

2019 Scheme**Q.P. Code: 215001****Reg. no.:****Second Professional MBBS Degree Regular/Supplementary
Examinations March 2024
Microbiology - Paper I****Time: 3 Hours****Total Marks: 100**

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Long Essays**(2x15=30)**

1. A 20-year-old female with history of multiple blood transfusions presents to outpatient department with fever, malaise, nausea vomiting and yellowish discoloration of urine. The blood examination showed elevated bilirubin and liver enzymes and positive for HBs Ag
 - a) What is the probable diagnosis
 - b) Write the mode of transmission
 - c) Mention the serological markers and their significance
 - d) Write the long term complications of the condition.
 - e) Write the laboratory tests used for the diagnosis
 - f) Mention briefly on post exposure prophylaxis. (1+3+4+2+2+3)
2. A 12-year-old child complained of high fever (101°C), malaise and abdominal pain since 7 days. A blood culture and the Rapid Typhi-dot test was found positive.
 - a) What is most probable clinical diagnosis
 - b) Name the causative agent.
 - c) Mode of transmission of the infective agent
 - d) Pathogenesis of the disease condition
 - e) Write the laboratory diagnosis of the disease
 - f) Mention TWO drugs used in the treatment of the disease
 - g) Write TWO complications of the disease
 - h) Mention the prophylaxis (1+1+1+3+4+1+2+2)

Short essays**(5x8=40)**

3. Enumerate the methods of moist heat sterilization. Write briefly on the principle, application and sterilization control of laboratory autoclave. (3+1+2)
4. Write the pathogenesis, clinical features and laboratory diagnosis of Hydatid disease
5. Enumerate the various classes of immunoglobulins. Write briefly on the structure and properties of IgG (2+2+4)
6. Outline steps in biomedical waste management.
7. Define Health Care Associated Infection. Mention the various types of HAI and their preventive measures. (2+2+4)

(PTO)

Short answers**(5x4=20)**

8. Write the applications of ELISA test
9. List FOUR gaseous sterilants and write two uses of any one of them
10. Enumerate FOUR fungi causing systemic mycosis. Write briefly the laboratory diagnosis of any one of them.
11. Larva migrans
12. Write FOUR mechanisms of antimicrobial resistance in bacteria with examples.

Objective type questions**(10x1=10)**

13. Name TWO tests used for diagnosis of HIV infection in window period.
14. A sample was received in laboratory for blood culture from medical ward and it was found to be wrongly labelled. What measures will you adopt in such a situation.
15. Draw and label fertilized ova of *Ascaris Lumbricoides*.
16. Name TWO transport media.
17. Name TWO mechanisms of auto-immunity.
18. Name TWO antiseptics.
19. Name the infective form of *Entamoeba histolytica*.
20. What is an adjuvant. Give one example.
21. Name TWO complications of malignant malaria.
22. Name TWO halophilic vibrios.
