Subject Code: BP605T

PAPER ID-311143

Roll No: | | | | | | | | | | | | | |

BPHARM
(SEM VI) THEORY EXAMINATION 2023-24
PHARMACEUTICAL BIOTECHNOLOGY– THEORY

TIME: 3 HRS **M.MARKS: 75**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	What is the use of amylase?
b.	Suggest some techniques to reduce foam formation in a fermenter.
c.	Cite examples of chemical mutating agent.
d.	Explain the function of MHC
e.	Differentiate between vaccines and sera
f.	Suggest some application of genetic engineering in medicine
g.	How will you sterilize media for fermentation?
h.	Suggest the role of sparger
i.	Differentiate between cellular and humoral immunity
j.	What is bioreactor?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Enumerate the various technologies involved in enzyme immobilization with examples.
b.	Justify the application of r-DNA Technology in the production of interferon.
c.	What are the various types of mutating agents? How will you separate and preserve a mutant culture?

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Discuss the scope of biotechnology in healthcare sector
b.	Explain the process of production and purification of asparginase enzyme.
c.	Explain the various types of hypersensitivity reactions. Narrate the structure of immunoglobulin
d.	Discuss the process of ELISA and Southern Blotting as immunoblotting techniques
e.	Explain the process of collecting and storage of dried human plasma
f.	Write short note on PCR
g.	Explain with figure the various parts of a multibladded impeller fermenter used in the production of a metabolite. What are the reasons for foam formation during fermentation.?