Introduction to Bio-Chemistry BVOCOT-105

UNIT-1

Introduction to Laboratory apparatus: Pipettes- different types (Graduated, volumetric, Pasteur, Automatic etc.), Burettes, Beakers, Petri dishes, depression plates. Flasks - different types ) Volumetric, round bottomed, Erlenmeyer conical etc. Funnels - different types (Conical, Buchner etc.), bottles - Reagent bottles - graduated and common, Wash bottles - different type Specimen bottles etc., measuring cylinders, Porcelain dish, tubes - Test tubes, centrifuge tubes, test tube draining rack etc.

UNIT-2

Maintenance of lab glass ware and apparatus: Glass and plastic ware in Laboratory use of glass: significance of boro silicate glass; care and cleaning of glass ware, different cleaning solutions of glass care and cleaning of plastic ware, different cleaning solutions etc.

UNIT-3

Instruments 1 (Theory and demonstration) : Diagrams to be drawn Water bath: Use, care and maintenance Oven & Incubators: Use, care and maintenance. Water Distillation plant and water deionizers. Use, care and maintenance Refrigerators, cold box, deep freezers - Use, care and maintenance

Reflux condenser:

Use, care and maintenance Centrifuges (Theory and demonstration) Diagrams to be drawn Definition, Principle , Svedberg unit, centrifugal force, centrifugal field rpm.

UNIT-4

Instruments 2: Laboratory balance diagrams to be drawn Manual balances: Single pan, double pan, trip balance Direct read out electrical balances. Use care and maintenance: Colorimeter and spectrophotometer Principle Use, care and maintenance: pH meter principle, parts, Types of electrodes, salt bridge solution. Use, care and maintenance: Ph meter and electrodes.