

WEST YORKSHIRE AND LINDSEY REGIONAL  
EXAMINING BOARD

REGULATIONS  
AND  
SYLLABUSES  
FOR THE  
CERTIFICATE OF SECONDARY  
EDUCATION EXAMINATIONS

1966

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WEST YORKSHIRE AND LINDSEY REGIONAL  
EXAMINING BOARD FOR THE CERTIFICATE  
OF SECONDARY EDUCATION

**REGULATIONS AND SYLLABUSES**

To : THE SECRETARY,  
West Yorkshire and Lindsey Regional Examining Board,  
Old City Grammar School Building,  
Orchard Lane,  
SHEFFIELD 1.

Please send me.....copies of the Regulations and  
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value.....to cover cost and postage.

Signed.....

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## GENERAL INFORMATION

### 1. Correspondence

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THE SECRETARY,  
West Yorkshire and Lindsey Regional Examining Board,  
Old City Grammar School Building,  
Orchard Lane, SHEFFIELD 1, Yorkshire.

### 2. Regulations

Copies of these Regulations and Syllabuses may be obtained from the Secretary, price 4/6, post free in the United Kingdom. Heads of Schools and other educational establishments within the area served by the Board, will be supplied with two free copies.

### 3. Payments to the Board

All payments to the Board should be made by cheque, money order or postal order, payable to the West Yorkshire and Lindsey Regional Examining Board, and should be crossed "NOT NEGOTIABLE".

## CALENDAR OF DATES, 1966

Syllabuses and Specimen Examination Papers (Modes B and C) to be submitted by . . . . .	31ST MARCH, 1965
Registration Forms to be completed and returned by . . . . .	17TH APRIL, 1965
Entry Forms to be completed and returned by. . . . .	1ST JANUARY, 1966
All Examination Dues to be paid by .	30TH APRIL, 1966
Practical and Oral Tests will take place	DURING THE SECOND HALF OF THE SPRING TERM, 1966
Written Examinations (Modes A and B only) will be held . . . . .	2ND — 27TH MAY, 1966
Notification of Results . . . . .	LATE JULY, 1966

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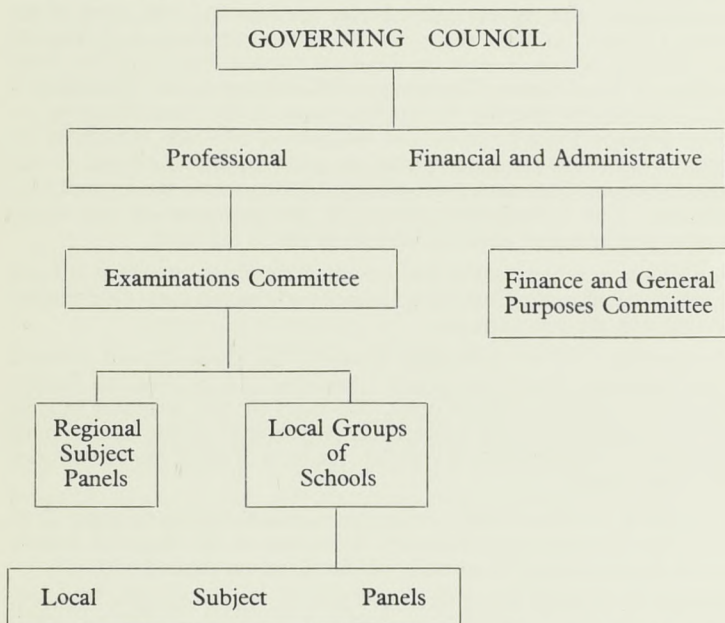
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## WEST YORKSHIRE AND LINDSEY REGIONAL EXAMINING BOARD

### 1. The Constitution — Administrative Machinery

The Board is responsible for the administration of the examinations leading to the award of the Certificate of Secondary Education in the geographical region comprising the areas of the Local Education Authorities for the counties of Lincolnshire Lindsey, the West Riding of Yorkshire, and the County Boroughs of Barnsley, Doncaster, Rotherham and Sheffield.

The full text of the Constitution of the Board, as approved by the then Minister of Education in 1963, is to be found in the wallet-pocket inside the back cover. The following paragraphs set out to summarise the machinery of Committees through which the Board consults and performs its main functions. These can be illustrated diagrammatically :—



The broad base upon which the Constitution rests is the practising subject teacher and the school; the contribution of the school is made through membership of the Local Group, of which fifteen have been formed in the Region (see Appendix for the Constitution of Local Group Committees); the contribution of the subject teacher is made through membership of the Local Subject Panel functioning within the Local Group. A close link has been forged between the school, the Regional Subject Panels, and the Regional Examinations Committee : there is direct or indirect nomination to these from the Local Groups.

The Board itself is governed by a COUNCIL, consisting of 38 voting members; in addition to a Chairman, provision is made for representation from teachers (20); Local Education Authorities (6); the Sheffield Institute of Education (5); Industry and Commerce (2); a maximum of four members can be co-opted. The Council must appoint two statutory Committees: the Finance and General Purposes Committee and the Examinations Committee. THE FINANCE AND GENERAL PURPOSES COMMITTEE, as the name implies, is appointed to advise the Board on matters of finance and general administration. The membership of twelve is drawn from the Council and includes a representative from each Local Education Authority included in the Region, and six other members of the Council of whom at least three are required to be serving teachers and one a representative of the Sheffield Institute of Education.

THE EXAMINATIONS COMMITTEE is the professional Committee of the Board, charged with the conduct of the examination and the promotion of research and development. The representative bodies are identical with those of the Governing Council; in total there are 34 voting members, including 20 teachers of whom ten must serve on Regional Subject Panels and five must be members of Local Group Committees. The Examinations Committee is advised on all matters affecting the administration of the examination by:— REGIONAL SUBJECT PANELS: these are established for each subject to be examined; nominations for appointment are made through the Local Group to the Examinations Committee, who reserve to themselves the appointment of Chairman. The Constitution allows for the co-option of non-voting members to proffer expert advice as and when this is required.

In addition to representative and co-opted members, provision is made for the appointment to the Governing Council and the two main Committees, of Assessors who are non-voting.

Membership of the Governing Council, the Finance and General Purposes Committee, the Examinations Committee and the Regional Subject Panels is for a period of three years, one-third of the members retiring annually; an exception to this general rule is permitted in the case of those first appointed; in the interests of stability, the term of office can be extended for one or two years.

A full list of the Council and Committee members is given on pages 10-15. Details of the Chairmen and Honorary Secretaries of the Regional Subject Panels and Local Group Committees will be found on pages 16-19.

THE SECONDARY SCHOOL EXAMINATIONS COUNCIL (more recently known as the SCHOOLS COUNCIL FOR THE CURRICULUM AND EXAMINATIONS). The C.S.E. is a Certificate of national currency: although the Regional Boards are given freedom to function and develop within the confines of their Constitution and delegated powers, the right to prescribe national conditions and to formulate national regulations is reserved to a Central Body: the Secondary School Examinations Council. The S.S.E.C., as the co-ordinating authority, lays down, *inter alia*, the standards of the examination; the form of the Certificate; the way in which results shall be presented; the general rules for the admission of candidates. A right of appeal to the S.S.E.C., from the Regional Boards, exists under certain circumstances.

## 2. The Constitution and the Philosophy of the C.S.E.

In the previous pages a brief synopsis has been given of the constitutional machinery for the administration of examinations in this Region. Although machinery is essential, it must be subordinate to the purpose for which it has been designed; the paramount importance of the child, the teacher and the school is, therefore, prefabricated into the Constitution. In the examination for the C.S.E., the rights of all three are recognised and an opportunity is given for full and active participation in the following ways :—

- (i) The Board must offer an external examination : the syllabuses are compiled by practising teachers in the Region.
- (ii) Where any school or group of schools is of the opinion that it is not in the best interests of the children to sit an external examination identical throughout the Region, as it may not accord with the work and method of teaching, there is an assured right to request an examination designed to cater for their individual needs.

This can take one of two forms :—

*either*

- (a) an external examination conducted by the Board's examiners on the basis of syllabuses and examination papers submitted by the school or groups of schools;

*or*

- (b) an examination set and conducted internally by the school or groups of schools on their own syllabuses, the results of which will be assessed and validated by the Board.

(iii) Although it is the purpose of an examination to measure attainment, it is recognised that the sole criterion need not be the standard of performance at a specified point of time. An assessment of work that has been carried out over a relevant period, is a useful adjunct in reaching an informed and balanced judgment, not only about academic achievement, but also about other worthwhile attitudes.

(iv) The results of the examination will be published in a form which it is hoped will benefit a child seeking employment; the record will not be in the terms of pass/fail. Attainment in each subject will be indicated by the use of the five Grades described on page 20 of these Regulations. In this way, employers will be given a profile of performance for each child.

**MEMBERS OF THE REGIONAL GOVERNING COUNCIL  
1963-1964**

*Chairman :*

T. H. TUNN, Esq., M.A.

*Director of Education*

Education Offices, Leopold Street, SHEFFIELD 1

**Teachers Representing Schools (18)**

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E. DUFFIELD, Esq.	South Grove Secondary School, Moorgate, Rotherham.
C. D. ELLIOTT, Esq., B.Sc.	Benton Park Secondary School, Harrogate Road, Rawdon, Nr. Leeds.
D. GILGALLON, Esq. (Deceased)	Foxhills Secondary School, Foxhills Road, Scunthorpe.
G. E. GREEN, Esq.	Barnsley Central School, Mark Street, Barnsley.
R. W. HAMILTON, Esq., M.A., M.Litt.	The Grammar School, Hemsworth.
F. W. KIMBER, Esq., M.A.	Harrogate High School, Avondale Road, Harrogate.
Miss M. E. RHODES-DENTON	South Secondary Girls' School, Lea Road, Gainsborough, Lincs.
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E. URRY, Esq., M.A.	Glanford Secondary School, Brigg, Lincs.
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Granville Road, Sheffield 2.
- L. SHIPPERBOTTOM, Esq. North Lindsey Technical College,  
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- County Alderman  
C. T. BROUGHTON 45 High Hazel Crescent, Catcliffe,  
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- M. J. PASS, Esq., M.A. Chief Education Officer, Education  
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- H. A. REDBURN, Esq.,  
O.B.E., T.D., B.A. Director of Education, Education  
Department, Town Hall, Barnsley.
- T. H. TUNN, Esq., M.A. Director of Education, Education Offices,  
Leopold Street, Sheffield 1.

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- Alderman A. BALLARD,  
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- L. B. BIRCH, Esq., M.A., B.Sc. Institute of Education, The University,  
Sheffield 10.
- C. S. DARVILL, Esq. Chaucer Secondary School, Halifax Road,  
Sheffield 6.

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Sheffield 1.
- D. R. O. THOMAS, Esq. The United Steel Companies Ltd.,  
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State for Education and Science)*

L. S. GRIMSDALE, Esq., H.M.I. Department of Education and Science,  
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Sheffield 1.

*One Local Authority Inspector  
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*One Representative of the Youth  
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*Appointments by :  
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and Science;  
Secondary School Examinations  
Council*

R. A. PRING, Esq. Dept. of Education & Science  
Curzon Street, London W.1.

R. E. WOOD, Esq. Principal, College of Commerce and  
Technology, Leicester.

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1963-1964

*Chairman :*

County Alderman C. T. BROUGHTON,  
45 High Hazel Crescent, Catcliffe, Rotherham.

### **One Representative of Each Local Education Authority**

- |  |   |
|--|---|
| F. J. BIRKBECK, Esq., M.A.                 | Director of Education, Education Department, County Offices, Lincoln.   |
| R. BLOOMER, Esq., B.Com.                   | Director of Education, Education Offices, 21 Moorgate, Rotherham.       |
| County Alderman<br>C. T. BROUGHTON         | 45 High Hazel Crescent, Catcliffe, Rotherham.                           |
| M. J. PASS, Esq., M.A.                     | Chief Education Officer, Education Offices, Whitaker Street, Doncaster. |
| H. A. REDBURN, Esq.,<br>O.B.E., T.D., B.A. | Director of Education, Education Department, Town Hall, Barnsley.       |
| T. H. TUNN, Esq., M.A.                     | Director of Education, Education Offices, Leopold Street, Sheffield 1.  |

### **Six Other Members of the Governing Council**

- |   |   |
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| L. B. BIRCH, Esq., M.A., B.Sc.              | Institute of Education, The University, Sheffield 10.               |
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| C. S. DARVILL, Esq.                         | Chaucer Comprehensive School, Halifax Road, Sheffield 6.            |
| D. GILGALLON, Esq.<br>(Deceased)            | Foxhills Secondary School, Foxhills Road, Scunthorpe.               |
| G. E. GREEN, Esq.                           | Barnsley Central School, Barnsley.                                  |

### **Assessors (Non Voting)**

- |                               |  |
|-------------------------------|--|
| L. S. GRIMSDALE, Esq., H.M.I. | Department of Education and Science, 2nd Floor, 8-12 Furnival Gate, Sheffield 1. |
| R. A. PRING, Esq.             | Department of Education and Science, Curzon Street, London W.1.                  |

## MEMBERS OF THE REGIONAL EXAMINATIONS COMMITTEE

1963-1964

*Chairman :*

C. S. DARVILL, Esq.,

Chaucer Comprehensive School, Halifax Road, Sheffield 6.

### Teacher Representatives (18)

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E. T. BUTCHER, Esq., M.A.	Colne Valley High School, Linthwaite, Huddersfield.
J. CAULFIELD, Esq., B.A.	Hemsworth Secondary School, Regent Street, Hemsworth, Nr. Pontefract.
W. CLAYTON, Esq., M.B.E.	Yew Lane Secondary School, Creswick Lane, Grenoside, Nr. Sheffield.
E. W. COWTON, Esq.	Riddings Secondary School, Enderby Road, Scunthorpe.
E. DUFFIELD, Esq.	South Grove Secondary School, Moorgate, Rotherham.
C. D. ELLIOTT, Esq., B.Sc.	Benton Park Secondary School, Harrogate Road, Rawdon, Leeds.
D. GILGALLON, Esq. (Deceased)	Foxhills Secondary School, Foxhills Road, Scunthorpe.
G. E. GREEN, Esq.	Barnsley Central School, Mark Street, Barnsley.
R. W. HAMILTON, Esq., M.A., M.Litt.	The Grammar School, Hemsworth.
F. W. KIMBER, Esq., M.A.	Harrogate High School, Avondale Road, Harrogate.
Miss M. E. RHODES-DENTON	South Secondary Girls' School, Lea Road, Gainsborough, Lincs.
A. RINDER, Esq.	Queensbury and Shelf Secondary School, Deanstones Lane, Queensbury, Yorks.
H. SCHOFIELD, Esq.	County Secondary School, Leeds Old Road, Heckmondwick.
D. SPOONER, Esq.	Abbeyle Secondary School, Glen Road, Sheffield 7.
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### Teachers Representing Institutes of Further Education (2)

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L. SHIPPERBOTTOM, Esq.	North Lindsey Technical College, Kingsway, Scunthorpe.

### **Representatives of the Local Education Authorities (3)**

- |                            |  |
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| A. B. CLEGG, Esq., M.A.    | Education Officer, County Education Offices, Wakefield.                |

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| E. ROBERTS, Esq. | Divisional Officer, Iron and Steel Trades Confederation, (Rooms 49 and 50), Norwich Union Buildings, High Street, Sheffield 1. |

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- |                             |   |
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| J. R. LONG, Esq.            | St. Theresa's R.C. School, Prince of Wales Road, Sheffield 2. |
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*One Representative of another Examining Board*

Vacant

*One H.M. Inspector of Schools*

L. S. GRIMSDALE, Esq. H.M.I. Department of Education and Science, 2nd Floor, 8-12 Furnival Gate. Sheffield 1.

*One Local Education Authority Inspector or Adviser*

Vacant

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1963-1964**

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**1963-1964**

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<i>Batley, Morley, and Spen Valley</i>	H. SCHOFIELD, Esq., Heckmondwike Secondary Modern School, Cawley Lane, Heckmondwike, Yorks.	A. STANDEVEN, Esq., B.Sc., Bruntcliffe School, Bruntcliffe Lane, Morley, Nr. Leeds.
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<i>Don Valley and Doncaster</i>	J. H. RICHARDSON, Esq., Bentley Secondary School, Doncaster.	J. WEBSTER, Esq., Rossington Boys' Secondary School, Doncaster.
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<i>Selby and Goole</i>	R. PATTINSON, Esq., Goole County Secondary School, Goole.	F. COLLEY, Esq., County Secondary School, Hatfield, Nr. Doncaster.
<i>Mid-Lindsey</i>	J. HOLMES, Esq., M.A., Beacon Hill Secondary School, Cleethorpes, Lincs.	C. E. HALLETT, Esq., Yarborough Secondary School, Caistor, Lincs.
<i>Scunthorpe and North Lindsey</i>	D. GILGALLON, Esq. (Deceased), Foxhills Secondary School, Scunthorpe.	R. H. BEACOCK, Esq., J.P., Thomas Sumpter Secondary School, Chandos Road, Scunthorpe.
<i>South-East Lindsey</i>	R. JOHNSON, Esq., B.Sc., Skegness Morris Secondary School, Skegness, Lincs.	D. H. PARKIN, Esq., Gartree Secondary School, Tattershall, Lincs.
<i>Rotherham</i>	T. H. WILLIAMS, Esq., M.A., South Grove Secondary School, Moorgate, Rotherham.	T. HUTCHISON, Esq., B.A., Wingfield County Secondary School, Greasbrough, Rotherham.
<i>Sheffield</i>	G. MACK, Esq., B.A., High Storrs Grammar School for Boys, High Storrs Road, Sheffield 11.	R. J. THRIVES, Esq., Newfield Boys' Secondary School, Lees Hall Road, Sheffield 8.

## GENERAL REGULATIONS FOR THE CONDUCT OF THE EXAMINATION

### 1. Rules for the Admission of Candidates

(a) Candidates attending schools must be aged sixteen or in the final term of a five-year course of secondary education, or must have completed such a course (the expression "a five-year course of secondary education" includes, for the purposes of these conditions, any full-time course of five years duration undertaken in any type of school after the normal age of transfer from primary to secondary education).

(b) Where, for the time being, pupils are unable, owing to lack of maintained secondary school facilities, to take their fifth year save in a further education establishment, candidates entered by such establishments shall be accepted for the examination, if they have completed and are in the last term of five years' full-time secondary education partly in school and partly in a further education establishment.

(c) Other candidates may be accepted provided they are not less than seventeen years of age on 1st September following the summer term in which the examination is taken.

### 2. Definition of the Scope of the C.S.E. System

(i) The examinations are designed for a range of candidates extending from those who just overlap the group taking the ordinary level of the G.C.E. examination, to those who are just below the average in ability of the whole age group.

(ii) The examination will be offered on a single subject basis.

### 3. Presentation of Results

The performance in each subject will be assessed by the allocation of a Grade.

FIVE grades will be used and the interpretation to be attached to each is :—

GRADE I : The candidate is of such ability in the subject that he might reasonably have secured a pass in the 'O' level of the G.C.E. examination had he followed a course of study leading to that examination.

GRADE IV The candidate is one of average ability who has followed a course of study regarded by teachers of the subject as appropriate to his age, ability and aptitude.

GRADES II AND III These Grades will be awarded to candidates who, in ability, lie between Grades I and IV as already defined. Approximately one half of this middle group of candidates will be assigned to each Grade.

GRADE V Will indicate a candidate of average ability in the subject, who, though not meriting the award of Grade IV, has nevertheless been properly entered for the examination.

All performances inferior to those placed in GRADE V will be classified as ungraded.

### Form of the Certificate of Secondary Education

A Certificate of Secondary Education will be awarded to candidates who secure at least one grade in the range I — IV.

Where Certificates are issued, they will also record Grade V performances.

Other Grade V performances, and all ungraded results will be officially communicated to the candidate and his school, but will not be recorded on a Certificate.

# REGULATIONS OF THE WEST YORKSHIRE AND LINDSEY REGIONAL EXAMINING BOARD

## 1. Modes of the Examination

Schools and Groups of Schools may choose which of the following options offered by the Board, in 1966, will best suit the needs of the children in each subject.

- MODE A An external examination set by the Board's examiners, Detail of the subjects available, the method of assessment, and the content of the syllabus will be found on pages 23-91.
- MODE B An external examination set by the Board's examiners on syllabuses and specimen examination papers proposed by a school or group of schools and approved by the Board.
- MODE C Examinations set by a school or group of schools upon their own syllabuses in accordance with the appropriate clauses of the Constitution and the Appendix for the Constitution of Local Group Committees.

### NOTE :

MODE B Schools opting for Mode B must lodge with the Secretary to the Board not later than **31st March, 1965**, two copies of the syllabus proposed for each subject and two copies of a specimen examination paper.

MODE C School opting for Mode C, **MUST BY**

**31st March, 1965**: Inform the Board of their scheme of examination. Where syllabuses and specimen examination papers have been prepared, two copies of each must be lodged with the Secretary; in all other cases sufficient detail must be supplied to give a clear picture of what is intended.

**1st November, 1965**: Submit draft Question Paper and detailed marking scheme where these have been prepared.

## 2. Date of Examinations

- (a) MODES A and B.—Written examinations will commence on Monday, 2nd May, 1966. Oral, practical tests and assessment of the candidates' work will take place during the second half of the preceding spring term.
- (b) MODE C.—Primary (internal) assessment by the school or group of schools to be completed by Monday, 2nd May, 1966. Secondary assessment and Moderation by the Board will take place during the period May/June, 1966.

The provisional time-table for the Board's examinations under Modes A and B will be issued to schools not later than June, 1965; the official time-table will be published in November, 1965.

### **3. Method of Entry**

(i) Candidates will normally be entered by the school which they are attending and will then normally be examined at that school.

(ii) Schools proposing to enter candidates for the examination in 1966 **MUST REGISTER** with the Board. Copies of the Registration Form, which can be obtained on request, should be returned to the Secretary of the Board **NOT LATER THAN 17th APRIL, 1965.**

(iii) **ENTRY FORMS** for the admission of candidates to the examination will be sent not later than 1st **NOVEMBER, 1965**, to each school registered and will be returnable by 1st **JANUARY, 1966.**

### **4. Conduct of the Examinations**

The Head of the school, acting as Local Examinations Secretary, will be responsible for ensuring that the examinations are conducted in accordance with the rules of the Board currently in force. A copy of the rules will be issued prior to the examination.

The Board reserves the right to send a representative to any school at any time to inspect the arrangements for the examination and the manner in which they are conducted.

### **5. Examination Fees**

(a) Details of the entry and subject fees will be published annually.

(b) **LATE ENTRIES**

Between the period 2nd **JANUARY** to 1st **MARCH, 1966** only, late entries and additional subject entries will be accepted on the payment of an additional fee of £1 per candidate.

After 1st **MARCH, 1966**, no further entries will be accepted.

No late entries whatsoever will be accepted which entail the setting of additional papers by the Board.

(c) **REFUND OF FEES**

(i) Entry fees are non-returnable.

(ii) Subject fees will be refunded only in the case of withdrawal from the examination in exceptional circumstances approved by the Board.

No refund will be made for absence or withdrawal from part of the examination in any subject.

### **6. Examination Results**

The results of the examination will be expressed for each subject in the form of Grades, from I to V or as ungraded (see page 20). As soon as possible after the examination, lists will be sent to the Local Examination Secretaries, showing the graded and ungraded results of each candidate.

### **7. Certificates**

Certificates will be awarded in accordance with the national regulations in force at the time.

## SYLLABUSES

### FOREWORD

The syllabuses which follow are published as a guide to schools; they define an area of knowledge or accomplishment in each subject; they are not intended as a teaching syllabus and do not replace schemes of work. It would be a negation of the underlying philosophy of the examination if the syllabuses were allowed to exert any undue influence on the work of the school, either in content or presentation. Credit will be given where a candidate shows evidence of relevant knowledge outside the syllabus.

The syllabuses of the Board have been prepared by the Regional Subject Panels, consisting of practising teachers in the schools. It is intended that they shall remain extant for a period of two years : for the Board's examinations under Mode A in 1966 and 1967. Advances in knowledge, changes in teaching techniques and the comments received from schools using the examination will be reflected in the Specimen Examination Papers to be published from time to time. The Specimen Papers in the various subjects for which the Board is offering external examinations in 1966 will be published in August, 1965.

### ART AND CRAFTS

#### SCHEME OF EXAMINATION

1. The examination in Art and Crafts may be presented in one of the following ways :—
  - (a) A selection of course work produced over the last two years.
  - (b) Course work together with an assessment of a piece of work carried out as a final "commission". An Appendix giving greater detail about the final commission has been prepared for the guidance of teachers. It follows immediately after the syllabus.
2. The Examiners will look for :—
  - (a) Original and creative thought and outlook.
  - (b) Evidence of breadth of study leading, through experiment and discovery, to a measure of achievement in a chosen field, or study arising from outside visits and leading to a wider understanding and appreciation of things of artistic interest.
3. Credit will be given :—
  - (a) Where it is seen that a candidate has shown ability in following a train of thought to its conclusion.
  - (b) For the suitable presentation of selected course work.
4. Where a school timetable is arranged in such a way as to provide for the overlapping of subjects within the curriculum, Art and Craft work produced during the two years but allied to another subject, may be added to the course work for consideration.
5. The examiners will accept group work in support of a candidate's individual course work.

## SYLLABUS

The Examiners have no desire to limit the choice of media or forms. The only limitations will arise from school facilities, the candidates themselves, and the durability of the work.

A long list of media or possible Art and Craft forms could be considered confusing and limiting and, indeed, the Examiners feel that experiment in unusual or new materials is most desirable and should be encouraged.

### APPENDIX FOR THE GUIDANCE OF TEACHERS

#### *The Final Commission*

1. The main purposes behind the final commission are :—

- (a) That candidates be given a starting point or point of departure from which they may develop an idea in their chosen media or craft.
- (b) That candidates should have the opportunity of working unaided over an extended period towards the end of the two-year course of study.

2. *The Question Paper*

Each of the four sections in the question paper should be interpreted as freely and widely as possible. For example, project work is not confined to Section III, nor is work connected with drama confined to Section IV.

3. On the appointed day the candidate will be given the question paper, and will have a maximum of three hours in which to study the questions, choose a subject, make sketches and formulate ideas. Where necessary, the teacher may explain the meaning of the question paper to the candidate. The work done in these three hours should be kept in a folder or in the form of preparatory models to be available ultimately to the assessor. Thereafter, for a period of six weeks, work on the final commission will continue in school during suitably supervised time set aside for Art and Craft work (which may include the school Art Club and visits in connection with local studies, e.g. the art gallery, places of architectural interest and so on).

It is desirable that, where necessary, candidates should have the opportunity of making outside visits in connection with their chosen commission.

4. *The Log*

Candidates should keep a log or record of work showing time spent and a brief account of progress made. This will be valuable in moderating where a great discrepancy in time allowed exists between schools. This log should be available to the assessor.

5. On the question of the relative importance and weight to be attached to course work and the final commission, where the commission is of equal or lower standard compared with the course work, it would not be likely to alter the Grade, but an outstanding final commission could well be sufficient to up-grade a candidate from, say, Grade 3 to Grade 2.

## ACCOUNTS

### *Introduction*

The Examination will test understanding of the purpose of accounting in business and non-profit making organisations, not merely ability to record financial data in a routine fashion.

Candidates will be expected to produce accurate and well-presented work.

### *Scheme of Examination*

The Examination will consist of :—

- (i) Written paper of 2½ hours.
- (ii) Course work.

### SYLLABUS

The importance of accounting.

The recording of business transactions from common documents (invoices, debit and credit notes, cheques) in books or records of original entry and posting to the Ledger on double-entry principles.

Practical sub-division of the Ledger. Petty Cash Book.

Simple columnar analysis. Simple Journal Entries.

The Trial Balance : purpose and limitations.

Bank balances, overdrafts, and reconciliation statements.

Valuation of Stock.

Trading and Profit and Loss Accounts of Sole Proprietors and Partnerships.

Elementary treatment of payments in advance and items due but unpaid, bad debts, depreciation.

Gross and Net Profit, and relationship to turnover, expenses, and capital.

Conception of Profit as increase in net value of assets.

Balance Sheets of Sole Proprietors, Partnerships and Non-Trading Organisations.

Current and Fixed Assets, current and long-term liabilities.

Solvency, Working Capital. Comparison of results of accounting periods.

Difference between Capital and Revenue.

Accounts of Non-Trading Organisations. Receipts and Payments.

Account, Income and Expenditure Account.

Simple Partnership Accounts, Current and Capital Accounts, Interest on Capital (but NOT Interest on Drawings), Salary, Sharing of Profit or Loss.

**COMMERCE**  
SCHEME OF EXAMINATION

The examination will consist of :—

- (i) Course work, which may include individual projects.
- (ii) A written paper of two hours duration which will contain :—
  - (a) Questions of the objective type.
  - (b) A selection of questions of the essay type from which candidates will be asked to answer two or three.

SYLLABUS

1. *Background Study*

- (a) Human needs and their satisfaction.
- (b) Specialisation and exchange.
- (c) The interdependent community.
- (d) Classification of productive activities.
- (e) Industry : commercial and direct services.
- (f) The divisions of Commerce.

2. *Trade*

- (a) *Home*
  - (i) Distribution of raw materials, semi-finished and finished goods.
  - (ii) Functions of wholesaler and retailer; types of retail outlet; branding and advertising; resale price maintenance; cash sales; forms of credit sales; hire purchase; protection of consumer—Consumers' Associations; British Standards Institute; Chambers of Commerce.
  - (iii) Functions of business documents—orders, invoices, debit/credit notes, delivery notes, statements and pro-forma invoices.
- (b) *Foreign*
  - (i) The Importance of Foreign Trade to Britain.
  - (ii) Simple treatment of Britain's balance of trade and of payments (Foreign Trade documents will not be included).

3. *Transport and Communication*

- (a) Forms of transport and their relative merits and importance to commerce.
- (b) Various means of communication; G.P.O. services.

4. *Insurance*

- (a) Personal and business risks and the means available to minimise loss and liability.
- (b) The general principles underlying the Insurance Contract.

5. *Means of Payment and the British Banking System*

- (a) Money as a medium of exchange and as a measure of value.
- (b) State-provided and other means of effective payment.
- (c) The services of the G.P.O.
- (d) The services provided by the banks.
- (e) The Clearing House System.
- (f) The work of the Bank of England.

6. *Forms of Business Organisation*
  - (a) The need for capital.
  - (b) Fixed capital and working capital.
  - (c) Sole proprietor; partnership; private and public limited liability companies; co-operative societies, public corporations including nationalised industries and municipal enterprises.
7. *The Stock Exchange*
  - (a) Functions of the Stock Exchange.
  - (b) Work of the Broker and Jobber.
  - (c) Types of securities—ordinary and preference shares, debentures and unit trusts.

## COMMERCIAL MATHEMATICS

### SCHEME OF EXAMINATION

The Examination paper of two hours duration will be in three sections. The first will be primarily arithmetical, the second statistical and the third a more advanced test on Part I of the syllabus. Candidates must answer all questions from Section I, and a prescribed number from Sections 2 and 3.

### SYLLABUS

#### Section 1. *Mathematics*

- Problems of the four rules, including short methods.
- Decimalisation of money, percentages and discounts.
- Simple Interest and the use of Compound Interest Tables.
- Metric system—weights and measures; foreign exchange, simple conversions.
- Simple depreciation—straight line and percentage.
- Calculations involving cost price and selling price, profit and loss and turnover.
- Cash discounts, trade discounts.
- Sharing of partners' profits and losses.
- Rent, rates, P.A.Y.E., gas and electricity tariffs.
- Simple mortgage calculations.
- Simple hire purchase.
- Use of logarithm and square root tables.
- Use of ready reckoner.
- Areas and volumes—rectangle, circle, triangle; surface area and volume of cylinders and right prisms, square, triangular and rectangular.
- Use of symbols.
- Simple equations.
- Simple formulae with substitution.

## Commercial Mathematics—*continued*

### Section 2. *Elementary Statistics*

Meaning and use of statistics.

Collection of data.

Approximation and accuracy.

Tabulation.

Diagrammatic Representation—Pictograms, block, bar and pie diagrams.

Graphs.

Averages—mean, mode and median.

Histograms—unequal intervals.

Cumulative frequency diagrams.

Analysis of time series.

Index numbers and weighted averages.

### Section 3. More advanced questions on Part I.

## SHORTHAND

### SCHEME OF EXAMINATION

The examination is offered for Pitman and Gregg systems.

There will be a preliminary passage of three minutes duration dictated at a speed decided by the reader. Shorthand notes taken during the reading of the preliminary passage will not be submitted.

Two passages of three minutes each, will be read at 40, 50, 60, 70 and 80 words per minute with one minute interval between the passages. Punctuation and paragraphing will not be dictated. Shorthand notes may be taken with either pen or pencil. Special attention must be given to spelling and punctuation. Candidates may take down passages at two consecutive speeds, but must submit a transcription of two passages at one speed only; any other attempt must be cancelled.

At each speed, one passage will be of general commercial interest and one selected from such matter as articles from leading journals and public speeches.

Transcription may not be commenced until dictation at all speeds has been completed.

Passages may be transcribed in ink or on a typewriter direct from the shorthand notes.

*Time allowed for transcription :—*

10 minutes for the reading of notes prior to transcription.

1½ hours for transcription.

Original notes must be submitted. A corrected outline may be inserted in the margin, the incorrect outline being ringed.

## TYPEWRITING

### SCHEME OF EXAMINATION

A two-hour paper will be set. This will include a copying test of five minutes and an output test of one hour fifty-five minutes. The output test will consist of one letter with carbon copy, one tabulation and two questions involving display. The questions, which will not necessarily be confined to business material, may be in print, typescript or manuscript, and a knowledge of simple correction signs will be required.

The paper will be based on an overall typewriting speed of 25 w.p.m.

The use of an eraser or other accepted means of rectifying errors is permitted, but untidy corrections will be heavily penalised.

Where schools so choose, provision will be made for a separate paper in audio-typewriting. The passage chosen will contain approximately 200 words; it will be dictated in 10 minutes and will include punctuation instructions.

## ENGINEERING METALWORK

### INTRODUCTION

The examination is intended primarily to meet the needs of the schools which are able to organise specialised courses, but it is hoped that other schools will enter individual candidates who show aptitude in engineering metalwork.

The aim of this examination is to provide a valid assessment of the candidate's attainment in engineering metal work after completing a course suitable for his age and ability.

Engineering metalwork should provide opportunity for acquiring the necessary workshop knowledge and skill as well as opportunities for using these accomplishments to help solve simple problems in constructional design. The natural correlation between engineering metalwork and other curricula subjects, e.g. mathematics, science, should be used to advantage in developing the scope and interest of the work undertaken.

### SCHEME OF EXAMINATION AND SYLLABUS

The examination will comprise :—

Part I	A Project
Part II	An Assessment of Course Work.
Part III	A Workshop Theory Paper.

The weighting of Parts I, II and III of the Examination will be in the proportion 4 : 3 : 3.

A candidate must submit work in each part of the examination.

#### Part I. *Project*

The candidate's choice of project should be made under the guidance of the teacher and should preferably develop from his own particular interests and aptitudes, whilst providing suitable opportunity for showing his craft skill. The work is to be executed during the Christmas and Easter terms of the last year of the course in the normal timetabled metalwork periods.

The following conditions must be strictly observed :—

- (i) The period taken to complete the project, including planning and/or research or design, shall be limited to the two terms specified.
- (ii) At least two of the machine tool operations listed in the workshop theory syllabus, Section 8a, b and c, e.g. lathework and shaping, should be carried out.
- (iii) All the practical work involved in the execution of the project must be the candidate's own unaided work.

The scope of the practical work undertaken in the project need not be confined to the range of hand and machine processes listed in the workshop theory syllabus.

The assessment of the project may be carried out by one of the following methods :—

- (i) In school by the teacher, subject to external moderation.
- (ii) By external examiner at the Board's office.
- (iii) By external examiner visiting the school.

#### Part II. *Assessed Course Work*

This will be an assessment of the candidate's Course Work by his teacher, subject to external moderation.

The external moderator will require evidence of a candidate's Course Work in the form of a selection of work showing the scope and range of the metalwork undertaken during the course. The candidate should offer no more than five items for assessment.

#### Part III. *Workshop Theory Paper*

Candidates will be expected to have a general knowledge of the syllabus and questions will be directly related to workshop practice.

- (1) Safety in the school workshop, including mechanical, electrical and personal safety.
- (2) Materials : the properties, uses, and a simplified outline of the production of the following metals and alloys : cast iron, mild steel, medium high carbon and alloy steels, copper, aluminium and their relevant alloys. The recognition of the above metals and alloys.
- (3) Heat treatment : annealing, normalising, case hardening, hardening and tempering, as applied in the school workshop.
- (4) Measurement : basic engineering; measuring, marking out, and testing; tools and procedures, including micrometer, depth gauge, surface plate, surface gauge, vee blocks and clamp, angle plate, combination square, centre square, dial indicator and engineers' blue.
- (5) Cutting : the theory and practice of the following processes; sawing, chiselling, filing, scraping, shearing, drilling and reaming.
- (6) Joining : the theory and practice of the following processes : screw fastening devices (including taps and dies), riveting, hard soldering, soft soldering, the theory of the principles of arc and gas welding.
- (7) Forming : the theory and practice of the following : basic forging processes, cold bending and the use of simple press tools, simple moulding and casting technique.

(8) Machine tools : the theory and practice of any two of the following sections :—

(a) The centre lathe; including sliding and surfacing with the work held in chuck (3- and 4-jaw), between centres and on mandrel; tapers use of compound slide, simple screw-cutting and the use of steadies, tool shape, clearance and rake.

(b) The shaper : basic setting up procedure, length of stroke, position of stroke, the efficient use of the machine vice and the production of rectangular blocks and grooves.

(c) The miller : basic knowledge of the applications and setting up procedure, the use of plain, side and end cutters.

(The use of the lathe with attachments for milling operations is permitted where no milling machine is available.)

- (9) Grinding : the use of the bench grinder for tool grinding.  
All candidates will be expected to have a knowledge of the basic considerations of cutting speeds, feeds, lubricants and cutting fluids as applied to the machines listed.
- (10) Holding tools : including spanners, pliers, types of vice and tool-makers' clamps.

*The paper will consist of two sections :—*

Section I — 30 minute duration

An objective type test of multi-choice and/or short answer type questions covering a wide range of the syllabus. All questions to be attempted and the papers collected at the end of the allotted time.

Section II — 90 minute duration

Ten minutes, prior to the commencement of the examination, will be allowed for reading through the question paper.

Answers in this section are expected to be reasonably comprehensive in content with the liberal use of sketches for illustration, and may be in note, tabulated sentence, or essay form.

The questions will be set out under three headings as follows :—

- (i) Benchwork and fitting practice.  
Two questions will be set, of which ONE must be attempted.
- (ii) Machinework.  
Three questions will be set, of which TWO must be attempted.
- (iii) Miscellaneous (including safety and materials).  
Two questions to be set, of which ONE must be attempted.

## ENGLISH

### INTRODUCTION

The elements of verbal communication are listening, speaking, reading and writing, and the examination in English will seek to assess the ability of the candidate to use the spoken and the written word fluently, accurately, appropriately and effectively.

*English is regarded as a single subject.* The examination will not contradict this principle, and will assume recognition of the central role of literature in developing the powers of understanding and expression. Wide reading and a developed response to poetry, drama and various types of prose will be expected of the candidate.

#### SCHEME OF EXAMINATION

The final grade awarded will be determined by the candidate's performance in three areas of assessment :—

- (i) Written English
- (ii) Spoken English
- (iii) Course Work.

These will be weighted in the proportions 2 : 1 : 1 respectively to ensure that teachers in the schools will be able to share with the external examiners the responsibility of determining the candidate's final grade.

The school will present *two* gradings : one in respect of the candidate's spoken English, the other in respect of his course work. The external examiners will present a grade in respect of the candidate's written test. All these gradings will be subject to moderation.

#### A—*Written English*

- (a) TWO PAPERS will be set, each designed to occupy the average candidate for one and a half hours, though a further hour will be allowed to any candidate who desires it.
- (b) The two papers will be complementary, covering between them most aspects of the written language.
- (c) In each of the two papers candidates will be asked to write various forms of continuous prose, which may include letters, essays, purposive summaries, instructions, explanations, dialogue, comment, and so on.
- (d) Part of the written material will aim to test the candidate's understanding of and response to the printed word. The material provided may come from a variety of sources, including novels, plays, poetry, newspapers, magazines and books of instructional literature.
- (e) Although it is not proposed to examine candidates on set books, the written examination will include questions designed to test the candidate's knowledge and understanding of works of prose, poetry and drama.
- (f) There will be no questions in formal grammar, "vocabulary", "punctuation", etc., but in all their writing candidates will be expected to use an adequate vocabulary and to show competence in arrangement, grammar, punctuation, spelling, and correct usage generally.

- (g) Candidates will be permitted to use dictionaries during the examination.
- (h) From year to year the overall pattern of the written test may be varied.
- (i) The written test will be marked and graded by the external examiners.

#### B—Spoken English

- (a) The candidate will be expected to understand the spoken word and to use it effectively.
- (b) The school will present a grade (see paragraph 5) in respect of the oral work done by the candidate during the course. This grade may be determined by a cumulative assessment, a final test, or both.
- (c) The oral work on which the *cumulative assessment* is to be made could include general conversation, group discussion, reading aloud, instructional and explanatory talks, drama and debate.
- (d) The *test* should give the candidate the opportunity to express his own thoughts as an individual and as a member of a group.
- (e) The grades presented by the school will be subject to external moderation.

#### C—Course Work

- (a) For the purpose of assessment the term “Course Work” is taken to apply to the individual written work carried out by the candidate from the beginning of the fourth year to the time the work is presented for moderation.
- (b) Course work should show evidence of a candidate’s ability
  - (i) to write appropriately
  - (ii) to use works of reference intelligently
  - (iii) to understand and appreciate the writing of others.
- (c) The external moderator will expect to be presented with a fair sample of the work the candidate has done during the prescribed period.

This sample should include as wide a selection as possible of the following :—

- (i) A sustained piece of writing requiring reference to a number of sources; e.g. a local craft or industry; facilities for old people in the locality; furnishing a modern home; stage lighting; the Brontë country; T.V. and the 12-15 age group; aspects of literature; monuments.
- (ii) A collection of personal writing; e.g. stories; poems; essays; articles; dramatic pieces; diary entries.
- (iii) Private and formal correspondence.
- (iv) A simple record of books read, with brief comments and/or summaries, some of the books to have been the subjects of more detailed study.
- (v) Records and reports; e.g. experiments; outings, events and activities.

- (vi) Studies of articles/topics in newspapers and magazines.
- (vii) Film, theatre, television and radio criticism.
- (viii) Any other work which in the opinion of the teacher might help to establish the candidate's ability in English.
- (d) Course work will be assessed internally and offered for external moderation.

#### SYLLABUS

So that teachers may be left free to plan their courses as they think best, no syllabus is promulgated. The form and nature of the examination are, however, described in some detail in order to provide guidance for the construction of schemes of work.

The compilation of a book list is a matter for the teacher and his pupils, but useful guidance may be obtained from the following :—

FISHER, M. : " Intent upon Reading " (Brockhampton Press).

HOLBROOK, D. : " English for Maturity " (C.U.P.).

SMITH, A. E. : " English in the Modern School " (Methuen).

The occasional publications of Area Institutes of Education and of other specialist organisations such as the N.A.T.E.

# GEOGRAPHY

## INTRODUCTION

The aim of the syllabus is to encourage the ability to use geographical principles in order to understand the constantly changing facts of our world. It will offer opportunities for children to study the Geography of the British Isles in general and of certain areas in detail, the general Geography of the World and of some aspects of World Geography in detail. The course will include work on Ordnance Survey maps and will give opportunity for individual work on topics of a candidate's own choice.

## SYLLABUS AND SCHEME OF EXAMINATION

### PAPER I

Duration : 2 hours with the addition of 15 minutes reading time.

Candidates will be *advised* to spend not more than 20 minutes on question A1., 30 minutes on each of the other two choices from section A and 40 minutes on question B.

#### A. *British Isles*

##### 1. *General Geography*

- (i) Relief and Drainage
- (ii) Seas and Coastal features
- (iii) Elementary Climate
- (iv) Towns
- (v) Communications—ports, roads and air travel
- (vi) Agriculture
- (vii) Major industries

2. *Regions of the British Isles*—Areas in which contrasts can be found although candidates will not necessarily need to draw contrasts. Candidates should be prepared to answer a compulsory question on region (i) and one question from a choice of five set on the whole *or part* of the other regions.

The regions are :—

- (i) Yorkshire and Lincolnshire (compulsory question)
- (ii) Lancashire and Cheshire
- (iii) The Midland Triangle
- (iv) London and South-East England
- (v) South Wales and South-West England
- (vi) The Central Lowlands of Scotland
- (vii) Ireland
- (viii) The North-East of England and the Lake District

#### B. *Ordnance Survey Map Work*

Examination of the 1-inch series, although candidates should have a knowledge of the 2½-inch and 6-inch series. Candidates will be expected to :—

- (a) Recognise conventional signs
- (b) Use six-figure grid references
- (c) Recognise contour patterns produced by physical land-forms
- (d) Recognise different drainage patterns
- (e) Make a traverse—plot a route including gradients and sixteen compass points
- (f) Sketch sections—intervisibility
- (g) Explain reasons for settlement

The types of areas from which the O.S. map extracts will be selected are :—

- (i) Chalk or Limestone (or porous rock) and clay areas
- (ii) Glaciated areas
- (iii) Highlands and Lowlands
- (iv) Industrial areas
- (v) Coastal areas

## PAPER II

Duration : One hour if first part only is to be examined; two hours if both parts; fifteen minutes reading time will be allowed.

Candidates will be *advised* to spend not more than 15 minutes on question A1, 45 minutes on the other two questions from A and 30 minutes on two questions chosen in Section B if this is to be a written examination.

### A. *World Geography*

1. A world map containing information which has to be identified or extracted and particularly pertaining to :—

- (a) Major features of relief and drainage
- (b) Major sources of minerals and foodstuffs
- (c) The *location* of current world events
- (d) Population—differing densities—reasons
- (e) Planetary Geography—latitude, longitude, time and seasons, etc.
- (f) Routes—the major sea and air routes and ports

2. Sample studies on areas of outstanding human activity, the questions so framed as to allow candidates to choose topics of individual interest in order to answer two out of five questions set upon the following (no specific crop or product to be given) :—

- (i) Areas of great mineral wealth
- (ii) Forestry
- (iii) Fisheries—including ports and activities
- (iv) Areas of commercial farming—food and industrial crops  
—pastoral
- (v) Areas of subsistence farming
- (vi) Densely populated industrial areas and their sources of power
- (vii) Major human problems such as over-population and backwardness

### B. *Optional Section*

There are four options in this part of which the first three are not considered suitable for a written examination. These three are :—

- (i) Local Studies—A study of the geographical aspect(s) of the candidate's local area.
- (ii) Field studies—An individual study of some geographical aspect(s) of a defined area selected by the candidate.
- (iii) Topics—A presentation of an individual geographical study which may be an extension of any part of the course.

Candidates choosing one of these three will not be examined but will instead, submit a piece of work for internal assessment and external moderation.

The fourth option is :—

(iv) Practical Geography—and may include :—

- (a) Physical Geography—recognition, mode of origin and location of examples of simple land forms
- (b) Latitude and Longitude
- (c) Time, seasons and weather
- (d) Reading of graphs and thermometers
- (e) Interpretation of photographs, diagrams, etc.
- (f) Elementary surveying and map making
- (g) Simple Geology—the recognition of rocks, their properties and uses and distribution in Britain.

For this fourth option there may be a written paper for those who wish it OR there may be centres for a practical examination where this is feasible. Details of such centres will be issued later.

Where candidates choose to do a written paper they will remain in the examination room for the second hour and will be issued with atlases. (A candidate must specify which atlas he is using.)

On the written paper there will be a choice of questions including all seven topics; the candidate will be expected to answer two.

As a guide to ALL teachers, the type of questions to be set in the Regional Examination will be :—

- (i) Objective tests on geographic principles (multiple choice)
- (ii) Interpretation of information given in the form of :—
  - (a) Outline maps
  - (b) Prose
  - (c) Photographs
  - (d) Sets of statistics
  - (e) Diagrams

The answers may be in the form of :—

- (i) Insertions on maps
- (ii) Selecting the correct answer to multiple choice questions
- (iii) One word answers
- (iv) Sentence answers
- (v) Short passages
- (vi) Sketch maps

Each question will contain several parts—possibly a combination of some of the above, graded from the easier type to the more difficult. All children will be able to answer some and some children might answer all so that the paper will suit as wide a range of ability as is possible.

The weighting of the papers will be in the following proportion :—

PAPER I	A	1	Question 1
	A	2	The two other questions.
	B	$1\frac{1}{2}$	
PAPER II	A	1	Question 1
	A	$1\frac{1}{2}$	The two other questions.
	B	3	

## HISTORY

### INTRODUCTION

Candidates may offer one of three syllabuses for examination. Each is concerned with a different field of recent history, which is the period thought most likely to interest candidates by its relevance to their own historical experience. It is hoped that this study will promote a better and broader understanding of the world into which they are growing up.

Within the first two syllabuses the topics for study have been set out in some detail; recent history is complex, amorphous, and not always familiar, as teaching material presenting difficult problems in the selection of material for study, particularly to the non-specialist. It is, therefore, hoped that guidance in the subject matter for examination will be welcomed, and not misunderstood as restrictive of a freedom which lies essentially in interpretation and presentation. It will not be necessary for candidates to cover the whole of a syllabus in detail.

Each syllabus is planned to cover a two-year course.

The form of the examination will test memory and understanding in both Papers I and II.

Paper II will test two kinds of ability : to read, understand and draw conclusions from historical extracts, maps and diagrams and to relate these to their historical background; to recall, understand, and arrange relevant information, and to give it appropriate expression.

The project will test ability to work independently, collecting and collating historical information, arranging, expressing and illustrating it.

### SCHEME OF EXAMINATION

#### PAPER I

This will be an objective test lasting approximately one hour. It will contain questions ranging over the whole syllabus, all of which should be attempted. The test will be timed and may contain between 60 and 100 questions.

#### PAPER II

This will be a two-hour paper with an allowance of fifteen minutes for reading time.

Candidates will be advised to spend not more than thirty minutes each on Sections A and B.

##### Section A

This section will contain a wide choice of short answer questions which may include maps and diagrams.

Two questions should be answered from this section.

##### Section B

This section will contain four unseen extracts taken from historical sources and relating to major topics, together with sets of questions. The extracts will be titled and the source given. A glossary of terms may be included where necessary.

Candidates will be required to answer questions on one extract only.  
Section C

This section will contain a wide choice of questions mainly of the assisted essay kind in which the framework of the answer is conveyed in the form of the question.

Two questions should be answered from this section.

### *Project*

During the examination course candidates will be required to produce a piece of individual work on a topic of a historical nature. It is expected that candidates will receive some guidance in the choice and preparation of this work. The work could take the form of a folder, notebook, thesis or evidence of practical work, or some combination of these. If the project is a piece of written work it should not exceed 3,000 words in length. A list of authorities and sources consulted should be appended.

The weighting of Papers I, II and the Project will be in the following proportion : 3 : 5 : 2. The internal weighting of Paper II will be :

Section A and B	....	2½ each
C	....	5

## SYLLABUS A

### BRITISH ECONOMIC AND SOCIAL HISTORY FROM THE AGE OF REFORM TO 1950

#### 1. *Britain in the Age of Reform* *Britain about 1830*

The Reform Act of 1832. Ideas of reform : laissez-faire; the Evangelicals; the Utilitarians; the Ten-hour movement; Robert Owen. Social reform : slavery; factories; mines; Poor Law; climbing boys.

#### 2. *The Railway Age to 1870*

The origins and development of the railways; the development of shipping; the penny post; the Free Trade Movement (including the Anti-Corn Law League); mid-Victorian prosperity; the Great Exhibition; family, architecture, dress and customs; agriculture; new developments in the steel industry.

#### 3. *Working-class Movements to 1880*

Working-class radicalism.

Chartism.

Friendly societies; trade unions; the Co-operative movement.

#### 4. *The Challenge to Britain's Economic Supremacy*

Britain's competitors; problems of re-equipment and small-scale organisation in British industry to 1914; depression in agriculture.

Economic aspects of imperialism : emigration; investment; imports and exports.

Tariff reform.

5. *The Growth of Democracy*

Parliamentary reform (1867-1928); the Suffragette movement; the rise of the Labour Party.

The growth of industrial and general unions after 1880.

Social reform : health; housing; workmen's compensation; old age pensions; health and unemployment insurance.

6. *The Growth of Education*

The growth of elementary education; the growth of secondary education; the growth of adult and further education.

7. *The Development of Applied Science*

Electric power; the internal combustion engine; the steam turbine; development in communication; medicine; science and agriculture.

8. *Religious Movements*

Nineteenth century Nonconformity; the Evangelical movement; the Oxford movement; the Roman Catholic Church in England; the Salvation Army; the decline in public worship.

9. *Britain between the Wars*

Trade and industry; agriculture; the General Strike; the depression; the problems of unemployment.

The pattern of city life; housing; transport; entertainment and the growth of mass media.

Family life; architecture; dress and customs.

10. *Social and Economic Changes during and after the Second World War*

Full employment; the revival of agriculture; rationing; changing social relationships; the changing role of the State.

The Beveridge Report; the Health Act; town and country planning; housing.

Nationalisation.

Balance of payments problem.

SYLLABUS B  
WORLD HISTORY : 1900-1960

1. *Introduction : The World Situation at the Beginning of the Twentieth Century*  
The balance of power in Europe.  
National aspirations in Central and Eastern Europe.  
How Europe dominated the world.  
Russia : Peasant and Czar.  
U.S.A. : immigration (a land of opportunity); hostility to European imperialism.
2. *Major Economic Changes in the Twentieth Century*  
The state of world economy at the turn of the century.  
The significance of the growth of world population.  
Changes in world industry :
  - Outline of the main regions of growth.
  - Importance of the steel industry.
  - From coal and steam to oil, electricity and atomic power.
  - New methods, e.g. mass production.
  - Booms and slumps—1929 depression.
  - Organisation of industry and labour : monopoly capitalism; state ownership; function of trade unions.
3. *World War I*  
Causes of the War.  
Changes in the nature of war :
  - Trench warfare and the tank.
  - Submarine and Dreadnought.
  - Aeroplane and Zeppelin.
  - Civilian involvement.The new map of Europe and the Middle East :
  - Break up of the Austrian and Turkish Empires in Europe.
  - New European States.
4. *Developments in Democracy in Britain*  
Parliamentary reform to 1928.  
Emergence of the Labour Party.  
The growth of the Welfare State since 1906.
5. *Communism*  
Karl Marx.  
The Russian Revolutions.  
Communism in Russia since 1917.  
Communism in Europe since 1945.
6. *Fascism and National Socialism*  
Mussolini and the rise of Fascism in Italy.  
The condition of Germany after World War I.  
The rise of Hitler to 1933.  
Nazi rule in Germany to 1945.  
The Spanish Civil War and Franco's dictatorship.

7. *Japan*  
Economic development.  
Political ambition.  
Japan since 1945.
8. *The Great Powers and World War II*  
Causes of the war :  
The failure of collective security after 1919.  
Foreign policy of Germany and Italy after 1935.  
Nazi-Soviet pact of 1939.  
  
World War II in outline :  
Main areas of conflict.  
Changes in the nature of war :  
Static war—the Maginot line. War of movement : Blitzkrieg.  
Naval war—U boats and aerial attack.  
The war as it affected civilians (a) in occupied countries,  
(b) in belligerent countries.  
The division of Germany.
9. *The Decline of Imperialism*  
Foundation of the Commonwealth (Statute of Westminster).  
India between the wars : Gandhi.  
Break-up of the colonial empires of Britain, France and Holland.  
The Commonwealth since 1945 :  
The emergence of independent states.  
The problem of South Africa.  
The function of the Commonwealth.
10. *The Evolution of Modern China*  
Sun Yat Sen.  
Chiang Kai Shek.  
Mao Tse Tung.  
The extension of Chinese power since 1945.
11. *The U.S.A.*  
Isolationism between the wars.  
Roosevelt and the New Deal.  
Role as a world power since 1945 :  
Marshall Plan.  
Truman.  
Eisenhower.  
The Negroes in the U.S.A.,
12. *The Middle East*  
Emergence of the Arab states.  
Zionism and the establishment of Israel.  
Israel and the Arab states since 1948.
13. *International Order*  
The League of Nations : origins and failure.  
The United Nations : aims, organisation and evolution.  
The cold war and the nuclear arms race.

## SYLLABUS C

### THE BACKGROUND TO BRITAIN AND THE WORLD TODAY

#### PART I : *BRITAIN* (1851-1960)

- I. *Introduction : Britain in 1851*  
Britain's position in the world, internationally and imperially.  
Social, political and economic conditions.  
The social order—working and living conditions; religion; science; medicine; customs.  
Parliamentary representation; local government.  
Agriculture; chief industries; transport; trade.
- II. *Social Developments*  
Trade Unionism; Co-operative movement; education; poverty and unemployment; public health; the development of the Welfare State; Mass media : press, cinema, radio, television.
- III. *Political Developments*  
Parliamentary reform.  
Development of major political parties.  
Extension of powers of local government and contemporary organisation.
- IV. *Modern Economic Developments*  
New forms of power : electricity, oil, nuclear power. Their effects on the location of industry; the impact of new materials on contemporary life : synthetic fibres; metals; plastics; detergents.  
Land, sea and air transport.  
The growth of large-scale industry; mass production; automation.  
State ownership and control of industry since 1945.  
Recent developments in agriculture.

#### PART II. *THE WORLD* (1918-1960)

- I. *Developments between the Wars*  
Peace of Versailles.  
Communism in Russia.  
The Rise of the Fascist Dictators.  
The League of Nations and the search for peace.  
The U.S.A.  
Events leading to World War II.
- II. *The Second World War (in broad outline)*
- III. *Post-War Developments*  
Effects in Europe :  
Political conflicts (including summit meetings 1943-45).  
The German question and the growth of Russian influence in East Europe.  
Social and economic problems in post-war Europe.  
The United Nations Organisation.  
Organisation.  
Political and economic role.  
World Power Groupings.  
The Decline of Imperialism.

# HOUSECRAFT

## INTRODUCTION

This is a widely based syllabus designed to develop the pupils' potentialities both as individuals and responsible members of the family and community.

The course should consist of two years' work on the following syllabus, assuming that the basic aspects of the subject will have been studied :—

### SCHEME OF EXAMINATION

1. *A Theory Examination* of 1½ hours.

This paper will be in three sections :—

Section A : Objective type questions.

Section B : short answer type questions.

Section C : 2 essay type questions from a choice of 6.

2. *Practical Assessment*.—An assessment of practical work to be based on 6 grades given by the teacher during the Autumn and Spring terms of the final year of the course. The assessment will be subject to moderation during the Spring Term and will take 60% of the final mark or grade.

When grading, the following headings should be taken into consideration :—

(a) Written preparation and/or records of each piece of practical work (this to be available for moderation).

(b) Hygienic approach to work.

(c) Organisation.

(d) Initiative.

(e) Practical Skills.

(f) Presentation of work.

(g) Finished results.

3. *A Special Study*

All candidates should compile a folder and present it for examination at the end of the course, showing some individual work done on a topic of their own choice connected with the home :—

e.g. Furniture

Kitchen Planning

Interior Decoration

Soft Furnishings

Colour and Design in the Home

Flower Arrangement

China and Glass

Preservation

Dairy Produce

Herbs and Spices

It should be stressed that this is only a list of *suggestions*. Originality in choice is to be encouraged.

The weighting of the theory examination, the practical assessment and the special study will be in the proportion : 3 : 6 : 1.

A candidate must submit work for, and reach a minimum standard in each section of the examination.

## SYLLABUS

### SECTION A—*THE FAMILY*

#### 1. *Nutrition and Wise Feeding of the Family*

The planning, cooking and serving of everyday meals for the family, with regard to simple nutrition, choice, costing and storage of food, to include :—

- (a) The use of convenience foods.
- (b) Quick methods of preparation.
- (c) Food for young children.
- (d) Invalid cookery.
- (e) Packed Meals.
- (f) Food for old people.
- (g) Simple entertaining.

#### 2. *The Care and Laundering of Personal Clothing and Household Articles* —including the treatment of modern fabrics.

#### 3. *Good Grooming*

—including personal appearance and hygiene.

#### 4. *Hygiene in Relation to Family Health*

To include :—

- (a) Food hygiene.
- (b) Disposal of kitchen and other household refuse.
- (c) Cleanliness in the kitchen, larder, bathroom and toilet.

### SECTION B—*THE HOME*

#### 1. *The Kitchen*

Choice and arrangement of basic kitchen equipment to include :—

Sinks

Cookers

Refrigerators

and

Washing Machines.

Choice of essential small equipment.

#### 2. *Wise Spending of Money*

To include :—

- (a) Cash buying and hire purchase.
- (b) Value for money.
- (c) Personal budgeting and saving. Simple allocation of money.

3. *Safety in the Home*

To include :—

- (a) Prevention of accidents.
- (b) Simple first-aid—cuts and grazes, burns and scalds, stings, electric shock, sprains and fractures, fainting, nose-bleeding.
- (c) The use of emergency services.

SECTION C—*THE COMMUNITY*

The aim of this section is to draw attention to the existence of the following services and to show how one would seek aid from them :—

- (a) The National Health Service.
- (b) Local Welfare.
- (c) Maternity Services.
- (d) Voluntary Services, e.g. W.V.S.

# MATHEMATICS

## INTRODUCTION

The syllabus is in two parts. Part 1 contains basic mathematical knowledge and Part 2 consists of nine topics of a more advanced or specialised nature of which the candidate will offer two.

Questions in Part 1 of the syllabus will be compulsory. The emphasis of the examination will be on the understanding of fundamental mathematical ideas. Although importance will be attached to style, presentation and accuracy, calculations and manipulation will be kept to a minimum, particularly in the compulsory part of the examination.

Candidates may use any appropriate method of solution unless otherwise stated.

Computations may be carried out at the discretion of the candidate, with the aid of 4-figure tables, ready reckoners, slide rules, desk calculators or any other mathematical devices, unless otherwise stated.

## SCHEME OF EXAMINATION

There will be two compulsory papers, Paper 1, based on the "common core" syllabus and Paper 2, a choice of any *two* from nine of the topics.

The time allowed for each paper will be two hours, but the paper will be so designed that the average and above candidate should complete it in one and a half hours.

Paper 1 will be an objective type examination, and will consist of a combination of multi-choice, multi-facet and constructed response questions. This paper will consist of not more than 20 questions (five parts to each) all of which should be attempted.

The weighting of Paper 1 and Paper 2 will be in the proportion 6 : 4.

## PART 1—*BASIC COMMON CORE SYLLABUS*

The numerals; the symbol for zero, and its use as a place holder; numbers written in the scale of ten; the idea of numbers written in other scales, the use of the binary scale in mechanical computation.

The metric system as an example of a practical system of weights and measures employing the scale of ten.

Combining numbers; the addition tables and the multiplication tables; the repeating patterns associated with these tables.

Easy computation involving the usual processes as applied to practical situations and problems of a practical nature.

Fractions; decimals; percentages; negative numbers; (such as  $\pi$  and  $\sqrt{2}$  but not complicated surds involving rationalisation).

Proportional and percentage errors; approximations to a given number of significant figures and decimal places; estimation.

Index notation; the convenience of expressing numbers in Standard Form.

The recognition of shapes in three and two dimensions; shapes that arise from moving points (loci) and moving lines (envelopes).

The analysis of shapes; faces, edges and vertices of solids; sides and angles; curved lines and surfaces; measurement of volumes, areas and perimeters.

Mensuration and simple geometrical properties of triangles; quadrilaterals; circles; cuboids; triangular prisms; cylinders.

Derivation of simple formulae.

Direction and change of direction; bearings; the fixing of position.

Similar figures (treating congruence as a special case); ratio of sides, areas and volumes.

Symmetry about planes, lines and points.

Importance of the right angled triangle.

Similar triangles and constant ratios leading to relationships between acute angles and their trigonometrical ratios.

Use of protractor, compasses, set square and straight edge in construction of simple plane figures, bisectors, parallels and perpendiculars.

Use of fractions for purposes of comparison; ratio; proportion; percentage.

Graphical representation and interpretation of statistical data.

Pie charts; pictograms; bar and column charts; frequency curves; simple histograms.

Recognition and statement of relationships in general or symbolic terms; functions and formulae; dependent variables; co-ordinates.

Graphical representation of linear and simple non-linear relationships (e.g. linear conversion graphs  $y = kx$ ,  $y = kx^2$ ,  $y = \frac{k}{x}$ ,  $y = k^x$ ).

Inequalities; simple algebraic and graphical treatment; equalities appearing as marginal cases between inequalities.

Solution of simple linear equations in one unknown, and simple linear simultaneous equations in two unknowns.

Other characteristics of a function that can be obtained from its graph, e.g. its rate of change and turning values; the significance of gradient and of "area" under the graph.

## PART 2—TOPICS

### 1. *History of Mathematics*

The development of mathematical thought through the ages as illustrated by :—

- (a) the growth of number systems
- (b) the use of calculating devices
- (c) the concepts of place value; zero; negative numbers; rational and irrational numbers.

A knowledge of the work of the great mathematicians will be expected.

### 2. *Mathematics of Commerce and Daily Life*

Wages; Salaries.

Bills; income and expenditure accounts.

Insurances; gas and electricity costs; rates and taxes; banking; investments; Unit Trusts.

Profit and loss; discount and commission; hire purchase; house purchase.

### 3. *Statistics*

Collection, representation and analysis of data.

Mean; median; mode.

Measures of dispersion; range; quartiles; mean deviation.

Qualitative treatment of sampling; quality control; correlation.

Simple probability.

### 4. *Earth Measurements and Time*

Shape of earth; approximate dimensions; Great Circles.

Meridians and equator.

Latitude and longitude.

Miles per degree on Great Circles.

Distances between points on Great Circles, including examples on equator and distances over poles.

Small Circles; parallels of latitude.

Diagrammatic method of comparing parallel of latitude with Great Circle distances.

Rotation of earth.

Rotation about the sun.

The seasons.

International date line.

Time by the sun.

Greenwich mean time; standard times.

Time differences.

The calendar.

### 5. *Surveying*

Heights by scale drawing.

Levelling.

Use of GNOMON and geometrical square.

Surveyor's field book.

Chain line and offset method of surveying.

Use of clinometer.

Use of theodolite.

Plane table surveys.

Area of irregular shapes by mid-ordinate and trapezoidal rule.

(Evidence of field work must be submitted by all candidates. The use of school made instruments should be encouraged.)

#### 6. *Modern Mathematics*

The language and notation of sets. (The following symbols only, will be used :—

$\in$   $\subset$   $\cap$   $\cup$   $\{$   $\}$   $\emptyset$   $\mathcal{E}$

The use of Venn diagrams :—

(a) to solve simple problems involving the organisation of data

(b) to analyse simple logical arguments

(c) to illustrate simple laws of the algebra of sets.

Algebra of sets and simple switching circuits.

Sets with internal laws of composition. Groups. The group of the rectangle. The group of rotations of the equilateral triangle. Groups under multiplication and addition in modulo arithmetic.

2 x 2 non-singular matrices as operators. The matrix as a coding device.

The use of matrix multiplication in arithmetic. Multiplication and addition of matrices. Row and column vectors (two elements only). The idea and notation of vector addition. Application of vector algebra to simple geometrical problems.

Simple topology (mainly descriptive). The sphere and the torus. Idea of topological equivalence of surfaces. Euler's theorem on the invariance of  $F + V - E$ . Network problems, map colouring, the bridge problem. Möbius strips. Practical illustrations of the growing importance of this subject.

#### 7. *Further Mathematics*

More searching questions may be asked on the subject matter of Part 1 of the examination, together with :—

Laws of indices.

Logarithms and very simple theory of logs.

Harder linear and simultaneous linear equations.

Factorisation of trinomial expressions.

Quadratic equations and their solution by any method.

Simple problems based on the above equations.

Further graphical work.

Application of sine and cosine rule for angles up to  $180^\circ$  but excluding the ambiguous case.

Area of triangle using  $\frac{1}{2} ab \sin C$ .

The sine, cosine and tangent of angles of  $30^\circ$ ,  $45^\circ$ , and  $60^\circ$ .

3D problems in figures involving right angled triangles.

Angle properties of the circle to include :—

(a) angle at centre, angle on same and equal arcs

(b) angle in a semi circle.

(c) opposite angles in a cyclic quadrilateral

(d) tangents to a circle from an external point

(e) angle between chord and tangent.

Angle sums of a polygon.

## 8. *Mechanics*

Concepts of (i) velocity

(ii) acceleration.

Distance time and velocity time graphs.

Use of formulae for uniformly accelerated motion.

Energy, work and power.

Momentum. Conservation of momentum and energy.

Resultant of two forces. Resolutes of a force.

Moment of a force about a point.

Equilibrium.

Centre of gravity.

Simple machines : (i) wheel and axle

(ii) inclined plane

(iii) simple screw jack

(iv) pulley systems.

Mechanical advantage, velocity ratio and efficiency.

(Friction to be included only on a qualitative basis.)

## 9. *Elementary Coordinate Geometry and Calculus*

Coordinates of a point.

The length, gradient and equation of a line joining any two given points.

Gradient to a curve by drawing and by calculation.

Idea of a limit.

Differentiation of simple algebraic polynomials.

Maximum and minimum.

Rates of change.

Numerical integration.

Integration as the reverse process from differentiation.

Area under a curve.

## METALWORK

### INTRODUCTION

Metalwork is envisaged as providing opportunity for the fostering of two aspects of creativity, viz. : inventiveness and the ability to solve simple practical problems, as well as providing opportunity to acquire sound basic knowledge of the processes and skills of the crafts which constitute the normal school metalwork course.

#### SCHEME OF EXAMINATION AND SYLLABUS

The scheme of the examination is designed to permit the widest possible choice of crafts to be undertaken, as well as allowing for a limited amount of specialisation, according to the interests and aptitudes of the candidate and the facilities available.

The examination will comprise :—

PART A : Practical Test of three hours duration.

PART B : An assessment of the candidate's Course Work.

PART C : Craft Knowledge Paper of two hours duration.

Each section carries equal weight. A candidate must submit work in each part of the examination.

#### PART A :

The choice of the type of practical test undertaken should be made by the candidate under the guidance of the teacher prior to the examination.

Schools will be permitted to have more than one type of practical test being undertaken in a workshop at the same time.

A period of fifteen minutes prior to the examination will be allowed for the candidate to study the question paper and plan his work. Detail paper should be available, but any drawings or notes made will not be required by the Board.

Candidates will be required to work from dimensioned sketches and/or dimensioned working drawings conforming to B.S. 308/53.

Candidates will also be expected to supply simple constructional details and/or dimensions which will be deliberately omitted from the question paper.

As far as possible the test will be a complete and recognisable article.

Provision for alternative tests are as follows :—

- (i) a benchwork test that may include simple turning (the turning requirements will not exceed fifteen minutes duration)
- (ii) a hammered metalwork test—excluding raising from the flat sheet
- (iii) a forgework test that may include simple fitting.

It is not proposed to include a sheet metalwork test, but if any school requires it, the Board would be prepared to set such a test.

## PART B :

### *Assessed Course Work*

This will be an assessment of the candidate's Course Work by his teacher, subject to external moderation.

The external moderator will require evidence of a candidate's Course Work in the form of two examples of work showing skill in different aspects of the craft, which have been made in the two years prior to the examination. It is the intention of the Board that candidates should be encouraged to design or partially design the pieces submitted thus showing the ability to solve simple design problems.

## PART C :

### *Craft Knowledge Paper*

Candidates will be expected to have a knowledge of :

General safety in the school workshop.

Metals and alloys commonly used in the school workshop—aluminium, copper, lead, zinc, brass, gilding metal, nickel silver, soft solders, silver solders, brazing spelters, mild steel, cast steel, high speed steel, stainless steel, cast iron, tinplate, galvanised sheet. Recognition of the above metals and alloys and general ironmongery found in the school workshop, their properties and normal applications.

Simple heat treatment : hardening and tempering, case-hardening, annealing and normalising as applied in the school workshop.

The recognition, care and maintenance of all tools normally used in the school workshop.

The basic processes of : setting out, sawing, chiselling, filing, drilling, reaming, riveting, and the use of taps and dies.

The principles and correct use of holding tools including spanners, vices (parallel and non-parallel) and pliers.

The reading and use of the micrometer.

Forgework : including hot and cold bending, drawing down, twisting, simple scrollwork and simple upsetting.

Hammered metalwork: including hollowing, sinking, simple raising, planishing, the making of simple base rings and feet.

Sheet metalwork : including basic development, cutting out, folding, lapping, seaming and wiring.

The plain lathe : ability to recognise and name the main parts; the use of : three jaw self-centering chuck, four jaw independent chuck, catch plate and carrier, hard and soft centres.

Simple turning : including parallel turning, facing, parting, knurling, taper turning, drilling and boring in the lathe.

Finishing and protection of metals normally carried out in the school workshop.

*The Paper will consist of two sections.*

SECTION I (30 minute duration).

An objective type test consisting of multi-choice and/or short answer type questions covering a wide range of the syllabus. All questions to be attempted and the papers collected at the end of the time limit.

SECTION II (90 minute duration).

Ten minutes, prior to the commencement of the examination, will be allowed for reading through the question paper.

Answers in this section are expected to be reasonably comprehensive in content with the liberal use of sketches for illustration, and tabulated sentence form may be used where suitable.

The questions will be set out under six headings as follows :—

- (i) benchwork
- (ii) hammered metalwork
- (iii) sheet metalwork
- (iv) forgework
- (v) lathework
- (vi) general (including safety and materials).

Each section will contain two questions, the second question will require a more detailed knowledge of the subject.

The candidates will be required to answer any FOUR questions thus catering for both the wide general course and the limited specific course.

### **MODERN LANGUAGES**

The syllabus for Modern Languages is available in duplicated form only. It is intended to issue as a separate booklet in printed form :—

The Syllabus,

The Specimen Examination Paper,

The basic vocabulary to which reference is made in the syllabus.

This booklet will be circulated in late August, 1965.

## MUSIC

### AIMS

While the scope of music will vary considerably from one school to another, there are certain elements which should be common to all schemes of music. The examination will, therefore, contain the four main items :—

- (a) Practical music—vocal, instrumental.
- (b) Musical literacy.
- (c) General knowledge of music.
- (d) Individual musical interests.

So far as has been possible, the practical aspect of music has been given the greater prominence in order to encourage active participation in actual music-making.

### SCHEME OF EXAMINATION

The examination will be divided into parts, each of which will carry the following weighting :—

(a)	Ensemble Work	....	....	....	—
(b)	(i)	Individual Reading	....	....	1½
	(ii)	Individual Listening	....	....	2
(c)	(i)	Musical Knowledge	....	....	2½
	(ii)	General Musical Experience	....	....	2
(d)		Individual Interests	....	....	2

The ensemble work will be authenticated by the school entering the candidates and a list of works regarded by the school as admissible ensemble work should be submitted along with the entries.

The practical side of the examination should be completed by the end of the Spring Term.

### SYLLABUS

The examination will consist of the following sections :—

(a) *Ensemble Work*

Taking part in ensemble work will be a condition of entry to the examination. The school must authenticate that the candidate has taken part in some form of ensemble work, vocal or instrumental, during the length of the course. Each candidate shall compile a list of the pieces he has performed as a member of such ensemble and must present the list to the assessor at the time of the aural tests.

(b) (i) *Individual Reading*

There will be a compulsory sight reading test. The test will be an actual piece of music and not a piece written specially for the examination. The candidate should have up to five minutes preparation (at his discretion) before attempting the reading. Each candidate to be allowed up to three attempts, if he desires it, the examiner marking the best attempt. Phrase marks, expression marks and speed indication will be included in the set test. The sight reading test will be in C, G, or F for voice, and instrumentally in a simple key convenient to an instrument.

(ii) Candidates will be asked to listen to a recording of a short piece of music. The piece of music will be repeated a number of times and there will be a wide range of questions. Questions will range over dynamics, time signatures, simple form, sequences, phrases, style, instrumentation and Italian terms for speed and volume. A few bars may be left blank on the score provided for the candidate and the candidate will be asked to fill in the missing notes.

(c) (i) *Musical Knowledge*

Each school will select fifteen works from the prescribed list. The candidate to be conversant with the principal themes of the works selected. Questions to cover themes, composers, background; detailed analysis is not required. Candidates should be able to recognise the themes visually as well as aurally.

Prescribed List of Set Works for 1966

1. *Bach* Brandenburg Concerto No. 2 in F.
2. *Bartok* Concerto for Orchestra, 1st Movement.
3. *Beethoven* 5th Symphony, 1st Movement.
4. *Beethoven* Piano Sonata No. 8 in C Minor Op. 13.  
1st Movement.
5. *Bernstein* West Side Story. America, Tonight, One Heart.
6. *Bizet* Prelude to Carmen.
7. *Borodin* Polovtsian Dances from Prince Igor (Choral Version).
8. *Britten* Young Person's Guide to the Orchestra Op. 34.
9. *Chopin* Polonaise in A.
10. *Dag Wiren* Serenade—any two movements.
11. *Debussy* Children's Corner Suite.
12. *Delibes* Coppelia. Waltz Lente. Czardas.
13. *Delius* On Hearing the First Cuckoo in Spring.
14. *Dukas* Sorcerer's Apprentice.
15. *Dvorak* Symphony No. 9 in E Minor (From the New World).  
Slow Movement.
16. *Elgar* Enigma Variations. Theme. Nimrod. Finale.
17. *Gluck* Ballet of the Blessed Spirits and Aria, Che Faro, from Orfeo ed Euridice.
18. *Grieg* Peer Gynt Suite No. 1. Any two movements.
19. *Handel* Messiah. Christmas Music from 'There were Shepherds' to 'Glory to God'.
20. *Haydn* Emperor Quartet. Theme and Variations Movement.
21. *Haydn* Trumpet Concerto. 2nd and 3rd Movements.
22. *Holst* The Planets. Mars and Jupiter.
23. *Ibert* Divertissement. Parade and Finale.
24. *Kodaly* Hary Janos Suite. Any 2 movements.
25. *Mendelssohn* Hebrides Overture.

- |     |                         |   |
|-----|-------------------------|---|
| 26. | <i>Morley</i>           | April is in my Mistress's Face and My Bonnie Lass she Smileth.                |
| 27. | <i>Mozart</i>           | Magic Flute. Papageno's Songs.  |
| 28. | <i>Mozart</i>           | Oboe Quartet. 2nd Movement.   |
| 29. | <i>Prokofiev</i>        | Symphony No. 1 in D (Classical) Gavotte and Finale.                           |
| 30. | <i>Purcell</i>          | Dido and Aeneas. Dido's Lament and In our deep vaulted cell.                  |
| 31. | <i>Ravel</i>            | Bolero.   |
| 32. | <i>Rossini</i>          | William Tell Overture.  |
| 33. | <i>Saint Saens</i>      | Danse Macabre.  |
| 34. | <i>Schubert</i>         | Erl King, The Trout, To Music, Rose among the Heather. Any 2 of these songs.  |
| 35. | <i>Schubert</i>         | Piano Quintet in A (The Trout) Theme and Variations Movement.                 |
| 36. | <i>Schumann</i>         | Concerto in A Minor for Piano and Orchestra. 1st Movement.                    |
| 37. | <i>Sibelius</i>         | Symphony No. 2. 1st Movement.   |
| 38. | <i>Smetana</i>          | Overture to The Bartered Bride.   |
| 39. | <i>Strauss, J.</i>      | Emperor Waltz.  |
| 40. | <i>Strauss, R.</i>      | Till Eulenspiegel.  |
| 41. | <i>Stravinsky</i>       | Lullaby and Finale from the Firebird.   |
| 42. | <i>Sullivan</i>         | Overture to Pirates of Penzance.  |
| 43. | <i>Tchaikovsky</i>      | Romeo and Juliet. Fantasy Overture.   |
| 44. | <i>Vaughan Williams</i> | Folk Songs from Somerset from the English Folk Songs Suite for Military Band. |
| 45. | <i>Verdi</i>            | Celeste Aida and March (Choral) from Aida.                                    |
| 46. | <i>Wagner</i>           | Mastersingers Overture.   |
| 47. | <i>Walton</i>           | Belshazzar's Feast. Praise ye the Gods, Baritone Solo and Alleluia.           |
| 48. | <i>Warlock</i>          | Capriol Suite for Strings. Any 2 movements.                                   |
| 49. | <i>Weber</i>            | Oberon Overture.  |
| 50. | <i>Weinberger</i>       | Polka and Fugue from Schwanda the Bagpiper.                                   |

The fifteen selected works to include :—

- (1) a Movement from a Symphony or Concerto;
- (2) an extract from a Choral Work;
- (3) a Movement from a Chamber Work.

(ii) *General Musical Experience*

No presented syllabus will be laid down for this, but a wide selection of questions will be asked and answers to these will require the minimum of writing. The range of questions will extend beyond the traditional patterns and the test will consist of short musical excerpts accompanied by spoken questions, the whole range being recorded on a specially produced tape or disc.

(d) *Individual Interests*

Each candidate must offer either :—

- (i) a field study from one of the following :—
  - (1) an original composition or arrangement, e.g. a melody with guitar accompaniment, a descant to a folk song, or a hymn arranged for S.A.B. or for three recorders.
  - (2) a project based on some musical topic, e.g. the making and playing of a simple instrument, xylophone, fretted instrument or bamboo pipe; a programme, chosen, annotated and presented by the candidate, perhaps with the help of other participants; a written project with the possibility of practical musical examples.

*Or*

- (ii) a performance vocal or instrumental to demonstrate the candidate's practical musical ability.

## NEEDLECRAFT

### INTRODUCTION

The examination is intended to be the culmination of a five-year course in the schools and the emphasis is laid on the practical aspect supplemented by evidence of a child's own interests in the form of an individual study.

#### SCHEME OF EXAMINATION

Assessment will be based upon :—

(a) *Course Work* : This is to be interpreted as work carried out during the course, but with the addition of a **minimum** of one piece of practical work from the section chosen (see Syllabus below : Dress, Embroidery, Household Furnishings) executed during the final year.

(b) *A Topic* : Candidates must produce some form of evidence of an individual pursuit or interest within the general conception of, or allied to, needlecraft. This could take the form of a folder, notebook, thesis, etc., completed during the final year.

(c) *A Practical Examination* of three hours duration on ONE of the three sections in the Syllabus : Dress, Embroidery, Household Furnishings. The practical examination will take the following form.

(a) *Dress*

(1) ONE Simplicity, McCall or Butterick pattern will be chosen and will be used for the setting of *three* alternative tests of the same relative value :—

- e.g. (a) Make up a long sleeve with cuff and buttonhole ready to be set into the armhole  
(b) Make up and set a simple sleeve into the armhole of half the bodice  
(c) Make up and set the collar on to the upper half of the bodice.

(2) On the day previous to the examination, each candidate will be allowed ONE HOUR of preparation time during which she must :—

- (a) Select *one* of the three set tests  
(b) Study the pattern  
(c) Choose the fabric  
(d) Study the layout provided with the pattern.

*N.B.*—The candidate must not cut out her pattern during this preparation time.

(3) The examination will last THREE HOURS and during this time the candidate will complete the test which has been selected.

(b) *Embroidery*

(1) THREE tests of the same relative value will be set. Candidates will be required to make and work a design suitable for :—

- e.g. (a) A Cushion Cover  
(b) A Nursery Picture of specified minimum dimensions  
(c) A bag of specified minimum dimensions.

(2) One week prior to the examination, each candidate will be allowed TWO HOURS of preparation time, during which she must :—

- (a) Select *one* of the three set tests  
(b) Create a design or adapt a design from a reference book  
(c) Choose the method of design  
(d) Choose the material and threads which will be used.

(3) The examination will last THREE HOURS and during this time the candidate must transfer her design to the material and work sufficient of the design to show her choice of stitches, colour and texture.

(c) *Household Furnishings*

(1) Each candidate will plan a furnishing and colour scheme for a particular room.

THREE alternative tests of the same relative value will be set.

e.g. Make up to form part of the scheme which you have planned :—

- (a) A curtain for a small window, lined or decorated  
or (b) A cushion cover for a pad for which sewing technique is necessary, e.g. gussets, piping, etc.  
or (c) A fabric lampshade.

(2) One week prior to the examination, each candidate will be allowed TWO HOURS of preparation time during which she must :—

- (a) Plan the room, showing choice of colour and furnishings, and indicating quantities and cost of fabrics used.  
(b) Select ONE of the three set tests.  
(c) Choose the materials which will be used.

(3) The examination will last THREE HOURS and during this time the candidate will complete the test which has been selected. The weighting of course work, topic and practical examination will be in the proportion 4 : 2 : 4.

## SYLLABUS

In drawing up this syllabus and examination, the Panel felt that the broadest possible lines should be followed, relying on the experience of the teachers submitting candidates to interpret the syllabus in a manner suitable to the work carried on in their schools.

(a) Candidates for the examination will be expected, during the course, to have made a study of the following points :—

Practical study of fabrics; recognition of fibres, natural and synthetic; properties of fibres; suitability to style and purpose; handling in construction; reaction to modern cleaning techniques.

Choice, use and maintenance of tools and equipment.

Study of texture, colour and design in relation to function.

(b) In addition, the candidates will be expected to have studied in detail *one* of the following three sections :—

### *Dress*

Wardrobe planning; outfits, including accessories, for different occasions; costing and budgeting; choice and use of commercial patterns in the making of garments; simple pattern adaptations.

General maintenance of clothes in wear.

Prevention of accidents in use of nonflam' materials and suitable styles for children's clothing.

### *Embroidery*

Historical development; English and foreign embroideries; traditional and contemporary design.

Hand and machine embroidery and its place in fashion and interior decoration.

### *Household Furnishings*

Relevant study of colour schemes and interior decoration generally, and also in relation to various types of rooms, e.g. sitting room, bedroom, playroom, nursery, bed-sitting room for the teenager, etc.

Costing of soft furnishing schemes.

Making of curtains, cushions, bedcovers, table linen.

The above studies may sometimes be appropriately undertaken in connection with the re-decoration of the rooms in the housecraft flat.

## RELIGIOUS KNOWLEDGE

### INTRODUCTION

This syllabus aims at presenting to young people the challenge of the personality of Christ, by means of conveying to them a sound knowledge of the Life and Teaching of Christ and its relevance in everyday life.

Young people following this study should be encouraged to use the Bible and their initiative in order to further their knowledge of these topics. No attempt will be made, however, to test candidates' personal conviction. A simple knowledge of the religious, political and geographical background to the subject will also be expected.

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### SCHEME OF EXAMINATION

The examination will consist of TWO papers :—

- (1) The Life and Teaching of Christ. This paper will be of 1½ hours duration.
- (2) Problems and Principles. This paper will be of 2 hours duration.

While it is hoped that most sections of the syllabus will be studied, in this paper candidates will only be required to answer questions from three parts, some of which must be from Part VI.

The examination paper will be set on references given in Appendix I to this Syllabus but a candidate need not exclude from his answers relevant and complementary material. Candidates may use any version of the Bible while preparing for the examination, but quotations in the question papers will be taken from The Authorised Version and New English Bibles only. Bibles may be taken into the examination room for use during Paper II, provided they do not contain commentary or notes.

In addition the examination will consist of an **INDIVIDUAL PROJECT** which entrants must have completed during the twelve months prior to its submission on 1st April of the examination year. Suggested subjects will be found in Appendix II—at the end of the Syllabus. By project is meant a special study undertaken by a candidate. The method of presentation is the choice of the candidate and should be a genuine product of his own research.

THE WEIGHTING of Paper I, Paper II and Individual Project will be in the proportion of 3 : 4 : 3.

## SYLLABUS

### THE LIFE AND TEACHING OF CHRIST AND ITS RELEVANCE TO EVERYDAY LIFE

#### SECTION 1 — *THE LIFE OF CHRIST*

- The Preparation for the Ministry.
- The Call and Training of the Disciples.
- Growing Opposition.
- Jesus the Christ.
- His Passion and Triumph.

#### SECTION 2 — *PROBLEMS AND PRINCIPLES*

- (i) *Relationship with Others*
  - (a) Race prejudice and class distinction.
  - (b) Affluent and under-developed nations.
  - (c) Advertising.
  - (d) The Christian's responsibility to his fellow men.
- (ii) *Stewardship of Talents*
  - (a) Drinking.
  - (b) Gambling.
  - (c) Money and Material Things.
  - (d) Stewardship.
  - (e) The Christian and his employer.
- (iii) *Family Life*
  - (a) Sex and Marriage.
  - (b) Family Responsibilities.
- (iv) *Citizenship*
  - (a) Nuclear Weapons and Pacifism.
  - (b) The Christian and the State.
  - (c) Politics.
- (v) *The Church*
  - (a) Teaching about the Church.
  - (b) Church divisions.
- (vi) *The Key to the Christian Answer*
  - (a) The Christian's responsibility to God :
    - (i) Worship
    - (ii) Prayer
  - (b) Death, Judgement, Heaven and Hell.
  - (c) Suffering
  - (d) God's Guidance.
  - (e) Jesus' Teaching about God, the Father.
  - (f) Jesus' Teaching about God's Kingdom.
  - (g) Teaching about the Holy Spirit.

## APPENDIX 1

### SECTION 1 — *THE LIFE OF CHRIST*

#### *The Preparation for the Ministry*

Matthew 3, vv. 1-6	Message and appearance of John.
Matthew 3, vv. 13-17	Baptism of Jesus.
John 1, vv. 19-34	John bears witness to Jesus.
Matthew 4, vv. 1-11	The Temptations of Jesus.

#### *The Call and Training of the Disciples*

John 1, vv. 35-end	Call of Andrew, Peter, Philip and Nathaniel.
Luke 4, vv. 31-44	The first Sabbath at Capernaum.
Luke 5, vv. 1-11	Miraculous draught of fishes. Peter, Andrew, James and John become "fishers of men."
Luke 5, vv. 27-32	Call of Levi.
Luke 6, vv. 12-16	The calling out of the Twelve.
Matthew 10, vv. 5-16	The sending out of the Twelve.
Matthew 10, vv. 25-33	The nature of discipleship.

#### *Growing Opposition*

Luke 5, v. 17 to 6, v. 11	
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#### *Jesus the Christ*

Luke 5, vv. 12-26	Healing of leper.
Luke 7, vv. 1-17	Forgiving the sins of the paralytic.
Luke 4, vv. 16-21	The Gentile believer. (Healing of Centurion's servant.)
Luke 7, vv. 18-23	Raising of Widow's son at Nain.
John 6, vv. 1-15	Preaching of Jesus at Nazareth.
Mark 8, vv. 11-13	John sends his disciples to Jesus.
Matthew 16, vv. 13-20	Feeding of 5,000. They try to make Jesus king.
Mark 9, vv. 2-13	Pharisees ask for a sign.
Mark 9, vv. 30-32	Peter's confession at Caesarea Philippi.
Luke 18, v. 35, to 19, v. 10	The Transfiguration.
Luke 19, vv. 29-48	Prediction of the Passion.
	The visit to Jericho.
	Jesus enters Jerusalem. He cleanses the Temple.

#### *His Passion and Triumph*

Luke, chs. 22-24	Jesus washes His disciples' feet.
John 13, vv. 1-16	Ascension. Missionary charge. Return to the Upper Room.
Acts 1, vv. 1-14	The descent of the Holy Spirit.
Acts 2, vv. 1-24, 41-47	

## SECTION 2 — PROBLEMS AND PRINCIPLES

### (i) *Relationship with Others*

#### (a) Race prejudice and class distinction

- |                       |  |
|-----------------------|--|
| Luke 14, vv. 16-24    | } Gentiles are included in God's plan.                         |
| Matthew 28, vv. 19-20 |  |
| Matthew 8, vv. 1-13   | Jesus heals a Gentile's servant.                               |
| Luke 10, vv. 30-37    | } Gentiles sometimes put Jews to shame.                        |
| Luke 17, vv. 11-19    |  |
| Acts 9, v. 15         | Paul is commissioned specially to preach to Gentiles.          |
| Acts 11, vv. 1-18     | A Gentile is baptised.   |
| I Cor. 12, vv. 12-13  | } All are one in Christ no matter what their class and colour. |
| Galations 3, v. 28    |  |
| James 2, vv. 1-4      | Class distinction is condemned.                                |
| Mark 2, vv. 13-17     | Jesus mixed with all classes of people.                        |

#### (b) Affluent and under-developed nations

See references under (i) (d), (ii) (d), (i) (a) and (ii) (c).

#### (c) *Advertising*

- |                        |                         |
|------------------------|-------------------------|
| Matthew 5, v. 37       | Honesty.                |
| I Thess. 5, vv. 21, 22 | "Test all things . . ." |
- See references under (i) (d) and (ii) (c).

#### (d) The Christian's responsibility to his fellow men

- |                       |                                 |
|-----------------------|---------------------------------|
| Matthew 7, v. 12      | The golden rule.                |
| Luke 10, vv. 25-37    | Good Samaritan.                 |
| Romans 12, vv. 9-21   | Love expressed in various ways. |
| Matthew 7, vv. 1-5    | Harsh criticism reprovved.      |
| I Peter 3, vv. 13-17. | Always uphold what is right.    |
| Matthew 18, vv. 21-35 | Forgiveness.                    |

### (ii) *Stewardship of Talents*

#### (a) Drinking

- I Cor. 8, vv. 10-13.  
 I Cor. 10, vv. 23, 24, 31  
 I Cor. 3, vv. 16, 17; 6, vv. 18, 20  
 Ephesians 5, v. 18  
 I Timothy 5, v. 23  
 Romans 14, vv. 3, 4, 13-18

#### (b) Gambling

Link with Stewardship; danger of riches and material things.  
 Principles in I Cor. 8, vv. 10-13, also apply  
 "More blessed to give than to receive" Acts 20, v. 35.

(c) Money and material things

Matthew 13, v. 22	}	Their dangers
Mark 10, vv. 17-25		
Luke 12, vv. 15-21		
Luke 16, v. 13		
Luke 10, v. 35	}	Their right uses.
Luke 12, vv. 33-34		
Acts 4, vv. 34, 35		
Acts 6, vv. 1-4		
II Cor. 9, vv. 6-9		
Matthew 6, vv. 2-4		

(d) Stewardship

Matthew 25, vv. 14-30	Parable of talents.
I Cor. 10, v. 31	Do all to God's glory.
I Cor. 12, vv. 4-11	We have different gifts.
John 9, v. 4	We must take every opportunity to do God's work.
I Cor. 6, v. 19	We belong to God.
Mark 10, vv. 42-45	Jesus' teaching about ambition and true greatness.

The above may be referred to in connection with problems of money, vocation, leisure and the use of our time.

(e) The Christian and his employer

Ephesians 6, vv. 5-9

(iii) *Family Life*

(a) Sex and marriage

I Thess. 4, vv. 2-8  
I Cor. 6, vv. 18-20  
Romans 13, vv. 11, 12  
Mark 7, v. 21  
Matthew 5, vv. 27-32  
Mark 10, vv. 1-12  
John 8, vv. 1-11  
John 2, vv. 1-10  
Eph. 5, vv. 21-33  
I Cor. 13, vv. 4-7

(b) Family responsibilities

Mark 10, vv 1-2	
(c/f Matt. 19, vv. 1-9)	The permanence of marriage.
John 19, vv. 25-27	Jesus' care for His Mother.
Mark 10, vv. 13-16	Jesus' love for children.
Eph. 5, vv. 21 to 6, v. 4	} Husbands and wives; parents and children
I Cor. 7, v. 39	
Matt. 10, vv. 37-39	Loyalty to God comes first, however.

(iv) *Citizenship*

(a) Nuclear Weapons and Pacifism

Matthew 5, vv. 38-48

Matthew 7, v. 12

Mark 12, v. 31

I John 3, vv. 13-18

4, v. 7-8

Romans 12, vv. 17-21

I Peter 2, vv. 19-23

Jesus refused earthly kingship and warned that Jerusalem would be destroyed because it would not take His way of peace. Matthew 4, vv. 8-10; John 6, v. 15; Luke 19, vv. 28-44. Note also teaching on Stewardship (ii) (d) using God's gifts of nature and science rightly.

(b) The Christian and the State

Mark 12, vv. 13-17

Romans 12, vv. 7-8

Romans 13, vv. 1-7

Acts 5, v. 29

(c) Politics

See references under (iv) (b).

(v) *The Church*

(a) Teaching about the Church

Matthew 16, vv. 13-20

Matthew 18, vv. 15-20

Acts 2, vv. 41-47

Acts 6, vv. 1-6

I Cor. 12 vv. 12-31

Matthew 28, vv. 16-20

Mark 14, vv. 22-24

Matthew 13, v. 33

Romans 12, vv. 3-8

Luke 4, v. 16

John 17, vv. 20-23

James 2, vv. 1-4

Hebrews 13, v. 17

John 17, vv. 11, 20-23

I Cor. 1, vv. 10-13

3, vv. 4-11

I Cor. 12, vv. 12, 13

Phil. 2, vv. 1-11

4, vv. 2, 3

4, vv. 2, 3

4, vv. 2, 3

4, vv. 2, 3

} The Twelve Apostles as the nucleus of the Church.

} The Christian Fellowship.

} The Church as the Body of Christ.  
Two special sacraments.

(i) Baptism

(ii) Holy Communion

The Church must influence for good, the whole of society.

(b) Church divisions

John 17, vv. 11, 20-23

I Cor. 1, vv. 10-13

3, vv. 4-11

I Cor. 12, vv. 12, 13

Phil. 2, vv. 1-11

4, vv. 2, 3

(vi) *The Key to the Christian Answer*

(a) The Christian's responsibility to God

(i) Worship

Mark 12, vv. 28-34

Luke 4, v. 16

John 4, v. 23

I Cor. 16, v. 2

Acts 20, v. 7

Matthew 12, vv. 1-14

} First day of the week kept by Christians as holy day.

The true spirit of keeping Sunday.

(ii) Prayer

Matthew 6, vv. 5-8

Luke 18, vv. 9-14

Matthew 6, vv. 9-15

Luke 11, vv. 5-13

John 14, v. 13

Luke 10, v. 21

I Thes. 5, v. 18

Col. 3, v. 17

Phil. 4, v. 6

Luke 18, v. 13

Luke 22, v. 32

I Thes. 3, vv. 12-13

II Thes. 1, vv. 11, 12

Eph. 3, vv. 14-19

James 5, v. 14

Luke 22, v. 42

} Sincerity and humility

The model prayer.

} God is willing to answer prayer.

} Thanksgiving in prayer.

Confession in prayer.

} Prayer for others.

Our prayers must be in harmony with God's will.

(b) Death, Judgement, Heaven and Hell

John 14, vv. 1-3

Luke 23, v. 43

Matthew 7, vv. 13, 14

Matthew 25, vv. 1-13

Matthew 25, vv. 31-46

John 3, v. 26

John 17, vv. 1-3

I Cor. 15, vv. 16, 17, 35-39

I John 3, v. 2

Romans 2, vv. 11-16

Going before to prepare a place.

Promise to the penitent thief.

Finding eternal life.

Being prepared.

The parable of the Judgement

} Eternal life begins when one knows Christ.

} Christ's resurrection and the nature of the future life.

God's fairness to all.

(c) Suffering

Mark 3, vv. 22-26

Luke 10, vv. 17, 18

Luke 13, vv. 1-5

} Christ fought against disease, therefore disease is not God's will.

Tragedy does not imply God's punishment for sin.

- Romans 8, v. 28 } God brings good out of suffering.  
 Phil. 1, vv. 12-14 }  
 Mark 10, v. 45 } Suffering may help others (Christ's death).  
 (c/f Isaiah 53) }  
 Luke 10, v. 37 } Our duty to relieve suffering.  
 James 5, vv. 13-16 }  
 Romans 8, vv. 18-22 } Suffering is not always to be the lot of  
 Rev. 21, vv. 1-4 } humanity.

(d) God's Guidance

- Acts 8, vv. 34-38 } God guides by means of other people.  
 Matthew 4, vv. 1-17 }  
 Luke 24, v. 27 } God guides through the Scriptures.  
 II Tim. 3, vv. 16, 17 }  
 Acts 13, vv. 2, 3 } God guides through Christian fellowship.  
 Acts 11, vv. 5-17 } God guides through special revelation.  
 Rev. 1, vv. 10, 11 }  
 Mark 12, v. 30 } We have a duty to *think*. "Love God with  
 all your *mind*."  
 Reference under Prayer (vi) (a) (ii), the Holy Spirit (vi) (g) and the  
 Church (v) (a) will help here especially Matthew 7, vv. 7-8; Mark 14,  
 vv. 32-42; John 16, vv. 12-13.

(e) Jesus' teaching about God, the Father

- John 3, v. 16 } God's love.  
 Matthew 7, vv. 7-11 } God loves even more than an earthly father.  
 Matthew 6, vv. 26-34 } God gives through nature.  
 Matthew 10, vv. 29-31 } God's universal Presence and care.  
 Luke 15 } God's care for individuals.  
 Matthew 6, vv. 9, 10 } God the Father is also King  
 John 4, v. 24 } God is Spirit.

(f) Jesus' teaching about God's Kingdom

- Matthew 13, vv. 1-9 } God's rule in men's hearts.  
 18-23 }  
 Matthew 13, vv. 31-33 } Growth of God's Kingdom in the world.  
 Matthew 13, vv. 24-30 } God's Kingdom begins here on earth but is  
 completed in Heaven.  
 Matthew 13, vv. 44-46 } Worth more than anything else.  
 Matthew 5, vv. 3-16 } Citizens of the Kingdom.  
 Luke 14, vv. 15-24 } Entrance to the Kingdom.

(g) Teaching about the Holy Spirit

- John 14, vv. 16, 17, 25, }  
 26 } The Promise.  
 John 16, vv. 12-16 }  
 Acts 2, vv. 1-47 }  
 Gal. 5, v. 22 } Results of the Holy Spirit's coming.  
 I Cor. 12, vv. 4-13 }

## APPENDIX 2

### *Subjects for Project Work*

1. The Growth of the Church in *one* particular area at home or abroad.
2. The influence of Christianity in *one* particular field of social life, e.g. medicine, education, prisons, industry, etc.
3. A study of some aspect of *one* of the following :—  
Religious Music, Art, Architecture, Sculpture, Carving, Literature, Drama. (A worthwhile study would aim to show how different concepts emerge from different cultural backgrounds.)
4. The Bible : any aspect of its history and translation.
5. Some aspect of archaeology and the Bible.
6. A modern example of a Christian community, e.g. Mindola in Northern Rhodesia, Taizé in France, Iona in Scotland.
7. Some aspect of the movement towards Church Unity.
8. A modern venture, either by an individual Christian, or group of Christians, to care for refugees, the hungry, the homeless, the handicapped, etc., e.g. Inter Church Aid, Pestalozzi, Group Captain Cheshire, etc.

Subjects which do not come under these main headings may be chosen, but must first be submitted for approval.

# RURAL STUDIES

## INTRODUCTION

The syllabus is intended to ensure that successful candidates will have a thorough knowledge and understanding of the basic principles of Rural Studies, while at the same time providing opportunities for the candidate to show knowledge and understanding of any of the wider aspects of the subject. It is intended to offer the widest possible choice of studies to the child, as will necessarily be governed by the facilities of the school.

It is also intended that, wherever possible, candidates will show ability in the practical skills relevant to the aspects of the subject which they have studied.

### SCHEME OF THE EXAMINATION AND SYLLABUS

The Syllabus is divided into two parts, A. and B.

PART A will be examined externally as a written paper and is made up of three sections :—

- The Soil
- The Plant
- The Animal.

In the examination, questions from at least two of the three sections must be answered. Candidates will be expected to show a knowledge of the practical applications of the theoretical knowledge involved.

PART B of the Syllabus is divided into a number of optional topics. *Schools may study one or more* of these topics and the work done is to be assessed internally under the following headings :—

- (a) Course Work.
- (b) Practical skills.
- (c) Recognition and identification.

In addition, account will be taken of an INDIVIDUAL STUDY which will be assessed externally on a subject approved by the teacher.

The weighting of Part A, Part B and the Individual Study will be in the proportion 3 : 5 : 2.

### SYLLABUS

#### PART A

##### SECTION 1 — *THE SOIL*

The formation of the soil. Origins and processes of soil formation. Weathering and eroding agents.

Physical structure. Analysis by simple methods : sand, silt, clay and humus.

The formation of humus in soils. Decay processes. Determination of percentage composition.

Soil water—the movement of water in the soil. Capillary action. Permeability of sand and clay. Soil drainage. Mulching. Irrigation.

Soil temperature—relation to plant growth. The temperature responses of various soils. Altitude, exposure and aspect.

Acidity and alkalinity in soils. pH scale, as a scale of acidity and alkalinity. Importance of lime. Plants as soil indicators.

Organic and inorganic manures. Essential plant elements and their effects on plant growth.

Composting.

Seed and potting composts.

Soil organisms—beneficial and otherwise.

Soil cultivation and the use and care of tools.

## SECTION 2 — *THE PLANT*

External structure and function of root, stem, leaves and flower. Tap roots, tuberous roots, fibrous roots. Tubers, corms, stolons, rhizomes, bulbs.

Elementary plant physiology. Simple leaf, root, and stem structure. Osmosis, transpiration, photosynthesis, respiration.

Structure of flower. Pollination, fertilisation, fruit and seed dispersal and formation.

Seed structure and germination. Conditions necessary for germination—effect of oxygen and temperature. Germination tests.

Elementary consideration of seed dispersal with reference to the spread of annual and perennial weeds.

Annual, biennial, perennial, hardy and half hardy plants.

## SECTION 3 — *THE ANIMAL*

The habits, life histories and environmental adaptations of an earth-worm, an insect, an amphibian, a bird, a mammal, a fish.

## PART B — *OPTIONAL SECTIONS*

Candidates may study one or more of these topics. The work will be assessed internally.

Section 1 : Gardening.

Section 2 : Farming.

Section 3 : Small Livestock.

Section 4 : Forestry.

Section 5 : Field Studies.

Section 6 : Rural Crafts.

Section 7 : Rural Domestic Economy.

Section 8 : Any other approved Rural Studies Topic. The subject to be submitted by the end of June in the year two years previous to the one in which the examination is to be taken.

# GENERAL SCIENCE

## INTRODUCTION

It is hoped that the approach to the syllabus will be such as to stimulate and develop the pupil's ability to observe, reason and draw conclusions, rather than to acquire factual knowledge only; the aim is width rather than depth of knowledge.

It is intended that the following material and concepts should be utilised in context :—

- (a) that matter consists of particles,
- (b) that these particles are in random motion,
- (c) that reference be made to the energy changes involved,
- (d) that evolution is a result of natural selection.

It is expected that individual practical investigations will be carried out wherever possible and that, with the Biology topics, the approach will be through observation of a wide variety of living organisms in the laboratory and in the field.

Calculations of a simple nature will be required only where indicated.

## SCHEME OF EXAMINATION

There will be two theory papers, each carrying equal weight. The time allowed for each will be :—

Paper I — 1½ hours

Paper II — 2 hours

### PAPER I

Will be divided into three sections, labelled A, B and C. The separate sections will be Chemistry, Physics and Biology. In each section there will be twenty questions arranged as follows :—

- (a) Eight factual type, requiring completion of statements or insertion of values.
- (b) Six pictorial type, requiring completion of a diagram, labelling or interpretation.
- (c) Six multiple choice questions.

All questions should be attempted and will have equal weight.

### PAPER II

There will be a choice of nine questions from which candidates should answer FIVE. Ten minutes will be allowed prior to the commencement of each paper for reading the questions.

## SYLLABUS

### Physics

#### *Mechanics*

All things are made of matter; the relationship between mass, gravity and weight. Centre of gravity and stability.

Action of forces, thrust and pressure (simple calculations required), tension, friction, inertia, changes of speed and/or direction. Friction as a useful force and as a nuisance. Ways of increasing and decreasing friction.

Work and energy. Forms of energy including kinetic energy, potential energy, heat, light, electricity, atomic energy. The sun as a source of energy; simple examples of energy conversions. Conservation of energy. Work as force  $\times$  distance removed (calculations required), Power. The horse-power.

How machines help. Examples of simple machines in everyday life. Levers—simple moments (calculations required). Wheel and axle, inclined plane, screw, pulleys (single fixed and single movable pulley giving an advantage). Block and tackle up to twin pulley sheaf. Simple treatment of mechanical advantage, velocity ratio, efficiency (simple calculations required).

### *Hydrostatics*

Comparison of substances of equal volume leading to ideas of density. Determination of densities of solids and liquids by direct measurement of mass and volume (calculations required). Simple idea of relative density and flotation. Water pressure. Idea of pressure increasing with depth. Domestic water supply.

Air has weight and exerts a pressure (pressure is force per unit area). The aneroid barometer and altimeter. A simple mercury barometer, bicycle pump, syringe, siphon.

### *Electricity and Magnetism*

Conversion of chemical energy to electrical energy. Primary cells, voltaic, Leclanche, dry Cells. Polarisation : working principles and advantages of secondary cells as illustrated, for example, by a car battery. Principles of electro-plating.

Magnetic and non-magnetic substances. Permanent and temporary magnets. Properties of a magnet, simple magnetic fields, magnetic screening, magnetic compass. The Earth as a magnet (true North and magnetic North). Methods of making and destroying magnets. Simple induced magnetism. Electromagnet and simple applications : simple galvanometer, electric bell, telephone, D.C. motor.

Generation of an E.M.F. by the relative movement of a magnetic field and a conductor. Simple treatment of A.C. and D.C. generators. Generation, transmission and transformation of electrical power.

Relation between potential difference, current and resistance (calculations required). Practical units—Amps, Volts, Ohms, Watts (calculations required). Board of Trade unit, series and parallel circuits. Simple household electricity. Safety precautions. Heating effect of a current.

The electron, electron flow, thermionic flow, rectification as illustrated by a Diode valve. The transistor.

### *Heat*

As a form of energy; difference between heat and temperature. Sources of heat. Effects of heat—expansion and contraction in solids, liquids and gases. Practical applications including unequal expansions, uses in thermostats and thermometers. Temperature scales—Centigrade, Absolute and

Fahrenheit. Principles of internal combustion engines. Units of heat—Calories, Kilo-calories, British Thermal Units, Centigrade heat unit. Qualitative work on comparisons of Thermal capacities of substances. Changes of state by (i) heat, and (ii) pressure. Anomalous behaviour of water. Fusion and evaporation; ideas of latent heat. Cooling curves. Simple principle of the compression type of refrigerators. Transmission of heat : conduction, convection and radiation. Insulation. Practical applications : difference between evaporation and boiling ; water vapour in the air. Formation of dew, mist, fog and smog.

### *Light*

Sources of light; light appears to travel in straight lines. Shadows and eclipses. Action of a pinhole camera. Reflection of light. Uses of plane and curved mirrors. Periscope. Simple experiments to demonstrate refraction of light. Real and apparent depth. Total reflection at the boundary between two media—mirages. Prism and the uses of lenses as illustrated by the camera, eye, magnifying glass. Elementary treatment of visible spectrum as part of the electro-magnetic spectrum. Production of colour by addition only.

### *Sound*

Production, transmission and velocity of sound, speed of sound, as compared with the speed of light. Reflection of sound. A qualitative treatment of the effects of mass, length and tension on the frequency of a vibrating string. Frequency. Amplitude. Simple treatment of the principles of the production of sounds by musical instruments. Resonance. The ear.

### *Astronomy*

Simple treatment of the solar system : planets, stars, galaxies, common constellations (Great Bear, Little Bear, Cassiopeia, Orion). The meaning of the light year, day and night, the seasons. The Earth's satellite—the moon and its phases, spring and neap tides.

## **Chemistry**

Classification of substances into solids, liquids and gases—with reference to the kinetic theory. Elements, mixtures, and compounds—organic and inorganic compounds. Acids, alkalis (uses of indicators) metals and non-metals.

The difference between physical and chemical changes. Reversibility and non-reversibility as illustrated by examples drawn from the syllabus.

Bohr's concept of the atom (electron, nucleus—proton, neutron), in so far as it supports the ideas of chemical combination and valency. When a chemical action takes place, there is no change in the total mass. Symbolic notation of common elements and the molecular formulae of common compounds only.

(Word equations will be accepted for Chemical Reactions.)

Composition of air—nitrogen, oxygen, carbon dioxide, water vapour, inert gases. Chemical impurities and their effects. Combustion, respiration, rusting. Properties and uses of:- oxygen, nitrogen, carbon dioxide. Carbon and oxygen cycle.

Composition of water. Properties and uses of hydrogen. Analysis and synthesis of water. Solubility of solids and gases in water. Saturated and unsaturated solutions. Crystallization. Water of crystallization—use of anhydrous copper sulphate. Physical tests for pure water. Effects of dissolved impurities on freezing point and boiling point.

Purification of water by filtration and distillation. Public water supply. The rain cycle. Hardness of water—temporary and permanent. Causes. Removal of temporary hardness.

An acid as the oxide of a non-metal dissolved in water. A base as the oxide of a metal. Formation of alkalis. Properties and uses of acids and alkalis. Properties and uses of salts and any one method of preparation. Comparisons of physical characteristics of metals and non-metals. Metals; their reactions with air, water, and dilute hydrochloric acid with regard to their suitability for every day use: sodium, calcium, magnesium, aluminium, zinc, iron, lead and copper.

Extraction of metals (1) in the laboratory—lead, (2) in industry—iron. Some common alloys, including steel. Non-metals. The economic importance of sulphur and sulphuric acid, nitrogen, and nitrogen compounds (including the nitrogen cycle) and chlorine. Forms of carbon. Occurrence and uses of carbon, carbon dioxide, carbonate and bicarbonate of sodium and calcium. Chemical effect of rain water on limestone. Coal—its origin and its main products of distillation—gas, tar, coke, liquor.

Hydrocarbons and carbohydrates as organic fuels and food. Products of combustion and respiration. The formation of carbon monoxide during incomplete combustion. Simple fermentation. Elementary knowledge of the derivation, characteristics and uses of plastics.

## Biology

Characteristics of living organisms and the difference between plants and animals. The cell as the unit of life. (Cell wall, nucleus, cytoplasm, chloroplasts, sap vacuole.) Simple comparison of plant and animal cells. Simple ideas of cell specialisation—including division of labour in multicellular organisms. Growth by cell division.

The plant kingdom. Elementary study of the life histories of : an algae, a fungus, a non-flowering and a flowering green plant. Broad outlines of the structure and functions of roots, stem, leaves and flower. Fruit formation and seed dispersal. Germination. Vegetative reproduction and food storage. A broad knowledge of the following biological processes will be expected : osmosis, diffusion, capillarity, transpiration, respiration, photosynthesis, translocation, tropisms.

The animal kingdom. Comparative study of the following to give an idea of evolution and adaptation to environment of protozoa, hydra, earth-worm, insects, fish, amphibian, reptile, bird and mammal. Life histories of : a typical insect, a fish, an amphibian, a reptile, a bird and a mammal.

Interdependence of plants and animals. Circulation of carbon and nitrogen in nature (reference to the bacteria concerned is to be made in general terms.) Food chains, parasites, saprophytes, biological control and conservation. The constituents, properties and fertility of soil. Asexual and sexual reproduction, examples of which will be drawn from the syllabus. Hereditary factors carried by chromosomes. Applications in agriculture and horticulture. (Pupils will NOT be examined on examples of Mendelian inheritance.)

Human biology and hygiene. An elementary treatment of the skeletal system, action of muscles (contraction and opposition), digestive system (enzymes—ptyalin only), respiratory system and breathing movements. Structure, functions and circulation of the blood; nervous system and sense organs (e.g. eye, ear). Reproduction. Excretion. Factors concerned with good health—nutrition, cleanliness. Protection against disease—immunization, vaccination, sterilization.

## BIOLOGY

### AIMS OF THE SYLLABUS

The intention of this syllabus is to provide a selected course of study in biological science to create the opportunity for the pupil to :—

- (a) develop his powers of observation and judgement by studying biological material through a scientific approach,
- (b) acquire a basic knowledge of biology, the significance of which is both personal and vocational,
- (c) appreciate that biology is an ever-changing science which can command his interest throughout his life.

### SCHEME OF EXAMINATION

The examination will consist of :—

PAPER I Section A : Time —  $\frac{1}{2}$  hour. A short answer paper covering basic knowledge.

Section B : Time —  $1\frac{1}{2}$  hours, with the addition of 10 minutes reading time.

A written paper consisting of four questions from a selection of not less than twelve.

PAPER II Practical : Time — 2 hours.

The papers will be weighted in the following proportion :—

PAPER I Section A : 2

Section B :  $4\frac{1}{2}$

PAPER II :  $3\frac{1}{2}$

### SYLLABUS

#### INTRODUCTION

- (1) The functional aspect of whole living organisms and their relationships to the environment and other organisms, should form the basic approach.
- (2) It is expected that full use will be made of all opportunities to study living organisms in their natural environment. Pupils should be encouraged to carry out individual observation and investigation.
- (3) An extensive knowledge of plant and animal anatomy will not be expected of a pupil.

#### SECTION A — VARIETY OF LIFE AND ENVIRONMENT

The variety of organisms found in water, on land and in the air should be studied with some reference to the individual problems of their environment. Particular attention should be paid to the problems of support, movement, feeding, gaseous exchange, reproduction and dispersal.

*NOTE :* Detailed structure is not required. The pupil should be taught to appreciate the wide variety of living organisms, how they are able to live in different environments, how they influence each other and effects of environmental change.

## SECTION B. *THE CHARACTERISTICS OF LIFE*

It will be assumed that pupils will have some knowledge of the nature of protoplasm as the fundamental substance of life.

### 1. *Essential Materials*

- 1.1 Plants (green).
  - 1.11 Main sources of raw material.
  - 1.12 How inorganic materials are built up into starch (photosynthesis).
  - 1.13 Experiments to show the need for light, chlorophyll and carbon dioxide.
  - 1.14 The simple treatment of fats and proteins.
  - 1.15 Storage of food materials.
- 1.2 Plants (non-green).
  - 1.21 Saprophytic.
  - 1.22 Parasitic.
- 1.3 Animals.
  - 1.31 The main sources of organic food.
  - 1.32 Simple food tests.
  - 1.33 Ingestion and digestion.
  - 1.34 Enzyme action.
  - 1.35 Absorption, assimilation and storage of food.
  - 1.36 Parasitic.

### 2. *Energy Release*

- 2.1 The use of carbohydrates and fats.
- 2.2 The need for oxygen.
- 2.3 Tissue respiration.
- 2.4 How oxygen is obtained and carbon dioxide is eliminated :—
  - 2.41 By plants,
  - 2.42 By animals.
- 2.5 Temperature control.

### 3. *Growth and Movement*

- 3.1 Simple treatment of growth in plants and animals.
- 3.2 Plant movement.
  - 3.21 Microscopic plants, e.g. Diatoms.
  - 3.22 Higher plants,
    - 3.221 Why free movement is unnecessary.
    - 3.222 Response to light by leaves and flowers.
- 3.3 Animal movement.
  - 3.31 Why movement is an advantage to life.
  - 3.32 Animals without skeletons.
  - 3.33 Animals with external skeletons.
  - 3.34 Animals with internal skeletons.

### 4. *Conduction*

- 4.1 In plants.
  - 4.11 Absorption of raw materials by roots.
  - 4.12 Diffusion, osmosis, capillarity and transpiration related to movement of water through the root, stem and leaf.

- 4.2 In animals.
  - 4.21 The need for a transport system in higher animals.
  - 4.22 Structure and function of blood.
  - 4.23 Double circulation in man.
- 5. *Elimination*
  - 5.1 By plants.
  - 5.2 By animals.
    - 5.21 Water—by lungs, kidneys and skin.
    - 5.22 Unused solid food—defaecation.
- 6. *Control*
  - 6.1 In plants.
    - 6.11 Hormones and their influence. (General treatment only required).
    - 6.12 Geotropism and phototropism as examples of plant responses.
  - 6.2 In animals.
    - 6.21 Hormones and their influence. (General treatment only required).
    - 6.22 The nervous system—man.
      - 6.221 Voluntary and involuntary actions.
      - 6.222 The eye and the ear as examples of receptor organs. Structural details of the retina are not required.
- 7. *Reproduction*
  - 7.1 Plant reproduction.
    - 7.11 Asexual.
      - 7.111 Natural and artificial methods.
    - 7.12 Sexual reproduction including a flowering plant.
  - 7.2 Animal Reproduction.
    - 7.21 Asexual.
    - 7.22 Sexual—with particular reference to man.

## SECTION C. CONTINUITY OF LIFE

- 1. *Organic Evolution*
  - 1.1 The concept of organic evolution.
  - 1.2 Evidence to support the theory of organic evolution limited to :—
    - 1.21 Common structures.
    - 1.22 Fossils.
    - 1.23 Geographical distribution.
  - 1.3 The evolution of man.
    - 1.31 The past, present and future of man.
    - 1.32 Man's constant competition against other organisms.
      - 1.321 Disease-causing organisms.
      - 1.322 Prevention of disease.
      - 1.323 Feeding the world's population. The problems involved and possible solutions, etc.

2. *How Life is handed on*

2.1 Plant and animal cells.

2.2 The development of an organism from a single cell.

2.3 The chances of survival.

2.4 The mechanism of inheritance.

2.41 Chromosomes.

2.42 DNA and RNA.

2.43 Genetics.

*NOTE* : Section C.2 should be dealt with at an elementary level. An appreciation of the mechanism of genetics in broad terms, rather than the acquisition of technical, and often meaningless, vocabulary should be taken as the guiding principle.

## CHEMISTRY

### A I M S

The course should :

- (a) be centred on the children's interests and ability,
- (b) impart factual information of value in everyday life and in related studies,
- (c) form habits of accurate observation and recording, and simple interpretation of these observations,
- (d) rouse an appreciation of the practical significance of Chemistry in this modern age.

### SCHEME OF EXAMINATION

- (a) There will be two written papers, each of one hour's duration.  
PAPER I : Fifty to sixty questions requiring a short answer. The questions will be both factual and deductive. All must be attempted by the candidate.  
PAPER II : Six questions, mainly deductive, requiring a longer answer. The weighting for Paper I and Paper II will be in the proportion 3 : 2.
- (b) *A teacher assessment* which must not be interpreted as an estimate of performance, but rather as an impression of the candidate's development as a chemist. As a guide to teachers, assessment may be based on :
  - (i) Practical work :
    - (a) Technique
    - (b) Attack on problems
    - (c) Recording of experimental observations and deductions from this.
  - (ii) Project work : An extended investigation into any selected topic(s).
  - (iii) Achievement shown over the last two years of the course.The weighting between the written papers and the teacher assessment will be in the proportion 7 : 3.

### SYLLABUS

#### INTRODUCTION

Throughout the Chemistry Course reference should be made to the relationship between energy and chemical changes.

Ionic reactions, acid-base and oxidation—reduction reactions, should be an integral part of as much of the course as possible.

The qualitative interpretation of ionic and/or molecular equations will be expected.

- (a) *Classification and Nature of Matter*
  - (i) States of matter and their inter-relationships. Concept of matter as particles in motion.
  - (ii) Elements, compounds and mixtures. Air and solutions as mixtures.

(b) *Atmosphere*

- (i) Oxygen, nitrogen, carbon dioxide, water vapour, argon, neon as components of air. Their properties and uses.
- (ii) Pollution by acid gases, exhaust fumes, dust and bacteria.
- (iii) Corrosion and its prevention.
- (iv) Carbon dioxide—oxygen balance : burning, respiration, decay and photosynthesis.
- (v) Combustion as a source of energy. Fuels.

(c) *Organic Chemistry*

- (i) The important elements involved : Carbon, hydrogen.
- (ii) Hydrocarbons : Petroleum, Methane, Ethane, Butane, Propane, Octane, Ethylene, Acetylene. Physical properties and uses. Carbon—carbon links. Polythene.
- (iii) Carbohydrates (foods compared with fuels). Starch, sugar, paper (action of concentrated sulphuric acid). Fermentation : wine-making, brewing.  
Properties of Ethanol (burning and physiological aspect).  
Methylated spirits.

(d) *Metals*

- (i) General physical properties.
- (ii) Sodium, Calcium, Magnesium, Zinc, Iron, Tin, Lead, Copper, Aluminium, Mercury, Silver, Gold. The activity series of these metals as shown by their reactions with :—
  - (a) Water
  - (b) Dilute acid (hydrochloric and sulphuric)
  - (c) Air or oxygen
  - (d) Displacement of one metal by another.
- (iii) Uses of metals—dependence upon physical and chemical properties.

(e) *Non-Metals*

- (i) Chemical properties which distinguish them from metals.
- (ii) The properties and uses of the following elements and compounds indicated :—

CARBON—diamond, graphite, charcoal, lamp black, coke. (Allotropy will not be examined.)

Carbon dioxide—a laboratory preparation and collection.

Calcium carbonate—forms, action of heat and acids.

Carbon monoxide.

The carbon cycle.

NITROGEN—Ammonia as a soluble, alkaline gas.

The Nitrogen cycle.

SULPHUR—Frasch Process.

Sulphuric acid as (i) an acid and (ii) dehydrating agent.

HYDROGEN—Water. Treatment for domestic use.

Hardness of water, its causes (calcium ions) and removal.

Hydrogen peroxide (*i*) as a source of oxygen and (*ii*) as a bleaching agent.

CHLORINE—As a source of chlorides, a bleaching agent and bactericide.

(f) *Acids, Bases and Salts*

- (i) Characteristic properties of dilute acids : action on litmus, metals, carbonates, bases.
- (ii) Bases and their reaction with acids. Alkalis.
- (iii) The laboratory preparation of sodium chloride, copper sulphate, barium sulphate, magnesium sulphate and the uses of common carbonates, chlorides, nitrates and sulphates.

(g) *Electrolytes and non-electrolytes*

- (i) The investigation of the ability of solutions to conduct an electric current as a means of classification of the above.
- (ii) Concept of ions and electrolytic dissociation. Discharge of ions in electrolysis.
- (iii) Application of electrolysis to extraction of sodium, purification of copper and electroplating.
- (iv) Conversion of chemical energy to electrical energy in the simple cell.

(h) *Gravimetric Work*

The use of the chemical balance.

Determination of (a) Solubilities of salts

(b) percentage of water of crystallisation.

(i) *Industrial Preparations*

- (i) Liquid air.
- (ii) Ammonia by the Haber Bosch Process.
- (iii) Nitric acid by the oxidation of ammonia.
- (iv) Sulphuric acid from Sulphur by the Contact Process.
- (v) Pig iron in the blast furnace.
- (vi) Quick Lime.
- (vii) Coal gas (and tar, coke, liquor) by the Destructive Distillation of coal.

## PHYSICS

### INTRODUCTION

The syllabus has been compiled with the object of providing pupils with an understanding of some aspects of everyday physics.

Questions will be framed in such a manner that pupils will be able to show evidence of personal observation and experiment.

It will be assumed that pupils will have a working knowledge of common units of mass, length and time together with their simple measurement. An understanding of simple graphs also will be assumed.

### SCHEME OF EXAMINATION

The Examination will consist of :—

PAPER I : Duration 1 hour.

Objective questions on the Basic Syllabus.

Candidates must attempt as many questions as possible.

PAPER II : Duration  $1\frac{1}{2}$  hours.

This paper will consist of TWO sections.

Section A : 8 questions of an extended or essay type on the Basic Syllabus.

Candidates must answer THREE questions.

Section B : 2 questions of an extended or essay type on EACH of the two chosen options.

Candidates must answer ONE question.

*NOTE* : Questions relative to Sections A and B will be printed on separate sheets of paper. Schools will receive questions papers as follows :—

PAPER I and PAPER II Section A to ALL Schools : PAPER II Section B on the chosen options.

COURSE WORK : In addition to the written papers.

The weighting of Paper I, Paper II and Course Work will be in the proportion 3 : 5 : 2.

### BASIC SYLLABUS

Mass and weight. The spring balance and Hooke's Law. Density of solids and liquids. Relative density. Flotation. Action of forces. Moments. Centre of gravity. Work done by forces and against forces. Simple machines. Power.

Pressure in fluids. Simple mercury and aneroid barometers. Pressure and volume changes in gases.

Heat and temperature. Molecular motion. Descriptive treatment of expansion of solids, liquids and gases with everyday implications and applications. Liquid in glass thermometer (conversions excluded).

Heat units (calorie, B.Th.U., Therm). Specific Heat. Latent Heat. Cooling by evaporation and application to refrigeration.

Boiling and melting points. Effect of pressure on the boiling point of water. Temperature and volume changes in gases leading to Absolute scale of temperature.

Descriptive treatment of heat transmission. Conservation of energy.  
Rectilinear propagation of light. Reflection and refraction. Refractive index.

Curved mirrors and their uses. Formation of images by lenses (examples may be solved by the graphic method or by the use of formulae).

Single lens camera and comparison with the eye. Long and short sight and their correction. The visible spectrum.

Types of waves. Velocity, frequency and wavelength. Simple wave properties. Production and transmission of sound waves. Pitch, loudness and quality.

Simple magnetism. Lines of force due to magnets and electric currents. Electric bell. Descriptive treatment of heating effect of a current. Electroplating.

Ohm's Law. Connection of equipment in series and in parallel. The use of fuses. Safety precautions in the home.

The moving-coil meter, simple electric motor and the loudspeaker. Electromagnetic induction treated simply. A.C. and D.C. generators. Transformer.

Production of charges by friction. Attraction and repulsion of charges. The electroscope. Simple ideas on cathode rays, X-rays and radioactivity.

### OPTIONAL SUBJECTS

It is expected that candidates will offer TWO of the following options. The BOARD must be informed of the options chosen by a date to be decided. It is hoped that these optional sections will allow schools to pursue their special interests and will give scope for pupils to extend their leisure activities.

#### 1. *Astronomy*

The Solar System. Planetary motions, years.

The Sun. Sun spots, flares, radiation and their effect on the earth.

The Earth. Effect of rotation—day and night, apparent motion of the sun, stars and the Moon. The Pole Star.

The Moon. Surface, phases, rotation. Eclipses. Tides.

The Milky Way. Types of stars.

Telescopes—Astronomical, Galilean, Reflecting. Parabolic reflector.

#### 2. *Electronics*

The Diode. Construction and action. Use as a rectifier.

The Triode. Construction and action. Use as an amplifier and oscillator.

The Cathode Ray Tube. Construction and action. Application to the oscilloscope and television.

Transistors. p- and n- type germanium. Action of a junction diode.

#### 3. *Engineering Physics*

Vector addition and resolution of forces by graphical methods.

Machines including the lever, inclined plane, screw jack, hydraulic press, jack and brakes.

Pulley systems. Differential pulley. Wheel and axle.

Friction. Ball and roller bearings. Lubrication. Friction drive-clutch.

Belts, chains and gears.

#### 4. *Engines*

The Steam-engine and its development.

The internal-combustion engine. Two-stroke and four-stroke cycles.

The Diesel Engine.

Cooling systems.

Jet. Turbo-jet. Turbo-prop'. Ramjet. Reheat. Rocket motors.

#### 5. *Household Electricity and Power*

The Power Station. The turbo-generator.

The National Grid. Three-phase system of a.c. supply treated simply. Distribution.

Restatement of basic switches, fuses, earthing and safety precautions.

Ring circuit. Wiring practice. Wiring of simple appliances, payment for electrical energy, two-way circuit, cooker, suction cleaner, kettle, iron, immersion heater.

The rating of appliances. Payment for electrical energy.

#### 6. *Meteorology*

Rainfall. The rain gauge.

Air pressure. Barometers. The millibar. Isobars.

Temperature. Maximum and minimum thermometers.

Isotherms.

Humidity. Relative Humidity. The wet and dry bulb thermometer.

Wind velocity. The anemometer.

Radiation and Absorption. Air currents.

Formation of clouds, drizzle, rain, hail, snow. Dew, mists, fogs and smog. Frost.

Weather maps—interpretation.

#### 7. *The Motor Car*

Coil ignition. Sparking plugs. Distributor. Condenser.

Fuel system. Carburation. Petrol pump.

Four-stroke engine. The cooling system. Transmission, clutch, gear box, prop' shaft, rear axle.

Body, suspension, steering and brakes.

Instruments and accessories (e.g. speedometer, horn, indicators).

#### 8. *Photography*

Camera—basic parts. Comparison with pin-hole camera.

Focussing and depth of field; aperture, shutter-speeds.

Exposure meter. Range-finder.

Projector and enlarger.

Telephoto lens treated simply.

Simple outline of developing and printing by any one process.

Colour filters. Polarising filters.

Simple outline of the principles of colour photography.

Ciné camera and cinema projector treated simply.

9. *Physics and Music*

Resonance. Pitch. Loudness.

Vibrating strings. Qualitative relation between pitch, length, tension and linear density.

Production of sound in pianoforte, violin, guitar. Harmonics.

Vibrating Air Columns. Qualitative relation between pitch and length in open and stopped pipes. Tuning pipes.

Comparison of flute and reed (e.g. flute and saxophone).

Brass instruments.

Recording and reproduction from disc and tape.

## TECHNICAL DRAWING

### SCHEME OF EXAMINATION

The Examination will consist of three papers :—

- I Comprehension
- II Draughtsmanship
- III Applied Geometry

The weighting of papers I, II and III will be in the proportion  $4 : 3\frac{1}{2} : 2\frac{1}{2}$ . Paper II and III may be given at the same sitting, but will be separate papers.

### SYLLABUS

The following is not intended to replace a teacher's own scheme of work, but only as a guide to indicate the work on which the examination will be set.

GENERAL INFORMATION.—This will, where appropriate, apply to all three papers.

- (a) The use of drafting aids, e.g. nut templates and radius curves, to be allowed and encouraged.
- (b) Unless "Construction" is specifically asked for, any accurate drawing method may be used, e.g. the set square and straight edge for perpendiculars and parallels.
- (c) When a "Trammel" solution is offered, the trammel or an accurate drawing of the trammel must be included as part of the answer.
- (d) In isometric drawing, the isometric scale will not be used, but all curves must be of true shape.
- (e) An oblique drawing will have the oblique lines at  $45^\circ$  and half size, with curves on the front and rear vertical faces only.
- (f) Candidates to be familiar with the working of problems on square and isometric grid paper.
- (g) The B.S. convention of representing screw thread by parallel lines to the axis is to be recommended.
- (h) In Paper II, the opportunity to use good quality drawing OR detail paper will be given.
- (i) Questions will, for the present, be set in First Angle Projection only, although solutions will be accepted in any recognised projection according to B.S. 308; 308Q; 1196.

### PAPER I — COMPREHENSION

To test the candidate's ability to read and complete a drawing. The work, to be marked objectively, will be done on grid paper and will include the following types of problem :—

- (a) Complete a partly finished isometric drawing from a given orthographic drawing.
- (b) Draw in missing lines on given partly completed orthographic drawings.
- (c) Add missing plans, elevations, and sectional views to incomplete drawings.
- (d) Complete a partly finished assembly drawing from given detail drawings.

## PAPER II — DRAUGHTSMANSHIP

Half imperial paper will be used and special importance will be attached to careful layout of drawing, correct projection and dimensioning, and good quality lines, lettering, title label and border. (See also items *g*, *h* and *i* under general information.)

The candidate should be able to :—

- (1) Make a detail and/or assembly drawing, with or without sections
  - (a) from an orthographic drawing
  - (b) from an isometric or oblique drawing including exploded views
  - (c) from an actual object
  - (d) by making a dimensioned sketch of an object and then working from this sketch without further reference to the actual object.
- (2) Make an isometric or oblique drawing, including exploded views, from a given orthographic drawing.

## PAPER III — APPLIED GEOMETRY

To test the candidate's ability to solve geometrical problems having a practical application in the workshop. All or part of this paper may be marked objectively.

A working knowledge of the following will be required :—

- (a) General constructions of lines, angles, bisections, perpendiculars, parallels.
- (b) Division of lines into equal and proportional parts.
- (c) The construction and use of plain scales and the use only of diagonal scales.
- (d) Parts of the circle.
- (e) Construction of touching arcs and circles—given all radii.
- (f) Construction of triangles to rules of congruency.
- (g) Simple constructions of straight edged plane figures.
- (h) Construction of true ellipse.
- (i) Construction of parabola—given the rise and span.
- (j) Construction of a simple Helix.
- (k) Loci of simple mechanisms.
- (l) Orthographic of simple geometrical solids : right prism, cylinder, pyramid, cone.
- (m) True shape of sections and development of shapes based on above solids, but only when the cutting plane is perpendicular to one main plane, V.P. or H.P. and at set-square angles to the other main plane.
- (n) Auxiliary projection—the first auxiliary view only.

## WOODWORK

### SCHEME OF EXAMINATION AND SYLLABUS

The Examination will be in three parts :—

- (1) Course Work
- (2) Practical Test
- (3) Craft Knowledge Paper

The weighting of Course Work, Practical Test and Craft Knowledge Paper will be in the proportion 5 : 2 : 3.

#### (1) COURSE WORK

Course Work should be whole or part of the normal school work done over the last two years, to be presented for assessment, and the candidate himself to be available, if required, by the assessors.

#### (2) PRACTICAL TEST — 2½ hours + 10 minutes for reading question paper.

This will take the form of a timed test carried out under examination conditions to show the candidate's manipulative skill and his ability to work accurately.

Candidates would be required to work from orthographic and pictorial drawings conforming to British Standard 308/53, from which various details may be omitted, and which would be required to be determined by the candidate.

The timber should be a mild working hardwood, supplied by the school, planed to a nominal size, the candidate himself finishing the wood to an exact size.

#### (3) CRAFT KNOWLEDGE TEST — 2 hours + 15 minutes for reading question papers II and III.

#### AIM OF THE TEST

- (a) To discover if the candidate has gained sufficient knowledge of his tools and materials to enable him to practise the craft intelligently.
- (b) To discover if he has gained sufficient knowledge of processes used in the craft and the principles which govern working procedures and constructions.
- (c) To discover if he can communicate his ideas and thoughts in an understandable manner by means of simple sketches and drawings.

The Test will be in Three Parts :—

#### PAPER I

A number of questions on general workshop knowledge—tools, materials and processes. Questions will be objective or may require answers in a few words or a sentence.

#### PAPER II

*Processes and Planning*—with alternative questions.

#### PAPER III

*Constructional Design*

Questions in Papers II and III will require more detailed answers supplemented by sketches whenever possible.

Candidates must satisfy the Examiner in the examination as a whole and also in each of the three sections.

## NOTES

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NOTES

## NOTES



## NOTES



## NOTES

WEST YORKSHIRE AND LINDSEY

REGIONAL EXAMINING BOARD

FOR THE CERTIFICATE OF SECONDARY EDUCATION

CONSTITUTION

*In 21987*

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Braunschweig  
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WEST YORKSHIRE AND LINDSEY

REGIONAL EXAMINING BOARD

FOR THE CERTIFICATE OF SECONDARY EDUCATION

## CONSTITUTION

The Board was provisionally recognised by the Minister of Education in August, 1963, subject to the conditions set out in Appendix A. The draft Constitution was formally adopted and the conditions were accepted by the Governing Council at their meeting held on 30th October, 1963.

## CONSTITUTION

### INTRODUCTION

1. This Memorandum sets out the proposed constitution for the West Yorkshire and Lindsey Regional Examining Board, together with an Appendix for the constitution of local group committees.
2. The West Yorkshire and Lindsey Region, as originally constituted, includes the following six Local Education Authorities: Barnsley, Doncaster, Lincolnshire Lindsey, Rotherham, Sheffield, West Riding, acting in association with the Institute of Education of the University of Sheffield.

### THE FUNCTIONS AND POWERS OF THE REGIONAL EXAMINING BOARD

3. The functions of the Regional Examining Board shall be:-
  - (a) to offer external examinations on syllabuses and examination papers prepared by the Regional Examining Board, and to publish such syllabuses and specimen examination papers;
  - (b) to offer external examinations on syllabuses and examination papers proposed by individual schools, or groups of schools, and approved by the Regional Examining Board;
  - (c) to offer external assessment and validation of examinations conducted internally by individual schools, or groups of schools;
  - (d) to issue certificates to candidates judged successful in the examinations, such certificates to be known as the Certificate of Secondary Education and to be endorsed by an officer of the Ministry of Education appointed for the purpose by the Minister;
  - (e) to determine the arrangements necessary for the proper conduct of the examinations for which it is responsible;
  - (f) to appoint suitable administrative and other officers for the purpose of the exercise of its functions;
  - (g) to appoint such committees as it considers necessary and to delegate thereto power to act on its behalf in matters of management;
  - (h) to raise funds by examination fees and such other means as it shall from time to time determine; and
  - (i) to appoint a bank to facilitate and record its financial business.

## THE DUTIES OF THE REGIONAL EXAMINING BOARD

4. The duties of the Regional Examining Board shall include:-
- (a) ensuring that the examinations for which it is responsible are suitable for the candidates who present themselves for such examinations;
  - (b) ensuring that the standards of such examinations are reasonably comparable to those of the examinations conducted by other Regional Examining Boards;
  - (c) promoting the full participation on a local basis of practising teachers; and ensuring that effective arrangements exist for the full consideration of all representations received from schools, other educational establishments, candidates, local education authorities and other persons or bodies affected by or concerned with such examinations;
  - (d) providing assistance to local groups of schools in the form of courses, conferences, and individual advice on problems connected with devising, conducting and marking examinations, and with the assessment of course-work;
  - (e) determining conditions in relation to the admissibility of candidates in respect of age or other particulars, subject always to such regulations or conditions as may be imposed by the Minister of Education;
  - (f) ensuring that effective arrangements exist for the conduct of experiments into examining, and also of research and development;
  - (g) providing such information on all matters connected with the examinations as the Minister of Education or the Secondary School Examinations Council may request.

## THE REGIONAL GOVERNING COUNCIL

5. The Regional Examining Board shall be governed by a Council which shall have the functions and duties described in paragraphs 3 and 4. The Council shall consist of the following voting members:-
- (a) a chairman to be appointed by the vote of other members of the council but not necessarily to be appointed from amongst the representative members;
  - (b) eighteen teachers serving in the schools principally affected by the examinations in the Region, of whom at least fifteen shall be appointed on the nomination of the teachers' associations for the time being members of the Burnham Committee, and among whom there shall be at least one from each local education authority in the Region;

- (c) two teacher representatives of institutions of further education in the Region nominated by the teachers' associations for the time being members of the Burnham Committee;

NOTE: Representation of the teachers' associations under clause 5(b) and 5(c) shall be as follows:-

National Union of Teachers	10
Joint Committee of the Four Secondary Associations	2
Association of Teachers in Technical Institutions	2
National Association of Schoolmasters	2
National Association of Headteachers	1

- (d) one representative nominated by each of the local education authorities in the Region;
- (e) five representatives of the Sheffield Institute of Education, at least two to be teachers from participating schools in the region serving on the Board of the Institute;
- (f) two representatives of industry and commerce in the Region, one of whom shall be nominated by the Federation of British Industries and one by the Trades Union Congress;
- (g) not more than four members to be co-opted by the Council, subject to the proviso that there shall always be a majority of teachers serving in the Region in the membership of the Council; and
- (h) for each new Local Education Authority joining the Region two representative teachers shall be added within the terms of Section (b).

6. In addition to the voting members, the Council shall have the following assessors:-

- (a) one representative appointed by another Regional Examining Board;
- (b) one of H.M. Inspectors of Schools;
- (c) one local education authority inspector or adviser;
- (d) one representative of the Youth Employment Service; and
- (e) officers of the Ministry of Education and the Secondary School Examinations Council to be appointed by the Minister or the Secondary School Examinations Council from time to time.

7. Membership of the Council shall be for three years and one-third of the members shall retire each year except that in the interests of continuity the tenure of office of the members first appointed may be extended for one or two years. A retiring member may be re-appointed either as a representative member or as a co-opted member.

#### THE REGIONAL EXAMINATIONS COMMITTEE

8. The Committees appointed by the Council of the Regional Examining Board shall include a Regional Examinations Committee which shall have the following functions:-
- (a) to make arrangements for the conduct of the examinations;
  - (b) to appoint examiners after considering the advice of the Subject Panels;
  - (c) to approve arrangements for the adoption of syllabuses submitted by the Subject Panels or otherwise;
  - (d) to offer external assessment and validation of examinations conducted internally by individual schools, or groups of schools;
  - (e) to ensure maintenance of standards appropriate to the subjects taken and to the candidates participating in the examinations;
  - (f) to receive and to consider carefully and fully all representations on matters concerned with the examinations from schools and candidates participating and other persons and bodies affected or concerned;
  - (g) to receive and to consider carefully and fully all appeals against decisions of Subject Panels, chief examiners, moderators, assessors and examiners; and
  - (h) to supervise the arrangements for the conduct of experiments into examining, and of research and development.

#### MEMBERSHIP OF THE REGIONAL EXAMINATIONS COMMITTEE

9. The Regional Examinations Committee shall consist of voting members as follows;
- (a) a chairman to be appointed by the Council but not necessarily to be appointed from amongst the representative members of the Council;
  - (b) eighteen serving teachers, of whom at least ten shall be members of the Regional subject panels and at least five of local group committees, and among whom there shall be at least one from each local education authority in the Region;

- (c) three representatives of local education authorities in the Region;
  - (d) five representatives of the Institute of Education at least two to be teachers serving on the Professional Committee of the Institute;
  - (e) two teacher representatives of institutions of further education in the Region nominated by the teachers' associations for the time being members of the Burnham Committee;
  - (f) two representatives of industry and commerce in the Region; and
  - (g) not more than three members to be co-opted by the Committee and approved by the Council, subject to the proviso that there shall always be a majority of teachers serving in the Region in the membership of the Committee.
10. In addition to the voting members, the Regional Examinations Committee shall have the following assessors:-
- (a) one representative of another Regional Examining Board;
  - (b) one of H.M. Inspectors of Schools;
  - (c) one local education authority inspector or adviser; and
  - (d) such officers of the Regional Examining Board and such specialist advisers as the Committee itself shall decide.
11. Membership of the Committee shall be for three years and one-third of the membership shall retire each year except that in the interests of continuity the tenure of office of the first members may be extended for one or two years. A retiring member may be re-appointed either as a representative member or as a co-opted member.

#### REGIONAL FINANCE AND GENERAL PURPOSES COMMITTEE

12. The Committees appointed by the Council of the Regional Examining Board shall also include a Finance and General Purposes Committee which shall have the following functions:-
- (a) to determine the remuneration and conditions of service of the officials of the Regional Examining Board, including examiners and moderators, but excluding the Secretary whose remuneration and conditions of service shall be determined by the Council;
  - (b) to determine the fees to be charged to candidates, schools and groups of schools taking or participating in the examinations of the Board;

- (c) to advise the Council on all other matters involving the income or expenditure of the Board, but excluding those specifically assigned to other Committees.

#### MEMBERSHIP OF THE REGIONAL FINANCE AND GENERAL PURPOSES COMMITTEE

- 13. The Regional Finance and General Purposes Committee shall consist of voting members, selected from the members of the Council, as follows:-
  - (a) one representative nominated by each of the local education authorities in the Region;
  - (b) six other members of the Council, of whom at least three shall be serving teachers and at least one shall be a representative of the Sheffield Institute of Education.
- 14. In addition to the voting members, the Regional Finance and General Purposes Committee shall have the following assessors:-
  - (a) one assessor appointed by the Minister of Education;
  - (b) such officers of the Regional Examining Board as the Committee shall itself decide.
- 15. Membership of the Committee shall be for three years and one-third of the membership shall retire each year except that in the interests of continuity the tenure of office of the first members may be extended for one or two years. A retiring member may be re-appointed.

#### REGIONAL SUBJECT PANELS

- 16. There shall be a Regional Subject Panel for each subject examined except that the Regional Examinations Committee may, if they think fit, create panels to advise them on any combination of subjects.

Subject to the approval and authority of the Regional Examinations Committee, the functions of a Regional Subject Panel shall, in relation to the subject with which it is concerned, be as follows:-

- (a) to advise the Regional Examinations Committee on all matters affecting the administration of the examinations;
- (b) to prepare, scrutinise, or approve, as appropriate, examination syllabuses, examinations papers, marking schemes and mark lists of candidates, and to ensure that, however they are conducted, the examinations are, within reason, of a comparable standard;

- (c) to supervise the work of the chief examiners, examiners, moderators and assessors;
- (d) to encourage and, if thought fit, to arrange conferences with teachers of the subjects from the schools participating in the examinations;
- (e) to receive and consider fully and carefully all representations concerned with the work of the examiners and others on the examination syllabuses, papers, marking schemes, the marking of scripts and the preparation of mark lists.

#### MEMBERSHIP OF THE REGIONAL SUBJECT PANELS

17. A Regional Subject Panel shall consist of voting members as follows:-
- (a) a chairman, to be appointed by the Regional Examinations Committee, who shall not be the chief subject examiner, a moderator or an assessor;
  - (b) one serving teacher of the subject to be appointed by the Regional Examinations Committee on the nomination of each Local Group Committee from the Local Subject Panels, and such other teachers of the subject as the Regional Examinations Committee may select after consultation with the Heads of any schools which may not be included in the Local Group Committee;
  - (c) the chief subject examiner ex officio.
18. In addition to the voting members, the Regional Subject Panel may co-opt non-voting members in order to provide expert knowledge or experience in the subject or in examination matters.
19. The voting members of a Subject Panel shall be appointed for three years and a third of the members shall retire each year, except that in the interests of continuity the tenure of service of the members first appointed may be extended for one or two years. A retiring member may be re-appointed either as a representative member or as a co-opted member.

#### THE EXAMINATIONS

20. The external examinations of the Regional Examining Board shall be based upon syllabuses approved by the Regional Subject Panels.
21. The Subject Panels shall take into account the view of the schools participating in the external examinations on the preparation of syllabuses and examination papers.

22. The Regional Examining Board shall arrange for an individual school or a group of schools acting in concert to submit and, if approved, operate schemes under which examination syllabuses, examination papers, marking schemes, course-work assessment and mark lists are prepared and the examinations conducted within the school or schools, subject to approval, moderation, and inspection by the Regional Examining Board. In the event of a dispute with the Regional Examining Board, a school or group of schools shall have the right of appeal to the Secondary School Examinations Council.
23. The Regional Examining Board shall ensure that the standards of the examinations conducted under paragraph 22 above shall be reasonably comparable with the other examinations for which it is responsible, but this duty shall not be interpreted as requiring uniformity of content or method of examining as between the regional examination syllabuses and papers and those prepared by individual schools or groups of schools.

#### APPOINTMENT OF OFFICIALS OF EXAMINING BOARDS

24. Unless specifically approved by the Secondary School Examinations Council persons, other than teachers, who are employed by local education authorities within the region of a Regional Examining Board shall not be employed by the Regional Examining Board if they are to be wholly or mainly concerned with the administration of the school examinations in the area of the authorities by which they are employed.

#### THE ISSUE OF CERTIFICATES

25. The Regional Examining Board shall issue to successful candidates certificates in a form to be approved by the Secondary School Examinations Council.
26. The Certificates shall be known as the "Certificate of Secondary Education" and shall be signed by the Chairman and Secretary of the Council of the Regional Examining Board and by an officer on behalf of the Minister of Education and shall be taken to represent the Regional Examining Body's responsibility for the arrangements for the maintenance of standards and the administration of the examination.
27. The Regional Examining Board shall not introduce grades of marks for successful or unsuccessful candidates except with the approval of the Secondary School Examinations Council.

#### RIGHT OF REVIEW BY THE SECONDARY SCHOOL EXAMINATIONS COUNCIL AND THE MINISTER OF EDUCATION

28. The Regional Examining Board shall give access to all papers and accounts and shall permit attendance at all meetings of the Council, Regional Examinations Committee and subject panels to officers of the Minister of Education, H.M. Inspectors, and officers of the Secondary School Examinations Council authorised for that purpose.

29. On appeal from a school, group of schools, a candidate or any other interested body or person, officers of the Minister of Education or of the Secondary School Examinations Council may inspect or investigate the papers and activities of the Regional Examining Board.

#### RECOGNITION BY THE MINISTER OF EDUCATION

30. The Board shall not offer any examinations unless recognised by the Minister of Education, who may attach to such recognition conditions relating to the following matters: the definition of the scope of the C.S.E. system: the definition of the standards of the examinations, and their maintenance on a basis of reasonable comparability: the presentation of results: general rules for the admission of candidates: constitutional arrangements (including the areas to be covered by the Boards); national statistics and information.

Provided that the Minister shall act under this clause on the advice of the Secondary School Examinations Council.

Provided also that the Secondary School Examinations Council shall consult the Board before advising the Minister to grant, withhold or withdraw recognition, and shall in particular afford the Board an opportunity of commenting, before they are made binding, on any conditions which it is proposed to attach to such recognition.



## APPENDIX FOR THE CONSTITUTION OF LOCAL GROUP COMMITTEES

### THE LOCAL GROUP COMMITTEES

1. For the purposes of conducting and evaluating the examination, the participating schools in the Region will be divided into convenient groups. These groups may include schools from more than one Local Education Authority.
2. Each school will be free to choose how each subject shall be examined or assessed. The Local Group Committee will discuss the nature and form of the examination and its educational impact on the schools. The main examining alternatives are as set down in paragraph 3(a) to (d) of the constitution. In addition, the Local Group Committee may encourage continuing assessment within each school.
3. The Local Group Committee will be responsible for setting up Local Subject Panels. It will arrange, in conjunction with the Local Subject Panels, an annual meeting for teachers, to discuss the conduct and success of the examinations, and their larger educational implications and results.

### MEMBERSHIP OF THE LOCAL GROUP COMMITTEES

4. The Local Group Committees shall consist of voting members as follows:-
  - (a) the Head Teacher or his representative of each school in the group, one of them to act as Chairman;
  - (b) not more than two teacher representatives of local institutions of further education;
  - (c) not more than one co-opted member.
5. In addition to the voting members, each Local Group Committee shall include one local education authority officer and one H.M. Inspector as assessor.

### THE LOCAL SUBJECT PANELS

6. Local Subject Panels shall be established by the Local Group Committees in all the subjects, and combinations of subjects, in which the schools of the group wish to offer candidates for examination. Where schools -
  - (a) opt to take an examination set by the local group of schools for their collective use, the syllabus shall be determined by the Local Subject Panel;
  - (b) opt to set and mark an examination internally, the syllabus shall be determined in consultation with the Regional Subject Panel;

- (c) opt to take an external examination based on a syllabus provided by the school or group of schools, the Local Subject Panel shall be responsible for supervising or determining the syllabus, as the case may be.

#### MEMBERSHIP OF THE LOCAL SUBJECT PANELS

7. The Local Subject Panels shall consist of voting members as follows:-  
one subject teacher from each school concerned in the group.
8. In addition to the voting members, each Local Subject Panel shall include as assessor one external examiner and/or moderator and one member of the Local Group Committee.

## A P P E N D I X A

### CONDITIONS OF RECOGNITION

#### DEFINITION OF THE SCOPE OF THE C.S.E. SYSTEM

1. (i) The scope of the C.S.E. system of examinations shall be determined by the Secondary School Examinations Council who will, from time to time, issue guidance on the range of performances which the examinations should be designed to test.
- (ii) The examinations will be offered on a single subject basis.

#### DEFINITION OF THE STANDARDS OF THE EXAMINATIONS

2. The standards of the examinations shall be determined by the Secondary School Examinations Council who will, from time to time, issue appropriate guidance to the examining boards.

#### PRESENTATION OF RESULTS

3. (i) The manner in which performances are described, whether for private communication to the candidate or his school, or for public use on a Certificate of Secondary Education, shall be determined by the Secondary School Examinations Council.
- (ii) The form of the Certificate of Secondary Education, and of any other documents used for describing and communicating performances in the examinations, shall be determined by the Secondary School Examinations Council.

#### GENERAL RULES FOR THE ADMISSION OF CANDIDATES

4. (i) Candidates attending schools must be aged 16 or in the final term of the fifth year of a five year course of secondary education, or must have completed such a course (the expression "a five year course of secondary education" includes, for purposes of these conditions, any full-time course of five years' duration undertaken in any type of school after the normal age of transfer from primary to secondary education.)
- (ii) Where, for the time being, pupils are unable, owing to lack of maintained secondary school facilities, to take their fifth year save in a further education establishment, candidates entered by such establishments shall be accepted for the examination if they have completed or are in the last term of five years' full-time secondary education partly in school and partly in a further education establishment.

- (iii) Other candidates may be accepted provided that they are not less than seventeen years of age on the 1st September following the summer term in which the examination is taken.
- (iv) If local conditions suggest that candidates not falling within the above categories should be entered for the examinations, the Regional Examining Board will draw up regulations governing the admission of these candidates, and these regulations shall be approved by the Secondary School Examinations Council before they are adopted by the Regional Examining Board.

#### CONSTITUTIONAL ARRANGEMENTS

- 5. (i) The constitution of the Regional Examining Board and any amendment to it will be subject to the approval of the Minister of Education acting on the advice of the Secondary School Examinations Council.
- (ii) The Regional Examining Board will publish its constitution, with a copy of these conditions of recognition as an annex, in its first annual report or regulations; and any approved amendments shall be similarly published at the first available opportunity.
- (iii) The Regional Examining Board will be responsible for the Certificate of Secondary Education examination in its region, as defined in the Minister's letter of recognition, and will not offer or undertake such examinations in the area of another board without the prior approval of the Secondary School Examinations Council.

#### NATIONAL STATISTICS AND INFORMATION

- 6. The Regional Examining Board shall maintain such records as the Minister of Education, acting on the advice of the Secondary School Examinations Council, may require, and will provide the Minister and the Council with such information as they may from time to time request.



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