PAPER ID-312105

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

MPHARM

(SEM II) THEORY EXAMINATION 2024-25

ADVANCED BIOPHARMACEUTICS & PHARMACOKINETICS

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.	Define pH partition theory.
b.	Write the absorption pattern of elixir as a dosage form.
c.	Define permeability-solubility-charge state.
d.	Write the significance of drug release testing.
e.	Write the parameters of one compartment model.
f.	Define K_{max} and V_{max}.
g.	Define biosimilar drug products.
h.	Define immunotherapy.
i.	Write the gastric absorption of syrups.
j.	Write the significance of intracellular pH environment.

SECTION B

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

a.	Write the mechanism of drug absorption through gastrointestinal tract.
b.	Discuss the factors affecting drugs bioavailability.
c.	Elucidate the pharmacokinetics and pharmacodynamics of medications made by biotechnology.

SECTION C

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

a.	Write the properties of the gastrointestinal tract.
b.	Write a note on alternative methods of dissolution testing.
c.	Give the method of preparation and applications of monoclonal antibodies.
d.	Write the key features and types of cross over study design.
e.	Write a note on cytochrome p450-based drug interactions.
f.	Write the key parameters to study dissolution profile comparison analysis.
g.	Write the steps involved in study submission and drug review process.