

2019 Scheme

Q.P. Code: 215001

Reg. no.:

Second Professional MBBS Degree Supplementary Examinations July 2023

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 25-year-old migrant labourer was brought to outpatient department with high grade fever, severe myalgia and retro orbital pain. On examination, he had maculopapular rashes over his body. Blood examination showed thrombocytopenia and NS1 antigen positive
 - a) What is the probable diagnosis and name the aetiological agent
 - b) Write the vector transmitting the agent
 - c) Write four differential diagnosis of the condition
 - d) Write briefly the pathogenesis of the disease
 - e) Write two complications of the condition
 - f) How will you diagnose the infection in the lab
 - g) Mention the preventive measures. (2+1+2+3+2+3+2)
2. Four workers from a construction site were admitted in a primary health centre with watery diarrhoea, fatigue and muscle cramps. On examination, they were dehydrated with tachycardia. The stool samples were collected for examination and appeared like rice water. The bacteria isolated in stool culture was comma shaped and motile.
 - a) What is the most probable clinical diagnosis
 - b) Name the causative agent.
 - c) Write the mode of transmission of the infective agent
 - d) Describe the pathogenesis of the condition
 - e) Write briefly on the laboratory diagnosis
 - f) How will you treat the condition
 - g) Write briefly on the prophylaxis (1+1+1+3+3+3+3)

(P.T.O)

Short essays

(5x8=40)

3. Write the functions of HICC (Hospital Infection Control Committee). Add a note on antimicrobial stewardship (5+3)
4. Enumerate the classes of immunoglobulins. Write briefly on structure and properties of IgM
5. Write briefly on the pathogenesis, clinical features and laboratory diagnosis of Ascariasis. (3+2+3)
6. Enumerate various methods of moist heat sterilisation. Add a note on laboratory Autoclave.
7. Classify immunity. Add a note on passive immunity.

Short answers

(5x4=20)

8. Write the serological markers of Hepatitis B virus infection and their significance.
9. Laboratory diagnosis of Giardiasis.
10. Segregation of biomedical waste.
11. Enumerate four fungi causing systemic mycosis. Add a note on laboratory diagnosis of Histoplasmosis.
12. Name four mechanisms of antimicrobial resistance in bacteria.

Objective type questions

(10x1=10)

13. Name two selective media.
14. Name four contributions of Louis Pasteur
15. Name the antibody giving local mucosal immunity.
16. Name two antigen presenting cells.
17. Name two antibiotics inhibiting bacterial cell wall synthesis
18. Name two sporicidal disinfectants.
19. A blood sample received from pediatric ward for culture was found missing in the laboratory. What measures will you adopt to handle such a situation.
20. Name two bacteria with capsule.
21. Name the etiologic agent of Hydatid disease and mention the definitive and intermediate host
22. Name two complications of Enteric fever
