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QP CODE: 21102070

Reg No Name

B.Sc DEGREE (CBCS)EXAMINATION, AUGUST 2021

Third Semester

B.Sc Zoology Model II Medical Microbiology

VOCATIONAL COURSE - ZM3VOT06 - DIAGNOSTIC MICROBIOLOGY

2017 Admission Onwards

F1190BDE

Time: 3 Hours Max. Marks: 60

Part A

Answer any ten questions. Each question carries 1 mark.

- 1. Warning signage
- 2. Mention any 2 laboratory safety practises.
- 3. Name a citrate positive organism.
- Hydrogen peroxide is used in which test? 4.
- 5. Relevance of optochin and bacitracin sensitivity testing.
- 6. **Avidity**
- RIA 7.
- 8. B_H antigen
- 9. Haemmagglutination inhibition
- 10. GLC -MIDI
- 11. Western blotting
- 12. Extension

 $(10 \times 1 = 10)$

Part B

Answer any six questions.

Each question carries 5 marks.

13. What is warning signage and its significance? What are the personal protective barriers used by lab technician?



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- 14. What are the different types of waste generated in microbiology laboratory? Explain with examples. Also add a note on how they can be handled?
- 15. What are different basis on which cultural charcteristics of organisms described?
- 16. What is Ouchterlony's technique? Explain.
- 17. State the principle of the following techniques a) Mantoux test b) Weil -Felix reaction
- 18. Define automation. What is need for automation in a microbiology laboratory? Briefly explain any 3 principles on which automated systems work.
- 19. Describe the systems that works on the principle of Oxidation-reduction of substrate metabolism as indicator of growth & substrate utilization.
- 20. What is the use of BACTECH systems? On what principle does it work?
- 21. Molecular techniques in diagnosis- Give a brief account.

 $(6 \times 5 = 30)$

Part C

Answer any **two** questions.

Each question carries **10** marks.

- 22. How is the antibiotic susceptibility pattern of a pathogen determined? Explain the procedure. How does this help in treatment of infection?
- 23. Write an essay on Immunological diagnosis.
- 24. Describe the principle, working and use of VITEK System.
- 25. Give an overview of the diagnostic techniques used in clinical microbiology.

 $(2 \times 10 = 20)$

