

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2021-2024 ONLY)

21UBY202

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : JULY-2022

B.Sc.-BOTANY

MAXIMUM MARKS: 70

SEMESTER - II

TIME : 3 HOURS

PART - III

PLANT DIVERSITY- II

(PTERIDOPHYTES, GYMNOSPERMS AND PALAEOBOTANY)

SECTION - A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

(K1)

1. Pteridophytes are also called _____.
a. Phanerogams b. Vascular cryptogams
c. Spermatophytes d. Amphibian of the plants kingdom
2. The innermost layer of sporangium of *Selaginella* is _____.
a. Elaters b. Synangium c. Jacket d. Tapetum
3. The most advanced order in Gymnosperm is _____.
a. Cycadales b. Coniferales c. Gnetales d. Taxales
4. In spite of several angiospermic features *Gnetum* is a gymnosperm because _____.
a. polyembryony is a common features b. prothallial cell is present in the male gametophyte
c. seed is naked d. stem exhibit anomalous secondary growth
5. *Willamsonia* belongs to the order _____.
a. Cycadales b. Coniferales c. Ginkgoales d. Bennettitales

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES .

(K2)

6. Heterosporous
7. Ligule
8. Diplohaplontic
9. Dioecious
10. Fossilization

SECTION – B

(5 X 4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) List out the general characters of Pteridophytes.
(OR)
b) Describe the vegetative structure of *Psilotum*.
12. a) Discuss the vegetative reproduction in *Selaginella*.
(OR)
b) Elucidate the economic importance of Pteridophytes.

(CONTD 2)

13.a) Outline the Sporne (1966) classification of Gymnosperms.

(OR)

b) Illustrate the morphology of *Cycas*.

14.a) Listout the economic importance of Gymnosperms.

(OR)

b) Sketch the structure of *Gnetum* ovule.

15.a) Give a brief account of types of fossils.

(OR)

b) Briefly explain the external features of *Willamsonia*.

SECTION - C

(4 X 10 = 40 MARKS)

ANSWER ANY FOUR OUT OF SIX QUESTIONS.

**(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS
(FROM Qn. No : 17 to 21) (K4 (Or) K5)**

16. With a neat sketch, describe the stelar evolution in Pteridophytes.

17. Explain the sexual reproduction in *Lycopodium*

18. Discuss the types of reproduction in *Gleichenia*.

19. Narrate the life cycle of *Cycas*

20. Draw and explain male and female strobilus of *Gnetum*

21. Discuss Geological time scale.
