

QP CODE: 25014627



Reg No :
Name :

**UNDER GRADUATE (CBCS) SPECIAL REAPPEARANCE EXAMINATIONS,
FEBRUARY 2025**

Fifth Semester

(Offered by the Board of Studies in Biotechnology)

**OPEN COURSE - BT5OPT02 - BIOTECHNOLOGY FOR SUSTAINABLE
DEVELOPMENT**

2022 Admission Only

6A4CCA5C

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Mention the important mechanical properties of raw materials.
2. Mention any two substrates used in industrial processes.
3. Write about root nodules.
4. What is meant by rhizosphere?
5. Differentiate aerobic composting from anaerobic composting.
6. What are the microorganisms involved in composting?
7. Advantages of aerobic composting over anaerobic composting.
8. Applications of vermiwash.
9. Write the importance of *Bacillus thuringiensis*.
10. What is meant by Biodiesel?
11. What is meant by biochemical conversion?
12. What are nucleic acid probes?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. How biotechnology helps in withstanding resource depletion?
14. Explain the classification of chemical fertilizers.
15. Write notes on landfilling.
16. Write short notes on pit method of composting.
17. Write about the temperature profile in composting.
18. Write a note on biopolymers.
19. Comment on the commonly cultivated mushroom varieties.
20. Comment on the applications of biotechnology to improve the quality in aquaculture.
21. Comment on the important marine bioactive compounds.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain about different classes of raw materials
23. Give a detailed account of mass cultivation of Rhizobium and uses as biofertilizers.
24. Explain biosurfactants and its potential uses.
25. Write an essay on probiotics.

(2×15=30)

