

[This question paper contains 4 printed pages.]

Sr. No. of Question Paper : 1140 E Your Roll No.....

Unique Paper Code : 253601

Name of the Course : B.Sc. (Hons.) Microbiology

Name of the Paper : Medical Microbiology (MIHT-611)

Semester : VI

Duration : 3 Hours

Maximum Marks : 75

**Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Question No. 1 is compulsory.
3. Attempt five questions in all.

1. (a) Define the following terms (any five) :

(i)  $\alpha$ -hemolysis

(ii) Sepsis

(iii) Clinical symptoms

(iv) Hospital acquired infection

(v) Toxigenicity

(vi) Pandemic

(5×2=10)

(b) What is transport medium for microbiological clinical samples? (1)

2. (a) Expand the following (any four) :

(i) BCG

(ii) MDR

P.T.O.

(iii) TORCH

(iv) NRTI

(v) ART

(4×1=4)

(b) List the pathogen with which the following terms are associated  
(any six) :

(i) Espundia

(ii) Wool sorters disease

(iii) Traveler's diarrhea

(iv) Peptic ulcer

(v) Break bone fever

(vi) Thin man's disease

(vii) Flesh eating bacteria

(6)

(c) Why is it difficult to develop a vaccine against HIV ?

(3)

(d) Differentiate subcutaneous mycoses from dermatophytoses.

(3)

3. Write short notes on (any four) :

(i) Bird flu

(ii) Anthrax

(iii) Chickenpox

(iv) Malaria

(v) Tuberculosis

(4×4=16)

4. (a) List the clinical specimen/specimens that should be collected for the diagnosis of the following diseases (**any three**) :
- (i) Septic meningitis
  - (ii) Gastroenteritis
  - (iii) Cold sore
  - (iv) Syphilis (3)
- (b) Comment on the normal flora of gut and its significance. (3)
- (c) Discuss the etiology, symptoms and control of a recently eradicated viral disease. (3)
- (d) Why is it more relevant to use paired sera sample for sero-diagnosis of a disease. (3)
- (e) Briefly discuss the chronic diseases caused by *Streptococcus pyogenes*. (4)
5. Differentiate the following (**any four**) :
- (i) Hepatitis A and hepatitis C viruses
  - (ii) OPV and IPV
  - (iii) Convalescent and incubatory carrier
  - (iv) Mode of action of Miconazole and Amphotericin B
  - (v) Acquired and innate drug resistance in bacteria (4×4=16)
6. (a) Discuss the mode of action of sulphonamides and penicillins. (4)
- (b) Discuss rabies prophylaxis in detail. (4)

- (c) Comment on the different forms of leishmaniasis. (4)
- (d) Write a note on *Haemophilus influenzae*, the disease caused by it and its prophylaxis. (4)