

**Q.P. CODE: 115019**

**Reg. No: .....**

**First Year B.Sc Medical Microbiology & Medical Biochemistry Degree  
Supplementary Examinations December 2021**

**Paper IV – General Methodology**

**(2016 Scheme)**

**(Common for both specialty)**

**Time: 3 Hrs**

**Max. Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays: (2x15=30)**

1. What are preservatives. Which are the anticoagulants used in the lab, their principle and dose and uses. How do you prepare an anticoagulant bottle.
2. Classify microorganisms. Discuss the subtyping of bacteria based on their morphology.

**Short Essays: (2x10=20)**

3. Discuss the preparation of phosphate buffer and its uses.
4. Discuss the factors necessary for bacterial growth and nutrition.

**Short notes (6x5=30)**

5. Weighing of solids
6. Advantages of plastic wares in lab
7. Difference of analytical and digital electronic balance
8. Record keeping in the lab
9. Anaerobic culture methods
10. Animal inoculation methods

**Answer briefly: (10x2=20)**

11. Normal solution
12. Physical hazards in lab
13. What is the use of titration
14. Pasteur pipette
15. Use of centrifuge
16. Normal saline
17. Formalin
18. Benedict's reagent
19. Polarisation in microscopy
20. Culture plate

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