

WELSH JOINT EDUCATION COMMITTEE
Y CYD - BWYLLGOR ADDYSG CYMREIG

CERTIFICATE OF SECONDARY EDUCATION
1966 EXAMINATIONS

REGULATIONS
AND
SYLLABUSES

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WELSH JOINT EDUCATION COMMITTEE
Y CYD-BWYLLGOR ADDYSG CYMREIG

CERTIFICATE OF SECONDARY EDUCATION
1966 EXAMINATIONS

REGULATIONS

1. The Welsh Joint Education Committee has been approved as the examining board responsible for conducting examinations for the Certificate of Secondary Education in Wales and Monmouthshire.

2. **Date of 1966 Examinations**

The written examinations will begin on or about 6th June, 1966.

Oral Examinations and any subsequent moderation will take place late in the Spring Term.

Practical Examinations in Art, Metalwork and Woodwork will be held in the Summer Term before the date of the written papers.

3. **Admission of Candidates**

(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 examinations 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 1st September following the summer term in which the examination is taken.

4. **Date of Entries**

Entries for the examination must be received by 10th March, 1966.

Types of Examination

Every school entering candidates for the Certificate of Secondary Education will be free to adopt, in each subject, any of the following methods of examining—

- (a) MODE 1—an external examination based on the syllabus(es) prepared by the Committee (see pages 6 to 84)
- (b) MODE 2—an external examination on a syllabus submitted by the school or by a group of schools, and approved by the Committee
- (c) MODE 3—an examination set and marked internally in the school (or group of schools), but moderated under arrangements made by the Committee.

(NOTE : 1967 Examination—any school or group of schools wishing to adopt in 1967, the type of examination outlined in (b) or (c) above must apply for approval not later than 10th March, 1966. The proposed syllabuses and specimen papers based on them should be submitted with the applications.)

6. Subjects of the Examination

Examinations will be available in 1966 in the following subjects :

	See page
Arithmetic	6
Art and Design	7
Commerce	15
English	17
English Literature	20
Geography	20
Geology	22
History	25
Housecraft	37
Mathematics	38
Metalwork	41
Modern Languages	43
Music	45
Needlework	49
Office Practice	50
Principles of Accounts	51
Science—	52
Basic Science	53
General Science	55
Biology	56
Human Biology	58
Chemistry	60
Physics	61
Rural Science	63
Horticulture	64
Scripture Knowledge	67
Shorthand	71
Technical Drawing	72
Typewriting	73
Welsh	73
Welsh Literature	79
Woodwork	82

Candidates wishing to take any of the SCIENCE subjects listed above must also take an examination in Basic Science (see syllabus on page 53). General Science may not be taken in conjunction with Physics, Chemistry or Biology.

7. Examination Papers in Welsh

Welsh versions of examination papers will be available on application.

8. Results of the Examination

The results of the examination in each subject (except Shorthand and Typewriting) will be given in five grades, 1 to 5 in descending order of merit. Grade 1 and Grade 4 are defined as follows :

Grade 1

A sixteen year old pupil whose ability is such that he might reasonably have secured a pass in 'O' level of the G.C.E. had he applied himself to a course of study leading to that examination, may reasonably expect to secure Grade 1 having followed a course leading to the C.S.E. examination.

Grade 4

A sixteen year old pupil of average ability who has applied himself to a course of study regarded by teachers of the subject as appropriate to his age, ability and aptitude, may reasonably expect to secure Grade 4.

Grade 5 will be used to describe performances which, while not of Grade 4 standard, have enough merit to show that the candidate has been properly entered for the examination.

For Shorthand and Typewriting, the candidate's certificate will indicate the speed(s) attained.

9. Award of Certificate

A Certificate of Secondary Education will be awarded to every candidate who obtains at least one Grade in the range 1 to 4. Where a certificate is issued, it will also record Grade 5 performances.

10. Examination Fees

Information regarding the scale of fees payable in respect of the 1966 examination may be obtained on application.

SYLLABUSES

ARITHMETIC

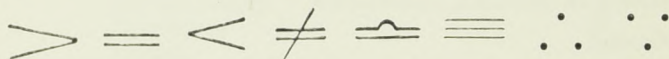
The examination will consist of one paper of $2\frac{1}{2}$ hours' duration, divided into 2 sections :

Section A (to carry 40% of the marks) : a number of compulsory questions requiring short answers only.

Section B (to carry 60% of the marks) : a choice of questions involving more steps in reasoning.

The examination will be designed to test the candidate's understanding of arithmetical processes, and his ability to apply them to problems of every-day life in the home and in the community. The questions set will not include complicated computations, but a high degree of numerical accuracy will be required.

Candidates will be expected to understand and use the following symbols :



Numbers written in the scale of ten ; the binary scale as a second example of the idea of a scale of notation ; the metric system. The four basic processes of combining numbers (binary scale and scale of ten). Prime numbers, expression of a number as the product of its prime factors using the index notation, square root by factors. Fractions, both common and decimal, and the meaning and use of negative numbers.

Percentages and percentage changes.

Ratio and simple proportion.

Approximations : degrees of accuracy (significant figures and decimal places), limits of accuracy.

Use of four-figure tables of logarithms (positive and negative characteristics), squares and square roots.

Applications of the above arithmetical processes to practical problems, such as :

evaluation from formulae ;

averages, including average speed and price problems ;

change of units, including foreign currency ;

profit and loss, discount ;

savings, simple interest, compound interest, depreciation ;

hire purchase ;

taxes, including income tax, purchase tax, and rates ;

elementary stocks and shares.

Use of every-day tables, e.g. compound interest tables, ready reckoners, time-tables.

The construction and interpretation of charts and graphs based on statistical data ; conversion graphs ; travel graphs.

Mensuration of triangle, rectangle, parallelogram and circle, and of solids of uniform cross-section. Mensuration of pyramid, cone, and sphere (formulae need not be memorised). Use of Pythagoras' theorem.

Note : Quantities will not be expressed in more than two units, with the exception of £ s. d.

Candidates may use slide-rules, where suitable, for numerical calculations.

ART AND DESIGN

The examination will consist of :

- (a) an assessment of course work, and
- (b) a practical test OR a written paper in Appreciation.

The course work and the practical test (or paper in Appreciation) will be equally weighted in compiling the results.

Guide syllabuses are provided under the following headings :

- A (i) Composition
- A (ii) Study from Observation
- A (iii) Two-dimensional Design
- B (i) Three-dimensional Design
- B (ii) Pottery
- B (iii) Lettering and Calligraphy
- B (iv) Design for Printing and Print-Making
- B (v) Book Crafts
- B (vi) Design for the Stage
- B (vii) Fabric Crafts
- B (viii) Embroidery
- B (ix) Weaving
- C Appreciation

Course Work

The examples of course work submitted for assessment may be chosen from any or all of the sections covered by the syllabus, but at least one example must be included from Section A (i), (ii) or (iii). The work to be assessed need not be confined to specimens completed in the final year of the course. It is envisaged that no more than eight finished works will be submitted by any candidate. A sketch book, a collection of preliminary studies or an appreciation note-book may be included as one item. Candidates will be assessed on the quality, rather than the quantity, of the work submitted.

It is intended that the course work should be assessed by the class teacher and the assessment moderated—wherever possible by practising teachers of the subject.

Practical Test

A number of tests will be set on all sections of the syllabus, but candidates will attempt ONE test only. The list of practical tests will be circulated to schools some time (probably about one week) before the date set for the examination, so that each candidate may choose a test. Sketches made during this week prior to the examination may be taken into the examination, but will not be submitted as part of the practical test.

Any necessary preliminary work, which normally takes up some time (e.g. setting up the warp in weaving), may be carried out by the candidate during this period.

The time in which a candidate should be expected to complete his chosen test will be specified, and to cater for the requirements of certain crafts this specified time may be spread over more than one day. At the discretion of the headteacher, extra time may be allowed to enable a candidate to complete the test, and the additional time taken must be stated when the test is moderated.

It is intended that the practical test should be marked internally and moderated externally.

Written Paper in Appreciation

This paper may be taken as an alternative to the practical test. Candidates must still submit examples of course work for assessment.

The duration of the paper will be $2\frac{1}{2}$ hours; candidates will be required to answer FOUR questions, TWO from each section of the paper.

It is intended that this paper should be marked externally.

The general aim of the following syllabuses is to encourage freedom of approach to the subject and experiment within it. The course should encourage the candidate to be critically aware of his environment, and to develop a personal vision and outlook through contact with works of art from other cultures.

The form of the examination will be determined by the work done in the schools, and there should be no deviation from the normal free approach to this work.

SECTION A

The three categories in this section are (i) pictorial composition, (ii) study of observed forms, and (iii) basic design.

The basis of this activity should be uninhibited ; evidence of discovery and invention will be sought. An appearance of laboured effort resulting from pre-conceived ideas of stereotyped planning should be avoided. The use of colour, where specified, should not restrict the candidate to the various forms of paint media.

(i) COMPOSITION

Candidates should give due regard to the arrangement of the principal shapes and components within the picture area. They should be encouraged to make good use of sketch books. The importance of the correlation of sketch books with finished works should be emphasised.

The practical test will give a choice of the following types of composition :

- Figure Composition.
- Landscape Painting (with emphasis on foreground interest).
- Design for Murals.
- Illustration.
- Still Life Composition.

(ii) STUDY FROM OBSERVATION

The study of natural forms in any traditional or experimental medium. Observation and discovery with a feeling for line, form, texture, and design.

The practical test will give a choice of the following, to be executed in line, tone, or colour :

- A study of the human form.
- A study of natural or structural forms.
- A study sheet of working drawings.

(iii) TWO-DIMENSIONAL DESIGN

Candidates will be free to present for the practical test unorthodox methods and materials that may have been developed during the course. Opportunity will be given to express a knowledge and experience of pattern, texture, form and colour. The work may be abstract, semi-abstract or representational.

The candidate may use techniques which involve raised surfaces, but only so far as they would add interest, and not a third dimension, to the design.

The following areas of study are suggested :

- Types of working surface.
- Materials and media.
- Methods of assembly.
- Reference to nature.
- Reference to buildings.
- Collected samples of good design.
- Experimental proportions.
- Pattern making for a purpose.

SECTION B

The nature and content of the following syllabuses should have in common the precepts of creative expression, technical skill, the development of good taste and a sense of fitness for purpose with its relation to general living, and an appreciation of the historical aspect.

(i) THREE-DIMENSIONAL DESIGN

The syllabus is intended to extend the scope of the subject, to encourage experiment in three dimensions, and to provide an opportunity for design and execution in unusual forms, with materials different from those traditionally in use.

The following areas of study are suggested :

A basic study of some object to gain knowledge of its construction : possibly the human head, studied, drawn, and modelled, so as to be thoroughly understood.

Study and drawing of objects of various shapes, textures, and colours. The use of basic materials and tools. Some attention to casting methods in various materials.

The use of adventurous materials for design in three dimensions ; materials selected for their properties of texture and form, and the combination of varying materials.

The practical tests will provide opportunity for design and work of a traditional nature, while including some tests broad enough to provide scope for thought along the lines suggested.

(ii) POTTERY

The suggested syllabus is an attempt to launch the craft upon a rather different course from that of thumb pot and coiled pot production. It is intended rather to impart knowledge of the craft as a whole, to further the realization of pottery as a lively craft offering opportunity for ambitious design projects, and to develop the candidate's ability to appraise critically everyday articles of pottery both utilitarian and decorative.

The following areas of study are suggested :

Materials. Clay : introduction to clay as a craft medium ; consideration of its qualities and limitations as a controlling influence upon design ; some knowledge of its sources and origins. Glaze : its composition and application ; its practical and decorative qualities ; the different effects achieved from the colour and texture of the glaze in use.

Production Methods. An introduction to thumb pottery, coiling, slab and tile work, pressing and flopping, throwing and turning, casting, jiggering and jollying. The practical use of as many of these methods as possible. Some knowledge of firing pottery.

Decoration. Incised and applied. Slip-trailing, combing, feathering, brush and sgraffito. Oxide—underglaze and onglaze. Resist, stencil, transfers.

(iii) LETTERING AND CALLIGRAPHY

Within the scope of this syllabus, it is hoped that candidates will be encouraged to use lettering and calligraphy with imagination while at the same time showing a sympathetic awareness of the values particular to the craft.

Candidates may offer for assessment examples of pure lettering typography or calligraphy, or any of these combined with illustration. The aim of the course should be to develop a feeling for and a discriminating attitude to lettering in all its applications.

The following qualities will be sought :

Clarity of presentation.

Good layout.

Good relations between type, pen-written and hand-drawn lettering, and areas and paper margins.

Legibility.

Suitability for purpose.

The following suggestions are made as a basis for study :

A broad knowledge of letter forms as developed from Roman times to the present day. This would of necessity cover a wide field, ranging from pen-written and hand-drawn lettering to printed type faces, but the only requirement should be an awareness of the tremendous variety and an ability to appreciate their uses.

The ability to use at least one good form of pen-written or hand-drawn lettering.

An understanding of methods of reproduction.

An awareness of all forms of advertising.

(iv) DESIGN FOR PRINTING AND PRINT-MAKING

The syllabus is intended to acquaint the candidate with the scope of print-making as a means of illustration and decoration, and to encourage experiment with print qualities obtained from conventional and unusual surfaces, and an appreciation of appropriate design in the print as a unique art object and as a quantitatively reproducible unit.

Suggestions for a basis of study :

A brief outline history of printing and paper-making, and a study of the application of methods of reproduction in the service of modern society.

The making of a scrapbook/notebook showing an appreciation of the qualities of various printing surfaces and papers, and the relationship of the illustrative and decorative print to typography.

Candidates should have experience of printing from metal (etched, engraved, punched or incised), wood, hardboard, linoleum, plaster, and a variety of natural and machined surfaces. A particular study should be made of one method of print-making.

The course should include the production of a series of prints on a theme; the prints may be intended as a suite for framing and exhibition, as an advertising series for a product or an idea, or for incorporation with type, hand-lettering, or writing, in book form.

(v) BOOK CRAFTS

Candidates may offer for assessment examples of pure craftwork in which evidence will be sought of an appreciation of good craftsmanship. It is not intended, however, that the syllabus should limit a candidate merely to the acquisition of technical skills. Full advantage should be taken, wherever possible, of the scope offered in course work to develop a broad interest in the art of book production.

The following suggestions are made as a basis for study :

A brief outline history of bookbinding.

An understanding of the use of materials and tools.

A knowledge of simple methods of construction.

An appreciation of the art of the book, involving a study of book illustration, lettering, both hand-drawn and pen-written, and printing types, methods of reproduction.

The production of a small written and illustrated book.

(vi) DESIGN FOR THE STAGE

The syllabus is intended to cover all aspects of design connected with the stage. The work done should display vitality, originality, a depth of personal research, an understanding of the fundamentals of design and colour and their application in evoking the mood of the production and a sense of the theatre.

Because of the breadth of activity in this syllabus, it is suggested that candidates should confine their studies mainly to *ONE* of the following three sections :

Section A : Sets for any form of stage entertainment. Wherever possible, schools are encouraged to use model stages, preferably proportionate to the dimensions of the school stage, so that candidates may experience both the visual effect and the production problems involved.

Section B : Stage properties and costume.

The work done on costume may vary from designs of a purely imaginative nature to those based on costumes of other periods or other countries. Thought should be given to the way in which colour and decoration can be used to project the personality of a character.

Apart from the artistic and technical aspects of property-making, candidates should be made aware of the practicability of their constructions, e.g. their strength, their lightness.

Section C : Any type of puppet or marionette.

Make-up, although not submitted as a subject for examination should provide an exciting sphere of study during the course, and could be presented for assessment in the form of photographs or sketch book studies.

Exercises may be presented as designs, models, or completed works, and should demonstrate an imaginative use of materials and a sensitive use of colour.

The value of the sketch book as a source of reference and research should be emphasised.

(vii) FABRIC CRAFTS

The course work should be designed to test creative ability and feeling as well as an understanding of the particular qualities and limitations of the materials chosen ; printed and dyed fabrics should be included. Attention should be given to the proper use and control of tools.

The following methods are suggested as a basis for study :

Block printing.

Screen printing.

Tie-and-dye : knotting, binding, folding or sewing techniques or a combination of any of these methods.

Resist techniques.

Experimental methods of the candidate's own choice.

(viii) EMBROIDERY

Embroidery should be considered as an art form which emphasizes something of the contemporary in life ; the work done should show a visual awareness and inquisitiveness.

Original ideas may stem from the material itself, texture and pattern often suggest a design. Many sources of inspiration are to be found in nature.

To preserve the freshness of the idea, too much time should not be spent on laborious drawing out of the design ; a rather more direct approach should be encouraged.

The course work to be assessed may include examples of the following :

Hand embroidery.

Machine embroidery.

Appliqué.

For Appliqué work, full use should be made of a wide variety of materials including nets, threads and cords of various thicknesses, beads, sequins, braids, buttons.

In the practical test, candidates will be required to create a design suitable for a particular article, and to embroider as much as possible.

(ix) WEAVING

The aim of the syllabus is to encourage an appreciation of the creative stimulus of the craft, and to develop good taste and a sense of fitness for purpose, so that candidates will look for quality and design when selecting fabrics for the home and clothes for themselves.

The craft offers a wide range of activities, and each school should develop its own scheme of work according to individual circumstances.

The following suggestions are recommended for inclusion in the course :

The keeping of a craft note-book.

Knowledge of the processes involved in spinning, dyeing, and weaving.

Knowledge of common weaves and designs.

Study of the use of colour, pattern and texture.

Experiments in the use of raffia, string, felt, and fancy yarns, as well as various ply wools.

Improvisation and making of simple looms and equipment.

Experiments with gathered and imported natural dyes.

Visits to local factories and the textile departments of museums.

Exercises may include initially the making of small table mats and similar items, moving on to the making of ties and belts on a braid loom. The use of simple roller looms, planning of pattern drafts, and threading of four-heddle looms could be envisaged during the later stages.

The possibilities of rug weaving might be considered.

SECTION C

As an alternative to the practical test, candidates may take a written paper in Appreciation.

As far as possible, the questions framed will be liberal in outlook so that candidates will have an opportunity to write what they know and think.

Each school choosing to participate in this section will be invited to submit four questions, some of which may be included in the question paper at the discretion of the Examiner.

APPRECIATION

The compiling of an appreciation note-book containing reproductions, photographs, sketches, and cuttings, together with personal explanatory and analytical notes, could contribute a great deal to the interest of the course of study. (This note-book may be submitted for assessment as an item of course work.)

Section A: A historical and contemporary appraisal of two-dimensional and three-dimensional culture.

In this section, sufficient latitude will be given for concentration on a particular subject, e.g. art, architecture, ceramics, sculpture, and for specialization in any given period.

Alternatively, a broad outline of art culture may be undertaken with the accent on general principles or schools of thought.

It is desirable that candidates be made conversant with contemporary trends.

Section B: A visual and aesthetic awareness of the world in which we live.

A study of basic design.

A knowledge of the essential ingredients that must be present in a well-designed article, whether hand-made or machine-made.

Colour and design in the home and its environment.

The visual study of nature ; its seasons, moods, colours, patterns, and textures.

COMMERCE

The examination will consist of one written paper of 2½ hours' duration, together with an *optional* independent project.

Written Paper: *Section A* : (to carry 40% of the marks)
 TWENTY compulsory questions requiring brief answers.

Section B : (to carry 36% of the marks)
 A choice of THREE from about eight questions.

Section C : (to carry 24% of the marks)
 This section is designed for the abler candidate who will be required to write an essay on ONE topic, chosen from about five. Clear expression of thought and opinion will be looked for in answers to this section.

Any topic in the syllabus may be examined in any section of the paper.

Project Work : Project work is optional, but it is strongly recommended that schools should undertake this type of work with a view to developing the candidate's own initiative, and his interest in local matters.

The project can be related to any commercial topic preferably connected with the local area. The work should be done by the candidate mainly in his own time, and it is suggested that the project should be about 1,000 words in length, supported by diagrams, maps, photographs, newspaper cuttings as appropriate. The assessment given to the optional project will be taken into account in the final result. It will be used however, only to improve a candidate's grading, and not to reduce it.

The syllabus is intended for candidates who take Commerce as part of a liberal education, and the course of study should be valuable as a background for any future occupation. It should not be confined to those specializing in other commercial subjects.

The course should be wide enough to cover the variation in local conditions in different parts of the country. It should be related to everyday life, and, in addition to covering a broad outline of our economic system to show its complexity, should be of practical value to the candidate, being concerned with future personal economic problems (Savings, Banking, Hire Purchase, Income Tax).

The course should include :

A very simple introductory outline of our economic system to show the effects of specialization :

- (a) The interdependence of individuals and communities.
- (b) Special occupations : Industrial, Commercial and Direct Services.
- (c) Mass production, resulting in a high standard of living compared with many other countries.

An outline of the stages from producer to consumer showing the importance of various branches of commerce.

Types of business organization: Sole Traders, Partnerships, Companies Co-operative Societies, Public Corporations and Nationalized Industries.

Buying and Selling. Forms of distribution, with emphasis on the retail trade. Functions of the wholesaler and recent developments by-passing the wholesaler. Types of retail outlet. A knowledge of the documents involved in a business transaction.

Buying on credit. Forms of deferred payment : credit sales, hire-purchase.

Advertising : its functions, advantages and dangers.

Methods of payment and banking. Methods of payment provided by the Post Office. Services of the commercial banks : types of banking account, the cheque system, loans and overdrafts, and other services such as references, safeguarding valuables, credit transfers.

Investing money. Importance of wise budgeting, both personal and business. A simple descriptive account of National Savings, Building Societies, and the Stock Exchange as a means of saving and investment.

Insurance. General considerations, importance to individuals and business firms. Types of insurance. Taking out an insurance policy. Lloyds.

Transport and communications. Relationship to Commerce. Forms of inland transport and their problems. Overseas transport. Communication services provided by the Post Office.

Trading overseas. Britain's special position, vitally dependent on imports and exports. Main goods and countries involved.

Government finance. Main items of government expenditure and sources of revenue. A simple account of P.A.Y.E.

ENGLISH

Candidates will be required to take TWO written papers and an oral examination.

Paper I will be of $2\frac{1}{2}$ hours' duration, and Paper II of 2 hours' duration.

In both written examinations, candidates will be allowed to use dictionaries.

PAPER I

The paper will consist of FOUR questions, all of which should be attempted. Letter writing will form part of the examination.

1. A test of the candidate's ability to write different types of prose, e.g. narrative, descriptive, argumentative, expository. The candidate will be required to write TWO pieces of prose, each of about one-and-a-half pages of the standard examination book. There will be a choice of topics.
2. A test of the candidate's understanding of a passage of prose. (The passage may have some relevance to the special topics section of Paper II.) Candidates will be asked to write out the main points of the passage, and then to express these points in a paragraph.
3. A piece of prose will be set, involving dishonesties of argument, tone and attitude, or lack of clarity in thought and expression, which the candidate will be asked to expose.
4. A test of the candidate's ability to convey in English the meaning of a cartoon or the information given in a graph or in statistical tables. (This question is intended to test the more able candidates.)

PAPER II

Candidates will be required to show that they have read various forms of literature with understanding and appreciation. There will be no context questions and a detailed knowledge of set texts will not be required. A list of suggested texts, prose, drama and poetry, is given below *for guidance only*.

Candidates will be required to answer FIVE questions, of which ONE will be compulsory.

The compulsory question will consist of an unseen poem or passage of verse or prose, on which questions will be set to elicit and test understanding and response. The candidate's understanding of the passage will be tested rather than a knowledge of technicalities.

The remainder of the paper will consist of *four* sections, on prose, drama, poetry and special topics. Candidates will be required to answer FOUR questions, one from each section.

The questions on special topics and themes will be of a general nature, and their purpose will be to promote study and discussion in schools on a range of interests relevant to English studies. Questions will be set on some of the following topics :

- (a) Newspapers.
- (b) Radio and Television.
- (c) Advertising.
- (d) Theatre and Cinema.
- (e) Sport and Hobbies.

LIST OF SUGGESTED TEXTS—for guidance only. Schools may choose other texts should they wish to do so. It is suggested that the books selected should be the best of their kind and should be valid for the experience of the candidate.

Prose

Selected Stories	D. H. Lawrence
Mirror of the Sea	Joseph Conrad
The Lost World	Conan Doyle
Sherlock Holmes (<i>any collection</i>)	Conan Doyle
Outcast	Rosemary Sutcliffe
The Day of the Triffids	John Wyndham
No Highway	Nevil Shute
War of the Worlds	H. G. Wells
Animal Farm	George Orwell
The Sword in the Stone	T. H. White
Prester John	John Buchan
The Thirty-nine Steps	John Buchan
A Tale of Two Cities	Charles Dickens
Tarka the Otter	Henry Williamson
People and Diamonds	ed. David Holbrook
Tiger in the Smoke	Marjorie Allingham
Autobiography of a Super Tramp	W. H. Davies
Lost Horizon	James Hilton
Leonardo da Vinci	Hilda Lewis
Rogue Male	Geoffrey Household
Shane	J. Schaeffer
A Kid for Two Farthings	Wolf Mankowitz
Ascent of Everest	John Hunt
Northanger Abbey	Jane Austen
Gulliver's Travels	Jonathan Swift
Welsh Short Stories	edit. Gwyn Jones
<i>Translations of Welsh works e.g.</i>	
Gwen Thomas	T. Ceiriog Williams and E. R. Harries
William Jones	Richard Buck
The Old Farmhouse	Waldo Williams

Drama

A Shakespeare Play	
A Selection of Scenes from Shakespeare	
Some One-Act Plays	
She Stoops to Conquer	Oliver Goldsmith

Arms and the Man	Bernard Shaw
The Admirable Crichton	J. M. Barrie
The Importance of Being Earnest	Oscar Wilde
Strife	John Galsworthy
Under Milk Wood	Dylan Thomas
Our Town	Thornton Wilder
The Corn is Green	Emlyn Williams
I Have Five Daughters	Margaret Macnamara
A Man for all Seasons	R. Bolt
Romanoff and Juliet	Peter Ustinov
Badger's Green	R. C. Sheriff
The Winslow Boy	Terence Rattigan

Poetry

Any anthology of English Verse, e.g.

Penguin Book of English Verse

Penguin Book of Contemporary Verse

Enjoying Poetry, Book 4—A Galaxy of Poems Old and New
(Longmans)

The Poet's Tongue (Bell)

Poems of Spirit and Action (E. J. Arnold)

The Poet's Tale (University of London Press)

Rhyme and Reason (Chatto and Windus)

Oral Examination

The Oral Examination will account for 20% of the total marks.

It will comprise—

(a) an Oral (Individual) Test, and

(b) a Group Test in Aural Comprehension.

The Oral Test will include—

(a) Reading aloud a passage chosen by the Examiner which the candidate will see for about half-an-hour before his test begins. The person conducting the test will ask the candidate questions to assess his understanding of the passage read.

(b) An informal conversation between the candidate and the person conducting the test on a topic of interest to the candidate.

(The Oral Test will probably be held during the latter part of the Spring Term, 1966.)

Aural Comprehension:

Candidates (in a group or class) will listen to short passages of different types read aloud by the class teacher, but they will not see them in print. Printed questions will be provided, aimed to test the candidates' understanding of the passages read by the teacher, and candidates will write their replies.

(The Aural Comprehension Test will be held in the Summer Term, 1966, together with other written examinations.)

ENGLISH LITERATURE

An examination in English Literature will be provided in 1966.

Copies of the Syllabus will be circulated to schools during the Summer Term, 1965.

GEOGRAPHY

The examination will consist of one paper of $2\frac{1}{2}$ hours' duration.

Candidates will be required to attempt FIVE questions—Question I (based on Section I), one question from each of Sections II, III and IV, and a fifth question to be chosen from any part of the paper. All five questions will carry equal marks.

Credit will be given for sketch-maps and diagrams where these are appropriate.

The syllabus is intended only as a guide to teachers, and is not aimed at circumscribing the teaching of Geography in schools. It is hoped that it allows scope for initiative and experiment on the part of teachers.

The four main sections of the course are :

SECTION I

A STUDY OF O.S. MAPS (1in, $2\frac{1}{2}$ in)

A knowledge of simple land forms (e.g. valley, steep slope, various types of lakes, spur, plateau, gap, cliff), the use of conventional signs, scale and direction, six-figure map references, types of settlement and human activities, town and village sites.

Candidates should be made aware of maps of scales and types other than those specified for examination in this section.

SECTION II

WALES, WITH SPECIAL REFERENCE TO THE CANDIDATE'S HOME AREA

Each school is free to decide for itself the limits of its "home area", but normally this should coincide with the area reasonably accessible for field study from the school. Schools should approach this study of the "home area" so as to emphasize the more significant geographical features within it, and the human response to the physical background.

Wales should be studied in relation to relief, drainage and climate, as background knowledge to a study of manufacturing industries and agriculture and such topics as Tourism, Types of Settlement, Language Distribution, Power, and Communications.

SECTION III

THE BRITISH ISLES

A knowledge of the location of the main physical features and chief settlements of the British Isles will be required.

The following should be studied :

- (a) The main types of farming : East Anglia, the South West Peninsula, the Cheshire Plain, the Vale of Evesham, the Central Plain of Ireland.

- (b) Industrial development : main extractive industries ; manufacturing industries connected with the major British coalfields, together with those of the London district, Northern Ireland and the Tweed Valley.
- (c) The major routeways of the British Isles and the location of principal settlements.
- (d) Topics such as the following, in relation to (a), (b), and (c) above—Problems of Transport, Depressed Areas, Population Drift, Water Resources, Atomic Energy, National Parks and their Preservation, Town Planning, The Fishing Industry.

(The areas chosen for the farming study (a), and the list of topics (d), will vary from time to time.)

SECTION IV

WORLD GEOGRAPHY

Only ONE of the following sub-sections need be studied, but schools wishing to study more than one will thereby provide their candidates with a greater choice of question.

- A.
 - (a) World communications by land, sea and air.
 - (b) Conditions of production and world trade in the following commodities—wheat, rice, oil, iron ore, tea, wool.
(This list will vary from time to time.)
- B. How geographical factors have influenced man's activities in the following :
 - (a) Hot wet forests.
 - (b) Monsoon lands.
 - (c) Hot deserts.
 - (d) Tundra and coniferous forests.

Topics such as the following are suggested for study against the background of (a), (b), (c), and (d) :

Resources; Problems of Race and Colour ; Under-development and Population.
- C. The geographical background of any ONE of the following :
 - (a) U.S.A.
 - (b) U.S.S.R.
 - (c) The Common Market Countries.

In Section IV (A, B and C) a general knowledge of the location of the main physical features and chief towns shown on the map of the world will be assumed, together with latitude, longitude and time zones. Regions should be studied in relation to the changing political and economic conditions in the world, bearing in mind the work of the World Health Organization, the Food and Agriculture Organization and the Meteorological Service of U.N.O.

General Note: In the examination, some questions will be designed to test the ability of the candidate to handle source material of varying kinds. Such questions may include work on a photograph, a large scale map, a distribution map, a set of climatic, economic or demographic statistics, or a paragraph of first-hand description.

GEOLOGY

The examination will consist of a practical test, and a theory paper of 2 hours' duration.

The syllabus is intended as a guide to teachers, and should not circumscribe the teaching of Geology in schools. It is hoped that the syllabus will encourage accurate observation and lead to the acquisition of useful knowledge in the field, and more especially in the candidate's 'home area'; the 'home area' should coincide with the area reasonably accessible for field study from the school. Such knowledge as is gained in this way should be the basis for further study, so that the general principles of the subject are illustrated by observed examples obtained by study at first hand.

Practical Test

The practical test will be conducted by the class teachers with their own pupils, and will take the form of an *oral* examination. A sample cross-section of candidates from each school will be selected for moderation by an external Examiner.

The work for the practical test should be based on a study of the candidate's home area, especially in the field. Candidates should present their own collections of labelled specimens, together with suitable photographs, drawings and maps of interesting local features of geological significance. These should be accompanied by a loose-leaf folder or note-book of observations related to the work done in the field. A knowledge of the main symbols used on simple geological maps is assumed.

(In order to assist in this matter of local field study the Geology Department of the National Museum of Wales is prepared to run courses to help teachers to prepare models and sections of the areas chosen for study by schools).

The examination will contain questions that deal with the following essential points :

- (i) The origin and age of the local rocks in relation to the stratigraphical column ; the recognition and use of local rocks and fossils.
- (ii) A simple study of the economic use of local rocks and minerals.
- (iii) The relation between structure and relief in the home area.
- (iv) Field evidence of the effect of agents of erosion and deposition in the home area.
- (v) The candidate's own collections of specimens.

The practical test will carry 40% of the total marks for this subject.

Theory Paper

This examination will be aimed at helping the pupil to place his local knowledge into a general setting, and to encourage observation of present-day phenomena as a key to the story of the past.

(It is suggested that the collection of geological specimens in the loan scheme of the National Museum of Wales Schools Service might form an important source for first hand study).

The paper will consist of the following sections :

ROCKS

A simple classification of rocks according to mode of origin and composition.

Sedimentary rocks. Special attention should be paid to limestone, marl, sandstone, shale, coal, conglomerate and breccia. These rocks should be studied with special reference to the ways in which such rocks may be forming at the present time.

Igneous Rocks. Pupils should study granite, dolerite, a porphyry, and basalt, to represent coarse, medium and fine-grained igneous rocks found in intrusions and flows, and illustrative of acid, intermediate and basic rocks.

Metamorphic rocks. Slate and marble as examples of the effect of heat and pressure in altering rocks.

MINERALS

The meaning of the term. The difference between minerals and rocks.

The main properties of quartz, orthoclase felspar, mica, magnetite, haematite, galena, calcite, fluorspar, rock salt, gypsum, graphite, flint, chert, corundum, clay-ironstone, barytes.

Emphasis should be placed on the study of these minerals in relation to the following tests that help to distinguish between common minerals in the hand specimen : hardness, streak, cleavage, fracture, lustre and specific gravity.

FOSSILS

The term explained. Ways in which fossils are preserved. The use of fossils.

Recognition of representative examples of each of the following groups : graptolites, corals, crinoid stems, brachiopods, lamellibranchs, ammonites, trilobites, and coal-measure plants. (Candidates will not be expected to label the parts of fossils).

THE CHANGING SURFACE OF THE EARTH

Earth movements, relative movements of land and sea, vulcanicity, earthquakes.

Simple structures, horizontal and dipping strata, dip and strike, anticline, syncline, and faulting.

Earth sculpture. A simple study of the main elements of the modelling of scenery through erosion and deposition :

- (i) by weathering—frost action, decomposition of rocks, solution ;
- (ii) by rivers—the three main stages in the development of river valleys and their associated features, underground waters, lakes, deltas, rias ;
- (iii) by wind—sand dunes, etched landscapes and buildings, soil erosion ;
- (iv) by ice—corries, U-shaped valleys, hanging valleys, arêtes, moraines, ribbon-lakes, fiords, drumlins, drift ;
- (v) by sea—coastal erosion, transportation and deposition, cliffs, arch, stack, caves, beaches, sand spits.

As far as possible examples should be taken locally and from the British Isles.

SOME USES OF GEOLOGY

The application of geological knowledge to every-day life.

- (i) Water supply.
- (ii) The search for oil and natural gas.
- (iii) Limestones and their uses.
- (iv) Coal.

The theory paper will carry 60% of the total marks for this subject.

HISTORY

Candidates will be required to take ONE paper of 2½ hours' duration based on one of the following syllabuses :

- A. The Modern World, *circa* 1918-1960.
- B. Social and Economic History of England and Wales, 1714-1832.
- C. Social and Economic History of England and Wales, 1815-1901.
- D. The Middle Ages.
- E. The Age of Queen Elizabeth I.
- F. The Victorian Age.
- G. The History of Food, Drink and Clothing in Britain.
- H. The History of Building in Britain.
- I. The History of Transport and Communication in Britain.
- J. The History of Wales, 1063-1536.
- K. The History of Wales, 1737-1939.

All question papers will include :

- (a) A number of questions, each of which may be answered in one word or in a short sentence.
 - (b) A question based on a map and/or a diagram or an illustration. (In papers based on syllabuses B, G, H and I, candidates may be asked to identify and describe illustrations of items mentioned in the syllabuses.)
 - (c) Context-type questions.
 - (d) Continuous prose questions.
- The marks allotted to these groups of questions will be (a) 20%, (b) 20%, (c) 20% and (d) 40%.

Questions will be set only on subjects included in the syllabuses.

Candidates may also submit *individual projects* on topics of their own choice, which need not be taken from those listed in any syllabus. The assessment given to the optional project will be taken into account in the final result, but it will be used only to improve a candidate's grading, and not to reduce it.

A. THE MODERN WORLD, *circa* 1918-1960

The Treaty of Versailles.

The Russian Revolution to the death of Lenin.

The General Strike in Britain and the Depression.

The emergence of the Dictators : Hitler and Mussolini ; the Rome-Berlin-Tokyo Axis.

Incidents of aggression : China, Abyssinia, Austria, Czechoslovakia, and the immediate causes of the Second World War.

The U.S.A. in the 1920's.

Outline history of the Second World War, to be studied under the following headings only :

- (a) German triumph in the West.
- (b) The German advance and retreat in Russia.
- (c) The Mediterranean War.
- (d) Normandy and after : the attack on Germany from the West.
- (e) The Japanese drive on India.
- (f) Pearl Harbour and the Japanese attack on Australia and the East Indies.
- (g) The American counter-attacks in the Pacific, and the A-Bomb.

The changing position of the British Commonwealth and Empire :

- (a) in Africa ;
- (b) in the Indian sub-continent ;
- (c) in the Far East ;
- (d) in the Caribbean.

Berlin and the Cold War : the Iron Curtain.

Portraits of men of power :

Europe : Kemal Ataturk ; Charles de Gaulle ; Stalin ;
Kruschev ; Adenauer.

Asia : Nehru ; Mao Tse-Tung ; Chiang Kai-Shek ; Sukarno.

Africa : General Smuts ; President Nasser.

America : President Wilson ; President Roosevelt.

Britain : Churchill ; Attlee.

Aviation developments from the Wright brothers.

Space exploration.

The League of Nations and UNO : their political and social work.

The Welfare State in Britain.

The relationship of state and industry in

- (a) Great Britain
- (b) U.S.A.
- (c) U.S.S.R.

The work of Sir Basil Spence, Graham Sutherland, Jacob Epstein, John Logie Baird, Henry Ford, Lord Nuffield, Lord Beaverbrook, Lascelles Abercrombie, Sir John Hunt.

B. THE SOCIAL AND ECONOMIC HISTORY OF ENGLAND AND WALES, 1714-1832

Changes in Agriculture—

- (a) Defects and limitations of the Open Field System.
- (b) The Enclosure Movement.
- (c) Technical improvements in farming.
- (d) Results of the Enclosure Movement.

Changes in industry—

- (a) Before the Industrial Revolution.
- (b) The domestic system—wool.

- (c) Men and inventions in the textile industry :
 Kay and the Flying Shuttle, 1733.
 Hargreaves and the Spinning Jenny, 1764.
 Arkwright and the Water Frame, 1769.
 Crompton and the Mule, 1776.
 Cartwright and the Power Loom, 1785.
 Whitney and the Gin, 1793.
- (d) Coal, iron and steam power—Derby, Smeaton, Huntsman, Cort, Watt.

Communications : roads, canals, railways—

- (a) Macadam, Telford, Metcalf.
 (b) James Brindley, Bridgewater.
 (c) Early attempts to build locomotives ; Stephenson, Trevithick.

Distress, agitation, repression and reform—

- (a) Growth of factory towns—slums, overcrowding, sanitation ; factories and their evils ; Corn Laws and bad harvests ; distress after Waterloo.
 (b) Luddites ; Secret and Friendly Societies ; Spa Fields ; the Blanketeers ; "Peterloo" ; the Merthyr Riots ; the Radicals—Hunt, Cobbett.
 (c) Combination Act, 1799 ; Game Laws ; the Six Acts ; harsh Penal Code.
 (d) Some attempts at reform—Speenhamland System, 1795 ; partial repeal of Combination Act, 1824 ; Truck Act, 1831.

Reformers—

Peel's reform of the Penal Code ; John Howard and Elizabeth Fry ; William Wilberforce ; Robert Owen ; John Wesley and Howel Harries.

Education—

Griffith Jones and the Circulating Schools ; Thomas Charles and Robert Raikes ; Bell and Lancaster ; religious intolerance—Gordon Riots, Forms of Disqualification, Test and Corporation Act repeal, 1828, Catholic Emancipation, 1829.

General social background—

Town life and country life ; sports, pastimes and leisure.

C. THE SOCIAL AND ECONOMIC HISTORY OF ENGLAND AND WALES, 1815-1901.

SECTION I : ECONOMIC

(a) Changes in Industry

- (i) *Textiles* : cotton and wool ; geographical distribution ; inventions ; spinning, weaving ; results—workshops and factories—hours—wages.
 (ii) *Coal* : geographical distribution ; kinds of coal ; uses of coal ; mining techniques ; open-cast ; drifts ; pits ; steam coal ; anthracite ; working conditions—1842-1860, 1881-1896.

- (iii) *Iron, steel and engineering* : geographical distribution ; cast-iron ; wrought iron, steel. Inventions in production technique. Developments in South Wales ; work of Neilson, Bessemer, and Gilchrist-Thomas.
- (iv) *General results* : increase of population ; movement of population into towns ; new towns in North and West ; increase in production ; cheapness ; new industries ; improvements in means of transport ; large scale production ; working conditions summed up.

(b) Changes in Agriculture

Area under cultivation ; greater demand for food ; landowners ; smallholders ; labourers ; Corn Laws—sliding scales ; Anti-Corn Law League ; repeal of Corn Laws—Royal Agricultural Society ; the work of Sir John Benet Lawes, the Golden years ; the great depression ; working conditions 1875-1900 ; Welsh Land Commission 1896.

(c) Communications

- (i) *Transport* : pack horse ; roads ; the road makers ; Metcalf, Telford, Macadam—turnpike roads ; decline of turnpike roads ; bridges ; canals, decline of canals ; railways ; colliery roads ; wooden plates—iron plates ; locomotives ; Trevithick ; Blenkinsop ; Hedley ; Stephenson ; railway mania ; Hudson ; network of lines ; battle of the gauges ; Brunel—railway and Traffic Acts ; building of railways in Wales.
- (ii) *Shipbuilding* : the work of Henry Bell ; iron ships—use of steam engines ; 'screw propeller' steelships—'the turbine'—internal combustion engine—results—export trade.
- (iii) *Communications* : mail coach ; Post Office ; the work of Rowland Hill ; telegraphy ; Morse ; submarine cable—telephony—Bell and Watson—wireless—Clerk—Maxwell and Marconi.

SECTION II : SOCIAL CHANGES

- (i) *Trade Unionism* : Combination Laws 1824-5 ; the work of Place and Hume ; Trade Union revival and collapse in 1834 ; the work of Robert Owen ; the new models, engineers, cotton operatives, miners ; Royal Commission of 1867—Acts of 1869, 1875, 1876 ; organisation of the unskilled—William Abraham (Mabon) ; gas, agricultural, match and dock labourers new unionism.
- (ii) *Poor Law* : Commission of Investigation, 1817 ; Poor Law Commission, 1832 ; Act of 1834 ; Control of Poor Law, 1847 ; Local Government Board, 1871.

- (iii) *Public Health* : living conditions at beginning of century ; sanitary system ; water supply ; infectious diseases—infant mortality ; death rate : conditions in industrial towns—Board of Health, 1848—the work of Edwin Chadwick—housing ; Public Health Act of 1872-1875 ; the work of Lister, Simpson, Florence Nightingale and Elizabeth Davies—hospitals.
- (iv) *Education* : state of education in 1815—British and Foreign Society ; National Society ; the monitorial system—grammar schools ; public schools ; the work of Robert Owen ; grant of 1833 ; Sir Hugh Owen ; the report of the Commissioners on the general state of education in Wales ; the work of Kay-Shuttleworth—the Revised Code of 1862—Act of 1870—Acts of 1880-1887 and the Board of Education in 1899 ; Intermediate Act, 1889 ; development of University of Wales, 1893.

(D) THE MIDDLE AGES

The Feudal System :

- (a) The Norman Conquest—based on the Bayeux Tapestry.
- (b) The Feudal System—based on the Domesday Book.
- (c) Life on a Norman Manor ; Lord and peasant.
- (d) Trial by Ordeal and Combat, punishments.
- (e) Training for Knighthood.
- (f) Life on the frontier ; Wales and the Marcher Lords.

The Church :

- (a) Life of a Parish Priest.
- (b) Church Architecture during the Middle Ages.
- (c) Monastic Orders—life in a monastery.
- (d) The Friars.
- (e) Church and Education.
- (f) Church and State—Thomas à Becket.

The Crusades :

- (a) Arab Civilization.
- (b) The Kingdom of Jerusalem.
- (c) Saladin and Richard I.
- (d) Results of the Crusades.

The Conquest of Wales :

- (a) Life in 12th Century Wales—The Lord Rhys and Gerald the Welshman.
- (b) The Two Llywelyns.
- (c) King John and Magna Carta.
- (d) Edward I and Parliament.
- (e) Statute of Rhuddlan and the new castles.

Social and Economic Life :

- (a) Life in a Mediaeval Town.
- (b) Trade and Travel—Marco Polo.
- (c) The King's Court and Government.
- (d) Tournaments and other entertainments.

The end of the Middle Ages:

- (a) The rebellion of Owain Glyndŵr.
- (b) The Black Death and the Peasants' Revolt.
- (c) The Wars of the Roses.
- (d) The coming changes.

(E) THE AGE OF QUEEN ELIZABETH I

The personality of Elizabeth : the problems facing her ; relations with Mary Queen of Scots ; relations with France and Spain ; the Armada.

Home Affairs :

- (a) The religious settlement.
- (b) Some aspects of economic affairs —
 - (i) Population.
 - (ii) Changes in the pattern of agriculture.
 - (iii) Vagabondage.
 - (iv) Elizabethan remedies—laws against enclosure ; the New Poor Law.
 - (v) Industrial and commercial development.
- (c) The Elizabethan Sea Dogs.
- (d) Everyday life in Elizabethan England and Wales—
 - (i) Houses, furniture and dress (with special reference to the Elizabethan manor house).
 - (ii) Social classes—
 - Landowners, Nobility and the Court.
 - Gentry—the right to Coat of Arms.
 - Yeomen.
 - Simple classes.
 - (iii) Sports and Pastimes.
 - (iv) The Elizabethan Theatre.
- (e) *Some Famous Elizabethans*—Sir William Cecil ; The Earl of Essex ; Roger Ascham ; Sir John Wynn of Gwydir ; John Penry ; the translators of the Bible into Welsh.

(F) THE VICTORIAN AGE (1837-1901)

The Political Background : Victoria and her Ministers—Peel, Palmerston, Gladstone, Disraeli and Salisbury.

The Material Background : industrial Wales—iron, steel, tinsplate, coal, slate ; transport and communications ; rural Wales ; the exodus—emigration overseas.

The Liberal Idea : social reforms—Shaftesbury, Chadwick ; development of Working Class Movement ; the development of Education.

The Victorian Imperial Achievement : explorers—Livingstone, Stanley ; Empire builders—Cecil Rhodes ; self-government—Durham Report.

Scientific Development : pioneers in (a) Medicine—Lister, Simpson; (b) Physics and Chemistry—Faraday ; (c) Biology—Darwin.

Church and Chapel in Victorian Times—their influence on Victorian society.

Women in Victorian England—the Victorian family.

The Arts— (a) Architecture and Art ;

(b) Music ;

(c) Literature— (i) Wales : the Eisteddfod, Ceiriog, Daniel Owen ;

(ii) Dickens ;

(iii) Tennyson.

Everyday Life : dress ; food and drink ; furniture ; sports and pastimes.

(G) THE HISTORY OF FOOD, DRINK AND CLOTHING IN BRITAIN

Early Britain

Food gathering by skin-clad hunters.

Early farming and regular sources of food.

The use of fire for cooking : clay pots.

Primitive bread making.

The invention of cloth making.

Roman Britain

The meals and clothing of Roman officials in Britain.

The organisation of Roman food supplies.

The introduction of new domestic animals and crops into Britain.

Methods of preparing and serving food.

Typical menus, table ware. Iron and bronze cooking pots.

The clothing and hair styles of a Roman official and his wife—tunic, toga, stolla.

The uniform of a Roman legionary soldier.

Norman England

Menus of royal feasts.

Setting the table, serving the food.

The usual fare of the peasantry—mead, ale.

Notable deficiencies in diet ; the background of mediaeval farming.

The dress of a Norman lord and lady, and of villeins.

The armour of a Norman knight.

The Late Middle Ages

The growth of trade and the development of towns, illustrated by increasing quantities of new materials and foods.

Spices from the East, sugar.

Extravagant fashions, e.g. men's shoes, women's headwear.

Costly fabrics.

Compare armour of 15th century knight with Norman chain mail.

The Age of Elizabeth I

Typical menus, elaborate sweet dishes.

Table ware of silver gilt, pewter, glass ; the appearance of the fork.

The elaborate, costly attire of men and women at the Court.

The dress of the merchant class.

Beards. Hair styles of men and women.

The use of handkerchiefs. Knitted stockings of silk and wool.

The Stuarts

New fashionable beverages—coffee, chocolate, tea.

Examples of clothing from mid-17th century.

Comparison of the appearance of men and women who supported Charles I and the appearance of Puritan men and women.

Disappearance of ruffs and farthingales, extensive use of lace.

Towards end of 17th century periwigs fashionable for men.

The Georgian Era

Growing popularity of coffee, tea, chocolate, as well as increased consumption of wines and spirits.

Gradual improvement in diet in 18th century owing to the new techniques in farming.

Potatoes becoming popular.

Table ware of Staffordshire pottery.

Increasing simplicity in style of men's clothing.

Increasing extravagance of women's clothing.

Reappearance of hoops.

Elaborate powdered hairstyles of upper classes. Wigs.

The Nineteenth and Twentieth Centuries

The effects of modern transport on our food supplies, e.g. lamb from New Zealand.

New methods of producing food, e.g. battery system of poultry-farming.

New methods of preserving food, e.g. the invention of refrigeration.

New cooking appliances. Domestic Science instruction in schools.

The influence of popular magazines on both food and clothing.

The supply of drinking water.

Revolution in clothing owing to the mass production of cloth, especially cotton.

Changes in men's clothing, increasing drabness.

The invention of the sewing machine.
 Examples of Victorian fashions *circa* 1860.
 Striking change in women's clothing after World War I owing to their more active lives.
 New materials and blends of materials.
 New processes of manufacture, e.g. permanent pleats and creases.
 The reasons for the rapid spread of new fashions in the modern world.
 Army uniform—the changes in colour and style from early Victorian days to the present day.

(H) THE HISTORY OF BUILDING IN BRITAIN

Candidates will be expected to illustrate their answers by reference to local examples whenever possible.

The Church

The parts of the church :

The Chancel—chancel arch, rood screen, rood loft, altar rails, sanctuary and altar.

The Nave—chantry chapels, pulpits, lecterns, galleries, family pews, the font, porch, steeples, towers, spires.

The Churchyard—yew trees, churchyard crosses, lychgates.

The village church : these churches as the principal source of our lessons in mediaeval life and craftsmanship.

The main architectural styles : Norman (11th and 12th centuries) ; Early English (13th) ; Decorated (14th) ; Perpendicular (15th).

The influence of such great men as Inigo Jones, Sir Christopher Wren and James Gibbs.

Our Welsh Cathedrals and their architectural styles.

The modern concept—Coventry Cathedral.

The Monastery

Monks and friars; parts of the Monastery and their functions; the Monastery Church ; the Friaries; the fate of the Monasteries, 1536-1540.

Castles

The early castles—motte and bailey, description, with some knowledge of the circumstances which led to their construction. The Bayeux Tapestry as a contemporary illustration.

Their translation into the stone Norman 'keeps'.

Henry III as a great castle builder. The main parts of a castle, e.g. the Great Hall, inner and outer bailey, barbican, drawbridge, portcullis. The functions of these parts.

The Edwardian castles of Wales.

Houses

The Manor House.

The Fortified Manor House.

The Stately Homes.

Where the ordinary people lived—
 Tudor and Stuart ;
 Georgian ;
 The Industrial Revolution and after.

The New Century: "Garden cities" ; Building Societies ; Council building.

Today : new towns.

(I) THE HISTORY OF TRANSPORT AND COMMUNICATION

Road Transport

Early Beginnings—discovery of sledge, rollers, wheel ; transport of heavy objects (Stonehenge) ; ridgeways.

Roman Roads in Britain.

Conditions in the Middle Ages.

Travel in Tudor and Stuart Times.

Golden Age of Coaching—Metcalf, Telford, Macadam ; speeding up of goods and passenger travel ; town travel, sedan chair, omnibus ; highwaymen, inns.

Bridges—brief outline of development.

Canals—reasons for construction ; James Brindley ; decline of canals.

Railways—early pioneers (especially Trevithick, the Stephensons and Brunel) ; opposition to railways ; outline of railway development ; passenger travel ; present decline of railways.

Development of the bicycle.

Development of the motor-car—Daimler, Benz, Ford, Dunlop.

Sea Transport

Early Beginnings—primitive forms of water transport ; coracles ; ships of ancient civilizations.

Development of Ship Construction—Viking long-boat ; carrack ; Elizabethan ship ; 18th century warship ; 'East Indiaman' ; clipper.

Voyages of Discovery—Columbus, Vasco da Gama, Magellan.

Conditions on board ship—press gang ; discipline ; attempts at improvement ; Samuel Plimsoll.

Triumph of Steamship—Bell, Symington, Fulton ; use of iron in ship construction ; Cunard and P. and O. Lines ; opening of Suez and Panama Canals ; Blue Riband.

Air Transport

Early Stages—possibility of human flight ; Leonardo da Vinci ; de Lana.

Balloon Flight—Montgolfier brothers—heated air flight ; hydrogen balloon—Blanchard and Jeffries, Count von Zeppelin ; early uses for balloon ; difficulties in development ; disasters ; present uses for balloon.

Development of Aeroplane and Helicopter—the Wright brothers, Bleriot, Lindbergh, Alcock and Brown, Igor Sikorsky.

Space Flight—brief outline of American and Russian astronauts ; satellites.

Communication

History of Writing—contribution of ancient civilizations, papyrus, parchment, hieroglyphics ; invention of printing press, Gutenberg, Caxton.

Development of Postal Services—letter carriers of the ancient world ; private mail services of the Middle Ages ; real beginning of postal services in Britain—Sir Brian Tuke, Thomas Witherings, William Dockwray, Rowland Hill, Samuel Roberts.

Telecommunication—Marconi, Edison, Baird, Bell, Daguerre, Friese-Greene.

(J) THE HISTORY OF WALES, 1063-1536

Wales in Norman Times :

- (a) The Marcher Lords.
- (b) Gruffydd ap Cynan.
- (c) Welsh Tribal System.
- (d) Feudal System—life on the Manor.
- (e) Early Norman castles.

Struggle for Independence :

- (a) Owain Gwynedd.
- (b) The Lord Rhys—court life and the Eisteddfod.
- (c) Gerald the Welshman.
- (d) Welsh Monasteries and Friaries.
- (e) Church and Education.
- (f) Everyday life in 12th century Wales—houses, clothes, food and drink.

The Conquest:

- (a) The two Llywelyns—methods of warfare.
- (b) Statute of Rhuddlan.
- (c) The new castles.
- (d) Economic effects of the Settlement (e.g. life in the new towns).
- (e) Government in the Principality.

Wales in Transition :

- (a) Welsh participation in the Hundred Years' War.
- (b) Black Death.
- (c) Rebellion of Owain Glyndŵr and its effects.
- (d) Henry VII and Wales.
- (e) Bishop Rowland Lee and the Council.
- (f) The Act of Union.

(K) THE HISTORY OF MODERN WALES, 1737-1939

The Welsh Revival :

- (a) Religious education—Griffith Jones.
- (b) Methodist Revival—Daniel Rowland, William Williams, Howel Harris, Thomas Charles.
- (c) Literary Revival—Cymmrodorion and Gwyneddigion, Goronwy Owen, Iolo Morganwg, the Eisteddfod.
- (d) Welsh Radicalism—Morgan John Rhys, Richard Price, Jac Glan-y-Gors, the French Landing.

Economic Changes:

Agricultural Societies—technical improvements ; enclosure movement ; cattle trade ; woollen industry ; industrial revolution—iron, coal, copper and slate ; turnpike roads and new bridges ; the “canal mania” and tramways.

Industrial Development:

Iron, steel and tinplate ; “King Coal” ; growth of railways ; the new ports ; growth of towns and increasing anglicisation.

Industrial Discontent:

- (a) Working conditions—truck, Merthyr riots, Scotch cattle ; Robert Owen.
- (b) Welsh Chartism—Hugh Williams, John Frost, riots in Montgomeryshire and Monmouthshire.
- (c) Trade Unions—William Abraham (Mabon).

Rural Discontent:

Distress in rural areas ; administration of the Poor Law ; Rebecca Riots ; landlords and tenants ; tithe war ; Welsh emigration to U.S.A. and Patagonia.

Nonconformity and Politics:

- (a) Periodicals—Joseph Harris, David Owen, David Rees, Samuel Roberts, William Rees, Thomas Gee.
- (b) Election of 1868—Henry Richard.
- (c) Parliamentary Reform and Wales.
- (d) Disestablishment of the Church.
- (e) Development of Local Government.
- (f) Sunday Closing Act.

Education:

National and British Schools ; treason of the Blue Books ; Sir Hugh Owen and the University of Wales ; Welsh Intermediate Education Act ; Sir Owen M. Edwards ; National Eisteddfod Association.

Features of the Twentieth Century:

- (a) Liberal success—T. E. Ellis, David Alfred Thomas, David Lloyd George.
- (b) Rural depopulation.
- (c) The Great Depression and its effect upon Wales.
- (d) The swing to Labour—Keir Hardie.
- (e) Decline of religious influence.

HOUSECRAFT

The examination will consist of a theory paper of $1\frac{1}{4}$ hours and a practical examination of $2\frac{1}{2}$ hours' duration.

The practical examination will consist of a practical cookery test and a series of shorter tests—in the form of situations—which candidates will deal with in turn. The time allowed for each of these shorter tests has been arranged so that where candidates are divided into groups, two or more tests may be taken concurrently by different groups.

Teachers will be required to submit estimates of the candidates' performance during the course.

The following subjects should be studied—

The Home:

Furnishing (choice, care and cleaning of furniture and furnishings for different types of rooms) ; choice of colour schemes ; kitchen (choice and care of equipment) ; the cleaning of the home and care of cleaning equipment ; heating and lighting ; home purchase, hire purchase, credit buying (advantages and disadvantages) ; budgeting (personal and household).

The Family:

- (a) Health and care of the family—safety in the home, prevention of accidents, treatment of scalds, burns, cuts and abrasions ; care and treatment of fabrics ; planning the housewife's time ; hygienic storage of foods and personal cleanliness in the kitchen.
- (b) Feeding the family—preparation of balanced meals for different members of the family and for different occasions ; simple entertaining ; meal costing.
- (c) The study of the following foods and how to use them, together with appropriate methods of cooking—
milk in its different forms on the commercial market ;
cheese—varieties and uses ; eggs ; meat ; fish ; fruit and vegetables.
- (d) Baking—simple foundation recipes (using the following methods of blending fats and flour—rubbing, creaming, melting, whisking).
Yeast cookery.
Pastry-making—short crust, flaky or rough puff pastry.
Commercial food preparations

MATHEMATICS

The examination will consist of two papers, each requiring knowledge of all sections of the syllabus.

Paper I ($1\frac{1}{2}$ hours) : A number of straightforward questions of various types (no choice of question), mainly on mathematical ideas and concepts.

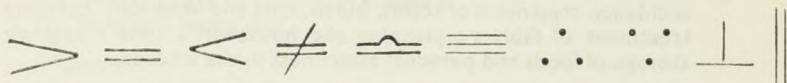
Paper II ($2\frac{1}{2}$ hours) : A paper with a compulsory Section A (to carry 40% of the marks) and Section B with a choice of questions (to carry 60% of the marks).

The papers will be weighted in the ratio 1 : 2.

The aim of the examination will be to test the candidate's understanding of mathematical concepts and his ability to apply them. As far as possible, the questions set will be related to the problems of every-day life and to simple technical applications : they will not require involved arithmetical or algebraic manipulation.

The syllabus has been sectionalized for convenience of presentation but is not meant to indicate any specific order or method of treatment.

Candidates will be expected to understand and use the following mathematical symbols :



Candidates may be expected to test the validity of converse statements.

Arithmetic

Numbers written in the scale of ten ; the binary scale as a second example of the idea of a scale of notation ; the metric system. The four basic processes of combining numbers (binary scale and scale of ten). Prime numbers, expression of a number as the product of its prime factors using the index notation, square root by factors. Fractions, both common and decimal, and the meaning and use of negative numbers.

Percentages and percentage changes.

Ratio and simple proportion.

Approximations : degrees of accuracy (significant figures and decimal places), limits of accuracy.

Applications of the above arithmetical processes to practical problems, such as :

averages, including average speed and price problems ; changes of units, including foreign currency ; profit and loss, discount ; savings, simple interest, the idea of compound interest ; hire purchase ; taxes, including income tax, purchase tax, and rates.

Note : Quantities will not be expressed in more than two units, with the exception of £ s. d.

Algebra

Basic arithmetical processes expressed algebraically.

Expression of relationship in algebraic terms by the construction of a formula. The use of formulae for calculation.

Change of subject of a formula (by simple processes only).

Use of brackets. Expansion of expressions of the following types : $\pm a (b \pm c)$, $(a \pm b) (c \pm d)$, $(a \pm b)^2$. Factorization : common factors, difference of two squares, simple trinomials of the form $x^2 \pm ax \pm b$.

Simple inequalities and their manipulation.

Simple linear equations, including those involving brackets and fractions.

Simultaneous equations of the first degree in two unknowns.

Simple quadratic equations in the form $4x^2 = 9$ and $x^2 \pm ax \pm b$ (soluble by factorization).

Meaning and use of logarithms (positive and negative characteristics, base 10 only).

Problems depending for their solution on the use of the above algebraic processes.

Geometry

It is emphasized that there is to be no testing of formal geometry ; no proofs will be required in the examination.

Theoretical geometry, to be treated numerically :

Properties of angles at a point and on a straight line.

Angle properties of parallel straight lines.

Angle sum of triangle, exterior angle ; interior and exterior angles of convex polygons.

Similar and congruent figures. Properties of similar and congruent triangles.

Equality and inequality in a triangle ; scalene, isosceles, equilateral triangles.

Properties of a parallelogram and special cases (rectangle, rhombus, square).

Pythagoras' theorem ; extension to simple inequalities, e.g. if $a^2 > b^2 + c^2$ then *angle A* is obtuse.

Symmetry about a point and about a line.

Elementary geometry of the circle—

perpendicular bisector of chord passes through centre of circle,

tangent is perpendicular to radius,

angle at the centre = twice angle at the circumference.

angles in the same segment are equal,

angle in a semicircle is a right angle,

angle properties of cyclic quadrilateral.

Constructions :

Bisection of angles and straight lines.

Perpendicular to a line from a point on or outside the line.

Angle equal to a given angle.

Construction of angles of magnitude 60° , 30° , 45° .

Regular polygon of 3, 4, 6 or 8 sides in or about a given circle.

Parallels to a given straight line.

Division of a straight line into a number of equal parts ; internal divisions in a given ratio.

Triangles and quadrilaterals from given data, including simple locus problems and scale drawings.

Circumscribed and inscribed circles of a triangle.

Trigonometry

Solution of right-angled triangles.

Applications to simple problems in two dimensions, including angles of elevation and depression, and bearings.

Graphs

Charts and graphs based on statistical data, their construction and interpretation.

Conversion graphs.

Travel graphs.

Rectangular axes, co-ordinates of a point, gradient and length of line joining two points.

Plotting and interpretation of the straight line in the form $y = mx + c$, significance of m and c . Consideration of $y > mx + c$ and $y < mx + c$.

Intersection of two straight line graphs.

Mensuration

Triangle, rectangle, parallelogram, circle.

Solids of uniform cross-section.

Tables

Candidates will be expected to show that they are able to use four-figure tables of logarithms, squares and square roots and trigonometrical functions.

Understanding and use of every-day tables, e.g. compound interest tables, ready reckoners, time-tables.

Candidates may use slide-rules, where suitable, for numerical calculations.

METALWORK

The examination will consist of (a) an assessment of course work, (b) a practical test, and (c) a theory paper.

The syllabus is intended to be a framework which will allow the widest possible scope to schools with varying facilities and special interests. It is hoped that the development of the examination will lead to a sound knowledge of basic construction, which the candidates will be able to show to advantage in the practical and theory tests.

Course Work

This should comprise work executed by the candidates over a period of not less than one year immediately prior to the examination. Unfinished work may be submitted. It will be assessed by the class teacher and a sample cross-section from each school will be re-assessed by an external moderator, or some other means adopted to ensure a reasonable uniformity of standards.

Course work will carry 25% of the total marks for the subject.

Practical Test

Each task set will be such that an average candidate could be expected to complete it in eight hours. If necessary, additional time, not exceeding 2 hours, will be allowed, and any such additional time will be recorded for the information of the Examiner.

The list of tasks, together with cutting lists of materials and details of tools required (other than those normally in adequate supply in the school workshop), will be sent to each school as early as possible in the Spring Term. This list will be accompanied by a pictorial sketch or photograph of each finished article. Each candidate will choose one task from the list supplied.

The practical test will take place about one month before the commencement of the written examinations. It should begin with a 3-hour period on a specified date, in the presence of an invigilator and the handicraft teacher. The remainder of the test will be carried out at times convenient to the school, under the supervision of the handicraft teacher.

The handicraft teacher should make all necessary arrangements for the use of specialized equipment. Examination papers should be opened at the beginning of the first working period and withdrawn at the end of each working period.

Working drawings will be large and clearly drawn and dimensioned, so that it will not be necessary for candidates to make involved calculations. Pictorial and/or exploded views will be used where necessary.

It is desirable that, in the examination, there should be a separate vice for each candidate and all necessary tools should be at hand. Only one replacement piece of metal will be allowed for any candidate during the practical test; a note must be made of any such replacement, and the reason stated.

All articles will be returned to the candidate after they have been marked.

The practical test will be based on the fundamental workshop techniques, including marking out, cutting, filing, drilling, riveting, cutting of screw threads with stocks and dies, soldering, brazing, and simple sheet metal manipulation, associated with one or more of the following :

Simple forging.

Hammered metalwork, the processes of silver-smithing.

Sheet metalwork, lapped and grooved seams, wired edges.

Simple lathe work.

Casting.

The practical test will carry 50% of the total marks for the subject.

Theory Paper

The theory paper will be of two hours' duration and will carry 25% of the total marks for the subject.

The paper will be divided into two sections as follows :

Section A : A choice of TEN from fifteen questions, requiring short concise answers and/or sketches, each question carrying six marks.

Section B : A choice of TWO from six questions demanding more detailed answers, each question carrying twenty marks.

The paper set may include questions on any of the following topics:

Safety precautions.

A knowledge of metals normally encountered in everyday life.

A knowledge of the working characteristics of metals generally found in the school workshop.

Use and care of common bench and hand tools.

A knowledge of basic metalwork processes.

Simple design problems involving articles likely to be within the candidate's experience.

Simple heat treatment ; annealing, hardening and tempering, case-hardening.

Ability to make simple sketches of tools and workpieces.

All theoretical work should be closely related to the practical experience of the candidate.

It is hoped that teachers will not restrict their teaching to the limits of this syllabus, but will pay attention to the background of the craft, avoiding excessive factual knowledge which can only serve to encourage mere rote learning.

MODERN LANGUAGES

The examination will comprise *oral*, *aural*, and *written* tests.

The Oral Test

- (a) Since it is the purpose of the oral examination to reflect and test the work done in schools throughout the five-year period, rather than to impose a prescribed amount of oral work, it is hoped that teachers will feel free to devise schemes of oral work best suited to the needs of their schools and of their pupils. Such schemes may include, for example, a range of topics on which candidates are prepared to talk, since, in the oral test, they will be allowed, if they so desire, to give a short talk on a chosen topic, after time for reflection—possibly on some aspect of course work, such as a region which has been studied ; or to talk about simple pictures or their own particular interests ; or to answer questions on familiar topics (e.g. the house, the garden, the family, the seaside). Although the test will be an assessment of individual candidates, preparation during the course may well include group projects, debates and plays. Other schemes and types of material may also commend themselves to teachers.
- (b) Candidates will also be asked to read aloud a passage of about 100 words which will have been seen just before the actual test begins.
- (c) Before the date of the test, teachers will be required to submit an order of merit and estimate of performance of their pupils, based on their knowledge of the pupils' oral work during the course.

(The Oral Test will probably be held during the latter part of the Spring Term, 1966.)

The Aural Examination

This will comprise :

- (a) dictation
- (b) an aural comprehension test.

(a) Dictation

The passage set will be within the compass of the candidates' linguistic experience. (In French Dictation, the Past Historic Tense will not be used.)

The normal dictation procedure will be followed.

(b) Aural Comprehension Test

A straightforward piece of narrative prose, with vocabulary well within the candidates' range, will be read aloud to them three times, and they will then answer, in writing, a number of questions designed to indicate how fully they have grasped the main points of the narrative. Some of the questions will be asked—and should be answered—in the foreign language, and these will be followed by further questions, asked and to be answered in English.

Candidates will have the questions in front of them before the first reading begins ; during this reading they will listen only ; after the first reading, candidates will be allowed an interval of two minutes to examine the questions and make notes, and they will be permitted to make notes also during the second and third readings.

After the third reading candidates will be allowed a reasonable time to answer the questions.

(The Aural Examination will be held in the Summer Term, 1966, during the period of the written examinations.)

The Written Examination

Two hours will be allowed, and there will be FOUR questions.

- (1) Candidates will write *either* a composition *or* a letter of about 100 words, in the foreign language, on a topic relating to everyday life, based on a suggested outline given in the foreign language.
(If they wish to do so, schools may choose, as an alternative to this question, the reproduction of a story which will be read several times to the candidates before they begin to write. Schools choosing this alternative must state this preference when entering candidates for the subject.)
- (2) Candidates will be required to answer in the foreign language a number of questions, set in the foreign language, based on a drawing or series of drawings.
- (3) Candidates will answer in English or Welsh a number of questions set in English or Welsh, designed to test their comprehension of a passage of simple narrative or descriptive prose, of about 150 words in the foreign language. A Welsh version of the questions will be supplied to any candidate who chooses to write the answer in Welsh.
- (4) A narrative passage in the foreign language will be set, about 300-400 words in length. Candidates will be asked to write the

story in English or in Welsh, in about a quarter of the length of the original and containing its salient points. (This question is intended to be a test of rapid reading.)

Notes for guidance in the understanding of the passage, and necessary explanations of vocabulary, will be given in English, as will the title of the passage. A Welsh version of these notes will be supplied to any candidate who chooses to write the story in Welsh.

Marks will be apportioned as follows :

Oral and Aural tests ...	60%
Written examination ...	40%

MUSIC

The aim of the syllabus is to develop, on a wide basis, the candidates' musical literacy and general musical experience, whilst offering them every opportunity of taking part in ensemble work and developing musical interests.

Candidates will be tested in the following (the allocation of marks to the various sections is shown) :

A. Ensemble Work		
B. Musical Literacy :		
(i) Individual Reading:	Test I,	10%
	Test II	15%
(ii) Individual Listening Test		20%
C. Questions on Set Works		20%
D. Questions on General Musical Experience		15%
E. Rudiments		10%
F. Individual Interest		10%

Sections B(ii), C, D and E will comprise one written examination of about 3 hours' duration. It is recommended that candidates spend the first 30 minutes on the questions in Section E (Rudiments).

The music for Sections B(ii), C and D, together with instructions to candidates and the set questions, will be recorded on a disc. The questions set in Sections C and D will also be presented in written form on the examination paper.

A. Ensemble Work

Candidates will be required to have taken part in appropriate vocal or instrumental ensemble work during the course. Ensemble work may range from partnerships like piano duet or voice or solo instrument with piano accompaniment, to trios, quartets and larger combinations, including choirs, orchestras, and bands. Evidence that candidates have participated in such activity shall be given by the head of the school, but no actual assessment of this work will be made.

The music chosen for ensemble work should be technically simple and of good quality ; a free choice of such music is allowed.

B. Musical Literacy

(i) Individual Reading

Candidates will be required to take both Test I and Test II. They will be allowed five minutes for preparation before attempting the tests.

Test I. A simple sight-singing test of four bars in staff notation, beginning and ending on the tonic. There will be *no* leaps greater than thirds, except for d - s and s - d. The test will be $3/4$ or $4/4$ time, with variation in rhythm, including the following note values :



Test II. Candidates will take *either* a set of two sight-singing tests *or* a set of two sight-reading tests on any instrument.

For the 1966 examination only, Tests I and II will also be set in Tonic Sol-fa notation, to meet the needs of some schools. A candidate may choose to read *either* notation, but will not be allowed to see the test in *both* notations.

Tests will be set in the examination for any instrument required by a candidate.

(ii) Individual Listening

Two separate tests will be set, one choral and one instrumental, but each candidate will take ONE test only.

The aim will be to ascertain how much detail the candidate can gather and record from a number of hearings of a short piece of music which, as far as can be expected, will be new to him. Matters other than pitch and rhythm will be included in the test.

The candidate will be given a sheet of manuscript paper with bar lines already inserted, more bars being indicated than will be necessary for the piece selected. The opening notes of the melody will be given on a separate unbarred staff, to be transferred to the barred staff before the sixth hearing.

The candidate will hear the music seven times :

- (1) Preliminary hearing.
- (2) To determine the top figure of time signature.
- (3) To count through the music and put a double-barline at the end of the passage.
- (4) To recognise simple binary or ternary form.
- (5) To recognise instruments used in the excerpt, and to indicate simple expression marks, e.g. *p*, *f*, *allegro*, *adagio*.
- (6, 7) To take down as much as possible of the melody in staff notation ; credit will be given for sol-fa notation and/or correct rhythm.

C. Study of Set Works

Candidates will hear excerpts from set works (see details below), and will be required to answer questions based on these excerpts, arising from any of the following :

- (a) Name of the work or part of it.
- (b) Name of the composer.
- (c) Nature of the work, e.g., symphony, oratorio, string quartet.
- (d) Programme or story of the work.
- (e) Knowledge of the instruments used : recognition of a particular instrument, its section in the orchestra (if a woodwind instrument, whether with a reed or without) ; the sections or instruments used to play the main themes ; the uses made of various instruments, e.g. the use of the xylophone in 'Fossils' from 'Carnival of the Animals.'

In the 1966 examination, questions may be set on the thirteen works which are marked 1966 on the list given below.

In the 1967 examination, questions may be set on any of the twenty works listed.

After 1967, four works will be withdrawn and four new titles substituted each year.

D. General Musical Experience

No prescribed syllabus is laid down but a wide selection of questions will be set to cover all likely musical interests.

The following are likely types of question :

- (a) Recognition of instruments found in combinations such as Symphony Orchestras, Dance Orchestras, Brass Bands.
- (b) The excerpt describing the birds in 'Carnival of the Animals' is played and candidates are asked to identify the instruments.
- (c) An extract from a sea shanty is played with the question : 'What type of song is this ?'
- (d) Recognition of Latin-American rhythm.
- (e) Recognition of a Chamber group as a piano trio, piano quartet, or string quartet.

E. Rudiments

Questions based on a knowledge of the following :

Note values and rests—semibreve to semiquaver including dotted notes.

Time signatures : $2/4$, $3/4$, $4/4$, and $6/8$. Grouping of notes.

Major key signatures up to four sharps and four flats.

Transposition from key to key within above key range (Bass and Treble Clefs).

Signs and terms in general use.

F. Individual Interest

An individual project must be offered by each candidate.

This may take the form of any one of the following :

- (a) An original composition or arrangement.
- (b) A short account of the life and work of any composer.
- (c) A solo performance, vocal or instrumental.
- (d) The making and playing of a simple instrument.
- (e) The preparation of a balanced concert programme or recital (with brief programme notes).

LIST OF SET WORKS

Symphonies

- 1966 Beethoven : *Symphony No. 5 in C minor*—First Movement only.
 1966 Dvorák : *Symphony No. 9 in E minor, Op. 95* ("From the New World")—Second Movement only

Concertos

- 1966 Mendelssohn : *Violin Concerto in E minor, Op. 64*—Second Movement only
 1966 Grieg : *Piano Concerto in A minor*—First Movement only

Overtures

- 1966 Rossini : "The Thieving Magpie" ("La Gazza Ladra")
 1966 Berlioz : "Carnival Romain"

Opera

- 1966 Verdi : "Il Trovatore"—'Miserere' and 'Anvil Chorus'

Ballet

- 1966 Tchaikovsky : "Swan Lake" Ballet Suite—"Dance of the Little Swans"
 1967 Khachaturian : "Gayaneh" Ballet Suite—"Sabre Dance" and 'Dance of the Young Maidens'

Oratorio

- 1967 Bach : *B minor Mass*—"Sanctus"

Chamber Music

- 1966 Mozart : *Quintet in A for Clarinet and String Quartet, K581*—First Movement only

Instrumental

- 1966 Bach : *Tocatta and Fugue in D minor*

Vocal

- 1966 Robert Jones : "Sweet Kate" (Madrigal)
 1967 Schubert : "Erl King"

March

- 1967 Elgar : "Pomp and Circumstance" March No. 4

Dance

- 1967 Weinberger : "Schwanda the Bagpiper"—Polka

Descriptive

- 1966 Saint-Saens : "Carnival of the Animals"—'The Elephant', 'The Swan', and 'Tortoises'
 1967 Dukas : "L'Apprenti Sorcier"

Suites

- 1966 Bizet : "L'Arlesienne"—'Farandole'
 1967 Grieg : "Peer Gynt"—'Hall of the Mountain Kings' and 'Solveig's Song'.

NEEDLEWORK

The examination will consist of (a) an assessment of course work, (b) a theory paper of one hour, (c) a practical examination of 2 hours and 20 minutes.

These three parts of the examination will be weighted as follows :

(a) 35 % ; (b) 20 % ; and (c) 45 %.

The theory and practical examinations will be based on the following syllabus—

Elementary study of fabrics (natural and synthetic), uses, costs. Purchase and use of commercial patterns, their adaptation for size. The main dressmaking processes for garment construction. Maintenance of equipment. Maintenance of clothes in wear. Quick methods of repair ; effect of laundering and cleaning. Prevention of accidents by use of non-flammable materials.

Suitable styles for children's clothing.

Planning a personal wardrobe, planning outfits for different occasions ; costing and budgeting a dress allowance ; clothing clubs and credit buying.

The practical examination will include a number of short tests (or "situations"), and the time allocated to each test has been arranged so that, when candidates in any school are divided into groups, two or more tests may be taken concurrently by different groups.

Course Work

Each candidate will be expected to produce—

- (a) an outfit for a teenager, to be worn by the candidate when the Examiner visits the School. This outfit can consist of a dress, two-piece, light suit, or blouse and skirt, and can be entirely machine-made ; and
- (b) an illustrated record of ONE of the following topics, together with one article as an example of that topic—
 - (i) Embroidery—hand or machine embroidery of original design.
 - (ii) Soft toys or dressed dolls.
 - (iii) Soft furnishings—e.g. curtains, lampshades, cushions, bed-covers, table linen.
 - (iv) The study of period costumes for play production : a record of steps in the production of costume (e.g. books and authorities consulted), preliminary sketches, notes of suitable construction methods for play production. (For the course work specimen, part of a finished costume will suffice.)
 - (v) Planning a layette or an outfit for a small child, cost, styles, outdoor and indoor clothes, play clothes, and party clothes.
 - (vi) Lingerie, showing hand embroidery.

The allocation of marks for Course Work will be :

Outfit—20% ; topic—15%.

OFFICE PRACTICE

The examination will consist of one written paper of 2½ hours' duration, divided into three sections :

- Section A (carrying 40% of the marks)
TEN compulsory questions demanding brief answers.
- Section B (carrying 36% of the marks)
A choice of THREE from six questions, to be answered by means of paragraphs or short essays.
- Section C (carrying 24% of the marks)
This section is designed for the abler candidate who will be required to write an essay on ONE topic, chosen from about four.
Clear expression of thought and opinion will be looked for in answers to this section.

Any topic in the syllabus may be examined in any of the three sections of the paper.

The aim of the course should be to acquaint the candidate with the normal routine functions of an office and the more common documents and equipment used.

The purpose of an office. Function and organization.

Incoming post. Methods of collecting, post office boxes and bags ; opening of mail, sorting, stamping, recording, distribution.

Outgoing post. Inland services: letters, postcards, parcels, samples, newspapers, printed papers, registration, certificate of posting, recorded delivery, express delivery, business reply. Overseas post: surface and air mail.

Methods of communication. Correspondence, internal memoranda and communications, telephone, telegrams, teleprinter and telex services, cables. Dictated letters and the drafting of letters from brief notes or instructions.

Office records and documents. Petty cash and postage books ; telephone record. Documents involved in transactions, e.g. order books, delivery notes, invoices, statements, debit and credit notes.

Indexing and filing methods.

Methods of payment. Postage stamps, registered cash, postal and money orders, cash on delivery, cheques, trader's credits and standing orders. Simple treatment of banking services, paying-in book and bank statement.

Mechanical devices to facilitate office work. Typewriter, duplicator, photo-copier, adding machine, post-room equipment. The care of equipment. (*Detailed mechanical knowledge will not be required*).

Simple committee procedure. Notice of meeting, agenda, minutes.

Books of reference in general office use. Post Office guide, railway guides, directories, year books, Whitaker's Almanack, government reports, trade journals.

Simple commercial terms, abbreviations and forms of address.

The junior's place in the office. Etiquette, dress, speech. Receiving callers, answering the telephone.

Applications and interviews for posts.

PRINCIPLES OF ACCOUNTS

Candidates will be required to take one written paper of 3 hours' duration. Neatness and general presentation of work will be taken into account.

The examination will test the candidate's understanding of the elementary principles of accounts and his ability to record transactions by double-entry book-keeping, having regard to the application of basic principles to modern methods, e.g. the manifold systems.

The nature of transactions. The necessity for accurate records of transactions. Information given by these records.

The candidate will be expected to prepare, and answer questions on the accounts of a sole trader or partnership in the home trade, and of associations such as clubs—Receipts and Payments, Income and Expenditure Accounts. He may be asked to explain the significance of any accounts or statements he prepares.

Sources of information for subsidiary books. Recording of transactions : the ledger ; cash books ; journal and other subsidiary books, including columnar books. Simple reconciliation statements. The trial balance ; its uses and limitations ; correction of errors.

The Trading Period : preparation of Final Accounts, including adjustment for payments in advance and items unpaid, provision for depreciation and bad and doubtful debts.

The Balance Sheet as a statement of financial position : valuation of assets ; structure and inter-relationship of its parts ; its connections with items in the trading and profit and loss accounts. Interpretation of Accounts to ascertain capital employed, capital owned, current and fixed assets, short term and long term liabilities, working capital, solvency. Gross and net profits and their relation to turnover, expenses and capital. The conception of profit as an increase in the net value of assets.

SCIENCE

Candidates in SCIENCE must take :

- (a) a BASIC SCIENCE paper of one hour's duration, consisting of about 30 questions (all compulsory) demanding short answers only ; and
- (b) ONE or MORE THAN ONE of the following papers, each of 2 hours' duration.

GENERAL SCIENCE
PHYSICS
CHEMISTRY
BIOLOGY
HUMAN BIOLOGY
RURAL SCIENCE
HORTICULTURE

GENERAL SCIENCE may not be taken in conjunction with PHYSICS, CHEMISTRY, BIOLOGY or HUMAN BIOLOGY.

Each of these papers will be divided into two sections :

Section A: about TEN questions (all compulsory) demanding medium length answers.

Section B: about ten questions demanding longer answers, of which candidates will be required to answer FIVE.

The papers will be weighted as follows :

(a) BASIC SCIENCE paper	30 %
(b) Any other paper—Section A	30 %
Section B	40 %

The marks awarded for the paper in BASIC SCIENCE will be integrated with the marks for each of the other papers taken.

Questions requiring scientific thought and reasoning from given data may be included in any paper.

The syllabuses represent the basic scientific knowledge which the the Science Panel believes every child should have.

They are not intended to be schemes of work, nor are they exhaustive.

The approach, wherever possible, should be a practical one, with frequent reference to the pupil's experience of everyday things. It is not possible to define fully the depth of approach required in each topic, and this must be left to individual teachers to decide, bearing in mind the ability, aptitude and interests of their pupils.

It is hoped that these syllabuses will not be approached in an academic manner, but that they will be used to give pupils some understanding of the world around them and to teach them the methods of scientific thought. This approach will be encouraged by the type of questions set. These will be designed to test a candidate's ability to think scientifically, to draw conclusions from data and to suggest experiments to test scientific hypotheses, rather than to test a candidate's ability to memorize facts.

BASIC SCIENCE

The aim of this syllabus is to present some essential generalizations and scientific laws that bring together harmoniously a number of otherwise unconnected facts ; to present features, of great interest even to non-scientists, that illustrate the romantic story of man's increasing control of his environment.

The treatment of the subject should be mainly qualitative and should take advantage of the candidate's natural interest in the present-day frontiers of science. Experimental work and demonstrations should be used wherever possible.

The Place of the Earth in the Universe

The sun : day and night ; the seasons. The moon : eclipse as an example of the rectilinear propagation of light ; tides. The solar system : the constituents of the system, planets, satellites, comets and meteors. The motion of planets as an example of motion without friction under gravity. Rockets, their suitability for space travel. The sun as a star. Types of stars ; novae. Stars shine by converting matter into energy. The plan of the universe. Galaxies. The expanding universe.

The Nature of Matter

Matter has weight and occupies space ; conservation of matter. Air as a form of matter. Air as a mixture of gases. The three states of matter as exemplified by the earth, the seas, and the atmosphere. An elementary descriptive treatment of the structure of matter ; atoms and molecules.

A study of the following physical properties, together with an explanation of the phenomena, using the atomic theory :

- (i) Solids ; nature of solidity. Orderly arrangement of the atoms as shown by the structure of crystals. Expansion. Molecular motion and temperature ; absolute zero. Conduction of heat. Melting and freezing.
- (ii) Liquids, as exemplified by water. Fluidity. Solutions, suspensions and colloids. Expansion. Principle of the thermometer. Convection. Evaporation, boiling and liquefaction. Difference between melting and dissolving. Surface tension.
- (iii) Gases, as exemplified by air. Fluidity. Compressibility. Pressure. Thermal expansion. Convection. Liquefaction as an example of change of state.

Chemical reactions of oxygen, hydrogen and carbon. Burning as a chemical change. Burning of hydrogen and carbon. Burning to produce energy. Products of combustion. Water as a simple compound. Use of the atomic theory to explain these phenomena.

Forms of Energy

Heat, light and other radiations, sound, electrical and mechanical energy, and their transformations. The conservation of energy. Interchangeability of matter and energy as illustrated by solar and atomic energies. The sun as the main source of energy on earth. Fuels as "bottled sunshine." Conversion of heat into mechanical energy in the internal combustion engine (detailed study of the engine is not required) ; analogy with the production of energy by living things.

Electricity— a convenient form of energy. Simple study of magnets. Frictional electricity as an example of static electricity. Causes of lightning and thunder. Conductors and insulators, and their uses. Signs and symbols for common electrical components. Simple electric circuits. The meaning of series and parallel. The properties of magnets. The effects of an electric current: magnetic effect simply demonstrated ; heating effect, common uses, fuses ; chemical effect, electrolysis of water. Explanation of "mains supply." The live, neutral and earth wires. Importance of earthing. The costing of electricity. Light. Shadows. Simple descriptive treatment of reflection and refraction phenomena at plane surfaces. Spectra.

The Earth as a Habitable Planet

Characteristics of living things ; conditions necessary to sustain life. Climate and the rain cycle. The main differences between plants and animals. The external parts of a typical flowering plant and their functions. Ability of plants to manufacture their food from simple compounds ; photosynthesis and respiration. Interdependence of plants and animals. An elementary treatment of evolution.

Man

Man as an example of a mammal. The vital needs of the human body: food, types of food and tests for them, essentials of a balanced diet ; oxygen ; removal of waste products. The principal organs and their functions. Simple treatment of reproduction and heredity.

Public Health

The importance of cleanliness. Communicable diseases. The house-fly. Bacteria and viruses. The meaning of vaccination, immunization, anti-toxins, antiseptic and aseptic surgery. The dangers of radiation, atmospheric pollution, smoking.

GENERAL SCIENCE

Air as a substance. Respiration in man compared with insects, fish, birds, worms. Air is changed by respiration. Composition of the air. Oxygen, its production by a living green plant, its preparation from potassium chlorate and mercuric oxide. Properties and industrial uses of oxygen. Carbon dioxide, its preparation from a carbonate ; properties of CO_2 . Presence of water vapour in the air. Oxygen as an essential of life.

Water content of plants and animals. Transpiration in plants (simple experimental treatment). The water cycle in nature. Formation of springs and wells. Water pressure increasing with depth. Dams and reservoirs. Our water supply. The action of a syphon.

Soluble and insoluble substances. Effect of temperature on solubility. Unsaturated and saturated solutions, crystallization. Filtration, evaporation, distillation. Crystallization, e.g. making of common salt. Hard and soft waters, their advantages and disadvantages.

The pressure of the air. Simple water and mercury barometers, the aneroid barometer, the altimeter. Lift pumps. The heart as a pump.

Ways in which animals, including man, keep warm. Good and bad conductors of heat. Expansion of solids on heating. Differences in expansion of metals, bi-metallic strip and thermostat. Expansion of liquids and gases on heating. The Centigrade and Fahrenheit scales. Fixed points. The clinical thermometer, the maximum thermometer, the minimum thermometer. Range of animal temperatures. Change of volume of water on freezing : icebergs, burst water-pipes.

Conduction : the miner's safety lamp. Convection : hot water system of a house, space heating by convection, ventilation. Radiation from the sun : effect of clouds on radiation. Radiation from dark and light surfaces. The vacuum flask.

Burning and respiration. Complete and incomplete combustion ; formation of soot. Explosion as an example of fast burning. Control of burning. Coal gas : its use to the community. Simple treatment of the commercial preparation of coal gas. Oxides and oxidation of metals. Elements and compounds. Rusting of iron, methods of prevention. Alkalis, from solutions of metal oxides. Oxidation of non-metals. Acids, from solutions of non-metallic oxides. Simple properties of acids and alkalis. Preparation of salts. Production of metals, e.g. iron from its ores.

Levers : applications in the human body ; muscles and movement. The wing of a bird. Friction (nature of surface and load only). The minimising of friction. The principle of the four-stroke petrol engine.

Natural sources of light. The pin-hole camera. Reflection of light on plane surfaces, e.g. household mirror, simple periscope. Simple treatment of the refraction of light ; real and apparent depth.

Properties of magnets : permanent and temporary magnets. The earth's magnetism. Magnetic effect of an electric current. Electro-magnets. Electric bell. Uses of electro-magnets in industry.

The simple electric circuit. Conductors and insulators. The heating effect of a current. Fuses, switches, plugs, earthing of domestic appliances. The generation of electricity. A dynamo simply described. Alternating current and direct current. Electric generator, transformer, and the National Grid System (treated simply). Electrical units : lamps in series and parallel. Power. Watts : use of voltmeter, ammeter, household wattmeter. Costing of electricity. The chemical effect of a current : electro-plating, electrolysis.

Parts of a flower, pollination, fertilization. Work done by root, stem, leaf, and flower of a growing plant. Structure of a seed. Conditions for germination. Trees and their external structure. Identification of common trees in winter and summer. Leaf fall and evergreens. Annuals, biennials, and perennials. Seeds and fruits, methods of dispersal. Some uses of seeds : cereals, cotton, linseed, mustard.

Carnivores, herbivores, and omnivores. Teeth adaptation. Hibernation and migration.

The digestive system, alimentary canal. Foods, the need of a balanced diet. Excretion and elimination. Transport in the body : the circulatory system, blood plasma, red and white corpuscles. Reproduction : external and internal, fertilization of ova. Frog spawn and the egg of a fowl. Mammalian reproductive organs, male and female sex cells. Parental care of the young as shown by man, other mammals, fish, bird, reptile, amphibian, and insect.

Butterfly ; house-fly. Insect life in a pond. Life-cycle of caddis fly and dragon-fly. Community life in social insects : ants' nest, beehive.

Simple cell structure. The work of leaves : respiration and transpiration. Photosynthesis. Nitrogen and carbon cycle. Food storage in plants : leaf, stem, root, bulb, corm, fruit.

BIOLOGY

The characteristics of living things and the differences between plants and animals, as illustrated by the study of a living community in the vicinity of the school, e.g. waste ground, hedgerow, meadow, pond, garden plot, tree. Ecology as an introduction to the idea of variety in the living kingdom.

- (a) Animals without vertebral columns :
Single-celled animals, coelenterates, flat worms, true worms, crustacea, myriapoda, insects, spiders, molluscs, echinodermata.
- (b) Animals with vertebral columns :
 - (i) Cold-blooded : fish, amphibians, reptiles.
 - (ii) Warm-blooded : birds, mammals.

(c) Plants which do not have flowers :

Algae, lichens, liverworts, mosses, ferns, fungi.

(d) Seed-bearing plants :

Coniferous trees, monocotyledons and dicotyledons.

Insects : characteristics, breathing, metamorphosis. A life-history of an insect such as a cabbage white butterfly, aphid, mosquito, house-fly, bee. Insects and man.

Fish : characteristics, external features, adaptation for life in water, feeding, respiration, life-cycle, cold-bloodedness.

Amphibians : characteristics, life-history of the frog.

Birds : characteristics, warm-bloodedness, adaptation for flight, breathing. Kinds of beak, feet. Migration. Recognition and observation of some common birds. Structure of the egg.

Cells : structure of a simple animal cell, e.g. squamous cell of cheek, epidermal cell of leaf.

Man : external features, the skeleton, functions of the skeleton. A simple treatment of muscles and levers.

The alimentary canal and its functions, including enzyme action. Food : carbohydrates, fats, proteins, mineral salts, vitamins, roughage, water. Simple food tests.

The thoracic cavity and the lungs, gaseous exchange, expiration and inspiration.

The structure and functions of the blood. The heart and circulatory system in main outline. Process of energy release.

Excretory systems.

The structure and functions of the skin. Body temperature.

Reproduction : the organs of reproduction, the sex cells, fertilization, internal development, parental care.

Structure and functions of the eye. Structure and functions of the ear. Taste buds of the tongue. A simple treatment of the following co-ordinating systems of the body : central nervous system, peripheral nervous system and endocrinal organs, thyroid, adrenal, pancreas, testes, ovaries.

The green flowering plant : external structure, the shoot system, functions of the stem, arrangement of leaves, structure of the leaf, photosynthesis. Experiments to demonstrate the effects of external conditions on photosynthesis, and the need for chlorophyll. The nitrogen cycle, soil bacteria. Root systems, external structure of a root, absorption of water by a root, movement of water through a plant. Transpiration, value of transpiration. Stomata. Respiration.

The flower structure. Identification of common wild flowers. Insect and wind pollination.

Fertilization, the sex cells, fruit and seed formation, dispersal of fruits and seeds.

Seed structure, different types of seeds, germination.

Annuals, biennials, perennials, bulbs, corms, stem and root tubers, rhizomes, tap roots. Vegetative reproduction, runners, suckers, stolons.

Trees, structure of a bud, types of bud, origin of scars, leaf fall. Characteristics of common trees throughout the seasons.

Fungi : absence of chlorophyll, and feeding as illustrated by *Mucor*.

Bacteria : their role in nature, harmful bacteria, resistance to disease. Prevention of infection.

HUMAN BIOLOGY

Introduction

The characteristics of living things.

Conditions necessary for life. The cell as a unit of life. The distinction between cells, tissues and organs. A comparison of plants and animals, their interdependence. Plants as the ultimate source of man's food.

Man as a Mammal

The general structure of man and his distinctive anatomical features. Position in the body of the principal organs.

Nervous System

General outline ; central nervous system, peripheral nervous system. The brain and spinal cord. Reflex action, simple reflex arc. The sense organs ; the structure and function of the eye and the ear, the skin as a sense organ, the organs of taste and smell. The cause and correction of long and short sight.

Endocrine System

The distribution of the ductless glands and a study of one gland and its secretion(s).

Skeleton

The skeleton and its functions. Types of joints and their functions. Muscles and movement. Characteristics of good posture, the importance of exercise.

Circulatory System

Main features of the circulatory system. Outline of heart structure and action. The main blood vessels. Composition and functions of the blood. Lymph and its function, tissue fluid. A general treatment of blood transfusions, blood groups, anaemia, leukaemia.

Respiratory System

The nature and purpose of respiration, its importance in other activities. The respiratory organs, mechanism of breathing and gaseous exchange. Effects of exercise. Respiratory failure and resuscitation.

Digestive System

Food and balanced diets in relation to differing activities and different ages. Simple food tests. General arrangements of the alimentary tract. Digestion and functions of the parts of the alimentary tract. Enzyme action, including experiments illustrating the action of two enzymes.

Excretory System

The removal of waste products of metabolism from the body.

The macroscopic structure and functions of the kidney, the function of the bladder, structure and functions of the skin.

Reproductive System

Male and female organs of reproduction. Fertilization. The fertilized ovum and the development of the embryo within the uterus. Birth and the care of the young baby. Needs of the mother. Menstrual cycles.

Man in Society

Public health services ; disposal of dry refuse, sewage. Sanitation and food inspection. Control of infectious diseases. Lighting, heating and ventilation. Water supply. Air pollution.

Personal health ; cleanliness of skin, head and mouth. Need for good habits, clothing, exercise and rest. Bacteria ; types of bacteria and the conditions favouring their reproduction, the resistance of spores. Diseases caused by bacteria, e.g. T.B., pneumonia, typhoid, staphylococcus causing sore throat. Viruses and virus diseases, e.g. common cold, measles, poliomyelitis, smallpox and influenza. Immunity, natural and artificial, against bacterial and virus diseases.

Antibiotics, disinfectants and antiseptics. The life-history, habits, dangers and methods of control of the housefly. Parasites ; the life-history habits, dangers and control of any TWO of the following ; mosquito, head louse, bed-bug, flea, tape worm. A study of any one disease spread in each case by air, water, food, insects.

Food ; hygienic conditions of processing, preparation, storage and distribution. Illustration by reference to milk.

First Aid at home, burns and scalds, cuts and fractures, haemorrhage, pressure points, fainting, sunstroke, drowning and artificial respiration.

CHEMISTRY

Chemistry of air. Properties of the gases in the air. Preparation, properties, and uses of oxygen. Combustion and oxidation. Breathing, burning, and rusting. Methods of preventing corrosion. Acidic and basic oxides. Acids, bases, and salts. The mineral acids, with special reference to the manufacture and uses of sulphuric acid.

Chemistry of water. Solutions of substances in water, including saturated solutions. Difference between solutions, colloidal solutions and suspensions. Filtration ; separation of soluble and insoluble substances ; filter beds. Preparation of large and small crystals from prepared solutions. Solutions in solvents other than water. Distillation ; production of water in a pure state. Separation of liquids from solutions. Composition of water by volume and by weight. Action of cold water and steam on metals. Water gas. Preparation, properties, and uses of hydrogen. Analysis and synthesis of water. Electrolysis of solutions and fused salts.

Occurrence in nature of calcium carbonate ; manufacture of quick lime and slaked lime. Preparation, properties, and uses of carbon dioxide. Hardness of water ; methods of removal, by boiling and by using soda. Preparation of soap in the laboratory ; action of soap.

Metals and non-metals. Physical and chemical changes, use of catalysts, mixtures and compounds. Occurrence of metals in nature ; ores, winning the following metals from their ores : iron, aluminium, and one other metal. Properties of metals ; modification of the properties of metals by the formation of alloys. Alloys, their properties and uses : steel, brass and a light alloy.

Reduction of oxides by heating with carbon. Preparation of wood charcoal. Preparation of coal gas by a laboratory method. Natural gases. Simple treatment of industrial preparation and supply of coal gas ; producer gas and other by-products.

Different forms of carbon. Carbon as a source of energy. Stored carbon in plants. Sugars and starches. Test for starch.

Observations of the effects of heat on different substances, including elements and compounds (organic compounds such as carbohydrates, fats, and oils should be included). Deductions from observations made. Opportunities should be given to observe the following: changes in colour, weight, and structure (e.g. crystalline to amorphous), fusion, evolution of gases, liberation of water, different kinds of residue, no residue, sublimation, condensation of products on cool parts, combustion, no change.

Separation of mixtures of liquids. Application to the petroleum industry.

Preparation, properties and uses of ammonia. The nitrogen cycle. Fertilizers. Preparation, properties and uses of chlorine. Properties and uses of sulphur dioxide.

Plastics and fibres : use of models to show build-up of a polymer from a monomer. Illustration of breakdown of polymer by distillation of polystyrene. Thermosetting and thermoplastic. Elementary study of Bakelite, P.V.C., Polyethylene, Perspex and Nylon (illustration of standard possible in "How things are obtained," M. Farrell, E.S.A. Ltd.). Actual formulae not needed.

Fuels : sun as a source of their energy. Heat of combustion. Petrol, coal. (Atomic energy should be mentioned.)

Detergents : how they work. Compare some in the laboratory.

Paints : ingredients. Linseed oil. Emulsions.

Nature of matter, atoms and molecules. Different kinds of atom ; the elements and their chemical symbols. Law of definite proportions. Meaning of atomic weight. Simple ideas of valency, representation of compounds by their formulae, representation of simple reactions by their equations.

PHYSICS

Matter and Measurement

The nature of matter ; early ideas, continuous theory. Molecular theory ; adhesion, capillarity, bubbles and surface tension. Effect of soap on surface tension.

Properties of matter; development of systems of units, standards. Measurement of mass, length, and time. Orders of magnitude. Measurement of volume, weight, and density. Simple problems on $D = M/V$.

Descriptive treatment of the kinetic theory of matter.

Descriptive treatment of Newton's Laws of Motion :

First law : inertia, force, gravity. Falling bodies ; acceleration, air resistance, terminal velocity; constant velocity. Measurement of velocity as distance travelled in unit time. Measurement of force ; spring balance ; pressure as force per unit area. Fluid pressure, simple experiments to illustrate the properties of water pressure. Principle of Archimedes, flotation, hydrometers.

Second law : idea of momentum.

Third law : practical examples, e.g. motion in a circle, curved roads, spin-dryers.

Forms of propulsion : steam engine, internal combustion engine, gas turbine, jet engine, rocket.

Energy

Simple ideas of wave motion, wavelength, frequency and amplitude (analogy to ripples on water). Sound, light, and heat as wave motions.

Electro-magnetic spectrum. Penetration, dependence on wavelength.

Sound : production of waves by vibration. Elementary experimental and descriptive treatment of pitch and frequency.

Light : sources of light, formation of shadows, rectilinear propagation of light. Passage of light through glass and water. Formation of the spectrum. Rainbow, colour. Addition and subtraction of colours. Reflection in plane mirrors. Reflection in curved mirrors. Use of concave mirrors as shaving mirrors. Use of convex mirrors as driving mirrors. The effect of concave and convex lenses on parallel beams of light and for the production of parallel beams of light. The pinhole camera. Camera with lens. The eye as a simple optical instrument.

Heat : sources of heat energy, the sun as a source of energy, radiant heat. The concept of specific heat and latent heat. Transfer of heat ; conduction, convection and radiation with common examples. Expansion of solids, liquids, and gases, with every-day applications.

Electricity : production of electricity at a power station, distribution, national grid, supply to the home. Conductors and insulators. Electric current as a flow of electrons. Charging by friction, static charges in nature (e.g. lightning). Simple electrical circuits, electrical units, Ohm's Law. Resistors, heating effect of a current, fuses. Series and parallel circuits, application to household electricity. Costing of electricity.

Properties of magnets : simple experiments to illustrate the magnetic effects of an electric current. Simple treatment of the transformer, motor, and dynamo. Chemical effect of an electric current ; electrolysis of water, plating baths, purification of metals, cells (no chemical detail required).

Heat and light as sources of electricity ; photo-electric effect. Liberation of electrons from a metal plate by light, photo-electric cells. Liberation of electrons from a metal plate by heat and light, as illustrated by the thermionic valve and the photo-electric cell.

Sound, heat, light, and electricity as forms of energy. Interchangeability of these forms. Conservation of energy ; matter and energy, and the relationship between them. Simple discussion of radioactivity.

Weather

Air has weight. Measurement of pressure. Heat and temperature. Measurement of temperature, scales of temperature, thermometers. How air is heated : convection, currents, breezes and winds. Water vapour in the air. Humidity ; measurement of humidity, dew, frost, fog. Evaporation and boiling. Changes in atmospheric conditions and their effects on the weather. Forecasting the weather. Weather maps.

RURAL SCIENCE

Rural Science is a practical subject involving the crafts of gardening and livestock-keeping and including the study of farming and the countryside.

How soil is formed. Composition and types of soil. Elementary study of clay, silt, sand particles and humus; properties of these fractions. Drainage. Soil acidity and alkalinity. Improvement of soil texture. Effects of earthworms and bacteria. Composts, natural and John Innes.

Simple account of the structure and functions of roots, stems, and leaves of a typical herbaceous plant.

Structure of a common flower ; pollination and fertilization. Vegetative reproduction : bulbs, corms, tubers, rhizomes, runners, grafting, budding, cuttings.

Fruits and seeds, and their dispersal. Structure of seeds, e.g. broad bean, maize grain, and sunflower seed, to show the different types of germination.

Conditions necessary for the germination of seeds.

Recognition of common weeds (it is recommended that this work be based on candidates' own collections). Cultural methods of controlling weeds; chemical weed-killers. The main characteristics of the following families : Gramineae, Leguminosae and Cruciferae.

The chief mineral foods ; their availability to plants in nature ; how the farmer and gardener maintain their supply in the soil. Elementary treatment of effects of deficiencies on plant growth.

Requirements of a good seed bed, with reference to the size of seed and time of the year. The cultivation of farm and garden ; the weather as an aid to cultivation ; ploughing and digging ; the effects produced by disc harrows, rotavators, cultivators, harrows, and rollers.

Rotation of crops on farm OR in garden. The Norfolk Four Course Rotation, and local rotations as modifications of the Norfolk Four Course Rotation.

Growing and harvesting of farm OR garden crops found locally. The diagnosis, prevention, and methods of control of a fungoid disease, e.g. potato blight. Two insect pests, e.g. wireworm, cabbage white butterfly.

Flowers : raising annuals, biennials, and perennials outside and under glass, their cultivation. The advantages of garden frames and greenhouses. Care of pot plants ; choice of suitable plants for pot growing. Care of flower beds.

Study of cultivated grasses and clovers, controlled grazing ; the establishment of a ley ; haymaking and silage making.

Seasonal activities on the farm OR in the garden.

A study of hedges and the inhabitants of the hedgerow.

Common trees, their identification, their value on the farm.

The various classes of farm livestock. Characteristics and uses of THREE local breeds (one of cattle, one of sheep, one of pigs). Recognition of a good-type animal. Points that make for success in animal husbandry. Needs of the young animal.

A study of the housing, feeding, breeding, products, and common diseases of TWO of the following: cattle, sheep, pigs, poultry, rabbits, bees.

Relationship between the wild life of the countryside and farm economy.

HORTICULTURE

Soils

Characteristics of sandy, loamy, chalky, clay and peat soils, and of the soil in the locality of the school, top and sub-soil.

Soil moisture, warm and cold soils.

Effects of frost, snow, draining, liming, winter cultivation and mulching on soils. Methods of testing for lime.

Tools

Ability to sketch, name, and describe the following tools, and knowledge of their use :

Spades—Boys' No. 0, 1, 2. Square and Round mouth shovels.

Forks—Boys', Border, Digging, Potato and Manure.

Hoes—Dutch, Push/Pull, Draw and Drill.

Rakes—Garden, Lawn, Wooden.

Shears—Garden, Edging, Grass and Pruning.

Hooks—Reap, Hedge and Grass.

Saws—Pruning and Bow.

Knives—Pruning and Budding.

Hand Tools—Forks, Trowels, Cultivators and Hoes, Dibbers, Sieves,

Garden Lines, Pegs, Measuring rods and measures.

Care of Tools and Garden Machinery.

Manures and Manuring

Role of Nitrogen, Phosphates and Potash in the soil (simply explained as plant foods).

Nature and uses of Farm Yard Manure, Poultry Manure, Composts, Green Manure crops, Sewage waste, Peat.

Use of the following artificial manures on appropriate crops :
Dried Blood, Hoof and Horn, Bone Meal, Nitrate of Soda, Sulphate of Ammonia, Nitro-chalk, Superphosphate, Sulphate of Potash. Simple compound fertilizers. Knowledge of John Innes composts. Storage of fertilizers.

Garden Operations

Digging (winter and summer), double digging, hoeing, mulching, raking, rolling and firming. Transplanting (dipper and trowel), thinning out of seedlings, blanching, ridging.

Winter storage of vegetable crops.

Rotation, intercropping, catch cropping.

Watering and feeding.

Propagation

(a) By seed. Conditions necessary for germination. Outdoor seed bed preparation. Preparation and method of sowing seed in pots and boxes.

(b) By vegetative methods. Bulbs, corms, rhizomes, tubers, suckers, stolons, and "tip" rooting. Hard and soft wood cuttings and pipings. Layering, division, grafting and budding of hardy fruit trees.

Horticultural Botany

Simple structure and functions of roots, stems and flower of a simple herbaceous plant. How a plant feeds and grows. Pollination, fertilization, seed and fruit formation. Characteristics of the following plant families—Cruciferae, Leguminosae, Solanaceae, Compositae, Liliaceae. Classification of vegetables on a botanical basis ; the structure of the plant.

Vegetables

Soil cultivation, manuring, sowing, planting, spacing, thinning and harvesting of the following crops :

Cabbage, Cauliflower, Brussels Sprouts, Savoy, Broccoli, Kale, Potatoes, Carrots, Beet, Parsnips, Turnips, Kohlrabi, Peas, Beans (Runner, Dwarf, Climbing, Haricot and Broad). Onions, Shallots and Leeks. Lettuce, Radish, Chives, Mustard and Cress. Outdoor Tomatoes, Sweet Corn. Rhubarb, Marrows, Spinach. Sage, Mint, Thyme, Parsley.

Fruit

General cultivation, propagation, training and fruiting of Currants (Black, Red and White), Gooseberries, Raspberries, Loganberries (or Blackberries), Strawberries, Apples, Pears and Plums.

Flowers

Cultivation of the following :

ANNUALS.	Hardy : Calendula, Cornflower, Larkspur. Half-Hardy : Asters, Stocks, Lobelia.
BIENNIALS.	Daisy (or Bellis), Canterbury Bells, Sweet William, Wallflower, Honesty.
PERENNIALS.	Anemone, Delphinium, Lupin, Scabious, Polyanthus, Anchusa.

Short term decorative beds

Choosing from the seedsman's catalogue the flowers to be grown ; meaning of catalogue abbreviations ; designing the beds ; spring bedding—bulbs, biennials ; summer bedding—hardy and half-hardy annuals, half-hardy perennials.

Permanent decorative beds

Herbaceous border ; shrub border—flowering shrubs, berrying shrubs, foliage shrubs ; shrubs as hedges ; trees, especially conifers, as hedges ; rose beds ; climbing plants.

Bulbs

Growing of bulbs for indoor decoration.

Lawns

Preparation of beds for sowing and turfing, simple seed mixtures, sowing, turfing and after-care of lawns.

Maintenance of established lawns.

Pests and Diseases

Treated as "Friends and Enemies" in the Garden. Basic life history and control measures (where necessary) for the following :

Slugs and Snails, Black Fly and Green Fly, Cabbage White Butterfly, Earthworm, Centipede, Ant, Earwig, Leatherjacket.

Carrot and Onion Fly, Potato Eelworm, Common Mole.

Club root on Brassicae, Potato Blight.

A brief knowledge of garden hygiene, simple soil sterilization, safety precautions in the garden.

Cloches and frames

For starting early vegetables *in situ* and for transplanting ; for crops to maturity ; for late vegetables ; for hardening off.

Advantages and disadvantages of the greenhouse

Highest temperatures—max-min thermometer ; no wind, no rain, watering, loss of light, higher humidity, ventilation. Types of greenhouse. Plants and light, water and CO₂ ; simple transpiration ; photosynthesis ; CO₂ enrichment—simple idea of limiting factors.

Greenhouse operation

Soil sterilization and the control of soilborne pests and diseases ; uses of J.I. composts ; sowing ; pricking out ; potting up ; watering ; liquid feeding ; foliar feeding ; potting on ; pest and disease control—fumigants.

Use of the greenhouse

For raising half-hardy annuals and perennials ; for raising plants to be planted outside ; for vegetative propagation of plants to be put outside ; for growing greenhouse vegetables, e.g. tomato ; for propagating and growing tender annuals and tender perennials e.g. Cineraria (seed), Solanum capsicastrum (seed), Schizanthus (seed), Fuschia (cuttings, training and pruning), Pelargonium (softwood cuttings), Mimosa pudica (seed), Saxifraga sarmentosa (runners), Begonia rex (leaf cuttings), Ficus elastica (air layering), Bryophyllum (vivipary), Cacti and succulents, Coleus (cuttings), Tradescantia.

Garden Design

Design and lay-out of gardens.

SCRIPTURE KNOWLEDGE

Candidates will be required to take TWO papers, each of 2 hours' duration, one based on either Syllabus A or B or C, and the other on D or E or F.

- A. From Abraham to the Division of the Kingdom (The Story of the Covenant).
- B. From the Division of the Kingdom to the Return from Exile.
- C. Prophecy and Prophets.
- D. The Life and Teaching of Jesus Christ.
- E. The Growth of the Early Church and the Adventures of Paul.
- F. The Christian Faith and its Application.

In the English Version of the questions, quotations will be taken from the Revised Version (Oxford University Press).

A. From Abraham to the Division of the Kingdom (The Story of the Covenant)

- | | |
|-----------|---|
| Abraham : | his call—Genesis xi. 31 - xii. 9.
the Covenant—Genesis xv. 1-18. |
| Joseph : | descent into Egypt—Genesis xlvi. 1-7, 28-34 ;
xlvii. 1-12. |
| Moses : | his birth and early training—Exodus ii.
his call to liberate his people from oppression—
Exodus iii. 1-17.
the passover and the great deliverance—Exodus
xii. 1-39 ; xiii. 17-22 ; xiv. 5-31.
the renewal of the promise—Exodus xix. 16-25.
God's law as the basis of national life—Exodus
xx. 1-21. |

- Joshua* : God's message to Moses—Numbers xxvii. 12-23.
Joshua's call—Joshua i. 1-9.
the fall of Jericho—Joshua vi.
- Gideon* : his call—Judges vi. 11-24.
the defeat of Midian—Judges vii. 1-21 ; viii. 22, 23.
- Samuel, Saul
and David* : the boy Samuel—I Samuel iii. 1-10.
the choosing and anointing of Saul—I Samuel ix ;
x. 1-16.
Saul's rejection—I Samuel xv. 10-23.
the choosing and anointing of David—I Samuel
xvi. 1-13.
his friendship with Jonathan—I Samuel xviii. 1-4.
his escape from Saul—I Samuel xix. 8-17.
the death of Saul and Jonathan—I Samuel xxxi.
David's lament—2 Samuel i. 17-27.
he is made King of Israel—2 Samuel v. 4-12.
the Ark brought to Jerusalem—2 Samuel vi. 11-19.
Nathan rebukes the King—2 Samuel xii. 1-14.
- Solomon* : his accession—I Kings ii. 1-4, 12.
the building of the Temple—I Kings v.
its dedication—I Kings viii. 1-4, 12-30.
- Rehoboam* : the Kingdom is divided—I Kings xii. 1-29.

B. From the Division of the Kingdom to the Return from Exile

- The division of
the Kingdom* : I Kings xii. 1-29 ; xvi. 21-28.
- Ahab* : erects altar to Baal—I Kings xvi. 29-34.
- Elijah and Elisha* : (the struggle against pagan worship and ideas)
Elijah on Mount Carmel—I Kings xviii.
the anointing of Elisha—I Kings xix. 16, 19-21.
Naboth's vineyard—I Kings xxi.
the mantle of Elijah—2 Kings ii. 1-15.
Naaman the leper—2 Kings v. 1-19.
Elisha and the King of Syria—2 Kings vi. 8-23.
- Proclamation of
doom* : Amos denounces and warns—Amos ii. 6 ; v. 4-17 ;
viii. 4-6, 10.
- Doom fulfilled* : capture of Samaria—2 Kings xvii. 1-18, 24-41.
siege and deliverance of Jerusalem—2 Kings xviii.
13-37 ; xix ; xxii ; xxiii. 1-6.
- Rise of Babylon* : destruction of Jerusalem and deportation of
Jews—2 Kings xxiv. 8-20 ; xxv. 1-12, 18-30.
Jeremiah denounces the apostasy—Jeremiah v.
10-31.
warns of disaster—Jeremiah vii. 1-20 ; xviii. 1-10.
Jeremiah's letter to the Jews—Jeremiah xxix. 1-28.
the exile's lament—Psalm cxxxvii.
- The Exile* :
- The Return* : rebuilding the Temple—Haggai i ; Ezra iii. 10-13 ;
iv. 1-6, 23, 24 ; vi. 1-15.
rebuilding the walls of the city—Nehemiah i. 1-4 ;
ii ; iv ; vi. 15, 16.
thanksgiving—Psalms lxxxv ; cxxvi.
reading the law—Nehemiah viii.

C. Prophecy and Prophets

- Elijah and Elisha* : Elijah on Mount Carmel—I Kings xviii.
the anointing of Elisha—I Kings xix. 16, 19-21.
Naboth's vineyard—I Kings xxi.
the mantle of Elijah—2 Kings ii. 1-15.
Naaman the leper—2 Kings v. 1-19.
Elisha and the King of Syria—2 Kings vi. 8-23.
- Amos* : the righteousness of God—Amos i. 1.
Amos denounces and warns—Amos ii. 6 ; v. 4-20 ;
vi. 4-7 ; vii ; viii. 1-6.
- Hosea* : his personal life—Hosea i ; ii. 2-5 ; iii. 1-4.
God's love for Israel—Hosea i. 1 ; vi. 1-6 ; xi. 1-4 ;
xiv.
- Isaiah* : his call—Isaiah vi. 1-8.
the parable of the vineyard—Isaiah v. 1-7.
the hope of Israel—Isaiah ix. 2-7 ; xi. 1-9.
- Jeremiah* : his call—Jeremiah i. 4-10 .
the potter's house—Jeremiah xviii. 1-12.
persecution of the prophet—Jeremiah xx. 1, 2.
the new Covenant—Jeremiah xxxi. 31-34.
imprisonment and release of the prophet—
Jeremiah xxxviii. 1-13.
- The Second Isaiah* : the prophet of hope—Isaiah xl.

D. The Life and Teaching of Jesus Christ (based on the Gospel of

- Mark, supplemented by Matthew, Luke and the Acts of the Apostles).
- St. Mark* : i ; ii ; iii ; iv. 1-9, 21-41 ; v. 21-42 ; vi ; vii. 31-37 ;
viii. 22-38 ; ix. 1-37 ; x ; xi ; xii. 1-17 , 28-34,
38-44 ; xiii. 1, 2 ; xiv ; xv.
- St. Matthew* : v. 1-16 ; vi.
- St. Luke* : x. 25-37 ; xii. 13-21 ; xv. 1-32 ; xviii. 1-14 ;
xxiv. 1-12.
- Acts of the
Apostles* : i. 1-11.

E. The Growth of the Early Church and the Adventures of Paul

- St. Luke* : xxiv. 44-53.
- Acts of the
Apostles* : i. 1-26 ; ii ; iii. 1-11 ; iv. 32-37 ; vi ; vii. 52-60 ;
viii ; ix ; x ; xi. 19-30 ; xiii. 1-12 ; xiv. 1-21 ;
xv. 1, 2, 22-29 ; xvi. 6-40 ; xvii. 13-34 ;
xviii. 1-17 ; xix ; xx. 7-12 ; xxi ; xxiii. 12-24 ;
xxv. 1-12 ; xxvii. 1, 9-44 ; xxviii. 1-10, 16, 30,
31.

F. The Christian Faith and its Application

The Abiding Value of the Bible.

"The Bible is unique and authoritative because, under the guidance of the Holy Spirit, it proclaims the redemptive activity of God, culminating in Jesus Christ and continued in the Church." (Revised Syllabus of Religious Instruction, Page 77.)

1. *Belief about God* (see pages 79-82—Revised Syllabus of Religious Instruction)
 - (a) *The Creator and Father.* Genesis i ; ii. 1-7 ; Amos iv. 13 ; v. 8 ; Isaiah xl. 21, 22, 25-28 ; lxvi. 1, 2 ; Psalm cii. 25-27 ; Psalm ciii ; St. Matthew v. 45 ; St. Luke xi. 2 ; xv. 11-32 ; Ephesians iv. 6.
 - (b) *Jesus Christ.* St. Matthew xi. 25-27 ; St. Mark i. 22 ; ii. 12 ; iii. 5 ; iv. 41 ; vi. 34 ; x. 14, 45 ; xiv. 61, 62 ; St. Luke iv. 1-13 ; St. John iii. 14-17 ; iv. 5-8 ; x. 30 ; xiv. 7-11 ; xx. 31 ; Acts iv. 12 ; I Corinthians vii. 22, 23 ; 2 Corinthians v. 19 ; Galatians iv. 4, 5 ; Hebrews i. 1-4 ; iv. 15 ; I John i. 7.
 - (c) *The Holy Spirit.* St. John xiv. 16, 17, 25, 26 ; xvi. 7, 12, 13 ; Acts ii ; i ; xiii. 2 ; xv. 28 ; xvi. 6, 7 ; Romans viii. 9-16 ; I Corinthians ii. 6-16 ; xii. 1-12 ; Galatians v. 16, 17, 22-26 .
2. *Belief about Man* (pages 85-86)
Genesis i. 26-31 ; iii ; Psalm viii. 3-6 ; St. Mark x. 45 ; St. John iii. 16 ; I Corinthians iii. 16 ; 2 Corinthians v. 17-19 ; Romans v. 8.
3. *Belief about the Church* (pages 83-84)
St. Luke xxiv. 44-49 ; St. John xiv. 15-19 ; xvi. 1-7 ; xvii. 20-23 ; Acts i. 1-11 ; ii. 42 ; Romans xii. 4, 5 ; I Corinthians i. 10-13 ; xii. 27 ; Ephesians i ; ii. 19, 20 ; iv. 4-6 ; I Peter i. 15, 16.
4. *The Home, The Family and Marriage* (pages 86-87)
St. Mark x. 2-12 ; St. Luke ii. 51, 52 ; x. 38-42 ; xv. 11-32 ; St. John xix. 26 ; Ephesians v. 22-31 ; vi. 1-4.
5. *Work and Leisure* (pages 88-89)
Proverbs vi. 6 ; Ephesians iv. 28 ; vi. 5-8 ; 2 Thessalonians iii. 7-13 .
6. *Wealth and Possessions* (pages 90 and 91)
St. Matthew vi. 19-21, 24 ; St. Mark x. 17-22 ; St. Luke xii. 15-21 ; xvi. 19-31 ; xix. 12-26.
7. *Prayer and Worship* (pages 92 and 93—to end of section on *Corporate Prayer and Worship*)
Psalm ciii ; St. Matthew vi. 5-13 ; St. Mark i. 21 ; xi. 20-25 ; xiv. 32-36 ; St. Luke iv. 16 ; v. 15, 16 ; vi. 12 ; ix. 18, 28, 29 ; xi. 1-4 ; xviii. 1-14 ; xxii. 39-46 ; St. John xiv. 13, 14 ; Acts ii. 46, 47 ; xvii. 28 ; xx. 7 ; 2 Corinthians xii. 7-9 ; Ephesians iii. 14-21.

The following list of famous Christians may be used by the Examiner to illustrate the implications and the applications of the above Biblical Teaching :

St. David	C. T. Studd
St. Francis	William Williams
Bishop Morgan	Aggrey of Achimota
John Bunyan	Sister Kenny
Griffith Jones	Mary Slessor
Father Damien	Elizabeth Fry
David Livingstone	Florence Nightingale

Isobel Kerr

SHORTHAND

The examination will consist of tests at three stages ; a candidate's certificate will indicate the speed attained. All tests will normally be set on the Pitman system, but schools may ask to be examined on any recognized system of Shorthand.

Answer books or personal note-books may be used in the examination. Notes may be made either in pencil or in ink.

Candidates may, if they wish, take down all four passages but must submit a transcription of the two passages at one speed only ; any other attempts must be cancelled. If this regulation is ignored, the first passages only will be marked. The shorthand notes for all speeds must be returned with the worked papers.

The duration of each examination will be TWO hours, excluding dictation time.

Stage I

The examination will consist of :

- (i) Transcription of a printed passage of Shorthand of about 150 words.
- (ii) Dictation of four passages, each of 3 minutes' duration.
 - A. (Literary Passage) 150 words at 50 w.p.m.
 - B. (Commercial Passage) 150 words at 50 w.p.m.
 - C. (Literary Passage) 180 words at 60 w.p.m.
 - D. (Commercial Passage) 180 words at 60 w.p.m.
- (iii) Transcription of *either* passages A and B
or passages C and D.

Weighting of marks : (i)—25% ; (ii) and (iii)—75% to be allocated at the discretion of the Examiner.

Stage II

The examination will consist of :

- (i) Dictation of four passages, each of 4 minutes' duration.
 - A. (Literary Passage) 280 words at 70 w.p.m.
 - B. (Commercial Passage) 280 words at 70 w.p.m.
 - C. (Literary Passage) 320 words at 80 w.p.m.
 - D. (Commercial Passage) 320 words at 80 w.p.m.
- (ii) Transcription of *either* passages A and B
or passages C and D.

Stage III

The examination will consist of :

- (i) Dictation of four passages, each of 4 minutes' duration.
 - A. (Literary Passage) 360 words at 90 w.p.m.
 - B. (Commercial Passage) 360 words at an average speed of 90 w.p.m.
 - C. (Literary Passage) 400 words at 100 w.p.m.
 - D. (Commercial Passage) 400 words at an average speed of 100 w.p.m.
- (ii) Transcription of *either* passages A and B
or passages C and D.

Weighting of marks : in both Stage II and Stage III, the Examiner will decide the allocation of marks to question (i) and (ii) respectively.

TECHNICAL DRAWING

The examination will consist of one paper of 3 hours' duration. Candidates will be required to answer ONE compulsory question, which will carry 60% of the total marks, and TWO other questions, carrying 20% each.

The aim of the course should be to train candidates to interpret and produce working drawings and to appreciate the value of Technical Drawing as a graphic language. The technique of drawing should be taught as laid down by B.S. 308. It is hoped that candidates will be encouraged to make dimensioned sketches from actual models, measurements to be taken by themselves prior to the production of scale drawings in orthographic projection.

Questions may be set on the following :

Orthographic projection (while the majority of questions will require first angle projection only, some questions may be set which require third angle projection).

Vertical and horizontal sections.

Extraction and separate reproduction of details from an assembled drawing or model.

Production of an assembled drawing from given components.

Simple fastenings, details of constructional features used in Woodwork or Metalwork.

Scale drawings.

Simple isometric projection, oblique projection and sketching, including work with curves. (Knowledge of the isometric scale will not be required, nor will isometric projection in inclined planes).

A knowledge of geometrical facts and constructions essential for the solution of practical work will be required, but this part of technical drawing should not be studied in isolation. The examination will include only work and constructions arising from representational drawing ; no question will require a geometrical construction for its own sake. The work studied should include the following :

Division of straight lines into a given number of equal parts.

Enlargement and reduction of given drawings.

Construction and bisection of angles.

Construction and properties of triangles, quadrilaterals, and regular polygons.

The circle, parts of a circle, properties of a circle. Tangents to a circle, common tangents, inscribed and circumscribed polygons.

Loci ; simple mechanisms.

Methods of construction of an ellipse, its tangents and normals.

Plans and elevation of right prisms, pyramids, cylinders and cones parallel to the principal planes, and their sections; true shapes, of sections ; developments of these.

TYPEWRITING

The examination will consist of the following tests at three stages ; a candidate's certificate will indicate the speed attained.

- (i) A printed test exercise of about 100 words. (This preliminary test will not be marked and should not be handed in.)
- (ii) A copying and accuracy test, each of 10 minutes' duration—

Stage I	250 words at 25 w.p.m.
Stage II	350 words at 35 w.p.m.
Stage III	500 words at 50 w.p.m.
- (iii) Typing of a printed extract, *either* in English or in Welsh. (A prepared extract will be provided in both languages.)
- (iv) Typing from a manuscript involving corrections. (Carbon copies will not be required in the examination at Stage I.)
- (v) Tabulation and Display Test.
- (vi) *Stage III only:*
An optional extra audio-typing test of 10 minutes' duration at an average speed of 50 w.p.m. Success in this test will be recorded on the candidate's certificate.

The time allowed for the examination will be—

Stage I—2 hours ; Stage II and Stage III—2½ hours, plus, in all three cases, five minutes for the preliminary test.

Marks will be allocated as follows, at each stage :

(ii)—30 % ; (iii)—15 % ; (iv)—25 % ; (v)—30 %.

The result of the examination will be decided by the aggregate of the marks awarded in all four sections.

WELSH

Three examinations will be set, for different categories of candidates, as follows :

Welsh 1

- (a) Welsh-speaking pupils living in Welsh areas ;
- (b) Welsh-speaking pupils living in English areas who have attended "Welsh Schools".

Welsh 2

- (a) Pupils from Welsh homes but living in anglicised areas who have not attended "Welsh Schools" ;
- (b) pupils from English homes but living in Welsh areas who have learnt Welsh in school and in the community.

Welsh 3

Pupils with no Welsh background but having been taught Welsh as a second language in school only.

Every candidate should be allowed to take the examination which gives him the best opportunity to do himself justice. A candidate whose place in the above table is in the third category, may take the WELSH 2 examination should he wish to do so, and, similarly, a WELSH 2 candidate may opt to take the WELSH 1 examination if he feels that that would better suit his ability.

On the other hand, no student should be entered for the WELSH 2 examination if his true place is in either of the first two categories named above, i.e. the WELSH 1 categories (a) and (b). Nor should any bona fide WELSH 2 candidate be entered for the WELSH 3 examination.

In each of the three examinations, there will be a written paper and an oral test, and marks will be apportioned as follows :—

	Written Paper	Oral Test
WELSH 1:	60 %	40 %
WELSH 2:	50 %	50 %
WELSH 3:	40 %	60 %

The Written Examination

Welsh 1

FIVE questions will be set, to be answered in $2\frac{1}{2}$ hours.

- Candidates will be required to compose TWO pieces of prose, one of about 200-250 words on a topic chosen from a choice of several which will suggest imaginative or descriptive writing ; and the other, about half the length of the first, on a controversial topic or a subject which calls for an expression of opinion from the candidate. (Suggestions may be included with some of the topics, which candidates may use or ignore, as they wish.)
- Questions will be set to test the candidates' understanding of a piece of prose and of a poem.
- Candidates will be asked to write a letter, or to compile the minutes or a report of a meeting, in about 120-150 words.

Welsh 2

FIVE questions will be set, to be answered in $2\frac{1}{2}$ hours.

- Candidates will be required to compose a piece of prose, from a choice of topics. Suggestions may be included which candidates may use or ignore, as they wish.
- Questions will be set to test the candidates' understanding of a piece of prose and of a poem.
- Candidates will be required to write a letter ; a choice of topics, with suggestions, will be provided.
- A general question will be set dealing with books which candidates will have read.

Welsh 3

FOUR questions will be set, to be answered in 2 hours. The rubrics of the questions will be given in Welsh and in English, and answers must be written in Welsh.

- Candidates will be required to write about 100-120 words. A choice of topics will be given in both Welsh and English, but suggestions concerning any topic will be given in Welsh only.

- (b) Questions will be set to test the candidate's understanding of TWO short passages.
- (c) A picture, or pen and ink sketch will be provided, and candidates will be asked questions, in Welsh, on its contents—to be answered in Welsh.
- (d) Candidates will be given a series of illustrations and asked to write about the story which they contain. Occasional words or phrases will be given in English, with the Welsh translation.

The Oral Test

Welsh 1 and 2

- (a) Candidates will be required to read aloud a piece of prose. The Examiner will select two or three passages which will be sent to schools beforehand, the final choice being left to the class teacher.
- (b) Questions will be asked on the passage which has been read aloud. The printed questions will be given to the candidate, but he will not have the reading passage before him when he answers them.
- (c) Candidates will converse with the teacher on topics in which they are interested. During the year they will have practised conversing on general topics such as "our county," the Eisteddfod, local councils, games and sports, crafts, farming, industries, television, fashion, holidays, dancing, or any other topics in which they are interested. At the oral test teachers will be free to suggest a topic to each candidate, and to prompt him with appropriate questions, if necessary.

Welsh 3

- (a) Candidates will read aloud a piece of prose, from a selection chosen by the Examiner, as in WELSH 1 and 2 above.
- (b) They will then be asked questions on the passage, aimed to test their understanding of it. The questions will be printed, and given to the candidates, who will be allowed to retain the reading passage and to refer to it when answering the questions in Welsh.
- (c) Candidates will be given a picture or a series of illustrations, and will be expected to converse, in Welsh, on what they see.

In each of the Oral Tests the reading passage will be given to the candidate a short while beforehand so that he may study it.

Each candidate's Oral Test should occupy about fifteen minutes.

Detailed arrangements for conducting the Tests will be decided in due course, and the information circulated to schools.

Candidates will naturally be allowed to use colloquial Welsh in conversation—and in the written examination, should they wish to do so. It is suggested that teachers refer to "CYMRAEG BYW," a pamphlet published by Llyfrau'r Dryw, Llandybie, on behalf of the Faculty of Education, University College, Swansea (price 2/-).

CYMRAEG

Trefnir TRI arholiad, ar gyfer gwahanol ddosbarthiadau o ymgeiswyr, fel a ganlyn :

Cymraeg 1, ar gyfer—

- (a) plant sy'n siarad Cymraeg ac yn byw mewn ardaloedd Cymraeg; a
- (b) plant sy'n siarad Cymraeg, yn byw mewn ardaloedd Seisnig eu hiaith, ond wedi mynychu Ysgolion Cymraeg.

Cymraeg 2, ar gyfer—

- (a) plant o gartrefi Cymraeg, sy'n byw mewn ardaloedd Seisnig eu hiaith, a heb fynychu Ysgolion Cymraeg; a
- (b) plant o gartrefi Saesneg, sy'n byw mewn ardaloedd Cymraeg ac wedi dysgu Cymraeg yn yr ysgol ac yn y gymdeithas leol.

Cymraeg 3, ar gyfer—

plant heb ganddynt gefndir Cymraeg o gwbl, ac sydd wedi dysgu Cymraeg fel ail iaith yn yr ysgol yn unig.

Dylid gofalu fod pob ymgeisydd yn cymryd yr arholiad sy'n debyg o roddi cyfle iddo wneud cyfiawnder ag ef ei hun a'i ymestyn hyd yr eithaf. Bydd hawl felly gan blentyn sy'n perthyn i'r dosbarth olaf uchod eistedd arholiad CYMRAEG 2 yn lle CYMRAEG 3 os dymuna wneud hynny; a gall plentyn sy'n perthyn i ddosbarth CYMRAEG 2 eistedd arholiad CYMRAEG 1 yn lle 2 os mynn.

Ar y llaw arall, ni ddylid ar unrhyw gyfrif ganiatáu i ymgeisydd eistedd arholiad CYMRAEG 3 os dylai berthyn i ddosbarthiad CYMRAEG 2, nac ychwaith CYMRAEG 2 os dylai fod yn eistedd CYMRAEG 1.

Bydd arholiad ysgrifenedig a phrawf llafar ar gyfer pob un o'r tri dosbarth, a rhennir y marciau fel a ganlyn—

	Arholiad Ysgrifenedig	Prawf Llafar
CYMRAEG 1 :	60 %	40 %
CYMRAEG 2 :	50 %	50 %
CYMRAEG 3 :	40 %	60 %

Yr Arholiad Ysgrifenedig:

Cymraeg 1

Gosodir PUM cwestiwn, i'w hateb mewn 2½ awr.

- (a) Disgwylir i bob ymgeisydd gyfansoddi dau ddarn o ryddiaith, un tua 200-250 o eiriau ar destun wedi'i ddewis o nifer a fydd yn awgrymu ysgrifennu'n ddychmygol neu'n ddisgrifiadol; a'r llall, tua hanner hyd y cyntaf, ar bwnc llosg neu gwestiwn a fydd yn gofyn am farn neu opiniwn yr ymgeisydd. (Gellir cynnwys cynllun neu ganllawiau i rai o'r testunau a bydd rhyddid i bob ymgeisydd eu defnyddio neu eu hanwybyddu, fel y mynno.)

- (b) Gosodir darn o ryddiaith a darn o farddoniaeth, gyda chwestiynau i'w hateb i brofi a yw'r ymgeiswyr yn deall cynnwys y darnau.
- (c) Disgwylir i ymgeiswyr ysgrifennu llythyr neu lunio cofnodion pwyllgor neu adroddiad o gyfarfod, mewn tua 120-150 o eiriau.

Cymraeg 2

Gosodir PUM cwestiwn i'w hateb mewn 2½ awr.

- (a) Disgwylir i ymgeiswyr gyfansoddi darn o ryddiaith, tua 200 o eiriau, ar bwnc wedi'i ddewis o nifer. Gellir rhoi cynllun neu ganllawiau, ond eto bydd rhyddid i bob ymgeisydd eu dilyn neu eu hanwybyddu.
- (b) Gosodir darn o ryddiaith a darn o farddoniaeth gyda chwestiynau i brofi a yw ymgeiswyr yn deall y cynnwys.
- (c) Gofynnir am lythyr, a rhoddir dewis o bynciau ynghyd ag awgrymiadau.
- (ch) Gosodir cwestiwn cyffredinol yn ymwneud â llyfrau Cymraeg y bydd yr ymgeiswyr wedi'u darllen.

Cymraeg 3

Gosodir PEDWAR cwestiwn i'w hateb mewn 2 awr. Rhoddir geiriad y cwestiyniau yn Gymraeg ac yn Saesneg, a disgwylir i'r ymgeisydd ateb yn Gymraeg.

- (a) Gofynnir i ymgeiswyr ysgrifennu tua 100-120 o eiriau ar destun wedi'i ddewis o nifer. Rhoddir y rhestr testunau yn y ddwy iaith, ond yn Gymraeg yn unig y bydd y cynllun a'r canllawiau a awgrymir ar bob testun.
- (b) Gosodir dau ddarn byr, gyda chwestiynau i'w hateb i brofi a yw'r ymgeiswyr yn deall cynnwys y darnau.
- (c) Rhoddir darlun, neu lun du-a-gwyn, a gofyn cwestiynau arno yn Gymraeg, i'w hateb yn yr un iaith.
- (ch) Disgwylir i ymgeiswyr ysgrifennu yn Gymraeg ar gynnwys cyfres o luniau sy'n adrodd stori. Rhoddir ambell air neu ymadrodd Saesneg, gyda'r cyfieithiad priodol, i'w helpu.

Yr Arholiad Llafar

Cymraeg 1 a 2

- (a) Disgwylir i bob ymgeisydd ddarllen darn o ryddiaith. Dewisir dau neu dri o ddarnau gan yr Arholwr a'u hanfon i'r ysgol ymlaenllaw, gan adael i'r athro wneud y dewis terfynol ar gyfer pob ymgeisydd.
- (b) Disgwylir i'r ymgeisydd ateb cwestiynau ar gynnwys ac ystyr y darn y mae newydd ei ddarllen. Rhoddir y cwestiynau iddo ar bapur, ond ni fydd y darn ei hun o'i flaen wrth iddo eu hateb.
- (c) Bydd cyfle i'r ymgeisydd ymddiddan â'r athro ar bwnc y mae ganddo ddi-ddordeb ynddo. Yn ystod y flwyddyn bydd ysgolion wedi ymarfer trafod ar lafar bynciau cyffredin fel y rhain—"fy sir i," yr Eisteddfod, cynghorau lleol, chwaraeon a mabolgampau, crefftau, ffermio, diwydiannau, teledu, ffasiynau, gwyliau, dawnsio, neu unrhyw bwnc arall y mae gan yr ymgeiswyr ddi-ddordeb ynddo—a bydd rhyddid i'r athro gynnig pwnc i bob ymgeisydd, a'i brocio â chwestiynau pwrpasol os bydd eisiau.

Cymraeg 3

- (a) Darllenir darn o ryddiaith, wedi'i ddewis gan yr Arholwr, fel yn CYMRAEG 1 a 2 uchod.
- (b) Gofynnir cwestiynau ar gynnwys yr un darn i brofi a yw'r ymgeisydd yn ei ddeall. Rhoddir y cwestiynau iddo ar bapur, a rhyddid iddo gadw'r darn ei hun o'i flaen ac edrych arno wrth geisio ateb y cwestiynau. Disgwylir atebion Cymraeg yn unig.
- (c) Rhoddir llun neu gyfres o luniau i'r ymgeisydd a disgwylir iddo ateb cwestiynau'r athro ac ymddiddan ag ef, yn Gymraeg, ar yr hyn a welir ynddynt.

Ymhob un o'r arholiadau llafar hyn rhoddir y darn darllen ychydig ymlaenllaw i bob ymgeisydd er mwyn iddo'i astudio. Bydd prawf llafar pob ymgeisydd yn cymryd tua chwarter awr.

Caniateir wrth gwrs i ymgeisydd ddefnyddio ffurfiau llafar wrth siarad â'r arholwr—ac yn yr arholiad ysgrifenedig hefyd os mynn. Dymunir tynnu sylw athrawon at y pamffledyn "CYMRAEG BYW" (Rhifyn 1), a gyhoeddwyd, ar ran Gyfadran Addysg Coleg y Brifysgol, Abertawe, gan Lyfrau'r Dryw, Llandybie (pris 2/-).

WELSH LITERATURE

Candidates will be required to take one examination of 2½ hours' duration.

The paper will be divided into three sections.

Section A

Questions on selections of Welsh Literature which the candidates will have studied. TWO questions should be answered, from a choice of three.

The selections for the 1965 examinations are :

Folk Tales—

- 'Breuddwyd Macsen' (See 'Tair Chwedl' (D. Gwynallt Evans) or 'Cyfres Chwedl a Chân', Rhif V)
- 'Branwen ferch Llŷr' ('Cyfres Chwedl a Chân', Rhif VI)
- 'Chwedl Llyn y Fan' ('Cyfres Chwedl a Chân', Rhif VI)
- 'Chwedl Cantre'r Gwaelod' ('Cyfres Chwedl a Chân', Rhif V).

Candidates may study these tales from other publications, e.g. 'Cymru'r Plant', should they wish to do so.

A Personality—

- 'Twm o'r Nant' (See 'Hunangofiant a Llythyrau Twm o'r Nant' (G. M. Ashton), Cyfres Llyfrau Deunaw, Gwasg Prifysgol Cymru—the letters need not be studied— or 'Twm o'r Nant' (Wyn Griffith), Cyfres Dathlu Gŵyl Ddewi (1953), Gwasg Prifysgol Cymru.)

Plays—

- 'Ei Seren Tan Gwmwl' (Gwilym T. Hughes), Gwasg Gee, or
- 'Pan Ddél Mai' (Gwilym T. Hughes), Gwasg Aberystwyth.

Section B

This section will aim to test candidates' general reading. A wide range of books is suggested, and two questions will be set on each book. Candidates will be expected to answer TWO questions, i.e. on two separate books, so the more books they have read, the greater the choice.

In the 1965 examination, questions will be set on the following books :

- 'Straeon Wil' (J. O. Williams), Gwasg Gee
- 'Trysor y Môr Ladron' (T. Llew Jones), Llyfrau'r Dryw
- 'Troeon Bywyd' (Daniel Owen), Hughes a'i Fab
- 'Croesi'r Paith' (R. Bryn Williams), Llyfrau'r Dryw
- 'Anturiaethwyr y Ganrif Hon' (Hydwedd Boyer), Gwasg y Brython.

Section C

General questions dealing with poetry. It is suggested that the following be studied :

- Ballads : 'Guto Nyth Brân' (I. D. Hooson) ; 'Stori Siaci'r Gwas' (from 'Straeon ar Gân,' (Sarnicol) ; 'Baled y Pedwar Brenin' (Cynan).
- Sonnets : 'Gwenci' and 'Y Llwynog' (R. Williams Parry).
- Ode : from the poem "Gwraig" by Mathonwy Hughes (See *Cyfansoddiadau a Beirniadaethau Eisteddfod Genedlaethol Aberdâr, 1956*) ; the second part— "Heddiw'n Wrach"—
"Wedi ffars, eneidiau ffôl
Llwyddodd lle methodd rhai mwy."
- Lyrics : 'Hafod Lom' (A. Gwynn Jones)
'Eifionydd' (R. Williams Parry)
'Melin Trefin' (Crwys)
'Aberdaron' (Cynan)
'Medi' (Eifion Wyn)
- 'Englynion' : 'Llys Ifor Hael' (Ieuan Fardd)
'Cyfnos' (Gwallter Mechain)
'Y Rhosyn a'r Grug' (Pedrog)
'Blodau'r Grug' (Eifion Wyn)
'Y Gorwel' (Dewi Emrys)
'Neuadd Mynytho' (R. Williams Parry).

An elementary study of "cynganedd" is suggested.

In this section candidates will be expected to answer TWO questions from a choice of five.

LLENYDDIAETH GYMRAEG

Disgwylir i ymgeiswyr eistedd un arholiad o ddwy awr a hanner. Bydd y papur wedi'i rannu'n dair adran.

Adran A

Bydd yr adran hon yn cynnwys cwestiynau ar ddetholion arbennig o lenyddiaeth Gymraeg y bydd ymgeiswyr wedi'u hastudio. Disgwylir iddynt ateb DAU gwestiwn o ddewis o dri.

Dyma'r detholion ar gyfer arholiad 1965 :

Chwedlau a Straeon Gwerin—

'Breuddwyd Macsen' (Gweler 'Tair Chwedl' (D. Gwynallt Evans) neu 'Cyfres Chwedl a Chân, Rhif V)

'Branwen ferch Llŷr' ('Cyfres Chwedl a Chân', Rhif VI)

'Chwedl Llyn y Fan' (Cyfres Chwedl a Chân, Rhif VI)

'Chwedl Cantre'r Gwaelod' ('Cyfres Chwedl a Chân,' Rhif V)

(Caniateir i ymgeiswyr astudio'r chwedlau hyn mewn cyhoeddiadau eraill, e.e. 'Cymru'r Plant,' os mynnant).

Georg-Eckert-Institut
für internationale
Schulbuchforschung
Braunschweig
Schulbuchbibliothek

Gŵr Enwog—

'*Twm o'r Nant*' (Gweler 'Hunangofiant a Llythyrau Twm o'r Nant' (G. M. Ashton), *Cyfres Llyfrau Deunaw*, Gwasg Prifysgol Cymru—nid oes rhaid astudio'r llythyrau—neu 'Twm o'r Nant' (Wyn Griffith), *Cyfres Dathlu Gŵyl Ddewi* (1953), Gwasg Prifysgol Cymru.)

Drama—

'*Ei Seren Tan Gwmwl*' (Gwilym T. Hughes), Gwasg Gee, neu
'*Pan Ddêl Mai*' (Gwilym T. Hughes), Gwasg Aberystwyth.

Adran B

Amcan yr adran hon fydd profi darllen cyffredinol yr ymgeiswyr. Rhoddir digon o ddewis yn y rhestr o lyfrau yr awgrymir eu darllen, a cheir dewis ar y papur arholiad o ddau gwestiwn ar bob llyfr. Disgwylir i ymgeiswyr ateb DAU gwestiwn o'r adran hon, hynny yw, un gwestiwn yr un ar unrhyw ddau lyfr. Felly, po fwyaf o'r llyfrau a ddarllenir, mwyaf y bydd y dewis.

Gosodir cwestiynau ar y llyfrau a ganlyn yn arholiad 1965 :

'*Straeon Wil*' (J. O. Williams), Gwasg Gee

'*Trysor y Môr-ladron*' (T. Llew Jones), Llyfrau'r Dryw

'*Troeon Bywyd*' (Daniel Owen), Hughes a'i Fab

'*Croesi'r Paith*' (R. Bryn Williams), Llyfrau'r Dryw

'*Anturiaethwyr y Ganrif Hon*' (Hydwedd Boyer), Gwasg y Brython.

Adran C

Cwestiynau cyffredinol ar farddoniaeth. Awgrymir astudio'r detholion a ganlyn :

Baledi : '*Guto Nyth Brân*' (I. D. Hooson) ; '*Stori Siaci'r Gwas*'
(allan o '*Straeon ar Gân*' (Sarnicol) ; '*Baled y Pedwar Brenin*'
(Cynan)

Sonedau : '*Gwenci*' a '*Y Llwynog*' (R. Williams Parry)

Cywydd : allan o'r Awdl "*Gwraig*" gan Mathonwy Hughes
(Gweler *Cyfansoddiadau a Beirniadaethau Eisteddfod Genedlaethol Aberdâr*, 1956) ; yr ail ran—
"*Heddiw'n Wrach*"—

"*Wedi ffars, eneidiau ffôl . . .*

Llwyddodd lle methodd rhai mwy."

Telynegion : '*Hafod Lom*' (A. Gwynn Jones)

'*Eifionydd*' (R. Williams Parry)

'*Melin Trefin*' (Crwys)

'*Aberdaron*' (Cynan)

'*Medi*' (Eifion Wyn)

Englynion : 'Llys Ifor Hael' (Ieuan Fardd)
 'Cyfnos' (Gwallter Mechain)
 'Y Rhosyn a'r Grug' (Pedrog)
 'Blodau'r Grug' (Eifion Wyn)
 'Y Gorwel' (Dewi Emrys)
 'Neuadd Mynytho' (R. Williams Parry)

Awgrymir astudio cyghanedd syml.

Disgwylir i ymgeiswyr ateb DAU gwestiwn o bump yn yr adran hon.

WOODWORK

The examination will consist of (a) an assessment of course work, (b) a practical test and (c) a theory paper.

The syllabus is intended to be a framework which will allow the widest possible scope to schools with varying facilities and special interests.

It is hoped that the development of the examination will lead to a sound knowledge of basic construction, which the candidates will be able to show to advantage in the practical and theory tests.

(a) Course Work

This should comprise work executed by the candidates over a period of not less than one year immediately prior to the examination. Unfinished work may be submitted. It will be assessed by the class teacher and a sample cross-section from each school will be re-assessed by an external moderator, or some other means adopted to ensure a reasonable uniformity of standards.

Course work will carry 25% of the total marks for the subject.

(b) Practical Test

Each task set will be such that an average candidate could be expected to complete it in eight hours. If necessary, additional time, not exceeding 2 hours, will be allowed, and any such additional time will be recorded for the information of the Examiner.

The list of tasks, together with cutting lists of materials and details of tools required (other than those normally in adequate supply in the school workshop), will be sent to each school as early as possible in the Spring Term. This list will be accompanied by a pictorial sketch or photograph of each finished article. Each candidate will choose one task from the list supplied. All timber required must be planed to size beforehand.

The practical test will take place about one month before the commencement of the written examinations. It should begin with a 3-hour period on a specified date, in the presence of an invigilator and

the handicraft teacher. The remainder of the test will be carried out at times convenient to the school, under the supervision of the handicraft teacher.

The handicraft teacher should make all necessary arrangements for the use of specialized equipment. Examination papers should be opened at the beginning of the first working period and withdrawn at the end of each working period.

Working drawings will be large and clearly drawn and dimensioned, so that it will not be necessary for candidates to make involved calculations. Pictorial and/or exploded views will be used where necessary.

It is desirable that, in the examination, there should be a separate vice position, equipped with the necessary tools, for each candidate. Only one replacement piece of wood will be allowed for any candidate during the practical test ; a note must be made of any such replacement, and the reason stated.

All articles will be returned to candidates after they have been marked.

The practical test may include any of the following joints and processes :

Housing joint : through and stopped (dovetail excluded).

Halving joint : including dovetail.

Bridle joints.

Mortice and tenon joint : including stopped, haunched, stub, bare-faced, plain, and wedged (exterior).

Simple through dovetails.

Simple curving of edges, ends and corners, using bow saw coping saw and spokeshave.

Simple decorative treatment, such as bevels and chamfers.

Simple lathe work. (No other machinery is to be used.)

The practical test will carry 50 % of the total marks for the subject.

(c) Theory Paper

The theory paper will be of 2 hours' duration and will carry 25 % of the total marks for the subject.

The paper will be divided into two sections, as follows :

Section A A choice of TEN from fifteen questions requiring short, concise answers and/or sketches, each question carrying six marks.

Section B A choice of TWO from six questions demanding more detailed answers, each question carrying twenty marks.

The paper set may include questions on any of the following topics :

Safety precautions.

The correct use and care of tools normally used in school workshops, including the woodwork bench and its accessories.

Maintenance of cutting edges ; planes and chisels.

A knowledge of the preparation of timber prior to its bench use. The uses of materials such as hardboard, laminboard, blockboard, plywood, chipboard, plastic-faced boards.

The suitability of various timbers for particular uses.

The main applications of the common joints and their uses in basic construction, including planning and assembly techniques.

The ability to describe briefly and illustrate simple wood-working processes and methods of procedure.

Simple design problems involving articles likely to be within the candidate's experience.

A working knowledge of nails, screws, adhesives and abrasives.

Suitable finishes.

Elementary wood-turning.

A knowledge of hinges, fastenings and catches.

It is hoped that teachers will not restrict their teaching to the limits of this syllabus but will pay attention to the background of the craft, avoiding excessive factual knowledge which can only serve to encourage mere rote learning.

