

30/6/22 m

Roll Number ----- (Total Number of Questions 13) (Total number of Printed Pages 01)

Programme	B. Pharmacy
Semester	6 th
Subject	Pharmaceutical Biotechnology
Subject Code	BP605T
Paper ID	77990
Time	3Hours
Maximum Marks	75

Instructions to Candidates: No supplementary/continuation sheet will be issued to the candidates. Answer the questions precisely.

*Section A consists of Ten parts of 2 marks each (Objective Type); Attempt **ALL**.

Section B consists of Three questions carrying 10 marks each (Long Answer); attempt any **TWO.

***Section C consists of Nine questions carrying 5 marks each (Short Answer); attempt any **SEVEN**.

Section A

(10 X 2 = 20)

1. Give very short answers to the followings (2 marks each):

i.	Define Immunity and its type.
ii.	Define Haptens.
iii.	What are Auxotrophs and Prototrophs.
iv.	Define Plasma substitute.
v.	Explain structure and functions of MHC.
vi.	What is role of mutants in fermentation?
vii.	What are typical components used in fermentor media.
viii.	What do you mean by Biotechnology?
ix.	Write the difference between vaccine and antibiotics.
x.	Write the difference between toxin and toxoid.

Section B

(2 X 10 = 20)

2.	What are Monoclonal antibodies? Discuss their production.
3.	How bacteria are immobilized? Explain streptokinase.
4.	Explain in detail the fermentation process for the production of Vitamin B12.

Section C

(7 X 5 = 35)

5.	Write a note on mutant isolation.
6.	Discuss the advantages of continuous culture over batch culture.
7.	Discuss the production of ethanol by fermentation.
8.	Draw well labeled diagram of anaerobic fermenter and discuss its working.
9.	Explain western Blotting and southern blotting.
10.	Explain Microbial biotransformation with its applications.
11.	What do you understand by protoplasts fusion? Describe various aspects of spontaneous and induce fusion.
12.	Write the difference between prokaryotes and eukaryotes.
13.	Describe the factors influencing rate of mutation.

Note: Disclosure of identity by writing mobile number or making request for passing on any page of answer-sheet will lead to UMC against the candidate.