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B PHARM
(SEM VI) THEORY EXAMINATION 2022-23
PHARMACEUTICAL BIOTECHNOLOGY- THEORY

Time: 3 Hours

Total Marks: 75

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

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1. Attempt all questions in brief.

10 x 2 = 20

- a. Name the microorganisms used in the production of enzymes amylase and penicillinase.
- b. What are the restriction end nucleases? Give an example.
- c. What is a toxoid vaccine? Give an example.
- d. Erythroblastosis foetalis is an example of which type of hypersensitivity reaction?
- e. Define the terms immune stimulation and immune suppression with an example of each.
- f. What is the storage temperature of refrigerated vaccines?
- g. What is ELISA? Give an example of its application.
- h. Give two differences in the genetic organization of eukaryotes and prokaryotes.
- i. Name two important parameters that need to be controlled while operating any fermenter. <https://www.aktuonline.com>
- j. What is a plasma substitute? Give one example.

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SECTION B

2. Attempt any two parts of the following:

2 x 10 = 20

- a. Discuss the working of a biosensor highlighting its various components with a neat and labeled diagram.
- b. Illustrate in detail about the process of PCR and write some of its important applications.
- c. Describe the processing and storage of whole human blood and dried human plasma.

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SECTION C

3. Attempt any five parts of the following:

7 x 5 = 35

- a. Discuss the various methods involved in enzyme immobilization with examples.
- b. Describe the process of manufacturing human insulin using rDNA technology and genetic engineering.