

F.Y.B.SC. SEM – I (2014 Course) : SUMMER - 2019
SUBJECT: MICROBIOLOGY: STRUCTURE OF PROKARYOTES & EUKARYOTES
(MB-12)

Day: Monday
Date: 15/04/2019

S-2019-0940

Time: 12.00 NOON TO 02.00 PM
Max. Marks: 40

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat diagrams **WHEREVER** necessary.
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Q.1 Attempt any **TWO** of the following: **(10)**

- a) With suitable examples, discuss arrangement of flagella.
- b) Describe the general properties and significance of *Chlamydia spp.*
- c) Discuss the structure or 'T₄ Bacteriophage'.

Q.2 Attempt any **TWO** of the following: **(10)**

- a) Comment on 'Prokaryotic Ribosome'.
- b) Give the distinguishing features of 'Bergey's Manual of Systematic Bacteriology' (Second Edition).
- c) Discuss the merits and demerits of 'Primary cell Cultures'.

Q.3 Write short notes on any **TWO** of the following: **(10)**

- a) Functions of Bacterial capsule
- b) Significance of Protozoa
- c) Taxonomic ranks

Q.4 Attempt any **FIVE** of the following: **(10)**

- a) Give any two examples of viruses showing 'Helical Symmetry'.
- b) Give two examples each of gram positive and gram negative bacteria.
- c) Mention the significance of bacterial cell membrane.
- d) Write significance of bacterial endospore.
- e) Give the significance of Viroids.
- f) What are uncultured microorganisms?
- g) Mention one human disease and one plant disease caused by *Mycoplasma spp.*

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