1B3N22013 (Pages : 1) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Botany Degree Examination, November 2022

BBT3B03 - Phycology, Bryology & Pteridology

(2019 Admission onwards)

Time: 2 hours Max. Marks: 60

SECTION A

(Answer all questions, each question carries 2 marks. Ceiling: 20 Marks)

1. Describe the structure and reproduction of *Chlorella.*
2. Describe the structure of tetrasporophyte of *Polysiphonia.*
3. Write a note on importance of algae as bio-fuels.
4. Describe the thallus structure and reproduction in *Vaucheria.*
5. Describe the salient features of Bacillariophyceae.
6. Write an account of Fossil bryophytes.
7. Describe the structure of archegonium in *Riccia.*
8. Write a brief outline of classification of bryophytes by Stotler and Stotler.
9. Describe apogamy and apospory in pteridophytes, citing examples.
10. Describe the structure of sporangia in *Pteris.*
11. Discuss the affinities of pteridophytes with gymnosperms.
12. Write a comparative account of the male gametes in *Selaginella* and *Psilotum.*

SECTION B

(Answer all questions, each question carries 5 marks. Ceiling: 30 Marks)

13. Describe the thallus structure in *Sargassum.*
14. Describe the thallus structure and reproduction in *Volvox.*
15. Write a note on the internal features of the thallus in *Riccia* and *Anthoceros.*
16. Write an account of the sporophyte in *Funaria.*
17. Describe the external and internal features of *Psilotum.*
18. Describe the internal features of *Equisetum.* Discuss its xerophytic adaptations.
19. Describe the structure of sporangia and spores in *Equisetum.*

SECTION C

(Answer any one question, each question carries 10 marks. 1 x 10 = 10 Marks)

20. Describe the thallus structure and sexual reproduction in *Chara.*
21. Describe the structure of gametophytes in *Selaginella, Psilotum, Equisetum* and *Pteris*

1B3N22014 (Pages : 1) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Zoology Degree Examination, November 2022

BBT3C03 - Morphology, Systematic Botany, Economic Botany, Plant Breeding & Horticulture

(2019 Admission onwards)

Time: 2 hours Max. Marks: 60

SECTION A

(Answer all questions, each question carries 2 marks. Ceiling: 20 Marks)

1. What is emasculation? What is its significance in hybridization ?
2. What is polyploidy breeding?
3. Write a short note on the inflorescence of Euphorbiaceae
4. Write about the medicinal values of *Rauwolfia serpentina*
5. What is aestivation? Name the aestivation present in the corolla of Fabaceae.
6. Write an account on Quarantine.
7. Distinguish between epigynous and hypogynous ovary.
8. What is layering?
9. Expand 1) NBPGR 2) BSI
10. Write the binomial and family of Cardamom and Cotton.
11. What are the advantages of seed propagation
12. Briefly explain the androecium of Malvaceae

SECTION B

(Answer all questions, each question carries 5 marks. Ceiling: 30 Marks)

13. Write an account on basic rules of nomenclature
14. Write an illustrated account on the different types of racemose inflorescences
15. Write a note on Pureline and Mass selection
16. Write an account on herbarium and its importance
17. Write an account on mutation breeding
18. With suitable diagrams, explain the different types of aestivations in angiosperms
19. Give a brief account of numerical taxonomy.

SECTION C

(Answer any one question, each question carries 10 marks. 1 x 10 = 10 Marks)

20. Give an outline on the classification of the seed plants by Bentham and Hooker. Write its merits and demerits.
21. What is hybridization? Explain the procedures of hybridization and its significance.