

**F.Y.B.SC. SEM – I (2014 Course) : WINTER - 2018**  
**SUBJECT: MICROBIOLOGY: STRUCTURE OF PROKARYOTES & EUKARYOTES**  
**(MB-12)**

Day: Monday  
Date: 15/10/2018

**W-2018-0774**

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.
- 

**Q.1** Attempt any **TWO** of the following: **(10)**

- a) Give the composition and functions of 'Bacterial Capsule'.
- b) Describe the general properties and significance of *Coxiella spp.*
- c) Discuss virus cultivation using 'Embryonated Egg'.

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

- a) Draw a neat labeled diagram of 'Bacterial Endospore' and mention its significance.
- b) Give the distinguishing features of 'Bergey's manual of Systematic Bacteriology'. (first Edition).
- c) Mention morphological types of viral capsids and discuss any one of it.

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

- a) Typical bacterial cell
- b) Significance of Fungi
- c) Viroids

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

- a) Give any two examples of RNA viruses
- b) Enlist various types of Pili.
- c) Give the significance of 'Poly  $\beta$  - hydroxybutyrate'.
- d) What is 'Centro type strain' and 'Neotype strain'?
- e) Give any two examples of 'Diploid cell cultures'.
- f) Mention the 'Infective form' and 'Intracellular form' of *Chlamydia spp.*
- g) Give the significance of Prions.

\* \* \* \*