

roofs, retaining-walls, arches, buttresses, and foundations to general building practice. Candidates to be allowed the use of pocket companions or handbooks issued by the Carnegie Steel Company or Dorman, Long, and Co., showing properties of sections. Such books to be handed in for inspection twenty-four hours before the examination, and to have no additional notes added.

Reference-books recommended for General Study.

Reinforced Concrete (F. Rings).
Reinforced Concrete (Hool).
Reinforced Concrete (C. F. Marsh).
Reinforced Concrete Manual (Marsh and Dunn).
Principles of Structural Mechanics (P. Waldram), Chapters 1 to 5, 7 to 23, 25 to 30, inclusive.
Stresses and Thrusts (G. A. T. Middleton), Chapters 1 to 16 and 18 to 22.
Architects' and Builders' Pocket-book (Kidder-Nolan).
Rivington's Building Construction, Vol. iv.

4. BUILDING CONSTRUCTION (ADVANCED APPLIED CONSTRUCTION).

(a.) Foundations, underpinning, shoring, scaffolding, reinforced concrete, brickwork, masonry, carpentry, joinery, structural steel-work, plumbing, slating, tiling, plastering, painting, glazing.

(b.) Materials of construction: The materials used in the construction of buildings, including cement, lime, sand, gravel, stone, brick, timber, copper, iron, steel, slates, tiles, lead, zinc, and oils, paint, and varnish.

Reference-books recommended for General Study.

Building Construction, 2 vols. (C. F. Mitchell).
Building Construction, 4 vols. (Rivington), (modern edition by W. N. Twelvetrees).
Building Construction (edited by F. M. Simpson).
Architect's Pocket-book (Kidder-Nolan).
Australian Building Practice (J. Nangle).
Building Materials (G. A. T. Middleton).
Modern Practical Joinery (Ellis).
Modern Practical Carpentry (Ellis).
Reinforced Concrete (F. Rings).
Reinforced Concrete (Hool).
Reinforced Concrete (C. F. Marsh).
Reinforced Concrete Manual (Marsh and Dunn).
Testing of Materials (W. C. Union).

5. HYGIENE, SANITATION, LIGHTING, AND FIRE-PREVENTION.

(a.) Site and aspects, soils and subsoils, ventilation, heating, and hot water engineering.

(b.) Sanitary plumbing and drainage, gas and water supply.

(c.) General knowledge of the systems of lighting, natural and artificial, their suitability for various occupations and their influence upon health. General knowledge of electricity and magnetism, relating to induction, electric current, units of electrical quantities, methods of generating and systems of wiring and insulating, and the prevention of fusing. Only such knowledge is required as is essential to an architect in his usual practice.

(d.) General knowledge of modern methods of fire and panic prevention in relation to the designing of buildings and their fittings.

Reference-books recommended for General Study.

Architectural Hygiene (B. F. and H. P. Fletcher).
Domestic Sanitation and Plumbing (Herring Shaw).
Modern Sanitary Engineering (G. Thomson).
Elementary Electricity (S. P. Thompson).
Fire-prevention and Fire-protection applied to Building Construction (J. K. Freitag).
Sanitary Fittings and Plumbing (G. L. Sutcliffe).

6. ARCHITECTURAL ORNAMENT AND DECORATION.

A general knowledge of historic ornament, mouldings, and details of architecture of the nations and at the periods set forth below, and knowledge of the influence and materials affecting the development of such features and details, and knowledge of the true application of decorative motifs:—

Ancient Greece; ancient Rome; mediæval England; Renaissance in Italy; Renaissance in France; Renaissance in England.

It is essential for this subject that the candidate should be able to make sketches of the features he describes.

Reference-books recommended for General Study.

Traite Elementaire d' Architecture (Pierre d'Esquie).
Practical Notes for Architectural Draughtsmen (Cross and Munby).
Fragments d' Architecture Antique (H. d'Espouy).
Fragments d' Architecture de la Renaissance (H. d'Espouy).
Civil Architecture (Sir Wm. Chambers).

Handbook of Ornament (Meyer).

Styles of Ornament (Speltz and Spiers).

Gothic Mouldings (Paley).

Analysis of Gothic Architecture (R. and A. J. Brandon).

7. THEORY OF ARCHITECTURAL DESIGN.

(Not required at present.)

8. DRAUGHTSMANSHIP.

A drawing to be made of a simple subject set by the examiners, fully rendered with shadows projected, and in either elevation or perspective, or both, as may be required.

Reference-books recommended for General Study.

Designs of the Ecole des Beaux Arts (published annually).
Architectural Shades and Shadows (M. C. Goodwin).
Principles of Architectural Perspective (Middleton).
Architectural Perspective (Ferguson).
Architectural Drawing (R. P. Spiers).
Traite Elementaire d' Architecture (Pierre d'Esquie).

9. ORAL EXAMINATION.

To be based on the papers set and the drawings submitted. The questions to be laid down uniformly for all centres of examination.

IV. FINAL EXAMINATION.

1. ARCHITECTURAL DESIGN (TEST SUBJECT).

(a.) Six months before the date appointed for the examination two alternative subjects for a design will be announced. Candidates who have made application for the schedule of these subjects have the option of selecting either of them. The subject selected is to be worked up by him, and is to consist of all necessary plans, elevations, and sections drawn to a suitable scale as for a contract, with a sketch perspective and a sheet of typical details drawn to a larger scale. These drawings, properly mounted on cardboard or strainers, and accompanied by a sealed envelope containing the candidate's name, and a declaration that the design is entirely his own design and execution, shall be lodged at the registered office of the Institute in Wellington, addressed to the Secretary, by a date laid down in the schedule of subjects, and not less than two months before the commencement of the remaining portion of the examination. Carriage to be paid by the candidate. The Secretary will place these drawings before the Board of Examination appointed by the Committee of Architectural Education, who will judge the designs submitted and record their approval or otherwise. Only those candidates whose designs are approved by the Board will be permitted to sit for the completion of the examination. The designs shall be numbered by the Secretary in the order of their arrival, and he shall similarly number and retain the sealed envelopes unopened until the decisions of the Board are made known, which date shall be at least one month prior to the date for the remainder of the examination.

(b.) To the successful candidates in the subject set under (a) the Secretary shall forward, with the notification of their designs being approved, a notice of the subject to be set under (b). This portion of the examination shall be a further test in design. The general nature of the subject to be set, without details, shall be notified as above, one month before the examination. The details of the problem are to be announced only in the examination-room, and will embrace either a small problem or a small subject of a larger one. This is to be worked out in the examination-room under supervision. Enlarged details of the design may be required.

Reference-books recommended for General Study.

Principles of Planning Buildings (P. L. Marks).
Essentials in Architecture (J. Belcher).
Modern Buildings (G. A. T. Middleton).
Houses and Gardens (Lutyens) (L. Weaver).
Recent English Domestic Architecture (Technical Journals, Limited), 5 vols.
Designs of the Ecole des Beaux Arts (published annually).
Town-planning in Practice (R. Unwin).
Civic Art (T. H. Mawson).

2. PROFESSIONAL PRACTICE.

The relations of employer, contractor, subcontractor, and architect. Laws and by-laws relating to buildings, building contracts, and the rights of building owners, contractors, subcontractors, merchants, and employees.

3. SPECIFICATIONS.

A short specification for the design done in the examination-room, or of a portion thereof, or such other subject as may be set by the Board of Examiners.

Reference-books recommended for General Study.

Specifications (F. W. Masey).
Specifications (J. Leaning).