# II. YEAR.

## MATHEMATICS.

Differential and Integral Calculus. Spherical Trigonometry. Plane Astromony.

### PHYSICS.

Hydrostatics. Optics.

### EXPERIMENTAL PHYSICS.

Light: Use of lenses and mirrors.
Calculat on of focal lengths.
The prism and spectroscope.
Goniometer and heliostat.

### DRAWING.

Subjects of First Year continued.

Coloring and shading applied in both topographical and construction drawing.

Descriptive Geometry in its application to solids bounded by curved surfaces. The various projections of the sphere and principles of map construction.

Machines and structures. (Drawings made from both copies and original notes.)

#### ENGINEERING AND SURVEYING.

Statics and Dynamics (pure and applied).
Strength and Elasticity of Materials.
Experimental work in Engineering Laboratory.
Transit-Theodolite Surveying.
Levelling.
Railway Location, curves, etc.
Mining Surveying.

### CHEMISTRY.

Chemistry, with special reference to industrial applications. Practical Chemistry.

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