

COURSE-IV: LABORATORY COURSE (BSCBO-104)

UNIT SCHEDULE

BLOCK-1- MICROBIOLOGY, MYCOLOGY AND PLANT PATHOLOGY

Unit-1-Study of Fungi- *Albugo*, *Phytophthora*, *Puccinia*, *Agaricus*, *Alternaria*, *Erysiphe*, *Saccharomyces*, *Mucor*

Unit-2-Study of Morphology and Structure of different types of Lichens

Unit-3-Symptoms, Morphology of pathogen and host-parasite relationship of plant diseases- Citrus canker, Wart disease of potato, Loose smut of wheat, Black rust of wheat, Red rot of sugarcane, Late blight of Potato, Early blight of Potato.

Unit-4-Different methods of Cultivation and Isolation of Microbes

BLOCK-2- DIVERSITY OF ALGAE AND BRYOPHYTES

Unit-5-Study of the Algae types -*Oscillatoria*, *Nostoc*, *Chlamydomonas*, *Volvox*, *Oedogonium*, by preparing temporary slides.

Unit-6-Study of the Algae types- *Vaucheria*, *Ectocarpus*, *Sargassum*, *Polysiphonia*, *Batracospermum* by preparing temporary slides.

Unit-7-Study of external features, internal structure and reproductive structures of *Riccia*, *Marchantia*, *Anthoceros*, with the help of permanent and /or temporary preparations.

Unit-8- Study of external features internal structure and reproductive structures of *Notothylus*, *Funaria* and *Polytrichum* with the help of permanent and /or temporary preparations.

BLOCK-3- PTERIDOPHYTES, GYMNOSPERMS AND PALEOBOTANY

Unit-9-Study of the external features and internal structures of rhizome, leaves, roots, sporangia and strobili of Pterodophytes- *Rhynia*, , *Selaginella*, *Equisetum*

Unit-10- Study of the external features and internal structures of rhizome, leaves, roots, sporangia and strobili of Pterodophytes -*Adiantum*, *Marsilea* and *Azolla*

Unit-11-Study of the morphology and anatomy of vegetative and reproductive parts of Gymnosperms -*Cycas*, *Pinus* and *Ephedra*

Unit-12-Study of fossil specimens: Impressions, Casts and Petrifications