

BACHELOR OF SCIENCE IN BIOTECHNOLOGY

SEMESTER – II

Laboratory Course-III

Paper Code: BTP-205

BTP 205: Laboratory course- III: Physics & Bioinstrumentations (Max. marks 80+20=100)

1. Determination of “g” by bar pendulum.
2. Determination of viscosity of liquid.
3. Determination of surface tension by capillary rise method.
4. Determination of focal lengths of convex lenses.
5. Determination of horizontal component of Earth’s magnetic field.
6. Determination of radius of curvature of a convex lens by Newton’s ring method.
7. Demonstration of the following instrumentations/methods:
 - UV-Visible spectrophotometer
 - IR –spectrophotometer
 - Atomic Absorption Spectrophotometer (AAS)
 - Chromatography
 - XRD
 - Centrifugation
 - Fluorescence
8. Paper Chromatography of amino acids, sugars, and purine and pyrimidine bases.
9. Colorimetric determination of any one amino acids.
10. Separation of pigments by adsorption chromatography.
11. Thin Layer chromatography separation - sugars & lipids.

Teachers will supply printed detailed instructions, procedure of the experiments.
