination on a date stipulated by the Board. The Assessor will wish to see the work of all candidates. This should be displayed so as to give the Assessor easy access to it. The work of each candidate should be clearly labelled. The teacher(s) responsible for the preparation of the candidates for the examination will be entitled to advise the candidate in the exhibition of his work.

The school will provide an assessment of each candidate (up to a maximum of 10 marks) based upon the way in which the candidate has tackled the job.

The Assessor will allocate the remaining 40 marks and is not empowered to divulge the marks he awards which are completely confidential to the Board.

### II—COURSE WORK: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A duplicate mark list should be available for the Board's Assessor when he visits the school to assess the Practical Work. He may ask to see the course work of any candidate.

The teacher should be present during the Assessor's visit so that any points of difficulty may be discussed. Wherever possible, the candidates should be available so that the Assessor may discuss a candidate's work with him if necessary.

As a general rule, the Assessor will not alter the order of merit, but he may change the marks awarded in the interests of standardisation.

Where there is serious disagreement between teacher and Assessor over a candidate's place in the order of merit, a second Assessor will visit the school within a day or two. In the interval, the work should not be altered in any way. The second Assessor will wish to see the work of *all* the candidates seen by the first Assessor. The second Assessor will not be informed of the first Assessor's evaluation of the candidates' work. He will also require from the teacher a list of candidates placed in the teacher's order of merit together with the marks awarded by the teacher.

Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board. The Chief Examiner's decision, which will have regard to the teacher's assessment and the two subsequent assessments, will be final.

*The Board reserves the right to inspect and assess the work of all candidates and to alter the order of merit.*

## METALWORK

The purpose of this examination is to test not merely the candidate's knowledge of materials and processes and his skill in using tools, but also his ability to think constructively in the terms of his chosen craft.

He will be expected to be capable of planning simple jobs from first principles; to make modifications to given basic constructions in order to improve function and aesthetic appearance, and to assess the relative values of given solutions to technical problems. The candidate should be able to read working drawings which conform to Engineering Drawing Office Practice British Standards 308, 9531.

The examination will be in three sections:

- I. DESIGN AND TECHNOLOGY—2 hours
- II. PRACTICAL—one school day
- III. COURSE WORK

### I. Design and Technology

The candidate will be expected to have a knowledge of accident prevention and the use and maintenance of the basic equipment in the workshop together with the tools, processes and materials associated with:

- Bench Work
- Sheet Metalwork
- Beaten Metalwork
- Forge Work
- Heat Treatment of Ferrous and Non-Ferrous Metals
- Hard and Soft Soldering
- Centre-Lathe Work

Compulsory questions will be asked which will require an understanding of simple design and the ability to sketch will greatly facilitate answering them. It should be natural for a craftsman to express technical ideas and to explore their possibilities in diagrammatic or pictorial form, and candidates will be encouraged to use such methods when answering questions.

### II. Practical

A drawing will be given on which certain dimensions only are indicated. Credit will be given for interpretation of the drawing and the design of details. It is, therefore, important that even the slower worker shall have time to finish and the whole of one school day will be allowed for the test.

The candidate should have had practical experience of all the branches of metalwork mentioned in the section "Design and Technology".

Details of the materials and equipment to be provided by the school authorities will be supplied to Heads of Schools, under confidential cover, at least two months before the commencement of the series of examinations.

### III. Course Work

Work done during the final year of study will be assessed by the school and should include some evidence, in notebook and sketch form, of a personal study of the craft. When assessing course work schools should consider the following factors in addition to the actual standard of craftwork achieved:

- (i) Initiative
- (ii) Perseverance

In order to encourage general reading by the candidate a study of the life, background and achievements of selected men who have made important contributions to the technological, scientific and artistic development of society might be included. Unfinished work may be submitted.

All work submitted must be available for inspection if required.

## MARKING AND ASSESSING

### I—WRITTEN PAPER: 30%

The Written Paper will be marked externally.

### II—PRACTICAL: 50%

The Practical Examination will be subject to external assessment. The Board's Assessors will visit the school as soon as possible after the examination on a date stipulated by the Board. The Assessor will wish to see the work of all candidates. This should be displayed so as to give the Assessor easy access to it. The work of each candidate should be clearly labelled. The teacher(s) responsible for the preparation of the candidates for the examination will be entitled to advise the candidate in the exhibition of his work.

The school will provide an assessment of each candidate (up to a maximum of 10 marks) based upon the way in which the candidate has tackled the job.

The Assessor will allocate the remaining 40 marks and is not empowered to divulge the marks he awards which are completely confidential to the Board.

### III—COURSE WORK: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A duplicate mark list should be available for the Board's Assessor when he visits the school to assess the Practical Work. He may ask to see the course work of any candidate.

The teacher should be present during the Assessor's visit so that any points of difficulty may be discussed. Wherever possible, the candidates should be available so that the Assessor may discuss a candidate's work with him if necessary.

As a general rule, the Assessor will not alter the order of merit, but he may change the marks awarded in the interests of standardisation.

Where there is serious disagreement between teacher and Assessor over a candidate's place in the order of merit, a second Assessor will visit the school within a day or two. In the interval, the work should not be altered in any way. The second Assessor will wish to see the work of *all* the candidates seen by the first Assessor. The second Assessor will not be informed of the first Assessor's evaluation of the candidate's work. He will also require from the teacher a list of candidates placed in the teacher's order of merit together with the marks awarded by the teacher.

Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board. The Chief Examiner's decision which will have regard to the teacher's assessment and the two subsequent assessments will be final.

*The Board reserves the right to inspect and assess the work of all candidates and to alter the order of merit.*

## BUILDING STUDIES

This syllabus is put forward to meet the needs of a balanced examination, but at the same time it will allow the schools freedom to experiment in order to develop a breadth of study in their Building Courses.

The course can then combine the best from the educational and vocational opportunities of the subject and yet be closely related to a basic concept familiar and important to everyone, namely "a place to live in". There is also a valuable historical and cultural background to the subject which should not be neglected.

Although specialised professional work and a wide field of craft activity combine to produce a completed building, this unity of purpose is sometimes not fully appreciated by a student dealing only with a limited aspect of the work.

With this in mind, the syllabus will be drawn from the relevant planning, construction and decoration which are involved in the building of a small, single-storey, domestic building containing a living room, bedroom, kitchen, bathroom and lavatory. It should be accepted that this building would be constructed using sound methods not excluding newer techniques and materials.

Such a building must satisfy essential human needs and yet have an individuality in such things as lay-out, services, interior decoration and external appearance. This should allow many interesting topics to be developed, and should encourage active co-operation both within the craft department and the school generally.

This centre of interest will meet the varied needs of any of the basic crafts as they are practised within the confines of the usual school accommodation. It will also allow significant variations of treatment to meet the individual approaches of teaching staff. At the same time, students will meet some of the problems, functional and aesthetic, that have to be solved when such a building is planned. These problems will, of necessity, have a content which demands both thought and skill.

The examination will be in three sections:

- I. WRITTEN—2 hours
- II. PRACTICAL—one school day
- III. COURSE WORK

### I. Written

The examination will be in two sections: Section A consisting of about 20 questions all to be attempted in thirty minutes and Section B where two questions out of five must be attempted. It will be an advantage for candidates to illustrate their answers by informal drawings.

It is expected that the syllabus will be covered by craft experience reinforced by more formal lessons, over two or three years, together with visits to sites, buildings in course of erection and buildings of craft and historical interest.

#### *Purposes to be served by a simple, single-storey domestic building*

Requirements for living in, sound structure, appearance.

#### *Foundations*

Simple preparation of level site and foundations for walls. Concrete, preparation and laying. Provision of outlets for drainage.

#### *Walls*

Types of bricks, manufacture, mortars and their constituents. Bonding of brickwork, 9 in.,  $4\frac{1}{2}$  in. and simple cavity walls. Stretcher, English and Flemish bonds. Stopped ends, toothing, racking back, quoins, junctions and piers for the simple single-storey dwellings. Gable ends. Uses of basic tools. Windows and door openings, prevention of rising damp. Lintels, pre-cast and in-situ. Single fireplace and domestic boiler flue construction. One-flue stacks. Joint finishes:

pointing, struck work. Partitions and partition blocks; bonding to walls. Fixing door and window frames.

#### *Roof*

The ridged roof and its components. Ridge, rafters, purlins, wall plates, fascias, eaves boards, forms of insulation, battens and plain tiling.

#### *Floor*

Solid floors; finishes in timber, in tiles, in synthetics. Damp proofing.

#### *Woodwork*

Simple characteristics of hardwoods and softwoods. The basic tools, their uses and maintenance. Fixing—common methods and means. Uses and preparation of common joints for carpentry and for joinery. Solid rebated door-frames; framed ledged and braced doors; flush doors; simple panel doors. Single casement windows and solid frames. Simple forms of linings, frames and finishings. Joiners' ironmongery.

#### *Drainage and Essential Services*

The plumber as a "services" engineer. Hygiene and sanitation. Weathering. Installation of essential services. Materials—lead, copper, zinc, aluminium, iron, steel. Their physical properties and uses by the plumber. Metallic and non-metallic substances in sheet form for weathering and in pipe form for domestic plumbing. Jointing and fixing.

Removal from the dwelling of waste water and soil. Gutters and rainwater pipes. Gullies. Soil pipes, simple inspection chamber and interceptor, ventilation of drain.

Fittings used to control domestic water supplies, e.g., ball-valves, bib taps, pillar taps, drain and plug taps. Sanitary fittings, traps and seals. Simple domestic cold water supplies.

Means for providing constant hot water in small dwellings. Simple domestic hot-water supply system with solid fuel boiler. Achievement of ventilation by traditional construction. Reference to electrical and gas supplies and their uses. Basic requirements for natural and artificial lighting. Suitable forms of heating, space and directional.

#### *Finishes to Walls and Ceilings, external and internal doors, windows and woodwork*

The work in plastering and decorating should go beyond that to be expected in the single-storey dwelling and should reflect the decorative possibilities of the craft. Visits should be made to buildings of historical and architectural interest.

#### *The Craft of the Plasterer*

Purpose of plasterwork. Shop and site work. Tools and materials. Lime plaster, gypsum plasters, cement mixes, dry lining. Properties and preparation. Manufacture of plasters and cement. Backgrounds and finishes to internal and external surfaces. Decorative plasterwork. Costing simple decorative features. Single moulds, running moulds. Design of cornice and mouldings. Forms of moulds, e.g., plastic melt, wax, gelatine, plaster. Introduction to fibrous plaster. Simple architectural features and terms allied to plasterwork. Their place in schemes of decoration.

#### *The Decorator and his Craft*

Colour, surfaces, harmony and contrast. Tools and materials of decorating, outdoor and indoor use. Order and purpose of processes, including preparation of surfaces, characteristics and uses of common pigments, driers and thinners in paints, distempers and emulsions. Finishes other than paint. Wallpapers and simple principles of paper hanging. Historical background and its relation to good design. Simple decorative schemes and lettering.

## *Accident Prevention*

Accident prevention in building craft work.

### **II. Practical**

In the interests of the usual work attempted in the school craft workshop certain aspects of the practical work in the syllabus below will go beyond the limitations of the small bungalow construction.

Candidates will choose *one* craft in which to be examined, from Brickwork, Carpentry and Joinery, Plumbing, Plasterwork, Decoration.

Details of the materials and equipment to be provided by the school authorities will be supplied to Heads of Schools, under confidential cover, at least two months before the commencement of the series of examinations.

#### (1) *Brickwork*

Dry bonding to discover main principles. Use of common tools. Construction of quoins, stopped ends and junctions in common and in facing bricks formed by  $4\frac{1}{2}$  in. and 9 in. walls as would be used for a simple, single-storey dwelling. Long walls and use of line and pins. Cavity wall suitable for this dwelling. Damp proofing. Single fire-place with gathering over flue. Simple chimney stacks. Solid floor constructions. Window and door openings. Setting out. Soldiers over window head. Lintels. Simple gable. Partition walls. Junctions formed with partition blocks and brickwork.

#### (2) *Carpentry and Joinery*

Housing—through and stopped. Mortice and tenon—through, stopped and haunched. Halving. Through dovetail. Lap-dovetail. Nailing, screwing and dowelling. Drawer construction. Window frame and casement sash. Door frames and linings, fitting and hanging. Floor construction. Simple pitched roof with gable ends.

#### (3) *Plumbing*

5 lbs sheet lead work—Bossing internal angles 4 in. high. Chimney gutters, aprons, roll ends and stepped flashings.

Lead pipe—Bends, preparation of joints, simple wiped joint, joint on 1 in. and  $1\frac{1}{4}$  in. pipes. Bending  $1\frac{1}{2}$  in. pipe.

Iron pipe—Cutting and screwing  $\frac{1}{2}$  in. and  $\frac{3}{4}$  in. pipes. Bending  $\frac{3}{4}$  in. pipes in forge.

Copper pipe—Cold bending of  $\frac{1}{2}$  in. pipe by spring loading. Bending  $\frac{3}{4}$  in. pipe by sand loading using forge or other means of heat. Soft solder joints to  $\frac{1}{2}$  in. and  $\frac{3}{4}$  in. pipes.

Sheet copper or aluminium—Stepped flashing, standing seam, aprons and batten roll.

#### (4) *Plasterwork*

Mixing of plaster. Care of tools and cleanliness. Use of solid plastering tools in forming plane surfaces and angles. Floating to wall surface not exceeding 6 ft.  $\times$  2 ft. Finishing to the same. Construction and horsing of zinc profiles for straight and circular running moulds. Formation of geometric shapes with simple panel moulding. Plaster moulds of low relief models. Planting in position. Casting simple fibrous plasterwork such as a plane face or simple beam casing. Casting cement and sand slabs from simply shaped wooden or similar moulds.

#### (5) *Decorating*

Preparation of surfaces. Care of equipment and brushes. Stripping, filling and rubbing down. Simple colour values and colour mixing. Colour schemes. Simple decorative patterns and effects. Application of paint and varnishes. Free brush work. Simple lettering.

### III. Course Work

Work completed or covered during the course will be assessed by the school and should include some evidence, in notebook and sketch form, of a personal study of the craft. When assessing course work schools should consider the following factors in addition to the actual standard of craftwork achieved:

- (i) Initiative.
- (ii) Perseverance.

In order to encourage general reading by the candidate, a study of the lives, background and achievements of selected men who have made important contributions to technological, scientific and artistic development of society might be included.

Submitted work must be available for inspection if required. Unfinished work may be submitted.

### MARKING AND ASSESSING

#### I—WRITTEN PAPER: 40%

The Written Paper will be marked externally.

#### II—PRACTICAL: 40%

The Practical Examination will be subject to external assessment. The Board's Assessors will visit the school as soon as possible after the examination on a date stipulated by the Board. The Assessor will wish to see the work of all candidates. This should be displayed so as to give the Assessor easy access to it. The work of each candidate should be clearly labelled. The teacher(s) responsible for the preparation of the candidates for the examination will be entitled to advise the candidate in the exhibition of his work.

The school will provide an assessment of each candidate (up to a maximum of 10 marks) based upon the way in which the candidate has tackled the job.

The Assessor will allocate the remaining 30 marks and is not empowered to divulge the marks he awards which are completely confidential to the Board.

#### III—COURSE WORK: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A duplicate mark list should be available for the Board's Assessor when he visits the school to assess the Practical Work. He may ask to see the course work of any candidate.

The teacher should be present during the Assessor's visit so that any points of difficulty may be discussed. Wherever possible, the candidates should be available so that the Assessor may discuss a candidate's work with him if necessary.

As a general rule, the Assessor will not alter the order of merit, but he may change the marks awarded in the interests of standardisation.

Where there is serious disagreement between teacher and Assessor over a candidate's place in the order of merit, a second Assessor will visit the school within a day or two. In the interval, the work should not be altered in any way. The second Assessor will wish to see the work of *all* the candidates seen by the first Assessor. The second Assessor will not be informed of the first Assessor's evaluation of the candidates' work. He will also require from the teacher a list of candidates placed in the teacher's order of merit together with the marks awarded by the teacher.

Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board. The Chief Examiner's decision which will have regard to the teacher's assessment and the two subsequent assessments will be final.

*The Board reserves the right to inspect and assess the work of all candidates and to alter the order of merit.*

## TECHNICAL DRAWING

The examination will be in two sections:

- I. WRITTEN—3 hours. (This time should enable the slower candidates to complete the paper.)
- II. COURSE WORK

It will aim at testing the following: the candidate's knowledge of basic geometry and the simple principles underlying technical drawing; the ability to solve simple problems in *applied* plane and solid geometry; the ability to interpret drawings, to visualize simple objects, and to express ideas by drawing or sketching in pictorial or orthographic projection.

### I. Written

The examination paper will be in five parts. Part A will consist of about 20 questions, all to be attempted in thirty minutes, on basic geometry and principles underlying technical drawing. One question, out of two, must be attempted from Part B (applied plane geometry), Part C (applied solid geometry), and Part D (interpretation of views in orthographic or pictorial projection). In Part E (sketching and design), one question only will be set.

Technical drawing is a universal graphic language for the communication of thought and ideas. It is, therefore, capable of wide application.

Constructional work in geometry should be related constantly, by means of practical examples, to the part it plays in the fields of engineering, architecture, surveying, technology, mathematics, astronomy, etc.

Emphasis, particularly in the early stages, should be given to the following: correct use of instruments; appreciation of quality and correct relative density of lines; lay-out; clear dimensioning; lettering; neatness and cleanliness; speed of execution.

Throughout the course, the drawings must conform to the standards laid down in Engineering Drawing Office Practice B.S. 308, 1953; the candidate will be expected to be familiar with the abridged edition.

#### *Applied Plane Geometry*

Constructions and related applications of the following—scales, triangles, quadrilaterals, parallelograms, regular and irregular polygons, triangulation, circles, tangents, inscribed, circumscribed and escribed circles, ellipse, simple loci.

#### *Applied Solid Geometry*

The prism, cylinder, pyramid and cone related to orthographic projection including sectional views, true shapes of inclined surfaces, auxiliary elevations and plans, developments. (*N.B.*—In the case of the cone, sectional views will not be required.)

### *Working Drawing*

Orthographic Projection—1st or 3rd angle. Pictorial Projection—isometric and oblique. (In order to reflect the increasing use of 3rd angle projection in industry, optional questions will be set involving knowledge of this projection.)

### *Technical Sketching*

Drawing without instruments should be practised throughout the course. Sketches should be made from castings, components and models which should be available for the pupil to handle.

## **II. Course Work**

Work done during the final year of study will be assessed by the teacher. When assessing course work schools should consider the following factors in addition to the actual standard achieved:

- (i) Initiative.
- (ii) Perseverance.

All work submitted for assessment must be available for inspection if required.

### MARKING AND ASSESSING

#### I—WRITTEN PAPER: 80%

The Written Paper will be marked externally.

#### II—COURSE WORK: 20%

The teacher(s) responsible for the preparation of the candidates for the examination will put the school's total entry into an order of merit based upon the performance of the candidates in this section of the examination. A mark should be awarded to each candidate.

A duplicate mark list should be available for the Board's Assessor when he visits the school. He may ask to see the course work of any candidate.

The teacher should be present during the Assessor's visit so that any points of difficulty may be discussed. Wherever possible, the candidates should be available so that the Assessor may discuss a candidate's work with him if necessary.

As a general rule, the Assessor will not alter the order of merit, but he may change the marks awarded in the interests of standardisation.

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Assessors are not permitted to reveal the marks awarded which are completely confidential to the Board. The Chief Examiner's decision which will have regard to the teacher's assessment and the two subsequent assessments will be final.

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