



PGIIS-N 1593 B-2K12



M.Sc. Third Semester Degree Examination
BIOTECHNOLOGY — Paper – SCT 3.1
Food Biotechnology and Bio-Process Engineering
(New)

Time : 3 Hours]

[Max. Marks : 80

Instructions : 1) Section 'A' has **all compulsory** questions.

2) Answer 'B' and 'C' Sections as per instructions.

SECTION - A

Answer the following in brief :

(10 × 2 = 20)

1. Algal proteins.
2. Bio conversion.
3. Flocculation.
4. Biosensors.
5. Upstream process.
6. Probiotics.
7. Bioseparation.
8. Strain improvement.
9. Nutraceuticals.
10. Allosteric enzymes.

SECTION - B

Answer any **four** of the following :

(4 × 6 = 24)

11. Fed batch reactor.
12. Enzyme inhibitors.
13. Koji fermentor.

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14. Treatment of effluent and its disposal.
15. Production of flavours.
16. Treatment of effluent.

SECTION - C

Answer any **three** of the following :

(3 × 12 = 36)

17. Write in detail the production and applications of carotenoids and single cell proteins.
 18. Discuss in detail the modification of microbes by strain improvement technique for the better yield of the product.
 19. Give a detailed account on the enzyme kinetic studies.
 20. Describe the process of monitoring and control of any fermentation.
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