

S.No. 1772

12UBT08

(For the candidates admitted from 2012 – 2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Sixth Semester

Biotechnology

INDUSTRIAL BIOTECHNOLOGY

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Bioreactors
2. Upstream processing
3. Media formulation
4. Packed bed bioreactors
5. CSTR
6. Air lift bioreactors
7. Glutamic acid

8. Riboflavin
9. IPM
10. Symbiosis.

PART B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain the growth of industrial fermentation.

Or

- (b) Describe in detail about development of inoculum.

12. (a) Give a detailed note on batch culture.

Or

- (b) Write short notes on methods of immobilization.

13. (a) Give details on tower bioreactor.

Or

- (b) Explain the functions of bioreactor.

14. (a) Give a detailed account on biosynthesis of penicillin.

Or

- (b) Discuss about the microbial strains for Amylase.

15. (a) Explain biopesticides.

Or

- (b) Give a detailed account on biodyes.

PART C — (3 × 10 = 30 marks)

Answer any THREE out of Five questions.

16. Give a detailed account on strain improvement.

17. Explain the types of fermentation.

18. Describe in detail the monitoring and control of fermentation process.

19. Give a detailed account on microbial strains for citric acid production.

20. Write in detail on mushroom technology.