QP CODE: 23104810

23104810

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR/IMPROVEMENT/REAPPEARANCE EXAMINATIONS, FEBRUARY 2023

First Semester

B.Sc Botany Model II Plant Biotechnology

Vocational Course - BO1VOT25 - INTRODUCTION TO BIOTECHNOLOGY

2017 Admission Onwards

B08063C5

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Distinguish between red biotechnology and blue biotechnology.
2. In 1997, Ian Wilmut and collegues made a land mark achievement in the field of Biotechnology. What was that ?
3. What is the most characteristic feature of modern biotechnology?
4. What is a fermentor?
5. Which alcohol is produced after fermentation of grapes into wine?
6. Give one difference between soft cheese and hard cheese.
7. Which is the first genetically modified crop plant in the world ?
8. What are herbicide resistant plants?
9. What is totipotency?
10. What is transestrification reaction?
11. What is stem cell?
12. What is called organ culture?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Comment on the scope and relevance of biotechnology.

14. Write a note on butter production.

15. What are high value food products? Explain the production of any one high value food product in detail.

16. How can you achieve large scale production of citric acid by fermentation?

17. How can you produce a transgenic plant?

18. Write a note on how biofertilizers are important in agriculture.

19. Write on how biopesticides are beneficial in agriculture?

20. Explain briefly any one strategy for bioremediation of oil spillage.

21. What is the significance of recombinant insulin?

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the principle of fermentation and comment on any two industrial fermentation procedures in detail

23. Write an essay on various strategies in biotechnology for the production of high yielding and disease resistant plants.

24. Explain in detail the applications of biotechnology in waste management.

25. Write an essay on gene therapy.

(2×15=30)