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Roll No

MPY-202 (PBT)

M.Pharmacy II Semester Examination, June 2020

Bioprocess Technology

Time : Three Hours

Maximum Marks: 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Write about techniques involved in Primary and secondary screening.
b) Describe design and operation of large scale fermentor and its application.
2. a) Give description on different types of bioreactors.
b) Explain the use of graphical plots for representing various cultivation systems.
3. a) Write the bioprocessing pathway for butanol production.
b) Describe in detail the process technology for production of penicillin.
4. a) Explain mass transfer theory and oxygen transfer system.
b) Discuss the preparation of fine chemical by using immobilized system.
5. a) Write in detail about theory, design, operation and recovery of solvent extraction.
b) Discuss HTST Sterilization in detail.
6. a) Explain microbial transformation of steroids.
b) Discuss biosynthetic pathway for production of Vitamins.
7. a) Discuss in brief about various types of impellers.
b) Write a detailed note on Maintenance of stock cultures.
8. Write a short note on any two:
 - a) Lineweaver-Burke Plot
 - b) Thermal death kinetics
 - c) Measurement of mass transfer coefficients
