

(i) Printed Pages : 2

Roll No.

(ii) Questions : 9

Sub. Code :

1	1	7	6	7
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Exam. Code :

5	0	1	2
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**Bachelor of Science (FYUP) 2nd Semester
(2055)**

BOTANY

Paper : Plant Diversity—II

Time Allowed : Three Hours]

[Maximum Marks : 60

Note :— Attempt **FIVE** questions in all, including Q. No. 1 which is compulsory and selecting **ONE** question from each unit.

Draw neat and well labelled diagrams wherever necessary.

1. Short Answer Type Questions :

- (1) What are vascular cryptograms ?
- (2) What are coralloid roots, and in which plant are they found ?
- (3) Write a note on spores of *Equisetum*.
- (4) The microspores of *Pinus* are shed at how many celled stage ?
- (5) Why is rhizophore of *Selaginella* called *structure sui generis* ?
- (6) Difference between mannoxylic and pycnoxylic wood.
- (7) Describe diploxylic Vascular Bundle.
- (8) Explain coenosorus. 8×1.5

UNIT—I

2. (a) Write note on structure and reproduction of *Rhynia*.
(b) Write illustrated note on structure of female gametophyte of *Selaginella*. 6,6
3. Write note on reproduction by spores in *Selaginella*. What is the importance of Heterospory. 12

UNIT—II

4. Describe in detail *Equisetum* strobilus. Illustrate your answer with well labelled diagram. 12
5. Write note on :
(a) TS stem of *Equisetum*
(b) Structure and dehiscence of Sporangium of *Pteris*. 6,6

UNIT—III

6. Write note on :
(a) Structure of male cone of *Cycas*.
(b) Economic Importance of Gymnosperms. 6,6
7. Write an illustrated note on the structural variations of the megasporophyll in three different species of *Cycas*. 12

UNIT—IV

8. Describe a detailed note on the male cone of *Pinus* and illustrate the structure of its pollen grain. 12
9. Describe the female strobilus of *Ephedra*. Draw the diagram of LS *Ephedra* ovule. 12