



SB-3560

M. Sc. In Microbiology (Part-II) Examination
March / April – 2011
Microbial Physiology & Enzymology : Paper - VI

Time : 3 Hours]

[Total Marks : 52

Instructions :

(1)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
M. Sc. In Microbiology (Part-II)	<input type="text"/>
Name of the Subject :	<input type="text"/>
Microbial Physiology & Enzymology : Paper - VI	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="5"/> <input type="text" value="6"/> <input type="text" value="0"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	
	Student's Signature

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

(3) Draw neat and labeled diagrams whenever necessary.

1 Answer the following : (Any two) 14

- (1) "Spontaneous reaction proceed forward with -ve value of ΔG ." Justify.
- (2) Explain serine-isocitrate lyase pathway in detail.
- (3) Discuss ribulose monophosphate pathway.

2 Answer the following : (Any three) 12

- (1) Discuss in detail about coordinated control of amino acids synthesis.
- (2) Explain biosynthetic pathway for purine nucleotides.
- (3) Explain the growth kinetics of chemostat as a continuous culture method.
- (4) Discuss in detail about group translocation.

- 3** Answer the following : (any **three**) **12**
- (1) Discuss in detail about bioluminescence as a microbial mechanism.
 - (2) Discuss in detail about dimorphism in fungi.
 - (3) Discuss various factors affecting enzyme activity.
 - (4) Explain non-competitive enzyme inhibition in detail.
- 4** Write a note on : (any **two**) **14**
- (1) Gluconeogenesis
 - (2) Bacterial sporulation
 - (3) Synchronous culture.
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