

Second Year Pharm. D : SUMMER - 2019
SUBJECT : PHARMACEUTICAL MICROBIOLOGY

Day : Tuesday
Date : 09/04/2019

S-2019-4506

Time : 02.00 P.M. TO 05.00 PM
Max. Marks : 70

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** A) Answer **ANY FOUR** of the following: [08]
i) Write characteristics of spirochetes.
ii) Draw a neat labeled diagram of flagella.
iii) Define: a) Mycology b) D-Value.
iv) Give medical importance of fungi.
v) How viruses are different from other micro organisms?
- B) Define and classify stains. [03]
- Q.2** a) Draw structure of Bacteriophages. Discuss their Lytic Cycle in detail. [07]
b) Explain the nutritional requirements of bacteria. [05]
- Q.3** Define and differentiate “Sterilization” and “Disinfection”. Explain in detail [12]
“Chemical Sterilization”.
- Q.4** Write short notes on **ANY THREE** of the following: [12]
a) Filtration Sterilization
b) Rickettsia
c) Biochemical tests for bacterial identification
d) *Penicillium notatum*

SECTION – II

- Q.5** A) Answer **ANY FOUR** of the following: [08]
i) Highlight the importance of Western Blot Test.
ii) Differentiate between microbial assay of antibiotics and vitamins.
iii) Justify the importance of “Booster Dose”.
iv) Define : a) MIC b) Adjuvants.
v) What is immunological memory?
- B) Enlist features and types of antigen – antibody reactions. [03]
- Q.6** a) Describe various components of non-specific host defense mechanism. [07]
b) How monoclonal antibodies are prepared? [05]
- Q.7** Draw and explain the structure of Antibody. Classify and compare [12]
Immunoglobulins.
- Q.8** Write short notes on **ANY THREE** of the following: [12]
a) Syphilis
b) Complement system
c) Immunofluorescence
d) Standardization of vaccines

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