

**2019 Scheme**

Q.P. Code: 215001

Reg. no.: .....

**Second Professional MBBS Degree Regular Examinations February 2022  
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. Classify hypersensitivity. Describe the pathogenesis of each one of them with examples.  
Draw diagrams wherever necessary (1+11+3)
2. A 50-year-old woman, an agriculture worker came with complaints of fever, malaise, headache with yellow discolouration of sclera in eyes for the past 5 days. O/E microalbuminuria. There were floods in her place in the previous week.
  - (a) What is your diagnosis
  - (b) Describe the pathogenesis
  - (c) Lab diagnosis
  - (d) Classify various causes of bloodstream infection with examples. (2+3+6+4)

**Short essays**

(5x8=40)

3. Describe various virulence factors in bacteria with examples.
4. Describe principles of genetic engineering and their applications.
5. Describe various modes of biomedical waste disposal with examples.  
Add a note on treatment of waste disposal (4+4)
6. Classify nematodes, Enumerate intestinal nematodes. Add a note on life cycle, pathogenesis and lab diagnosis of Hookworm. (1+2+5)
7. Enumerate viruses causing gastroenteritis. Add a note on Morphology, Pathogenesis, Lab diagnosis and prevention of rotavirus infection (2+6)

**Short answers**

(5x4=20)

8. Structure of Gram negative cell wall with diagram.
9. Principle of presumptive coliform testing and its interpretation.
10. Draw the structure of HIV and label. Add a note on its transmission (2.5+1.5)
11. Add a note on lab diagnosis of Pernicious Malaria.
12. Candida albicans.

**Objective type questions**

(10x1=10)

13. Name two sporicidal disinfectants.
14. Name two methods to test antibiotic susceptibility.
15. Name two immunosuppressive agents.
16. Name two viral disease transmitted by ticks.
17. Name two hepatitis viruses that are transmitted by Faeco-oral route.
18. Name two oncogenic viruses.
19. Name two protozoa that commonly cause opportunistic infection in AIDS.
20. Name two non-bile stained eggs.
21. Name two parasitic disease where man acts as intermediate host.
22. Name two dimorphic fungi.

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