

2019 Scheme

Q.P. Code: 215001

Reg. no.:

Second Professional MBBS Degree Supplementary Examinations July 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. 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. **(7+2+3+3)**
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.
 - (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 **(1+1+5+5+3)**

Short essays

(5x8=40)

3. Ethylene oxide and plasma sterilization **(4+4)**
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 **(1+3+4)**
6. Difference between bacterial and amoebic dysentery. Add a note on morphology and lab diagnosis of *E.histolytica* **(3+2+3)**
7. What are the differences between Hepatitis A virus and Hepatitis B virus. Describe various markers of HBV in detail and their applications **(3+5)**

Short answers

(5x4=20)

8. PCR – Principle
9. Hydatid disease
10. *Cryptococcus neoformans*
11. Lab diagnosis of Ring worm infection
12. NACO strategies for HIV testing

Objective type questions

(10x1=10)

13. Name 4 parasitic infections affecting the blood
 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.
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