

S. Y. B. SC. (BIOTECHNOLOGY) SEM – III (CBCS - 2015
COURSE) : SUMMER - 2018

SUBJECT: CONCEPTS IN MICROBIOLOGY

Day: Monday
Date: 02/04/2018

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

S-2018-1050

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** Explain in brief: (10)
i) Lysogeny ii) Phage typing
iii) Competence iv) Viroid
- Q.2** a) Briefly explain the terms:- (10)
i) hyphae ii) mycelium iii) dimorphic growth
v) mycorrhizal fungi v) fruiting body
b) Explain in detail replication of animal viruses with respect to influenza virus.
- Q.3** Enlist distinguishing characteristics of: (10)
a) Archaea
b) Actinomycetes
c) Rickettsia
d) Mycoplasma
- Q.4** Attempt the following: (10)
a) What is 'F' factor? Add a note on its role in conjugation.
b) Explain the lytic cycle of λ phage.

SECTION-II

- Q.5** Define the terms: (10)
i) Pathogenicity ii) Virulence
iii) Contagious disease iv) Epidemic disease
v) Pandemic disease vi) Endemic disease
vii) Non communicable disease viii) Carrier
ix) Acute infection x) Chronic infection
- Q.6** Explain in detail: (10)
i) Different modes of disease transmission
ii) Different methods of control of epidemics
- Q.7** Explain in detail: Mechanism of action of chemotherapeutic agents on: (10)
i) protein synthesis ii) folate metabolism
- Q.8** Write short notes on: (10)
a) Economic importance of fungi
b) Exotoxins
c) β lactam antibiotics
d) MIC

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