

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Sc. (BT) (Sem.-4)**

# FUNDAMENTALS OF INDUSTRIAL BIOTECHNOLOGY

**Subject Code : BSBT-208**

**Paper ID : [F0220]**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

**1. Write briefly :**

- a) Transformation
- b) Biotechnology
- c) Beverages
- d) Biofertilizers
- e) Corn Steep liquor
- f) Trickling filters
- g) Hetero-Fermentation
- h) Agitator
- i) Culture preservation
- j) Single cell protein

### SECTION-B

- Q2. What is the role of yeast in industry?
- Q3. What is the role of biocatalysts in industries?
- Q4. What is fuel biotechnology? Explain.
- Q5. Give the schematic protocol for production of vinegar.
- Q6. Give the scope and applications of biocontrol agents.

### SECTION-C

- Q7. Discuss the design and operation of continuous type stirred reactors.
- Q8. Describe the production of organic acids at commercial level using microbes.
- Q9. Write in detail the scope and applications of environmental biotechnology.