



SD-3714

M. Sc. (Int. Biotech.) (Sem. VII) Examination

April / May - 2011

IBT-704 : Bioprocess Technology - I

Time : 3 Hours]

[Total Marks : 70

Instruction : (1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य लक्षणी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
M. Sc. (Int. Biotech.) (Sem. VII)

Name of the Subject :  
IBT-704 : Bioprocess Technology - I

Subject Code No. : 3 7 1 4 Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

2. Figures to the right indicate full marks of the question.
3. Draw neat and labeled diagrams whenever necessary.
4. Both sections must be written in separate answer books.

1. Answer the following in short (any TWO) 18
  1. Discuss in detail about fibrous filters and sterilization of air.
  2. Explain bubble column and packed bed reactor in detail.
  3. Explain strain improvement techniques for properties related to growth of the organism.
2. Answer the following (any TWO) 18
  1. Discuss in detail about pH measurement and control.
  2. Discuss about biological heat transfer in detail.
  3. Elaborate on gas-liquid mass transfer in real systems.
3. Answer the following in short (any TWO) 18
  1. Elaborate your views on tangential filtration.
  2. Write note on gel filtration chromatography.
  3. Discuss in detail about Podbielniak extraction.
4. Answer the following (any TWO) 16
  1. Discuss basic objectives for the development of economically viable process.
  2. Elaborate on fermentation economics related to media formulation.
  3. Discuss continuous culture and economics.