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

First Semester

B.Sc Botany Model II Food Microbiology

Vocational Course - BO1VOT09 - MICROBIAL WORLD PART - I

2017 Admission Onwards

8D55C6AF

Time: 3 Hours   Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Write short notes on two Nobel Prize winners and their contributions in the field of microbiology.

2. Explain theory of spontaneous generation.

3. Write a short note on PHA.

4. Differentiate between protoplast and spheroplast.

5. What is the difference between diplococci and streptococci?

6. Explain the structural details of a chloroplast.

7. What are chlamydospores?

8. What is commensalism?

9. What is fermentation?

10. What is lysogeny?

11. Explain magnification.

12. What are the objective lenses in a bright field microscope?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Write a note on the major contributions made by various scientists in the field of microbiology.

14. Give a comparative account of Gram positive and Gram negative bacterial cell wall.

15. Write a short note on cytoskeleton of eukaryotes.

16. Explain the structure of a plant cell.

17. What are the methods employed for the culturing of viruses?

18. Briefly explain the structure of a bacteriophage.

19. What are prions? Explain their significance.

20. Explain the principle and working of fluorescence microscope.

21. Give a brief account of the optics, principle and working of a scanning electron microscope.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. What are the major discoveries and contributions to the field of microbiology?

23. Explain the structural details of a plant cell and an animal cell.

24. Write an essay on the multiplication of viruses.

25. Give a brief account of the optics, principle and working of a fluorescence microscope.

(2×15=30)