



Code	Subject Title	Cr. Hrs	Semester
BOT-102	Botany Lab-I (Plant Diversity)	1	I
Year	Discipline		
1	Botany, Zoology, Chemistry-I		

Syllabus Outline: Culturing, preservation and staining of microorganisms. Study of morphology and reproductive structures of the plant types mentioned in theory identification of various plant types mentioned from prepared slides and fresh specimens.

Course Outline:

Culturing and staining of microbial types.
 Maintenance and preservation of cultures of microbes (Bacteria / Cyanobacteria / Algae / Fungi)
 Identification of various types mentioned in the syllabus from fresh / preserved specimens and prepared slides.
 Study of morphology and reproductive structures of the types mentioned in theory (Specimens/prepared slides)

Module Aims: The course is designed to provide an adequate knowledge about basic microbial techniques and morphological characteristics of different plant groups.

Learning Strategies:

1. Lectures
2. Group Discussion
3. Laboratory work
4. Seminar/ Workshop

Learning Outcome: Students are expected to familiarize with the morphological and systematic knowledge about different plant groups. They are able to make use of this knowledge for detail study in other disciplines.

Assessment Strategies:

1. Lecture Based Examination (Objective and Subjective)
2. Assignments
3. Class discussion
4. Quiz
5. Tests

Books Recommended:

1. **Lee, E. R. (2007).** *Phycology* (4th Ed). Cambridge University Press U.K.
2. **Sambamurty, A.V.S.S. (2005).** *A Textbook of Bryophytes, Pteridophytes, Gymnosperms and Paleobotany*. I.K. International Pvt. Ltd. New Delhi, Bangalore, Mumbai. 573 pp.
3. **Agrios, G.N. (2004).** *Plant Pathology*. (8th Ed.), Academic Press London.



4. **Mauseth. J.D. (2003).** *Botany: An Introduction to Plant Biology.* (3rd Ed.) Jones & Bartlett Pub.UK.
 5. **Prescott, L.M., Harley, J.P. and Klein, A.D. (2004).** *Microbiology.* (3rd Ed.), WM. C. Brown Publishers.
 6. **Biswas, C, and Johri, B.M. (1999).** *The Gymnosperms.* Narosa Publishing House. New Delhi and London.
 7. **Alexopoulos, C.J., Mims, C.W. and Blackwell, M. (1996).** *Introductory Mycology.* (4th Ed.), John Wiley and Sons, UK.
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