

B.Sc. III Semester Degree Examination, November/December 2016
BOTANY

**Paper – III : Diversity of Vascular Plants, Pteridophytes Gymnosperms
and Morphology of Angiosperms**

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Questions of Part – I is compulsory.
2) Answer **any ten** questions from Part – II.
3) Labelled diagrams will enhance your answer value.

PART – I

- I. Answer the following : (2×8=16)
- 1) Write the structure and function of ligule.
 - 2) What is petrification ?
 - 3) How many types of canals are found in Equisetum ?
 - 4) Write the systematic position of Adiantum.
 - 5) What are foliaceous stipules ? Give example.
 - 6) What is catkin inflorescence ? Give example.
 - 7) Differentiate phylloclade from phyllode.
 - 8) What is velamen tissue ? Mention the function.

PART – II

- II. Answer **any four** of the following : (4×4=16)
- 9) Write about hydrophytic and xerophytic characters found in Equisetum.
 - 10) Describe the spore bearing structure of Adiantum.
 - 11) What is venation ? Explain the types.
 - 12) With the help of suitable diagrams, describe the structure of the coralloid root of Lycopodium.
 - 13) What is Aestivation ? Explain the types.
 - 14) Explain the special types of inflorescence.



III. Answer **any six** of the following :

(6×8=48)

- 15) Describe the structure of male strobilus of Gnetum.
- 16) Write a note on heterospory and seed habit.
- 17) Describe the structure of Marsilea Sporocarp HLS with the help of suitable diagram.
- 18) Write about the Geological time table.
- 19) Explain the underground modified stem.
- 20) Explain the modification of leaves including insectivorous plants.
- 21) What are aggregate and multiple fruits ? Explain the types with example.
- 22) Explain adhesion and cohesion of stamens with example.