

SUBJECT: CONCEPTS IN MICROBIOLOGY

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

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.

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.

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	

* * * *