Reg. No. | | | | | | | | | |

BSCBOCN 201

Second Semester B.Sc. Degree Examination, September 2022
(2021 – 22 Batch Onwards) (NEP 2020)
BOTANY (Discipline Specific Core Course)
Diversity of Non-Flowering Plants

Time : 2 Hours Max. Marks : 60

Instructions *: 1) Answer Part – **A** and Part – **B**.*
*2) Answer **four full** questions from Part – **B**, choosing **one full** question from **each** Unit.*
*3) **All** questions on Part – **B** carry **equal** marks.*
*4) Draw diagrams **wherever** necessary.*

PART – A

Answer **any ten** of the following : **(10×2=20)**

1. What are heterocysts ? Name one organism in which it is found.
2. Name any two algae which are used in cosmetics.
3. What are Tinsel and Whiplash flagella ?
4. Why Bryophytes are called 'Amphibians of plant kingdom' ?
5. Mention the types of rhizoids in *Riccia*.
6. Name the two canals in *Equisetum* stem.
7. Define Microsporophyll and Megasporophyll.
8. Write any two affinities of Gymnosperms with Pteridophytes.
9. Write the difference between protostele and siphonostele.
10. Write a note on compression.
11. Write the systematic position of *Rhynia*.
12. Which era is called as the 'Age of Cycads'.

P.T.O.

PART – B

Unit – 1

13. a) Explain the thallus structure of *Oedogonium*. **4**

    b) Write a note on cultivation of microalgae *Spirulina*. **6**

OR

14. a) Give an account on the reserve foods of algae. **3**

    b) Explain the structure of pennate diatoms. List any two economic importance. **7**

Unit – 2

15. a) Draw neat labelled diagram of *Selaginella* stem T.S. **4**

    b) Describe the general character of Bryophytes. **6**

OR

16. a) Write a note on protonema. **3**

    b) Explain the V.S. of sporophyll in *Pteris*. **7**

Unit – 3

17. a) Write a note on heterospory and seed habit. **4**

    b) Explain structure of female cone in *Pinus*. **6**

OR

18. a) Write a note on actinostele. **3**

    b) Explain the anatomy of *Cycas* leaflet with neatly labelled diagram. **7**

Unit – 4

19. a) Write a note on Impression and Incrustation. **4**

    b) Describe *Lepidodendron*. **6**

OR

20. a) Describe the structure of sporangium in *Rhynia*. **3**

    b) Give detailed account of Geological time scale. **7**

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