TDC (CBCS) Odd Semester Exam., 2021
held in March, 2022

BOTANY

(1st Semester)

Course No. : BOTHCC–101T

(Phycology and Microbiology)

Full Marks : 50
Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

SECTION—A

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

1. Name two plant diseases caused by viruses mentioning the name of pathogens.

2. Mention the role of viruses in medicine.

3. Write about microbial nutrition.

4. Draw and label TMV.

5. Write a note on T-phage.

6. "Viruses are neither living nor non-living." Justify.

7. Point out the features of eubacteria.

8. Write about sphaeroplasts.

9. Write the salient features of archaebacteria.

10. Write the contributions of M. O. P. Iyengar.

11. Give a short account of evolutionary classification of algae as proposed by Lee.

12. Mention the role of algae in environment.

13. Write the salient features of *Nostoc*.

14. Draw and label *Chara*.

15. Point out the features of cyanobacteria.

SECTION—B

Answer any *five* of the following questions : 6×5=30

16. Give a detailed account of bacterial growth. Add a note on microbial metabolism. 4+2=6

17. Describe economic importance of bacteria in fermentation and medicine. 3+3=6

18. Write notes on the following : 3+3=6

    (a) Viroids

    (b) Prions

19. Give a detailed account of lytic and lysogenic cycle. 6

20. Describe cell structure of bacteria. Add a note on mycoplasma. 3+3=6

21. Write notes on the following : 3+3=6

    (a) Binary fission

    (b) Conjugation

22. Describe Fritsch's system of algal classification. Mention its merits and demerits. 4+2=6

23. Give an account of range of thallus organization in algae. 6

24. Write notes on the following : 3+3=6

(a) Evolutionary significance of *Prochloron*

(b) *Volvox*

25. Give a detailed account of *Oedogonium* with necessary sketches. 6

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