

successfully operated on will be accepted. (*m.*) That his limbs are well formed and developed. (*n.*) That there is free and perfect motion of all the joints. (*o.*) That his feet and toes are well formed. (*p.*) That he does not suffer from any inveterate skin-disease. (*q.*) That he has no congenital malformation or defect. (*r.*) That he does not bear traces of previous acute or chronic disease pointing to an impaired constitution. (*s.*) If the candidate, in the opinion of the Board, appears to be not of pure European descent, a statement to this effect will be entered in the report by the Board.

APPENDIX II.—SYLLABUS OF SUBJECTS FOR THE ARMY ENTRANCE EXAMINATION. (See paragraph 5.)

*English.* (Marks, 2,000.)

Dictation. Essay: Three alternative subjects to be given for an essay or letter, of which candidates may choose one. *Précis.* Reproduction of a passage read out. General paper (to test general knowledge and intelligence).

*English History and Geography.* (Marks, 2,000.)

*History.*—The history of England, 1558 to the end of the reign of Queen Victoria. (Special attention should be paid to the growth of the British Empire. Questions will be set which will give the candidate an opportunity of showing his knowledge of European history as affecting English history during this period. Such questions will deal only with the broad outlines of the subject, and knowledge of detail will not be expected. Some choice of questions will be allowed.)

*Geography.*—The main physical features of the world, with special reference to the British Empire. General political geography of the world, with special reference to British possessions and Egypt, and the foreign frontier territories adjacent to them.

*French.* (Marks, 2,000.)

1. Translation from French. 2. Translation into French. 3. An essay or letter on one of two or more alternative subjects. 4. Colloquial—(1) Examiners to converse, candidate to interpret in English; (2) candidate to talk in French.

*German.* (Marks, 2,000.)

As for French.

*Mathematics.*—A. (Elementary.) (Marks, 2,000.)

*Arithmetic and Mensuration.*—The ordinary rules of arithmetic. The metric system. Use of decimals in approximative calculation (contracted methods of calculation are not expected). Measurement by length: scale, vernier, calipers. Measurement of area by dimensions (rectilinear figures and circle), by squared paper, by weighing; area of cross-section of a tube. Measurement of volume by dimensions, by displacement (overflow, graduated jar, burette), by use of the principle of Archimedes. Measurement of weight, use of balance. Measurement of density or specific gravity. (Algebraic formulæ and symbols may be used. Questions will not be set on present value or true discount. The extraction of the cube root, and the use and theory of recurring decimals, are not required.)

*Geometry.*—The elements of geometrical drawing and practical geometry. Measurement of angles, use of protractor. The substance of Books I to III of Euclid's Geometry, including application to the measurement of area. A working knowledge of as much of the properties of similar figures and solid figures as is necessary for plan-making and simple problems in mensuration.

*Algebra.*—To easy quadratic equations. The elementary use of graphs. (The solutions of equations should be worked out to a few significant figures; the candidates should be accustomed to test the accuracy of solutions by substitution. Skill in elaborate analysis, such as the simplification of complicated fractions, will not be looked for. The questions in elementary mathematics will test knowledge of fundamental principles and readiness in application to simple practical problems. Neatness and accuracy of working are expected, and the methods of solution employed must be clearly indicated. In the absence of special instructions that a question is to be answered by a particular method, candidates are at liberty to choose their own method from any branch of mathematics.)

*Mathematics.*—B. (Intermediate.) (Marks, 2,000.)

Includes Mathematics A (elementary) together with,—

*Arithmetic.*—Use of four-figure logarithms will be required; use of slide-rule permitted.

*Geometry.*—Geometrical drawing and practical geometry or plane figures. The substance of Books I to IV and VI of Euclid's Geometry. The elements of theoretical solid geometry with application to mensuration of solids. (Proportion may be treated algebraically, and the complications of Euclid's definitions and nomenclature avoided. The special treatment of incommensurables will not be required.)

*Algebra.*—The meaning and the simplest properties of fractional and negative indices; graphs of the simpler algebraic functions; quadratic equations; use of graphs in solving equations and in illustrating and solving practical problems; practical applications of gradients and of areas of graphs. (Grasp of elementary principles and readiness in practical application will be looked for, but great skill in analytical transformations will not be demanded.)

*Trigonometry.*—Solution of plane triangles; graphs of trigonometrical functions; use of four-figure tables; formulæ for the trigonometrical ratios of the sum and difference of two angles, and for the product forms of the sum and difference of the sines and cosines of two angles. (Readiness in straightforward practical applications will be looked for, but no great analytical skill will be demanded. A knowledge of the general expression for all angles which have a given sine or other trigonometrical ratio will not be required.)