

[This question paper contains 4 printed pages.]

1456

Your Roll No.

B.Sc. (Hons.) / III

A

MICROBIOLOGY – Paper XII

(Medical Microbiology)

Time : 3 Hours

Maximum Marks : 60

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

Attempt Five questions in all.

Question No. 1 is compulsory.

All questions carry equal marks.

1. (a) Associate the following with an infectious disease or organism as the case may be : (any 6)
- (i) Trismus
 - (ii) Child Bed fever
 - (iii) Rose spots
 - (iv) Walking Pneumonia
 - (v) Australia antigen
 - (vi) Antibiotic associated diarrhoea (1×6=6)

P.T.O.

(b) Give diagnosis of any two of the following diseases :

(i) Enteric fever

(ii) Influenza

(iii) Cholera

(3×2=6)

2. Write short notes on any four of the following :-

(i) Adeno viruses

(ii) Sub-cutaneous mycoses

(iii) Peptic ulcer

(iv) Gas gangrene

(v) Tularemia

(3×4=12)

3. (a) Give two anti viral compounds and outline their mode of action. (2+2=4)

(b) Discuss the current strategy followed for treatment of AIDS OR Tuberculosis. (4)

(c) Name two species of *Campylobacter* which are human pathogens. (2)

(d) Differentiate between ETEC and EIEC. (2)

4. (a) Give the causative agent and mode of transmission of the following :

- (i) Gonorrhoea
 - (ii) Peptic ulcer
 - (iii) Psittacosis
 - (iv) Toxic Shock Syndrome (2×4=8)
- (b) Name any two bacteria inhabiting the skin. (2)
- (c) Discuss the epidemiology of Leprosy. (2)
5. (a) Compare and contrast the Salk and Sabin vaccines with respect to composition, advantages and disadvantages. (4)
- (b) Name the components of MMR vaccine. (1)
- (c) Write a short note on mycetoma **OR** cryptococcosis. (3)
- (d) Give the virulence factors of *Streptococcus pyogenes* and *Bordetella pertussis*. (2+2=4)
6. (a) Name one fungal, one bacterial and one viral disease commonly associated with patients of AIDS. (3)
- (b) Name any two DNA viruses commonly associated with cancer. (2)

- (c) Outline the details of viral etiological agents of hepatitis and specify their mode of transmission. (5)
- (d) Discuss the preparation of currently used Rabies vaccines. (2)