

S.Y.B.PHARM. SEMESTER-III (CBCS - 2015 COURSE) :

SUMMER - 2018

SUBJECT: PHARMACEUTICAL MICROBIOLOGY - I

Day : **Thursday**
Date : **03/05/2018**

Time : **02.00 PM TO 05.00 PM**
Max. Marks : 60

S-2018-3919

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 **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION - I

- Q.1** Answer **ANY FIVE** of the following: [10]
- a) State Koch Postulates.
 - b) Draw a neat labeled diagram of Transmission Electron Microscope (TEM).
 - c) Give pharmaceutical significance of micro-organisms.
 - d) List morphological features of *Escherichia*.
 - e) Explain principle of Acid Fast Staining.
 - f) How bacterial cultures are preserved?
- Q.2** a) How will you identify an unknown bacterial culture? [06]
b) Draw and discuss Fluorescence Microscopes. [04]
- Q.3** a) Discuss scope and various applications of pharmaceutical microbiology. [06]
b) How to measure bacterial growth? [04]
- Q.4** Write short notes on **ANY TWO** of the following: [10]
- a) Discovery of Antibiotics
 - b) Bacteriological Culture Media
 - c) Bacterial Cell Wall

SECTION - II

- Q.5** Answer **ANY FIVE** of the following: [10]
- a) Highlight characteristics of Rickettsia.
 - b) Define and explain Z-value.
 - c) Draw a well labeled diagram of *Aspergillus niger*.
 - d) How halogens disinfect?
 - e) Write general properties of viruses.
 - f) Which biological indicators are used in moist heat sterilization?
- Q.6** a) Discuss factors affecting disinfectant activity. [06]
b) Write in detail about sterility tests as per I.P. [04]
- Q.7** a) Draw and explain Lytic Cycle of viruses. [06]
b) Explain isolation of Actinomycetes. [04]
- Q.8** Write short notes on **ANY TWO** of the following: [10]
- a) Phenol Coefficient Test
 - b) Moist Heat Sterilization
 - c) Cultivation of Viruses

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