

**QP Code: 203019**

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

**Second Year B.Sc. Medical Microbiology – October 2016**

**METHODOLOGY AND INSTRUMENTATION**

**Time: 3 Hours**

**Total Marks: 100**

- **Answer all the questions**
- **Draw diagrams wherever necessary**

**Essay**

**(2x15=30)**

1. Describe the principle, instrumentation and application of phase contrast Microscopy.
2. Explain the principle ,theory, classification and application of chromatography

**Short Essay**

**(2x10=20)**

3. Explain the techniques and application of RIA
4. Describe the care and handling of common lab. animals.

**Short Notes**

**(6x5=30)**

5. Ultracentrifugation
6. Automation in Microbiology
7. Principle and application of centrifugation
8. Specimen preparation for electron microscopy.
9. Bleeding techniques of common lab animals.
10. Competitive ELISA and its advantages.

**Answer Briefly**

**(10x2=20)**

11. Dark ground microscopy
12. Isodensity centrifugation
13. Principle and application of colorimetry
14. pH measurements.
15. Methods of inoculation of mice.
16. Two dimensional electrophoresis
17. Common enzyme labels and substrates used in ELISA
18. Method of handling and bleeding of rabbit.
19. High speed centrifuge.
20. Use of gas liquid chromatography

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