

Class – B.Sc-VIth Sem. (Biotech)
Subject – Bioprocess Engineering
Paper – Bioprocess Engineering

Time Allowed : 3 Hours

Maximum Marks : 40

SECTION-A

Note:- Attempt all Questions.

1. Define Bioprocess Engineering.
2. Discuss Role of Baffles.
3. How to control Foaming in a Bioreactor.
4. Name Bioreactors used for ATC.
5. What is the role of Impellers in a Bioreactors?
6. Give two advantages of Filter sterilization.
7. What do you mean by STP?
8. Define containment level.

SECTION-B

Note:- Attempt any five Questions.

(5 x 4 = 20)

1. Discuss various design of Impellers.
2. Discuss how air is sterilized.
3. What do you mean by Sealing in Bioreactor?
4. Give Physical methods for sewage treatment.
5. How heat produced in a Bioreactor is controlled?
6. Discuss Fermentation economy process.
7. Write a note on D.O. Probe in a Bioreactor.
8. Write a note on pH Probe in a Bioreactor.

SECTION-C

Note:- Attempt any two.

(6 × 2 = 12)

1. Write a note on C.S.T.B.R.
2. What do you mean by Aseptic operation of a Bioreactor.
3. Write a note on Down Streaming process.
4. Discuss different types of Bioreactors.
