



DG-3136

B. Sc. (Microbiology) (Sem. - V) Examination
March/April - 2016

MB - 12 : Microbial Physiology

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दशांशके निशानीवाणी विगतो उत्तरवही पर अवश्य लखवी. 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. - 5)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="MB - 12 : MICROBIAL PHYSIOLOGY"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="1"/> <input type="text" value="3"/> <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 labeled diagrams whenever necessary.

Q.1 Give Specific answers

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- Differentiate between: Homo lactic acid fermentation and Hetero lactic acid fermentation
- Define: (i) Denitrification
(ii) Oxidative Phosphorylation
- What do you mean by "Sulfer Oxidizers". Give any two example of it
- Name the cycle known as glycosylate bypass pathway. When it came in to existence?
- What do you mean by Reverse TCA Cycle? Name the bacteria can utilized this pathway
- What is the major role of Transaminases. Name two significant transaminases

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

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- Justify: Two Hydrogen carriers are the important components of ETC

- b. Justify: The glycolytic pathway is of conversion of glucose to pyruvic acid
- c. Explain: How non-oxidative deaminases are specific in their functions and substrate requirements

Q3. Discuss any two of the following. 16

- a. Define photosynthesis and discuss various types of photosynthesis in detail
- b. Discuss: How Acetyl co-A act as precursor molecule for TCA cycle
- c. Enlist the general reactions of aminoacids. Discuss any three in detail

Q.4 write short notes on any two of the following 10

- a. Arrangement of ETC in Cell membrane
 - b. Fermentations: Fueling reactions
 - c. Caratenoids
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