

Core IV

Diagrammatic Questions for Question

1. Thallus of Riccia or Marchantia (internal structure)
2. Life cycle of Riccia, Marchantia, Anthoceros, Psilotum, Selaginella, Equisetum, Pinus.
3. Diagram of sporophyte of Marchantia, Anthoceros OR Sphagnum
4. T.S. of stem of Selaginella OR Equisetum
5. Strobilus of Selaginella
6. L.S. cone of Equisetum
7. T.S. sporophyll of Pteris
8. T.S. of Pinus needle

Short questions:

1. Thallus of Riccia OR Marchantia
2. Sporophyte of Marchantia, Anthoceros OR Sphagnum
3. Gametophores of Marchantia
4. Classification of Bryophytes, Pteridophytes OR Gymnosperms
5. General characteristics of Bryophytes, Pteridophytes OR Gymnosperms
6. Leptosporangiate OR Eusporangiate conditions
7. Stem of Selaginella, Equisetum
8. Strobilus or cone of Selaginella, Equisetum
9. Pinus needle
10. Male and female cone of Cycas, Pinus OR Gnetum
11. Coralloid root in Cycas
12. Heterospory
13. Unifying features of archegoniates

14. Dating of fossils
15. Geological time scale.
16. Importance of fossil studies.
17. Mesozoic era .
18. Permineralisation .
19. Compression
20. Spiral time scale.

Long questions:

1. What is alternation of generation? Illustrate your answer with an example.
2. Compare the structure of thallus in Riccia and Marchantia with well labelled diagrams.

3. Compare the sporophyte of Marchantia and Anthoceros with well labelled diagrams.
 4. Give an account of progressive sterilization of sporogenous tissue in Bryophytes.
 5. Write a note on Rhynia.
 6. In a tabular form give the details of spore producing organs of Psilotum, Selaginella and Equisetum.
 7. Describe the stelar system in pteridophytes and their evolution.
 8. Describe the gametophytes of Selaginella.
 9. Compare the structures of stem of Selaginella and Equisetum.
 10. Describe the male and female reproductive structures of Gnetum with well labelled diagrams.
 11. Compare the coralloid root with that of normal root in Cycas.
 12. Give the economic importance of Bryophytes, Pteridophytes OR Gymnosperms.
 13. Describe the range of thallus structure in Bryophytes.
21. What are fossil ? Describe how fossils are made .
 22. Describe the silent features of geological time scale .
 23. Describe the different types of available fossil.
 24. Give the systematic position of rhynia and highlights on its life history.
 25. Describe the morphology anatomy and reproduction in rhynia gwynine vaughani
 26. Describe the importance characteristics of rhynia gwynine vaughani and compare with those R . major
 27. Describe the external morphology of lepidodendron
 28. Describe the life history of rhynia and explain why rhynia like plants are considered as a synthetic group
 29. Give an account of fruitification of lepidodendron
 30. Give a brief life history of lepidodendron
 31. Describe how the plant Lyginopteris oldhamia was constructed . Describe the stem structure of the plant.
 32. Give an account of reproductive biology of Lyginopteris oldhamia.
 33. What are the Cycadofilicales ? Describe the vegetative structure of one member of Cycadofilicales studied by you.
 34. Give an account of morphological features of cycadeoidea.
 35. Describe the cone of cycadeoidea ? How they are different from angiospermic flower.

Fill in the Blanks

1. The gymnosperms are _____ that's means they produce different male and females spores
2. _____ gymnosperms serves as connecting link between angiosperm and gymnosperm.
3. Gymnosperms are never _____
4. The roots in gymnosperms are generally _____ roots and in cycas small specialized roots called _____ are associated with nitrogen fixing cyanobacteria
5. Gymnosperm don't bear _____.

