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

BIOTECHNOLOGY

(1st Semester)

Course No. : BTCDSC-102T

(Environmental Biotechnology)

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. Write a note on coal.
2. Give a short account of firewood.
3. Write about gas as a conventional fuel.

(Turn Over)

UNIT—II

4. What is sewage?

5. Write a note on waste management.

6. Give a short account of composting.

UNIT—III

7. Write a note on mycoremediation.

8. Write about biostimulation.

9. What is bioaugmentation?

UNIT—IV

10. Write about VAM.

11. Write a note on nitrogen fixers.

12. What is ectomycorrhizae?

UNIT—V

13. Write about enrichment of uranium.

14. Give a short account of remote sensing.

15. Write a note on Nanotechnology.

(Continued)

SECTION—B

Answer *five* questions, selecting *one* from each Unit : 10×5=50

UNIT—I

16. Give a detailed account of modern fuels and their environmental impact. Add a note on methanogenic bacteria. 6+4=10

17. Give an illustrated account of microbial hydrogen production. Write about conversion of sugar to alcohol. 5+5=10

UNIT—II

18. Give a detailed account of biogas production with necessary diagram. Mention its significance. 6+2+2=10

19. Give an illustrated account of vermicomposting and its significance. 8+2=10

UNIT—III

20. Describe degradation of cellulose using microbes. Add a note on phytoremediation. 6+4=10

21. Define bioremediation. Describe degradation of pesticides by microorganisms. 2+8=10

UNIT—IV

22. Give a detailed account of biofertilizers and their significance. 8+2=10

23. What is IPM? Describe biopesticides in detail.

UNIT—V

24. Define bioleaching. Give an elaborate account of microbial enrichment of ores. 2+8=10

25. Write a note on environmental monitoring. Give an account of biosensors and their uses. 4+6=10

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