



AAN-489

Seat No. _____

B. Sc. (Sem. V) Examination

October / November - 2016

Biotechnology : Paper-31

(Industrial Biotechnology) (Elective)

Time : Hours]

[Total Marks : **50**

1 Answers the following : (any **ten**)

15

- (1) Which microorganism used in Citric acid production?
- (2) Define Bioprocess.
- (3) Which is the organism used as SCP?
- (4) What is a nature of Amino acid ?
- (5) Define Aerobic bacteria ?
- (6) Which bacterial strain is used to produce L-Lysine ?
- (7) Name the microorganisms used to produce Vitamin B₁₂.
- (8) Define Antibiotics.
- (9) Who is the father of Microbiology?
- (10) Industrially important Antibiotic producing organisms shall be isolated by
- (11) Mushrooms are rich sources of which nutrient component.
- (12) At which growth phase Antibiotics are produce _____
- (13) Write the function of sparger in fermentor.
- (14) Give the example of Solid state fermentative product.

2 Answer the following : (any **three**) 15.

- (1) Difference between Bioreactor and fermentor
- (2) Discuss Applications of Proteases.
- (3) Explain the Mushrooms cultivation process.
- (4) Explain the Nutrient Requirements of penicillin Fermentation
- (5) Explain Vitamin B₁₂ fermentation.
- (6) Discuss Recovery of Citric acid.

3 Answer the following : (any **two**) 20

- (1) Fermentative production of Amylase.
 - (2) Write a note on streptomycin production.
 - (3) Discuss fermentative process of I-Lysine.
 - (4) Write the downstream process of Penicillin fermentation.
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