

2. Theory of Construction.
3. Strength and Quality of Materials, and description of Workmanship, Tools, and Plant.
4. Analysis of Prices.
5. Measurement and estimate of Builders' Work, including taking off Quantities from Drawings and preparing the Abstracts and Bills of Quantities.

In addition to the above five subjects a candidate may take up any of the following optional subjects:—

- A. Euclid (the first three Books).
- B. Algebra, including quadratic equations.
- C. Plane Trigonometry.
- D. Geometrical Drawing and Freehand Sketches in outline.
- E. Chemistry and Mineralogy relating to Building Materials.

IV. A fee of £1 will be required from each candidate attending the preliminary part of the examination, and a further fee of £4 from each candidate who may be admitted to the competitive part.

V. Application for permission to attend an examination must be made at such times and in such manner as the Commissioners may appoint.

* * Candidates must be ready to serve at any Station at home or abroad.

The Civil Service Commissioners further give notice, that an Open Competitive Examination for five situations as Assistant-Surveyors in the Royal Engineer Department of the War Office will be held in London, under the above Regulations, on Tuesday the 14th March 1882, and following days.

No person will be admitted to the examination from whom the Civil Service Commissioners have not received, on or before the 3d March, an 'application,' in the candidate's own handwriting, on a prescribed form, which may be obtained from the Secretary at once.

CIVIL SERVICE COMMISSION,

February 3, 1882.

The Civil Service Commissioners hereby give notice, that the following Regulations have been approved by the Lords Commissioners of Her Majesty's Treasury, viz.:—

SPECIAL REGULATIONS (Supplementary to the General Regulations issued 8th April 1872, and amended by subsequent notices in the London Gazette) respecting Open Competitive Examinations for the situation of Engineering Draughtsman in the Department of the Director of Engineering and Architectural Works in the Admiralty, at the Head Office.

I. The limits of age for this situation are 26 and 32, and candidates must be of the prescribed age on the first day of the examination.

II. Candidates will be required to have served in a public or private office under a Civil Engineer for at least five years, and to show that they have profited by that training. Evidence on this point must be sent in at least a week before the date of the examination. If it prove *prima facie* satis-

factory, the candidate will be admitted to examination, subject to such further inquiry as may be necessary.

III. The examination will consist of two parts, and will be in the following subjects, viz.:—

PART I.—PRELIMINARY.

Handwriting.
Orthography.
Arithmetic (including Vulgar and Decimal Fractions).

* * No candidate who fails to show satisfactory proficiency in any of the subjects specified above will be admitted to the competitive part of the examination.

PART II.—COMPETITIVE.

A.

1. Practical Geometry.
2. Algebra to Quadratic Equations, including Progressions and Logarithms.
3. Rudimentary Mechanics.
4. Drawings and Design of Engineering Works and details.
5. { Calculations of Stability and Strength of Structures; and
Calculations (Graphic) of Strains on Braced Structures.
6. Materials of Construction, their strength and uses.
7. Drawing and Design of Ironwork and Details of Construction in Ironwork.

B.

- a. { Drawings and Design of Ordinary Machinery; and
Calculations of Power and Work of Machines.
- b. Details of Construction in Hydraulic Engineering Works.
- c. { Specifications.
Measurement of Quantities, and
Estimates of Cost in Engineering Works.
- d. Levelling and Surveying.
- e. Any one Modern Language.

IV. Candidates must pass to the satisfaction of the Commissioners in the subjects numbered 1 to 7. They must also pass in two of the subjects from a to d. Marks may be obtained in the remaining two of these subjects and e.

V. A fee of £1 will be required from each candidate attending the preliminary part of the examination, and a further fee of £3 from each candidate who may be admitted to the competitive part.

VI. Application for permission to attend an examination must be made at such times and in such manner as the Commissioners may appoint.

CIVIL SERVICE COMMISSION,

February 3, 1882.

The Civil Service Commissioners hereby give notice, that the following Regulations have been approved by the Lords Commissioners of Her Majesty's Treasury, viz.:—

SPECIAL REGULATIONS (Supplementary to the General Regulations issued 8th April 1872,