

F.Y.B.SC. SEM – I (2014 COURSE) : WINTER - 2017

SUBJECT: MICROBIOLOGY : STRUCTURE OF PROKARYOTES & EUKARYOTES
(MB – 12)

Day : Monday
Date : 30/10/2017

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

W-2017-0589

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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Q.1 Attempt **ANY TWO** of the following: [10]

- a) Discuss general properties of *Rickettsias*.
- b) What are 'prions'? Give their significance.
- c) Draw a neat labeled diagram of 'Bacterial Flagellum' and give its significance.

Q.2 Answer **ANY TWO** of the following: [10]

- a) Give distinguishing features of 'Bergey's manual of determinative bacteriology'.
- b) Draw a neat labeled diagram of bacterial endospore and mention its significance.
- c) Describe structure and functions of cell wall in context of Gram positive bacteria.

Q.3 Write short notes on **ANY TWO** of the following: [10]

- a) Viroids
- b) Types of pili
- c) Gas vacuoles

Q.4 Attempt **ANY FIVE** of the following: [10]

- a) What is multifaceted definition of 'Bacterial Taxonomy'?
- b) Give any two examples each of rod and round shaped bacteria.
- c) Draw a neat labeled diagram of 'Embryonated Egg'.
- d) Mention one example each of 'Diploid cell culture' and 'Continuous cell culture'.
- e) Give any two uses of fungi.
- f) Mention the importance of metachromatic granules.
- g) Give the functions of 'Bacterial capsule'.

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