
MICROMETRY: Stage and Ocular Micrometers, Haemocytometer, Camera Lucida.

MICROTOMY: Paraffin Microtomy – Rotary and Rocking microtomes, Sledge microtome, hand microtome, Ultra microtome, Freezing edge microtome.


CENTRIFUGE: Ultracentrifugation – Ultracentrifuge, refrigerated centrifuge, Cell fractionation.


UNIT – IV: ELECTROANALYTICAL METHODS


CONDUCTIMETRY: Conductimetric measurements, Application of conductimetric measurements.

RADIO – ISOTOPES: Nature of Radioactivity. Types of radioactivity, Decay, Units of radio activity, Safety, Detection and measurement of radioactivity: Gieger – Muller tubes, Scintillation counters, Autoradiography, Biological uses of isotopes: Tracers, Isotope dilution analysis, Radio activatiy analysis.

ECOLOGICAL INSTRUMENT: Uses of Luxmeter, Anemometer, Rain gauge, Air samplers and Bomb Colorimeter.


ESTIMATION OF ACTIVITIES OF: Catalase, Peroxidase, Polyphenol oxidase and Amylases.
TISSUE CULTURE TECHNIQUES: Explant preparation, Sterilization, Media preparation, Various types of media, Cell culture, Cell suspension culture, Isolation of protoplasts, Protoplast culture, Protoplast fusion, Haploid production, Anther culture, Pollen culture, Embryo Culture, Somatic embryogenesis, Callus induction, Micropropagation.

REFERENCE BOOKS

COURSE – II AREA OF SPECIALIZATION (6 CREDITS)


UNIT – V: SCIENTIFIC WRITTING: Choosing the problem for research – Review of literature. Primary, secondary and tertiary sources. Bibliography – indexing and abstracting. Storage and retrieval of

REFERENCE BOOKS