

FYUG Odd Semester Exam., 2023
(Held in 2024)

BOTANY

(1st Semester)

Course No. : BOTDSC-101T

(Microbiology)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks
for the questions

SECTION—A

Answer ten questions, selecting any two from each

Unit :

2×10=20

UNIT—I

1. Differentiate between prokaryotic cells and eukaryotic cells.

2. Define culture media.

3. Write a note on vaccines.

(2)

UNIT—II
structure of TMV.

4. Write a note on structure of TMV.
5. Write about mycoplasma.
6. Give a brief account of *Bacillus*.

UNIT—III

7. Write a note on plant growth promoting bacteria.
8. Name one nitrifying and one denitrifying bacteria.
9. Give a short account of humus.

UNIT—IV

10. Write a note on microbial spoilage of foods.
11. Write about food poisoning.
12. Give a brief account of continuous fermentation.

UNIT—V

13. Write a note on determination of BOD.
14. Write about aspergillosis.
15. Give a short account of tetanus.

24J/475

(Continue

(3)

SECTION—B

Answer five questions, selecting one from each
Unit : 10x5=50

UNIT—I

16. Describe microbial nutrition in detail. Give an account of growth curve. 6+4=10

UNIT—II

17. Give a detailed account of physical and chemical methods of sterilization. 5+5=10
18. Write notes on prions with its disease cycle. 5+5=10

UNIT—III

19. Write about *Rhizobium* and its role in agriculture. 5+5=10

20. Describe role of microbes in carbon cycle. Write a note on mycorrhiza. 6+4=10

21. Give a detailed account of mechanism of biological nitrogen fixation. Write about microbial pesticides. 6+4=10

24J/475

(Turn Over)

(4)

UNIT—IV

22. Give an account of pasteurization of milk. Describe microbial production of citric acid. 5+3
23. Define antibiotics. Point out their mode of action. Describe microbial production of penicillin. 1+2+7

UNIT—V

24. Give a brief account of water microflora. Describe the role of microbes in sewage treatment. 3+7
25. Give of a detailed account of microbes in biodegradation of hydrocarbons. Add a note on bioremediation of contaminated soil. 6+4
