

Day: Wednesday
Date: 01/11/2017

Time 10.00 AM TO 01.00 PM
Max. Marks: 60

W-2017-0939

N.B.:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of the remaining attempt any **TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Draw neat and labelled diagrams **WHEREVER** necessary.

SECTION-I

- Q.1** Define: (10)
 i) Recombination ii) Archaea
 iii) Eclipse period iv) Chemotherapeutic agents
 v) Epidemiology
- Q.2** Attempt the following: (10)
 a) Compare and contrast characteristics features of generalized and specialized transduction.
 b) Explain in detail:
 i) Zygomycota ii) Ascomycota
- Q.3** Write short notes on: (10)
 a) Major families of animal DNA viruses with suitable examples.
 b) General characteristics of bacterial viruses
 c) Economic importance of yeast
 d) Distinguishing characters of Rickettsia and Mycoplasma
- Q.4** Elaborate on: (05)
 a) Replication of bacteriophage
 b) Holiday model of Recombination (05)

SECTION-II

- Q.5** Define: (10)
 i) Primary infection ii) Secondary infection
 iii) Local infection iv) Systemic infection
 v) Bacteremia vi) Septicemia
 vii) Sporadic disease viii) Reservoir of infection
 ix) Clinical and subclinical disease x) Period of incubation
- Q.6** Explain in detail: (10)
 i) Structure and replication of TMV
 ii) Different enzymes as virulence factors in pathogenic bacteria
- Q.7** Elaborate on: (10)
 i) Mechanism of action of aminoglycoside antibiotics
 ii) Tissue penetration and adhesion of pathogenic organisms
- Q.8** Write short notes on: (10)
 a) Kirby –Bauer test
 b) Airborne disease
 c) Endotoxins
 d) Semisynthetic penicillins