(II.) SURVEYING AND LEVELLING.

LAND SURVEYING—

Chain Surveys.
Compass and Theodolite Surveys.
Methods of keeping Field Notes.
Determination of Heights and Distances.
Plotting.

LEVELLING—

Longitudinal and Cross sections.
Plotting.

SETTING OUT—

Setting out Straight Lines and Curves.
Setting out Levels.

MENSURATION—

Lines, Surfaces and Solids.
Timber, Masonry, Iron and Earthwork.
Capacities of Reservoirs, etc.

Lectures will also be given on the distinctive features of Mining and Hydrographic Surveying.

Text Books.—Murray's Manual of Land Surveying (*a*).
Gillespie's Higher Surveying (*b*), (*c*).
Henck's or Trautwine's Railway Curves (*b*).

Fees for Special Students, $10.

(III.) GEODESY AND PRACTICAL ASTRONOMY.

GEODESY—

Field Work.
Computation of the Triangles (considering the Earth, 1st as a Sphere; 2nd, a Spheroid).
Determination of the Figure of the Earth.