

SI No of QP : 5889

Unique Paper Code: 2534001202
Name of the Paper: Microbes in Infectious Diseases
Name of the Course: Microbiology
Semester: Part-II, Semester - IV
Duration: 02 Hours
Maximum Marks: 60 Marks

Instruction for Candidates

Attempt **any five** questions. All questions carry equal marks. Attempt all the parts of a question together.

Q1. (a) Write the causative agent for the following diseases (**any six**):

(1 x 6=6)

- i. Anthrax
- ii. Histoplasmosis
- iii. Mumps
- iv. Malaria
- v. Tetanus
- vi. Dengue
- vii. Athlete's foot

b) What are nosocomial infections?

(3)

c) Describe the various routes of transmission of diseases.

(3)

Q2.a) Write the function of the following (**any six**):

(1 x 6=6)

- i. Eosinophils
- ii. T_H cells
- iii. Plasma cells
- iv. Bone marrow
- v. NK cells
- vi. Macrophages
- vii. Lymph nodes

b) Give one example of the following (**any six**):

(1 x 6=6)

- i. Killed vaccine
- ii. Opportunistic infection
- iii. Dimeric antibody
- iv. Adjuvant
- v. Primary lymphoid organ
- vi. Vector-borne disease
- vii. Exotoxin

Q3. Differentiate between the following (**any three**):

(4 x 3=12)

- i. Innate and Adaptive immunity
- ii. Acute and Chronic infection
- iii. Primary and Secondary Immune response
- iv. Neutrophil and Eosinophil

Q4. Write a short note on the following (**any three**):

(4 x 3=12)

- i. Characteristics of antigens
- ii. Types of antibody
- iii. Killing mechanism of T-cells
- iv. Dengue

Q5.a) Illustrate the structure of thymus with the help of a well-labeled diagram. (5)

b) Describe the process of inflammation

(3)

c) Define virulence and elaborate on its determinants.

(4)

Q6. (a) Describe the cause, transmission, symptoms, and management of the following infectious diseases (**any three**):

(4X3=12)

- i. AIDS
- ii. COVID-19
- iii. Amoebiasis
- iv. Tuberculosis