BACHELOR OF SCIENCE (CBCS-2018 COURSE)
F. Y. B. Sc. Sem-I :SUMMER- 2022
SUBJECT : MICROBIOLOGY : STRUCTURE OF PROKARYOTES & EUKARYOTES

Day : Tuesday
Date : 5/7/2022

S-18305-2022

Time : 11:00 AM-02:00 PM
Max. Marks : 60

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: **(12)**

a) Give general characteristics of viruses.

b) Differentiate between cell wall of 'Gram positive bacteria' and 'Gram negative bacteria'.

c) Describe general properties and significance of *Rickettsias*.

Q.2 Attempt **ANY TWO** of the following: **(12)**

a) With suitable examples, explain 'Fluid Mosaic Model' of bacterial cell membrane.

b) Describe general properties and significance of *Coxiella.*

c) Give the types of viral nucleic acid with one representative example each.

Q.3 Attempt **ANY TWO** of the following: **(12)**

a) Draw a neat labelled diagram of bacterial endospore and give its significance.

b) Give general properties of Algae.

c) Discuss the structure and functions of bacterial flagellum.

Q.4 Write short notes on **ANY THREE**: **(12)**

a) Diploid cell cultures.

b) General properties of *Mycoplasma.*

c) T4 bacteriophage

d) Prions

Q.5 Attempt **ANY FOUR** of the following: **(12)**

a) Enlist morphological types of viral capsids and discuss 'Helical symmetry' of viral capsids.

b) Describe different types of Pili.

c) What are metachromatic granules? Give their significance.

d) Enlist uses of fungi.

e) What are viroids? Mention their importance.

f) Give the composition and functions of bacterial capsule.

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