



AC-1839

M. Sc. Microbiology (Sem. II) Examination
April / May - 2015

MB - 201 : Molecular Microbial Physiology &
Enzymology (Old)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दृशावेक 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="M. SC. MICROBIOLOGY (SEM. II)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="MB - 201 : MOLECULAR MICROBIAL PHYSIOLOGY & ENZYMOLOGY (OLD)"/>	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="8"/> <input type="text" value="3"/> <input type="text" value="9"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

(2) Digits on right hand side indicate marks.

Q.1. Answer the following: (Any two)

18

1. Explain the usefulness of primer extension technique in study of microbial physiology.
2. Write a note on DNA mobility shift.
3. Describe western blot technique as a tool to study microbial physiology.

Q.2. Attempt any two:

18

1. Discuss biochemistry and physiology of adaptation in extreme alkalophiles.
2. Write a note on regulation of signal transduction in two component system.
3. Discuss biochemistry and physiology of adaptation in extreme thermophiles.

Q.3. Answer the following: (Any two)

18

1. Describe briefly technique used for determination of protein structure in solution.
2. Describe Edman degradation reaction in detail for protein sequencing.
3. Explain in detail X-ray crystallography method for detection of protein structure.

Q.4. Write notes on the following: (Any two)

16

1. Initial velocity studies for investigating kinetics of enzyme catalyzed reaction.
2. Competitive inhibition.
3. Lineweaver-Burk plot v/s Eadie-Hofstee plot.

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[100]