Reg. No.										

MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND MBBS DEGREE EXAMINATION – DEC'24/JAN'25

SUBJECT: MICROBIOLOGY – PAPER I (ESSAY)

(OLD REGULATION - 2018-19 & PRIOR BATCH)

Saturday, December 28, 2024

Time: 10:20 – 13:00 Hrs. Maximum Marks: 80

✍ **Answer all questions.**

✍ **Essay questions:**

1. Define and classify hypersensitivity. Describe the mechanism and clinical significance of Anaphylaxis.

(3+7 = 10 marks)

2. A 35-year-old man presented to the medicine OPD with cough and hemoptysis. He gave history of evening rise of temperature, chest pain, loss of appetite and weight loss for the past three months. Chest X-ray examination revealed a cavitary lesion in the upper lobe of the lung. Sputum examination showed acid fast bacilli.

2A. What is the most probable diagnosis?
2B. Explain the pathogenesis of the above disease condition
2C. Describe the laboratory diagnosis of this disease.
2D. Add a note on drug resistance in the causative agent

(1+4+4+1 = 10 marks)

3. **Write short notes on:**

3A. Koch`s postulates
3B. Bacterial endospore
3C. Principle and uses of Autoclave
3D. ELISA -Principle and uses.
3E. Immunoglobulin M
3F. Passive immunity
3G. Cytokines
3H. Pathogenesis and laboratory diagnosis of Rheumatic fever.
3I. List four bacteria causing diarrhea.
3J. Laboratory diagnosis of bacterial meningitis.
3K. Enumerate four sexually transmitted bacterial infections
3L. Enumerate different types of food poisoning and their causative agents.
3M. Definition and prevention of Health care associated infections.
3N. Laboratory diagnosis of Typhoid fever
3O. Name four bacterial zoonotic infections

(4 marks × 15 = 60 marks)

Reg. No.										

MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND MBBS DEGREE EXAMINATION – DEC'24/JAN'25

SUBJECT: MICROBIOLOGY – PAPER II (ESSAY)

(OLD REGULATION - 2018-19 & PRIOR BATCH)

Monday, December 30, 2024

Time: 10:20 – 13:00 Hrs. Maximum Marks: 80

✍ **Answer ALL the questions.**

1. A 20-year-old college student presented with intermittent high-grade fever with chills and rigors. On examination he had pallor. Peripheral smear done as a part of laboratory work-up showed parasitic gametocytes.

1A. What is the probable diagnosis and etiological agent?

1B. Explain the life cycle and pathogenesis of the disease.

1C. Explain the laboratory diagnosis of the disease.

1D. Write two measures to prevent the disease.

(2+3+4+1 = 10 marks)

2. Describe the pathogenesis and laboratory diagnosis of human rabies. Add a note on prophylaxis**.**

(4+3+3 = 10 marks)

3. **Write short notes on:**

3A. List any four parasitic disease and their causative agents in which man act as intermediate host.

3B. Clinical features and laboratory diagnosis of Cryptococcal meningitis.

3C. Inclusion bodies

3D. Oral candidiasis

3E. Laboratory diagnosis of Giardiasis.

3F. List four viruses causing diarrhea.

3G. Laboratory diagnosis of HIV infection.

3H. Rhinosporidiosis.

3I. Laboratory diagnosis of eumycetoma.

3J. List four intestinal nematodes with infective forms.

3K. Laboratory diagnosis of visceral leishmaniasis.

3L. Antigenic shift and drift.

3M. Laboratory diagnosis cysticercosis.

3N. Hydatid cyst.

3O. Laboratory diagnosis of Hepatitis B

(4 marks × 15 = 60 marks)