



US – 387

VI Semester B.Sc. Examination, May 2017
(Semester Scheme)
(CBCS – 2016 – 17 & Onwards/NS – 2013 – 14 & Onwards)
(Fresh + Repeaters)
MICROBIOLOGY – VIII
Industrial Microbiology and Microbial Technology

Time : 3 Hours

Max. Marks : 70(F+R)

PART – A

I. Write brief notes on the following. (5×2=10)

- 1) Batch fermentation.
- 2) EDTA.
- 3) Smf.
- 4) Precursors.
- 5) Cyanocobalamine.

PART – B

II. Answer **any four** of the following. (4×5=20)

- 6) List the characteristics of an ideal fermentor.
- 7) Explain the role of media in fermentations.
- 8) Briefly describe wine production.
- 9) Explain the production of amylase enzyme.
- 10) Give an account of different methods of cell disintegration.

P.T.O.



PART - C

III. Answer **any three** of the following.

(3×10=30)

- 11) Give an account of immobilization of cells and enzymes.
- 12) Define down stream processing and explain the role of HPLC technique in compound purification.
- 13) Give an account of mushroom cultivation.
- 14) Explain the structure and applications of stirred aerated fermentor and bubble cap fermentor.
- 15) Give an account of different strain improvement methods.

PART - D

IV. Answer in **one line only**.

(1×10=10)

- 16) Seed fermentor.
- 17) Whisky.
- 18) Carrier gas.
- 19) Buffering agents.
- 20) Continuous fermentation.
- 21) Biofuel.
- 22) Penicillin.
- 23) Ligand.
- 24) Stock culture.
- 25) Primary metabolite.