PAPER ID-410862

Subject Code: RPH522

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

B. PHARM

(SEM V) THEORY EXAMINATION 2021-22

PHARMACEUTICS-VI (PHARMACEUTICAL TECHNOLOGY-I)

Time: 3 Hours ***Total Marks: 70***

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

SECTION A

1. Attempt *all* questions in brief. 2 x 7 = 14

a.	Mention the significance of studying particle size and dielectric constant in formulation development.
b.	Define biphasic liquid dosage forms with suitable examples.
c.	Define and classify multiple emulsions.
d.	Define *in situ* gels and hydrogels.
e.	Mention the roles of various components of a clear gel.
f.	State the uses of sterile water for injection and sterile powder.
g.	Classify pharmaceutical propellants with suitable examples of each class.

SECTION B

2. Attempt any *three* of the following: 7 x 3 = 21

a.	Explain in brief the role of three major parameters of preformulation studies for formulating a tablet.
b.	Write a brief note on packaging of biphasic liquid dosage forms.
c.	Classify semisolid dosage forms and explain the method of selection of semisolid bases used in them.
d.	Describe the in vitro evaluation parameters for testing eye drops.
e.	Explain the advantages, limitations, and applications of pharmaceutical aerosols.

SECTION C

3. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Describe the method of stability studies with reference to the ICH guidelines.
(b)	Justify the significance of preformulation studies in formulation development.

4. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Explain the evaluation parameters for nanoemulsion and nanosuspension.
(b)	Explain the various steps involved in the preparation of w/o/w and o/w/o emulsions with flow chart diagrams.

5. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Describe the various methods used for enhancement of skin permeation.
(b)	Highlight in brief the advantages, limitations, and applications of liquid suppositories.

6. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Mention the Significance and explain the formulation specifications of otic preparations.
(b)	Explain the selection criteria for containers and closures specified for parenteral products.

7. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Describe in brief the various methods of packaging of pharmaceutical aerosols.
(b)	Write in brief the regulatory requirements for approval of animal drugs.