B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

Second Semester

B.Sc Botany Model II Food Microbiology

Vocational Course - BO2VOT11 - APPLIED MICROBIOLOGY PART - I

2017 ADMISSION ONWARDS

8B747E5E

Time: 3 Hours   Max. Marks : 80

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Part A

*Answer any **ten** questions.*

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

1. What is the effect of sterilizing agents on vegetative cells and spores?

2. Write down the parts of an autoclave.

3. Name two gaseous sterilizing agents.

4. What are the applications of wet mount?

5. What is the Gram reaction of Staphylococcus and E. coli?

6. What are the stains and reagents used in acid fast staining?

7. Name two media components.

8. What makes blood agar a differential media?

9. Name two methods for obtaining pure culture.

10. What is a drug?

11. What is the contribution of Waksman?

12. Name two antiviral antibiotics.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Explain fractional sterilization. Mention its applications.

14. Explain how the efficiency of sterilization by hot air oven is checked.

15. Discuss about the role of gases as sterilants in microbiology.

16. Explain the principle of Gram staining.

17. What is AFB? What staining is to be used to demonstrate AFB? What is the application of this test?

18. Write down the composition and preparation of Nutrient agar.

19. Explain pour plate technique.

20. Classify antibiotics based on their mode of action. Give one example for each group

21. Discuss about the antiviral agents you have studied.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Write an essay on chemical sterilizing agents.

23. Write down the principle and procedure of Gram staining.

24. Discuss on the methods by which bacteria can be isolated in pure culture.

25. What are antibiotics? Give an account of their classification based on mode of action. Discuss about two antibiotics each from the different classes.

(2×15=30)