

UNIVERSITY OF MADRAS

CENTRE FOR ADVANCED STUDIES IN BOTANY

M.SC., BOTANY ENTRANCE EXAMINATION (2024 – 2025) SYLLABUS

Multiple Choice Questions from the following topics at the B.Sc., levels:

Plant pathology, Embryology, Herbal Science (Plant /microbe based antimicrobial compounds). Molecular Biology, Genetics, Plant Cell Biology and Plant Physiology, Plant Biochemistry, Plant Biotechnology, Plant Anatomy and Plant Morphogenesis, Algology, Bryophytes, Pteridophytes, Biostatistics, Mycology, Gymnosperm and Angiosperm, Microbiology (Bacteria and Virus). Industrial Biotechnology, Plant Ecology, Paleobotany, Bioproducts from algae and Biotechniques.

Model Questions:

1. According to mass flow hypothesis, the food flows in upward and downward direction through
 - a. Apoplast only
 - b. Symplast only
 - c. Apoplast and symplast respectively
 - d. Symplast and apoplast respectively.
2. Leguminous plants are able to fix atmospheric nitrogen through the process of symbiotic nitrogen fixation. Which one of the following statements is not correct during this process of nitrogen fixation?
 - a. Leghaemoglobin scavenges oxygen and is pinkish in colour
 - b. Nodules act as sites for nitrogen fixation
 - c. The enzyme nitrogenase catalyses the conversion of atmospheric N_2 to NH_3 .
 - d. Nitrogenase is sensitive to oxygen.
3. Fibre of Commercial importance is derived from epidermis is
 - a. Flax b. Hemp c. Coir d. Cotton


DIRECTOR