

Q.P. Code: 215001

2019 Scheme

Reg. no.:

**Second Professional MBBS Degree Supplementary Examinations
July 2022**

Time: 3 Hours

Microbiology - Paper I

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

1. Describe the mechanism of cell mediated immune response. Add a note on its applications, detection methods, and name the immunodeficiency diseases associated with defect in cell mediated immunity. (2x15=30)
2. 10-year-old girl presented with migrating joint pain, painless small nodules on the feet, and fever for the past 4 days. O/E murmur was observed on auscultation. ECG showed prolonged PR interval. ESR and CRP were raised. Parents gave a history of repeated sore throat infections earlier. (7+2+3+3)
 - (a) What is your diagnosis
 - (b) Name the causative agent
 - (c) Describe the virulence factors and pathogenesis in detail
 - (d) Describe the lab diagnosis
 - (e) Describe the criteria used for final diagnosis

Short essays

3. Ethylene oxide and plasma sterilization (1+1+5+5+3) (5x8=40)
4. Describe the major Hospital Acquired Infections (HAI) types. Add a note on standard precautions (4+4)
5. Define food poisoning, Enumerate the organism causing food poisoning. Describe the lab diagnosis (4+4)
6. Difference between bacterial and amoebic dysentery. Add a note on morphology and lab diagnosis of E.histolytica (1+3+4)
7. What are the differences between Hepatitis A virus and Hepatitis B virus. Describe various markers of HBV in detail and their applications (3+2+3) (3+5)

Short answers

8. PCR – Principle (5x4=20)
9. Hydatid disease
10. Cryptococcus neoformans
11. Lab diagnosis of Ring worm infection
12. NACO strategies for HIV testing

Objective type questions

13. Name 4 parasitic infections affecting the blood (10x1=10)
14. Name two rapid tests used for diagnosis of malaria.
15. Name any two viruses causing diarrhoeal disease
16. Name any two discoveries of Robert Koch
17. Biological control for autoclave
18. Name any two fungi causing Mycetoma foot.
19. Name any two parasites causing anaemia
20. Name any two superantigens.
21. Name two selective media
22. Name two vaccines used that prevent cancers.
