

**T.Y.B.SC. SEM – VI (2014 COURSE) : SUMMER - 2018**  
**SUBJECT : MICROBIOLOGY : BIOTECHNOLOGY**

Day : **Monday**  
Date : **16/04/2018**

**S-2018-0773**

Time : **12.00 NOON TO 02.00 PM**  
Max. Marks : 40

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
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**Q.1** Attempt **ANY TWO** of the following: **[10]**

- a) Describe recovery of fermentation products by using precipitation and centrifugation.
- b) Give an account of 'alcohol Fermentation'.
- c) Write in detail the mechanism of Lysine fermentation.

**Q.2** Attempt **ANY TWO** of the following: **[10]**

- a) Describe 'Turbidometric assay'.
- b) Discuss briefly the subject matter and characteristics of patent.
- c) Discuss briefly Fermentation economics with respect to product recovery costs.

**Q.3** Attempt **ANY TWO** of the following: **[10]**

- a) Describe the Diffusion assay technique for Penicillin.
- b) Discuss purification of fermentation product by Adsorption, Drying and Crystallization.
- c) Give brief account of Recombination techniques for strain improvement.

**Q.4** Attempt **ANY FIVE** of the following: **[10]**

- a) What is solvent recovery? Enlist commonly used solvents in recovery process.
- b) Enlist different types of wines.
- c) What is Penicillin technique? Give its significance.
- d) What is Ames Test? Give its significance.
- e) What is pyrogen testing? Give its use.
- f) What are primary metabolites? Give examples.
- g) What is allergy testing? Give its significance.

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