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**MBH 552** 

## IV Semester M.Sc. Degree Examination, September/October 2022 (CBCS-PG-CGPA) MICROBIOLOGY Industrial Microbiology

Time: 3 Hours Max. Marks: 70

I. Answer any five of the following:

 $(5 \times 3 = 15)$ 

- 1) Trophophase.
- 2) Substrate level phosphorylation.
- 3) Fed batch fermentation.
- 4) Growth factors.
- 5) Filter sterilization.
- 6) Buffers.
- 7) Citric acid.

II. Write notes on any five of the following:

 $(5 \times 5 = 25)$ 

- 8) Antifoaming agents.
- 9) Continuous fermentation.
- 10) Preservation of microbes.
- 11) Sterilization of media.
- 12) Production of vinegar.
- 13) Bioethanol production.
- 14) Culture collection centers.

III. Answer any three of the following:

 $(3 \times 10 = 30)$ 

- 15) Give an account on the strain improvement.
- 16) Describe the steps involved in purification of fermented products.
- 17) Explain the role of energy sources and inducers in the formulation of media.
- 18) Explain the different methods of screening and isolation of the industrially important microbes.
- 19) Give an account on good laboratory and manufacturing practices.