



RE-3425-26

M. Sc. (Microbiology) (Part - I) Examination

April / May - 2010

Paper-I : Cellular Microbiology & Microbial Diversity

Time : 3 Hours]

[Total Marks : 52

Instructions :

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लिखवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. SC. (MICROBIOLOGY) (PART - 1)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="CELLULAR MICROBIOLOGY & MICROBIAL DIVERSITY - 1"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="4"/> <input type="text" value="2"/> <input type="text" value="5"/>	<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.
(4) Both sections must be written in separate answer books.

- 1 (a) Explain in detail about nucleotide synthesis. 8
(b) Discuss about the general characteristics and classification of Fungi imperfectii. 8

OR

- 1 (a) Explain in detail about the physiological adaptations of halophiles. 8
(b) Explain the process of ascoporogenesis and describe the different types of ascocarp. 8
- 2 (a) Discuss in brief about microbial communities in hydrothermal vent and sea mount. 5
(b) Explain : Evolution of microbial cell. 4

OR

- 2 (a) Explain : Bacterial flagella. 5
(b) "Cell wall of eubacteria and archaebacteria are different." Justify. 4

- 3** Elaborate on ultrastructure, types of envelopes and properties of viruses. **12**

OR

- 3** Define : Homeostasis. Explain it with reference to lipid composition and membrane permeability in psychrophiles. **12**
- 4** Write short notes on : (any three) **15**
- (a) Molecular adaptations of halophiles
 - (b) RFLP
 - (c) Prions
 - (d) Microfilament
 - (e) Biosynthesis of lipid A.
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