

**(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2024 ONLY)**

**24UBY202**

**REG.NO. :**

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

**END-OF-SEMESTER EXAMINATIONS : MAY-2025**

**B.Sc.-BOTANY**

**MAXIMUM MARKS: 75**

**SEMESTER: II**

**TIME : 3 HOURS**

**PART-III  
PLANT DIVERSITY - II  
SECTION - A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. Pteridophyta group is otherwise known as \_\_\_\_\_.
  - (a) Phycobionts
  - (b) Cryptogams
  - (c) Mycobionts
  - (d) Basal Angiosperms
2. Sporangia arise from the several epidermal cell is known as \_\_\_\_\_.
  - (a) Sporangial formation
  - (b) Eusporangium
  - (c) Leptosporangium
  - (d) Heterospory
3. Naked seed are present in \_\_\_\_\_.
  - (a) Bryophytes
  - (b) Pteridophytes
  - (c) Gymnosperms
  - (d) Angiosperms
4. Example of dioecious species \_\_\_\_\_.
  - (a) Peacock fern
  - (b) *Pinus*
  - (c) *Selaginella*
  - (d) *Gnetum*
5. Second largest geochronological unit is \_\_\_\_\_.
  - (a) eon
  - (b) era
  - (c) Period
  - (d) age

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES**

**(K2)**

6. Protostele.

7. Leptosporangium.
8. Coralloid Root.
9. Dioecious.
10. Define: Palaeobotany.

**SECTION – B**

**(5 X 5 = 25 MARKS)**

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

**(K3)**

11. a) Give an outline structure of Pteridophytes classification by Reimers.  
 (OR)  
 b) Write the general characteristics of Pteridophytes.
12. a) Explain the morphological characters of *Gleichenia* with neat diagrams.  
 (OR)  
 b) Comment on the internal anatomical structures in *Selaginella stem* with neat sketches.

**(CONTD .... 2)**

13. a) Enumerate the morphological structure of *Cycas* with suitable diagrams.  
**(OR)**  
b) Explain the internal anatomical structures of *Cycas root* with neat sketches.
14. a) Enumerate the morphological structure of *Gnetum* with suitable diagrams.  
**(OR)**  
b) Discuss about the evolution relationship between Gymnosperms and Angiosperms.
15. a) Define fossil. Write short notes on various types of fossils.  
**(OR)**  
b) Briefly explain the morphological morphology of *Rhynia* with neat diagrams.

**SECTION – C****(5 X 8 = 40 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**  
**(K4 (Or) K5)**

16. a) Enumerate the Stelar evolution and its types in Pteridophytes.  
**(OR)**  
b) Discuss about the reproduction in *Psilotum*.
17. a) Elaborate the reproduction in *Selaginella*.  
**(OR)**  
b) Explain the economic uses of Pteridophytes.
18. a) Give an account on the classification of Gymnosperms by Sporne (1965).  
**(OR)**  
b) Illustrate the reproduction in *Cycas* with suitable diagrams.
19. a) Discuss about the reproduction in *Gnetum* with suitable sketches.  
**(OR)**  
b) Explain the economic uses of Gymnosperms.
20. a) Enumerate the details about geological time scale with neat time scale sketch.  
**(OR)**  
b) Describe the structure and reproduction in fossil *Williamsonia*.

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