

MINERALOGY AND GEOLOGY.

Elements of these Sciences.
 Blowpipe Practice.
 Determination of Minerals.

METALLURGY.

Iron and Steel.
 Mining and Ore Dressing.

III. YEAR.

EXPERIMENTAL PHYSICS.

Heat: Specific Heat. Latent Heat.
 Expansion of Air, Air Thermometer.
 Method of Least Squares.

DRAWING.

Subjects of previous years continued.
 Descriptive Geometry.
 Shades and Shadows.
 Stone cutting.
 Perspective Projection.
 Original Designs—Bridges, Roofs, Floors, Arches, etc.

ENGINEERING AND SURVEYING.

Statics and Dynamics (pure and applied).
 Strength and Elasticity of Materials.
 Theory of Construction.
 Practical Designs.
 Bridges, Roofs, Floors.
 Arches, Retaining Walls.
 Foundation, etc.
 Thermodynamics and Theory of Steam Engine.
 Hydraulics.
 Experimental work in Engineering Laboratory.
 Levelling.
 Profiles, Cross-sections, field work and plotting.
 Computation of quantities.
 Mathematical Theory of Surveying Instruments.
 Trigonometrical and Barometrical Levelling.
 Geodesy (considering the earth a Sphere).
 Practical Astronomy (treated in the manner required for the
 P.L.S. and D.L.S. Examinations).