MANGALORE UNIVERSITY

DEPARTMENT OF BIOSCIENCES

M.Sc. ENVIRONMENTAL SCIENCE

ESP506 ENVIRONMENTAL BIOLOGY LAB

Course Outcomes:

CO1 Conduct experiments to detect the physico-chemical and biological properties of water.
CO2 Understand intertidal region and mangrove vegetation.
CO3Enhance the theoretical knowledge of environmental biology with lab experiments and observation of specimens.
CO4 Learn algal indices.

1. Study of microbial flora/planktons found in water/soil samples including pond bottom sediments.
2. Determination of Total alkalinity of different water samples.
3. Estimation of chloride in the water samples.
4. Determination of DO in water sample.
5. Estimation of Nygaard's algal indices in a given water sample.
6. Positive/ Negative staining of bacterial sample.
7. Determination of Total Hardness of different water samples.
8. Microscopic observations of microbes - Keys to identify microorganisms.
9. Practical exercises in identification of symbiotic organisms.
10. Study of aquatic communities – Aquatic plants and animals.
11. Study of intertidal organisms.
12. Study of mangrove vegetation.
13. Study of seaweeds.
14. Identification of bryophytes, ferns and higher plants.