QP CODE: 24027462





 Reg No
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 Name
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B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

B.Sc Zoology Model II Medical Microbiology

VOCATIONAL COURSE - ZM3VOT06 - DIAGNOSTIC MICROBIOLOGY

2017 Admission Onwards

05528DD4

Time: 3 Hours

Max. Marks: 60

Part A

Answer any **ten** questions. Each question carries **1** mark.

- 1. What is the need of mask in a clinical laboratory?
- 2. Decontamination.
- 3. Name 2 bacterial growth patterns observed in liquid media.
- 4. IMViC.
- 5. MIC.
- 6. What is the nature of Precipitation arc when antigens are similar in nature?
- 7. ELISA.
- 8. Expand VDRL.
- 9. Relevance of Mantoux test.
- 10. Write the principle employed by any 1 automated system used for identification of pathogen.
- 11. Probe.
- 12. Name 2 emerging techniques in microbial diagnosis.

$(10 \times 1 = 10)$

Part B

Answer any six questions.

Each question carries 5 marks.

- 13. What are biosafety cabinets? What is its relevance in microbiology?
- 14. List out the laboratory safety rules and universal precautions.
- 15. Write a note on a)DNase b) cellulose c) urease.



- 16. Antigen-Antibody reactions.Explain.
- 17. Haemmagglutination inhibition essay explain. What is its significance in virology?
- 18. Write a short essay on Biolog identification system.
- 19. How is flurophore labeled substrate or redox dyes used as indicator of growth & substrate utilization? Explain a system that works on this principles.
- 20. What is FAME? How can this be employed in microbial identification?
- 21. Elaborate on western blotting. What is its use?

(6×5=30)

Part C

Answer any **two** questions. Each question carries **10** marks.

- 22. Write the principle, procedure of the following tests a)Oxidase b)Catalase c) Coagulase.
- 23. What do you mean by serological diagnosis? Write down in detail the principle and procedure of any 2 serological techniques used in the detection of bacterial pathogens.
- 24. Describe the principle, working and use of BACTECH systems.
- 25. Give an account of the diagnostic techniques you would use in detecting viral infections.

(2×10=20)

