QP CODE: 24026955

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

Third Semester

B.Sc Microbiology Model III

Core Course - MB3CRT06 - BIOINSTRUMENTATION AND TECHNIQUES

2017 Admission Onwards

39FE080C

Time: 3 Hours

Max. Marks : 80

core

Part A

Answer any ten questions.

Each question carries **2** marks.

- 1. What is eye piece lense?
- 2. Define dark microscope.
- 3. List the parts of a compound microscope.
- 4. Define the unit of centrifugation.
- 5. How can we determine the molecular weight of a protein using centrifugation?
- 6. What is free electrophoresis?
- 7. Define turbidity.
- 8. Define spectrophotometry.
- 9. Write down application of visible Spectrophotometry.
- 10. What is Lysozyme?
- 11. Define Polymorphic DNA.
- 12. What are Junk DNA?

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

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- 13. Write on parts of a fluorescent Microscope.
- 14. Descibe the principle of SEM.
- 15. Differentiate TEM and SEM.
- 16. Explain chromatic abberation.
- 17. Define Microfuge.
- 18. Explain AGE.
- 19. Write about Optical arrangement of Colorimeter.
- 20. State Beer Lambert's law and its application.
- 21. Explain the principle of RFLP.

(6×5=30)

Part C

Answer any **two** questions. Each question carries **15** marks.

- 22. Describe basic principle of Microscopy and its types.
- 23. Write an essay on the TEM.
- 24. Explain the principle behind protein gel electrophoresis . Differentiate between native and SDS- PAGE electrophoresis.
- 25. Discuss detail, Application and principle of RAPd.

(2×15=30)