

M.Sc. BOTANY
First Semester (Repeat)
LOWER PLANT DIVERSITY-I
(MSB - 101)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

Answer any four from Question no. 2 to 8
Question no. 1 is compulsory.

1. Describe the role of pigments in the classification of Algae. (10)
2. What are the different processes of genetic recombination in bacteria? Write briefly the different mechanisms of genetic recombination in bacteria. (2+8=10)
3. Describe with suitable diagram the ultrastructure of a bacterial cell. (10)
4. Describe the life cycle of *Puccinia* with suitable diagram. (10)
5. What is the ecological significance of Lichens? Discuss in details the uses of Lichens. (2+8=10)
6. Write the post fertilization changes in *Polysiphonia* with suitable diagrams. (7+3=10)
7. Define virus. Discuss the life cycle of λ - bacteriophage. (2+8=10)
8. Write a note on transmission of plant viruses. (10)
