

**2023/TDC(CBCS)/ODD/SEM/
BOTDSC/GE-101T/137**

TDC (CBCS) Odd Semester Exam., 2023

BOTANY

(1st Semester)

Course No. : BOTDSC/GE-101T

(Biodiversity)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

**Answer fifteen questions, selecting any three from
each Unit : 1×15=15**

UNIT—I

- 1. What is bacteriophage?**
- 2. Define lytic cycle.**
- 3. Give one example of gram-negative bacteria.**
- 4. What is the full form of TMV?**

(2)

UNIT—II

5. What is a heterocyst?
6. Give one example of Cyanobacteria.
7. Give one example of Rhodophyceae algae.
8. From which algae agar-agar is extracted?

UNIT—III

9. What is hypha?
10. Give an example of edible fungi.
11. Write one beneficial use of fungi.
12. Which fungi causes late blight of potato?

UNIT—IV

13. What is capsule?
14. Who proposed the Telome theory?
15. Name one pteridophyte of your locality.
16. What is rhizophore?

(3)

UNIT—V

17. Give one example of a gymnosperm found in North-East India.
18. What is megasporophyll?
19. What type of root is found in *Cycas*?
20. In which gymnosperm winged pollen is found?

SECTION—B

Answer *five* questions, selecting *one* from each
Unit : 2×5=10

UNIT—I

21. Write two characteristic features of a virus.
22. Write two economic importances of bacteria.

UNIT—II

23. What is isogamy? Give example.
24. Differentiate between globule and nucule.

(4)

UNIT—III

25. What is ectomycorrhiza? Give example.
26. Write about the cell wall composition of fungi.

UNIT—IV

27. Write the economic importance of *Spagnum*.
28. Write two medicinal importances of pteridohytes.

UNIT—V

29. Write two characteristic features of gymnosperm.
30. Draw and label leaflet of *Cycas*.

SECTION—C

Answer *five* questions, selecting *one* from each
Unit : 5×5=25

UNIT—I

31. Describe the process of conjugation with suitable diagrams.

24J/153

(Continued)

(5)

32. With the help of suitable diagram, describe the structure of T-phage.

UNIT—II

33. With the help of suitable diagram, explain the process of reproduction in algae.
34. With suitable diagram, describe the life cycle of *Oedogonium*.

UNIT—III

35. Write short notes on the following : 2½×2=5
(a) Lichens
(b) Mushrooms
36. With suitable diagram, describe the life cycle of *Penicillium*.

UNIT—IV

37. Write about the stelar evolution of pteridohytes.
38. Write short notes on the following : 2½×2=5
(a) Bryophytes as pollution indicators
(b) Amphibian nature of bryophytes

24J/153

(Turn Over)

(6)

UNIT—V

39. Describe the anatomy of *Pinus* needle with suitable diagram.
40. Describe with diagram the megasporophyll of *Cycas*.

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