## [Total No. of Questions - 13] [Total No. of Printed Pages - 2] DEC-23-0088

# BP-605 T (Pharmaceutical Biotechnology)

#### B.Pharm-6th (PCI)

Time: 3 Hours

Max, Marks: 75

Note: Section A is Compulsory, attempt all questions in this section. Attempt any Two questions from Section B and Seven questions from Section C.

#### SECTION-A

(10×2=20)

#### Short Answer (Compulsory)

- Give short answers:
- Write the applications of biosensors.
- = Write a brief about PCR.
- FI Write about MHC
- 2 What is the application of western blotting?
- < Write the names of sterilization methods
- ≤. Define genetic engineering
- ≦. Write about cloning vectors in brief.
- ≦. Why insulin is needed for our body?
- Σ, Write the function of MHC
- × What is the difference between humoral and cellular immunity?

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Discuss Immuno blotting techniques with their applications.

Long Answer (Any Two) SECTION-B

and MHC. Elaborate immunity and its types. Write about immunoglobulin

≥ Write the fermentation methods

Write about collection, processing and storage of human whole blood.

<u>B</u>

SECTION-C

 $(7 \times 5 = 35)$ 

## Short Note Answer (Any Seven)

- Write about ELISA and its application.
- 6 Give the study of production of Penicillin and Vit. B12.
- Define protein engineering and its applications.
- Pharmaceutical Industries Explain biosensors, their working and applications 5
- ဖွ What are blood products and Plasma Substitutes?
- 10. Write a note on genetic organization of Prokaryotes and Eukaryotes.
- 11. Give an introduction to Microbial biotransformation and applications
- 12. Write brief introduction to Biotechnology with reference to Pharmaceutical Sciences.
- 13. Write a short note on Hypersensitivity reactions, Immune stimulation and Immune suppressions.

 $(2 \times 10 = 20)$ BP-605 T