



AC-3086

B. Sc. Microbiology (Sem. - IV) Examination

April / May - 2015

MB - 8 : Taxonomy of Prokaryotes

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. SC. MICROBIOLOGY (SEM. - IV)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="MB - 8 : TAXONOMY OF PROKARYOTES"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="6"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

(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

- Give full form of (i) RFLP, (ii) MLST.
- With what three major criteria did Whittaker divide organisms into fivekingdoms?
- Give important feature of cell wall less *Achaea* with one example.
- Give important features of *Agrobacterium*.
- How do spirochete differ from the other gram negative bacteria?
- 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

- Nucleic acid base composition is significant in classification.
- Extreme halophilicarchaea possess some important features.
- The members of genus *Clostridium* have great practical impact.

Q3. Discuss any two of the following.

16

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

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

10

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