

## SUBJECTS OF EXAMINATION.

### MATRICULATION.

#### MATHEMATICS.

Arithmetic.

Algebra. (Colenso's).

EUCLID, Bb. I., II., III., IV., VI., and definitions of B. V. (Colenso's Ed. of Simpson's).

Nature and use of Logarithms. (Cherriman's).

Plane Trigonometry, as far as the solution of plane triangles. (Cherriman's).

#### ENGLISH.

Grammar and Composition.

#### FRENCH.

Grammar and Exercises. (DeFiva's).

VOLTAIRE, Histoire de Charles XII., Bb. I., II., III.

CORNILLE, Horace, Act IV.

#### HISTORY AND GEOGRAPHY.

Outlines of British History to the present time.

Outlines of Modern Geography.

Geography of the British Empire, including her Colonies.

#### DRAWING.

Drawing from a copy.

### FIRST YEAR.

#### MATHEMATICS.

EUCLID, XI, P. 1 to 21.

Statics and Dynamics. (Cherriman's).

Astronomy. (Main's in Weale's series).

#### ENGLISH.

Composition.

Orthographical, Etymological, and Rhetorical forms of the English Language. (Fowler's English Language, Parts III., IV., VII.)

#### FRENCH.

Grammar.

Translation from English into French.

WIRZ, Construction de chemins de fer, Chap. I.-X., inclusive. (Roret's series).

#### CHEMISTRY.

Chemistry and Chemical Physics. (Fownes's Elements of Chemistry; Lardner's Handbook of Heat and Electricity, or Miller's Chemical Physics).

#### MINERALOGY AND GEOLOGY.

The properties and distinctive characters of the commonly occurring minerals and metallic ores.

The structural characters, conditions of occurrence, and classification of rocks generally.

Geological phenomena now in action, with theory of springs, currents, tides, winds, &c. (Dana's Manual of Mineralogy; Lyell's Elementary Geology; Buff's Physics of the Earth; Synopsis of Professor Chapman's Lectures)

#### DRAWING.

Drawing from a model.

Perspective. (Pyne's, Weale's Rudimentary Treatises).

#### SURVEYING AND GEODESY.

Construction, and use of field and office instruments.

Surveying operations.

Mensuration of areas and solids.

Levelling operations; cross sections.

Method of conducting a trigonometrical survey, and of finding the latitude and longitude, and variation of the compass.

(Simms's Mathematical Instruments, and Treatise on Levelling; Gillespie's Land Surveying; Williams's Practical Geodesy; Practical Mathematics, Chambers's Educational Course).