



SB-3561

M. Sc. (Microbiology) (Part - II) Examination
March / April - 2011
Paper - VII : Biochemical Engineering &
Fermentation Technology

Time : 3 Hours]

[Total Marks :70

Instructions :

(1)

नीचे दशांशके निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. 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 - II)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="BIOCHEMICAL ENGINEERING & FERMENTATION TECHNOLOGY : PAPER - VII"/>	<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="1"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	

- (2) Figures to the **right** indicate full marks of the question.
(3) Draw neat and labelled diagrams whenever necessary.

1 Answer the following (any **two**) 14

- (i) Elaborate on the methods for preservation of industrially important microorganisms.
- (ii) Give an account of sparger as the means of aeration system.
- (iii) Discuss sterilization of air supply.

2 Answer the following : (any **three**) 12

- (i) Discuss about various fermentors used in solid state fermentation.
- (ii) Discuss the kinetics of external feedback system in multistage chemostat.
- (iii) Elaborate on microprocessor based control systems.
- (iv) Compare and contrast : Batch and continuous fermentation.

- 3** Answer the following : (any **three**) **12**
- (i) Explain about aerobic process of effluent control.
 - (ii) Give an account of LAL test.
 - (iii) Discuss use of immobilized enzyme in extreme environments.
 - (iv) Discuss in detail about modification of primary structure of enzymes.
- 4** Write notes on : (any **two**) **14**
- (i) Intellectual property rights
 - (ii) Fluid rheology
 - (iii) Media sterilization.
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