QP Code: 213019 Reg. No..... Second Year B.Sc Medical Microbiology Degree Examinations October 2018 Paper VIII – Methodology and Instrumentation (2016 Scheme) Time: 3 hrs Max Marks: 100 Answer all Questions Draw diagrams wherever necessary **Long Essays** (2x15=30)1. Explain the principle, working, staining and specimen preparation of electron microscope. Describe the principle, types and application of ELISA (Enzyme Linked Immunosorbent Assay). **Short Essays** (2x10=20)3. High Performance Liquid Chromatography (HPLC) - theory and practical applications. 4. Describe the principle and applications of spectrophotometry **Short Answers** (6x5=30)5. Cold room 6. Types of gel electrophoresis 7. Gas-liquid chromatography 8. Fluorimeter 9. Density gradient centrifuge 10. Radio imaging Comment on (10x2=20)11. Ethylene oxide steriliser 12. Autoradiography

- 13. Principle of colorimetry
- 14. Different types of centrifuge
- 15.pH meter
- 16. Relative centrifugal force (RCF)
- 17. Turbidometry
- 18. Scintillation counting
- 19. Immune electrophoresis
- 20.2D gel electrophoresis
