

**ANNAI VIOLET ARTS AND SCIENCE COLLEGE  
DEPARTMENT OF MICROBIOLOGY**

**CONTINUOUS INTERNAL ASSESSMENT – II (ODD SEM.)  
SUBJECT: General Microbiology and Microbial Physiology**

**Class: I BSc MB**

**Max.Marks: 75**

**Date: 1.11.22**

**Sub. Code: SN21A**

**PART A (10 × 2 = 20 Marks)  
Answer any TEN questions**

1. Define Biogenesis.
2. Write about differential staining.
3. What is meant by pure culture?
4. What are Animalcules?
5. What is Resolving power.
6. Write about chemical sterilization
7. Define Fermentation.
8. List the arrangement of bacterial flagella
9. Write the importance and example of Assay media.
10. Differentiate virtual and real image.
11. What is Oil immersion objective.
12. Define disinfectant.

**PART B – (5 × 5 = 25 Marks)  
Answer any FIVE questions**

13. Discuss elaborately the Koch's postulates.
14. Discuss briefly about principle, working and uses of fluorescence microscope.
15. Give the classification of medium based on consistency.
16. Explain whittaker's five kingdom concept.
17. Describe the procedure in Spore staining of bacteria.
18. Comment on working principle and uses of hot air oven.
19. Explain preparation of bacterial culture media.

**PART C – (3 × 10 = 30 Marks)  
Answer ANY THREE questions**

20. List out the contributions of Antony Van Leeuwen hoek, Joseph lister, Alexander Fleming and Edward Jenner.
21. Describe the principle and procedure of gram staining with neat diagram.
22. Write briefly about moist heat sterilization with neat sketch.
23. Enlist the differences between prokaryotes and Eukaryotes.
24. Explain in detail about principle, working conditions of phase contrast microscope with diagram and list their advantages and disadvantages.