

Roll No.

Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (Sem.-6)
PHARMACEUTICAL BIOTECHNOLOGY-THEORY

Subject Code : BP605T

M.Code : 77990

Date of Examination : 14-07-22

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.
3. SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.

SECTION-A

1. Write briefly :

- (a) Enzyme Biotechnology
- (b) Protein engineering
- (c) PCR
- (d) Cloning vectors
- (e) MHC
- (f) Bacterial vaccines
- (g) ELISA
- (h) Microbial conjugation
- (i) Griseofulvin
- (j) Plasma substitutes

SECTION-B

2. Define the term Biotechnology. Explain basic principles and applications of genetic engineering.
3. What do you understand by immunity? Comparatively illustrate features of humoral and cellular immunity.
4. Explain principle, methodology and applications of Southern Blotting. Also, provide a well illustrated diagram of the Southern Blotting technique.

SECTION-C

5. Explain working and applications of Biosensors in Pharmaceuticals.
6. Discuss potential applications of microbes in Pharmaceutical industry.
7. Write down the detailed notes on restriction endonucleases and DNA ligases.
8. What is hypersensitivity? Differentiate between immune stimulation and immune suppressions using suitable examples.
9. Give principle, methods and applications of PCR.
10. Explain briefly the microbial biotransformation processes and their applications in pharmaceutical product synthesis.
11. Compare genetic features of prokaryotes and eukaryotes using suitable examples.
12. What is fermentation technology? Give an overview of the fermentation methods and general requirements for synthesis of pharmaceutical ingredients.
13. How do you collect, process and store dried human plasma?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.