

Instructions:

- All questions are compulsory
- Draw diagrams wherever necessary
- Answers of Questions and Sub-questions must be written strictly according to serial order of question paper.
- MCQ has to be answered in theory answer book
- Please write MCQ answer neatly and in serial order with black or blue pen in brackets; for example: - 1. (a) 2. (c)
- MCQ has to be answered only once, any kind of repetition or cutting or erasing or whitener will be considered as malpractice, such answers will not be counted in marks and action will be taken according to UFM rules of university.
- Subjective answer should be answered in up to 30 words per marks. For example, if a question having 2 marks should answered in up to 60 marks.

Q1. Total MCQs: 10

10 x 1 = 10

| | | | |
|---|-----------------------------|------------------------|--------------------------|
| 1. What is the basis of Paul Bunnell test for EBV? | | | |
| (a) Heterophile | (b) Cell mediated | (c) immune complex | (d) None |
| 2. Which of the following microfilaria comes to peripheral blood in daytime? | | | |
| (a) Brugia malayi | (b) Wuchereria bancrofti | (c) Loa loa | (d) Brugia timori |
| 3. Gram positive α-hemolytic cocci with catalase negative and optochin resistant causing endocarditis | | | |
| (a) Str pneumoniae | (b) Str agalactiae | (c) Staph epidermidis | (d) Str sanguis |
| 4. All of the following intestinal nematodes are oviparous, EXCEPT: | | | |
| (a) Roundworm | (b) Strongyloides | (c) Hookworm | (d) Enterobius |
| 5. Diagnosis of typhoid fever on 5th day is best done by: | | | |
| (a) Blood culture | (b) Urine culture | (c) Stool culture | (d) Widal test |
| 6. In emergency patient relative donated blood. It was tested in lab before transfusion. Which of the following disease will be tested EXCEPT | | | |
| (a) Hepatitis B | (b) Hepatitis A | (c) HIV & 2 | (d) Hepatitis C |
| 7. Example of antibody-dependent cellular dysfunction or ADCD: | | | |
| (a) Graves'disease | (b) Hemolytic anemia | (c) Pemphigus vulgaris | (d) Transfusion reaction |
| 8. Disc diffusion method is also known as: | | | |
| (a) String test | (b) Darkfield | (c) VDRL | (d) Kirby Bauer |
| 9. Jumping gene is | | | |
| (a) Plasmid | (b) Epitope | (c) Transposon | (d) Cosmid |
| 10. Bacterial capsule is best demonstrated by: | | | |
| (a) Albert staining | (b) Methylene blue staining | (c) Negative staining | (d) Silver Impregnation |

Q2. Long Answer Questions

- a. A 30-year-old man brought to hospital with history of severe watery diarrhoea for one day. He gave history of recent visit to Prayagraj for Kumbh mela. On examination, he was afebrile with s/o severe dehydration, no abdominal tenderness. Hanging drop preparation of stool shows darting motile bacteria. With this history, answer the following questions. (2+6+6+6=20)
1. What is your clinical diagnosis and probable causative agent?
 2. Describe the epidemiology of this condition.
 3. Discuss the pathogenesis of this condition.
 4. Describe the laboratory diagnosis of this condition.
- b. Define Sterilization, Disinfection, Asepsis and Decontamination. What are the methods of sterilization? Write a detail note on physical methods of sterilization.

Q3. Brief Answer Questions**6 x 05 = 30**

- a. Differentiate gram-positive and gram-negative bacterial cell with the help of suitable diagram.
- b. Write a note on Autoimmunity.
- c. Lab diagnosis of acute rheumatic fever.
- d. Opportunistic infections in HIV patients.
- e. Viral markers of Hepatitis B infection.
- f. Explain briefly about "Respect to patient's clinical sample".

Q4. Short Answer Questions**10 x 2 = 20**

- a. Enlist bile-stained eggs.
- b. Enumerate any Four types of vaccines with example.
- c. Complement fixation test.
- d. PPE and its uses.
- e. Anaerobic culture methods.
- f. Enumerate any Four blood stream infections.
- g. Pseudomembranous enterocolitis
- h. Urea breath test.
- i. CAMP Test.
- j. Koch's postulates.