DSS-1699
M. Sc. (Sem. VIII) (Int. Biotechnology) Examination
April / May - 2016
BT-2001 : Bioprocess Technology - II

Time : 3 Hours] [Total Marks : 70

Instructions :

(1) Figures to the right indicates full marks.

(3) Draw neat and labeled diagrams wherever necessary.

1 Explain in detail any two :

(a) Describe the process flow of beer fermentation.

(b) Discuss various substrate and organisms used for SCP production.

(c) Give a brief account on biochemistry of vinegar production and organisms involved in it.

2 Attempt any two :

(a) Discuss koji process for citric acid production along with application of citric acid.

(b) Give flow diagram of penicillin production. Explain penicillin recovery process in detail.

(c) Write a complete note on production and commercial aspects of Humilin.
3 Explain in detail any two:
   (a) Discuss support systems to be considered for animal cell culture process.
   (b) Discuss downstream processing for animal cell culture.
   (c) Elaborate on strategies for cultivation of Plant cells at industrial level.

4 Explain in detail any two of the following:
   (a) Give a brief account on regulatory agencies involved in regulation of bioproduct.
   (b) Explain the aspects of fermentation for making the process economic.
   (c) Give an overview of structure for validation.