PAPER ID-311026

Subject Code: RPH522

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

BPHARM

(SEM V) THEORY EXAMINATION 2023-24

PHARMACEUTICS-VI (PHARMACEUTICAL TECHNOLOGY-I)

TIME: 3 HRS **M.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.	How does the shape and density of particles impact the manufacturing process?
b.	Differentiate between nanoemulsion and microemulsion.
c.	Define suppositories.
d.	Compare the differences between paste and cream.
e.	What is sterile water for injection?
f.	Discuss aerosols and its significance in drug delivery.
g.	Highlight the importance of packaging in preserving the quality and shelf life of biphasic liquid dosage forms.

SECTION B

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

a.	Discuss the role of particle size in the formulation development of pharmaceuticals, and how does it affect drug solubility, dissolution rate, and bioavailability?
b.	Provide examples of different types of vehicles and their roles in delivering active ingredients.
c.	Discuss the various types of semisolid dosage forms and provide a detailed classification.
d.	Summarize the challenges and significance of ophthalmic, nasal, otic, and parenteral products in pharmaceutical formulations.
e.	Explore the different types of propellants used in pharmaceutical aerosols and their impact on formulation stability and environmental concerns.

SECTION C

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

a.	Describe the techniques and strategies employed to enhance wetting in formulations, particularly for poorly water-soluble drugs.
b.	Explore the significance of stability in pharmaceutical formulation, and how does it affect the shelf life and efficacy of a drug product?

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

a.	Explain the manufacturing processes involved in creating emulsions and suspensions.
b.	Illustrate the importance of suspending agents and emulsifying agents with examples.

PAPER ID-311026

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

BPHARM
(SEM V) THEORY EXAMINATION 2023-24
PHARMACEUTICS-VI (PHARMACEUTICAL TECHNOLOGY-I)

TIME: 3 HRS **M.MARKS: 70**

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

a.	Explore and compare different methods used to enhance skin permeation in semisolid dosage forms.
b.	Recommend the packaging and evaluation of Suppositories.

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

a.	Examine the importance of appropriate container and closure selection in ensuring the stability and sterility of ophthalmic, nasal, otic, and parenteral products.
b.	Illustrate the *in-vitro* methods used for the evaluation of ophthalmic, and parenteral preparations.

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

a.	Discuss in detail about the general formulation considerations for pharmaceutical aerosols, highlighting key components and their roles in the formulation.
b.	Recommend the regulatory requirements and approval processes for animal drugs.