

(20623)

B.Sc. (Bio-Tech.)- III Year

NS-3478

B.Sc. (Bio-Technology) Examination,

June-2023

INDUSTRIAL BIO-TECHNOLOGY

(B-306)

B.Sc. (Bio-Tech.)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt any **five** questions.

- ✓ 1. Give a detailed account on industrial microorganism. 15
2. Describe the role of pH, temperature and media aeration in fermentation. 15
3. Describe about microbial growth kinetics in batch fermentation process. 15

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(2)

4. Give a detailed account on bioreactors. 15
5. Give a detailed account on commercial production of any one of the following : 15
- (a) Streptomycin
 - (b) Acetic acid
 - (c) Lactic acid
6. Give a detailed account on commercial production of one of the following amino acid : 15
- (a) Glutamic acid
 - (b) Lysine
 - (c) Tryptophan
7. Give a detailed account on Immobilized enzymes. 15
8. Give a detailed account on protein engineering. 15

(3)

9. Write notes on the following : 7.5×2=15
- (a) Transgenic Cow
 - (b) Fermented dairy products
10. Give a detailed account on food adulteration with reference to dairy products and food grains. 15