AC-3086

B. Sc. Microbiology (Sem. - IV) Examination
April / May – 2015
MB - 8 : Taxonomy of Prokaryotes

Time : 2 Hours] [Total Marks : 50

Instructions :

(1) Fill up strictly the details of ☐ sign on your answer book.

Name of the Examination :
☐ B. SC. MICROBIOLOGY (SEM. - IV)
Name of the Subject :
☐ MB - 8 : TAXONOMY OF PROKARYOTES
Subject Code No. : ☐ 3 ☐ 0 ☐ 8 ☐ 6 ☐ Section No. (1, 2,....) : ☐ Nil

Seat No. :

(2) Figures to the right indicate full marks of the question

(3) Draw neat and labelled diagrams whenever necessary.

Q.1 Give Specific answers 12

a. Give full form of (i) RFLP, (ii) MLST.
b. With what three major criteria did Whittaker divide organisms into five kingdoms?
c. Give important feature of cell wall less *Achaea* with one example.
d. Give important features of *Agrobacterium*.
e. How do spirochete differ from the other gram negative bacteria?
f. Name one beneficial and one pathogenic *Bacillus* species? How they are beneficial and pathogenic?

Q.2 Explain/comment on any two of the following 12

a. Nucleic acid base composition is significant in classification.
b. Extreme halophilic archaea possess some important features.
c. The members of genus *Clostridium* have great practical impact.

Q.3 Discuss any two of the following. 16

a. Give important features of *Bdellovibrio*.
b. How do archaea possess similarity and differences in genetic and molecular characteristics from bacteria and eucaryotes.
c. Give a brief account on BERGEY’S MANUAL for classifying bacteria.

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Q.4  write short notes on any two of the following

a. The ENTEROBACTERIACEAE
b. Cell wall lacking bacteria.
c. Taxonomic rank.