

Anekant Education Society's

TULJARAM CHATURCHAND COLLEGE OF ARTS, SCIENCE AND COMMERCE,
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P. G. Research Centre, Department of Botany

Question Bank: M.Sc. I, Semester- II Paper BOT-4201: Plant systematics-II

Question 1 (2marks):

1. Define Apospory and apogamy.
2. Comment on parthenogenesis.
3. Discuss the heterospory and comment on seed habitat.
4. Give the economic important of pteridiophyte.
5. Comment of reproduction in *Rhynia* .
6. Comment of protostele and haplostele.
7. Give the distinguishing character of *Rhynia*.
8. Give the distinguishing character of *Lepidophyllum*.
9. Give the distinguishing character of *Stigmaria*.
10. Give the distinguishing character of *Lepidocarpon*.
11. Give the distinguishing character of *lepidostobu*.
12. General characters of Sigillaria.
13. Comment on calamites.
14. Comment on Annularia.
15. Enlist fossil pteridophytes with suitable example
16. Define parthenogenesis
17. Give the characters of Annularia and Cheirostrobus.
18. Describe sporophytes of Isoetes
19. Give distinguishing characters of Osmundales and Maratiales
20. Difference between sterile and fertile branches of Equisetium
21. Briefly write on Williamsonia
22. Contribution of Birbal sahani
23. Write a brief Caytonia

Question 2 (5 mark):

1. What is gametophyte?
2. Define apospory with example.
3. Why pteridophyte are called as vascular cryptogams.
4. Why pteridophyte are non-including angiosperm.
5. Describe the heterospory and seed habitat in pteridophyte.
6. Distinguishing character of filicophyta.
7. Comment on *Rhynia*.

8. Describe the life cycle of Equisetales?
9. Give the account of morphology and anatomy of sporophyte of psilopsida.
10. Give the economic important of pteridophyte.
11. Describe the sporophyte of *Isoetia*.
12. Draw and describe the structure of leaf of *Polytrichum*.
13. Give the account of stellar evolution in pteridophyte.
14. Explain in brief algal and bryophytes origin of pteridophytes
15. Give an outline of classification of pteridophyta proposed by the Sporne system.
16. Enlist the type of sporophyte of pteridophyte.
17. Difference between sterile and fertile branches of *Equisetum*.
18. Comment on *Lepidocarpon*.
19. Give an account of morphology and anatomy of gametophyte of order Marsiales.
20. Describe the Teleome theory and any five distinguishing characters of pteridophytes.
21. Write classification system of pteridophyte as per Sporne system (1975) of classification.
22. Write anatomy of sporophyte in *psilotum*.
23. Explain gametophyte of *Lycopodales*.
24. Comment on morphology of Equisetales.
25. In what way bryophyte are different from pteridophyte?
26. Explain the evolution of steles in pteridophytes.
27. Give a brief account of on parthenogenesis.
28. Mention the distinguishing character of Lycopside adds a note on the life cycle pattern in *Selaginella*.
29. Describe Heterospory and seed habits in Pteridophytes
30. Comment on life cycle pattern of Equisetales
31. Give an account of morphology and anatomy of gametophytes of order Marsiales
32. Give an account of stellar evolution in pteridophytes
33. Write a distinguishing characters of Lycopodiales
34. Discuss external morphology of Rhynia.
35. Give an outline of classification of pteridophytes proposed by Sporne (1975).
36. Write general characters pentoxylon
37. Give characters of Neuropteris
38. Write distribution of gymnosperms in India
39. Give general characters of Ephedrales
40. Give merits and demerits of Sporne (1965) classification system in gymnosperm.
41. Give general characters of coniferales
42. Write affinities of Gnetales with Angiosperm.
43. Describe economic importance of gymnosperm.
44. Explain salient features of Ginkgoales.
45. What is Gymnosperm? Give classification of gymnosperm as per Chamberlain (1934).
46. Describe sporophytes of cycadales

47. Explain pteridospermales
48. Describe male and female strobili in pentoxylon
49. Describe male and female cone in coniferales
50. Give characters of Cordaitales and Comment on Cordianthus
51. Give an outline classification system of Gymnosperms as per Raizada and Sahani (1960)

Question 3 (12mark):

1. Give an account of morphology anatomy of sporophytes and gametophyte of order Psilotales
2. Give general characters of gymnosperm and add a note on distribution in India and world.
3. Write classification system of pteridophyte as per Sporne system (1975) of classification.
4. Give merits and demerits of Sporne (1965) classification system in gymnosperm.
5. Write on Indian contribution in pteridology any three scientist.