

25

QP Code : 3669

(Hours 3)

[Total Marks : 80

- N.B. (1) Answer any four questions.
(2) All questions carry equal marks.

1. Attempt any four:-

- | | | |
|-----|---|----|
| (a) | What is fermentation? | 10 |
| (b) | What is up-stream processing? | 10 |
| (c) | Explain solid-state and Submerged-Fermentation | 10 |
| (d) | What is "Growth-Media"? | 10 |
| (e) | What is "Continuous Fermentation" process? | 10 |
| | | |
| 2. | (a) Describe parameters of "Down-Stream" processing. | 10 |
| | (b) Describe "Bio-fertilizers". | 10 |
| | | |
| 3. | (a) What is "Fed-batch" culture? Give suitable examples. | 10 |
| | (b) What are "Good" mutants for fermentation? | 10 |
| | | |
| 4. | (a) How would you preserve Industrial microorganisms? | 10 |
| | (b) Write briefly about "Bio-Pesticides". | 10 |
| | | |
| 5. | (a) What is the importance of "Artifoam" agents? | 10 |
| | (b) How is oxygen demand and supply met and regulated? | 10 |
| | | |
| 6. | (a) What are "Bubble-column" and "Air-lift" Bio-reactors used for? Explain. | 10 |
| | (b) How is Cider-Vinegar made? | 10 |