

Geography.—(1.) General questions in industrial and physical geography, including the elements of physiography. (2.) The geography of the United Kingdom. (3.) The following sections, of which each candidate may select one only: (a) The colonies and dependencies; (b) Europe; (c) Asia, Africa, and America.

History.—(1.) General questions on English history. (2.) More detailed questions on the following periods of English history, of which each candidate may select one only: (a) The earliest historic times until 1485; (b) 1485–1688; (c) 1689 to the date of the examination.

II. Compulsory and Optional Subjects.

(a.) *Compulsory.*—(1.) *Needlework*.—Theoretical: Stitches used in plain sewing, appropriate use of each; various modes of joining materials, appropriate use of each; setting on bands, gathering and plaiting materials; patching dress materials, calico and flannel; darning linen, calico, knitted and woven woollen materials; right and wrong way of cutting materials for various parts of garments. Practical: Tacking on patches, making a buttonhole, or other practical needlework.

(2.) *Freehand Drawing*.—Design, on the basis of a common plant, to fill a given space. A plant, or a drawing showing the characteristic growth of the plant, will be placed before each candidate.

(b.) *Optional.*—*Group A.—English Literature.*—A general paper testing knowledge of classical and current literature, followed by questions on certain selected books, of which each candidate may select the questions relating to one, and only one, subject. The selected subjects for June, 1897, are—(1) Shakespeare, “Hamlet”; (2) Shakespeare, “King Lear”; (3) Shakespeare, “Julius Cæsar”; (4) Shakespeare, “Tempest”; (5) Milton, “Paradise Lost,” Books VII., VIII. In the general paper full marks will be given for correct answers to about one-half of the questions.

French, German.—(1.) Translation of passages by classical authors from and into the language. (2.) Knowledge of the accidence and of the fundamental rules of syntax. (3.) Dictation: A simple extract to be read by the examiner and taken down by the candidates.

Latin.—Translations from the easier classical authors; questions on accidence, parsing and syntax; short English sentences and short piece of connected prose to be turned into Latin.

Group B.—Botany, including Practical Work.—The elements of chemistry, physics, and mechanics, as far as they are necessary for the intelligent study of elementary botany. The main outlines of the structure of the following organisms as far as they illustrate the fundamental facts of vegetable morphology: *Torula*, *spirogyra*, *fucus*, *pteris*, *selaginella*, *pinus*, *helianthus*; elementary vegetable physiology and anatomy. The processes of nutrition and fertilisation of plants; the principles of classification of main groups. Candidates will also be required to describe actual specimens from the more common natural orders, and to know their leading characteristics.

* *Chemistry, including Practical Work.*—The conservation of matter; the laws of chemical combination, elements and compounds; formulæ and equations; determination of the exact proportion by volume and weight of the constituents of air and water; the more commonly occurring non-metallic elements and their chief compounds; the quantitative investigation of well-known chemical reactions; the more important chemical researches of Black, Priestley, Cavendish, and Lavoisier; vapour densities; specific heats; determination of equivalents; the atomic theory; atomic and molecular weights, methods of determination; the preparation and purification of chlorides, nitrates, and sulphates of common metals; sodium, potassium, and iron, and the chief compounds into which they enter; volumetric analysis restricted to acidimetry and alkalimetry.

Elementary Mathematics.—Algebra up to and including easy quadratic equations; geometry, covering the subjects of the first book of Euclid, with easy riders.

The Laws of Health.—The elements of chemistry, physics, and mechanics as far as they are necessary for the intelligent study of elementary physiology. The general structure of the heart; the circulation of the blood; the main features of the alimentary and respiratory systems; classification of food-stuffs; the action of the various secretions upon them; bread, meat, and milk as articles of diet; adulteration of food; detection of adulterants; the composition of air, water, storage of water; the detection of impurities in air and water; ventilation; the spread of disease by impure water; bacteria.

SIDNEY WEBB, Chairman of the Board.

WM. GARNETT, Secretary of the Board.

St. Martin's Place, W.C., 5th April, 1897.

* Only those candidates who have satisfied the examiner in the paper-work will be allowed to take the practical examination, which will be held in the laboratory of one of the polytechnics.