



**2022/TDC/ODD/SEM/BOTDSC/
GE-101T/137**

TDC (CBCS) Odd Semester Exam., 2022

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*

UNIT—I

1. Answer any *three* of the following : 1×3=3
 - (a) Who discovered virus?
 - (b) Name one useful bacterium.
 - (c) Name one DNA virus.
 - (d) Name one harmful bacterium.

2. Answer any *one* of the following : 2
 - (a) Write a brief note on TMV.
 - (b) Write a brief note on T-phage.



(2)

3. (a) With a suitable diagram, describe the lysogenic cycle. 5

Or

(b) With suitable diagram, describe the cell structure of bacteria.

UNIT—II

4. Answer any three of the following : 1×3=3

(a) Name the reserve food material in Phaeophyceae.

(b) Name one filamentous alga.

(c) What is pyrenoid?

(d) Name one nitrogen-fixing blue-green alga.

5. Answer any one of the following : 2

(a) Write a short note on the morphology of *Vaucheria*.

(b) Write systematic position of *Oedogonium*.

6. (a) Give an account on the range of thallus organization in algae. 5

Or

(b) With suitable diagram, describe the life cycle of *Chlamydomonas*.

(3)

UNIT—III

7. Answer any three of the following : 1×3=3

(a) What is saprophytic fungi?

(b) Write the cell wall composition of fungi.

(c) What is mycorrhiza?

(d) What do you mean by mycelium?

8. Answer any one of the following : 2

(a) Write a brief note on the nutrition of fungi.

(b) Write a brief note on lichens.

9. (a) With suitable diagram, describe the life cycle of *Alternaria*. 5

Or

(b) Give a detailed account of *Penicillium*.

UNIT—IV

10. Answer any three of the following : 1×3=3

(a) What is archegoniate?

(b) What is peat moss?

(c) Name one early land plant.

(d) Name the first vascular land plant.

11. Answer any one of the following : 2

(a) Write a brief note on transition to land habit.

(b) Write a brief note on the ecological importance of pteridophytes.



(4)

12. (a) Describe *Funaria* with suitable diagrams. 5

Or

(b) Write a note on *Selaginella* with suitable diagrams.

UNIT—V

13. Answer any *three* of the following : 1×3=3

- (a) What do you mean by coralloid root?
- (b) Name one gymnosperm found in Assam.
- (c) What do you mean by pine needle?
- (d) Name one gymnosperm of ecological importance.

14. Answer any *one* of the following : 2

- (a) Give two economic uses of gymnosperms.
- (b) Write the external characters of *Cycas*.

15. (a) Write a note on the classification of gymnosperms. 5

Or

(b) Describe the anatomy of *Cycas* leaflet with suitable diagram.
