Magnetism and Electricity: Magnets; laws of magnetic attraction and repulsion; polarity; magnetic induction; terrestrial magnetism; construction of simple voltaic cell; decomposition of water by electricity; electro-magnet; electric bell; telegraph; heating and lighting effects of the current.

NOTE.—In both Physics and Chemistry, practice in the proparation and manipulation of apparatus should form part of the Course. Where practicable, the Course should also include simple operations in glass-blowing and lathe work, and in hard and soft soldering.

CHEMISTRY

SECOND YEAR

March

Air: Its constituents; combustion in air, and resulting changes; detection of carbon dioxide and water vapour in air; rusting of a metal such as iron in the air, and how it affects the air.

Water: Decomposition of, into its elements; the obtaining of pure water, and how it differs from ordinary water.

Carbon: Its presence in plant and animal substances; combustion of carbon, and lime-water test for carbon dioxide.