



All India Institute of Medical Sciences, Kalyani
Second Professional MBBS Examination 2021

Time: 3 Hrs.

Microbiology (Paper-II)

Marks: 100

- Answer all questions.
- Answer the questions in the same serial order strictly.
- Illustrate your answers with well labelled diagram wherever necessary.
- Answer each section in a separate answer book.

SECTION - A (50 MARKS)

Long answer question:

1. A 10 year old boy was brought to the emergency with history of high grade fever for last 4 days. He had severe malaise, body pain, retro-orbital pain and weakness. For last 1 day, he complained of bleeding from nose and developed petechiae on his body. On examination he had thready pulse and his BP was 80/60 mm of Hg. He had cold and clammy extremities. (1+1+2+4+2=10)

- a. What is your provisional diagnosis?
- b. Enumerate the causative agent.
- c. Write about pathogenesis of this disease.
- d. Write about the laboratory diagnosis of this patient.
- e. Write about the prevention of this disease.

Write Short notes on:

[8x5=40]

2. Interferon
3. Replication of viruses
4. Hepatitis B mutants
5. Laboratory diagnosis of HIV infection
6. Oncogenic viruses
7. Emerging viruses
8. Pathogenesis and laboratory diagnosis of influenza
9. Viral gastroenteritis

SECTION - B (50 MARKS)

Long answer question:

1. A 12 year old boy was brought to the OPD with history of fever for last 5 days. He had fever every 48 hours with chills and rigor and the fever decreases with sweating. For last 2 days he is disoriented with altered sensorium.

(1+1+3+4+1=10)

- a. What is your provisional diagnosis?
- b. Enumerate the causative agent.
- c. Discuss the life cycle of this agent.
- d. Discuss the laboratory diagnosis of this patient.
- e. Write about the vaccine for prevention of this disease.

Write Short notes on:

[8x5=40]

2. Life cycle of Toxoplasma
3. Mucormycosis
4. Dermatophytes
5. Cryptococcal meningitis
6. Dimorphic fungi
7. Free living amoeba
8. Wuchereria bancroftian filariasis
9. Mycetoma