

Seat No. : \_\_\_\_\_

**AC2-05**

**April-2018**

**B.Sc., Sem.-VI**

**CC-309 : Microbiology  
(Medical Microbiology)**

**Time : 3 Hours]**

**[Max. Marks : 70**

- Note :** (1) Draw figures wherever necessary.  
(2) Mention correct question number against each answer.  
(3) Figures to the right indicate marks.

1. Answer the following : (any **two**) **14**
  - (a) Explain the concept of host parasite relationship.
  - (b) Describe various factors responsible for development of infection.
  - (c) Differentiate between protein and LPS toxin. Explain their mode of actions.
  - (d) Describe the cellular defense mechanism of host.
  
2. Answer the following : (any **two**) **14**
  - (a) Describe the importance of normal flora of various body parts of host.
  - (b) What is gnotobiosis ? Explain in detail.
  - (c) Discuss the various types of epidemiological markers.
  - (d) Explain source and transmission of nosocomial infections.
  
3. Answer the following : (any **two**) **14**
  - (a) Discuss the transmission, symptoms and control of typhoid.
  - (b) Explain etiological agent, transmission and symptoms of syphilis.
  - (c) Describe life cycle of Plasmodium vivex and its role in human life.
  - (d) Explain transmission, symptoms and control of rabies.

4. Answer the following : (any **two**) **14**
- (a) Explain the methods of collection of various types of pathological specimen.
  - (b) Describe two serological methods used in diagnosis of disease.
  - (c) How the pathological changes in human host are helpful in diagnosis of disease ?
  - (d) Discuss various biochemical techniques of identification of a pathogen.
5. Give short and specific answers in **1-2** lines only : **14**
- (1) Define parasite.
  - (2) What is infection ?
  - (3) Name positive association that can occur between host and pathogen.
  - (4) Name two secretions which helps in invasiveness of a pathogen.
  - (5) What is inflammation ?
  - (6) Name one technique used to study epidemiology.
  - (7) Draw infectious disease cycle.
  - (8) Name one opportunistic pathogen.
  - (9) Define morbidity and mortality rate of the infection.
  - (10) Name the scientist who received the Nobel Prize in Physiology or Medicine for the discovery of yellow fever vaccine.
  - (11) Which particular cells of in the human immune system are attacked by AIDS virus ?
  - (12) What is DOTS ?
  - (13) What is pandemic disease ? Give one example.
  - (14) Name the virus which causes Hepatitis B.
-