

T.Y.B.SC. SEM – VI (2014 COURSE) : WINTER - 2017
SUBJECT : MICROBIOLOGY : BIOTECHNOLOGY

Day : Friday
Date : 27/10/2017

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

W-2017-0681

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
-

Q.1 Attempt **ANY TWO** of the following: **[10]**

- a) Describe briefly 'Enzymatic assays'.
- b) Describe briefly the fermentation processes involving biomass production.
- c) Give brief account of 'Lysine fermentation'.

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

- a) Give an account of 'Amylase Fermentation'.
- b) Describe Mutation approach for strain improvement.
- c) Discuss purification of fermentation products by solvent extraction and crystallization.

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

- a) Discuss fermentation economics with respect to Market potential and product recovery costs.
- b) Give brief account of subject matter and characterization of a patent.
- c) Describe Fermentation of Vitamin B₁₂

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

- a) Write uses of Citric acid.
- b) What do you mean by Protoplast fusion technique?
- c) Enlist different types of wines.
- d) How carcinogenicity testing is done?
- e) Define adsorption and elution.
- f) Write benefits of patent to inventor.
- g) What is pyrogen testing? Give its use.

* * * *