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BACHELOR OF PHARMACY
(SEM V) THEORY EXAMINATION 2018-19
PHARMACEUTICS-VI (PHARMACEUTICAL TECHNOLOGY-I)

Time: 3 Hours ***Total Marks: 100***

Note: Attempt all Sections.

SECTION A

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

a. What do you mean by *Drenches* and *Tubings*?
b. Give example of polymers used for preparing *In situ gels*.
c. What is Syneresis of gel?
d. Give example of some humectants used in semi-solid preparation.
e. Write the equation used for describing dissolution of drug.
f. Write the USP classification of glass.
g. What is product concentrate? What are the components of product concentrate?
h. Write any two differences between flocculated and deflocculated suspensions.
i. What is Solid-Fat Index?
j. What do you mean by Macromelting and Micromelting point?

SECTION B

2. Attempt any *three* of the following: 10 x 3 = 30

a. Write about the significance of preformulation studies. Discuss about the methods used for bulk characterization of drug.
b. Discuss in detail about the evaluation of stability of a pharmaceutical suspension. What are nanosuspensions?
c. What are the advantages of Suppositories? Enumerate the ideal features required for a suppository base.
d. What are Ophthalmic preparations? Write in detail about formulation of an Ophthalmic product.
e. Name the components of a pharmaceutical Aerosol. What are the evaluation parameters of an Aerosol?

SECTION C

3. Attempt any *one* part of the following: 10 x 1 = 10

(a) Discuss in detail about the regulatory bodies and their guidelines for approval of animal drugs.
(b) What are the different semisolid bases? Discuss in detail with examples.

4. Attempt any *one* part of the following: 10 x 1 = 10

(a) Write in detail about the large scale manufacturing techniques of Parenteral products.
(b) Discuss about the stability problems of an emulsion. Add a note on the stabilization of emulsion.

5. Attempt any *one* part of the following: 10 x 1 = 10

(a) Classify Propellants according to their use. Discuss about the propellant selection with the help of different gas laws.

(b) What are structured vehicles? Discuss their role in controlled flocculation in suspensions. Give example of some flocculating agents.

6. Attempt any *one* part of the following: 10 x 1 = 10

(a) What are the different studies which are performed under solubility analysis of a drug? State the significance of solubility analysis in formulation development.

(b) What are the different manufacturing methods of suppositories? Write about the packaging and storage of suppositories.

7. Attempt any *one* part of the following: 10 x 1 = 10

(a) Discuss in detail about the pre-filling treatments required in manufacturing of a parenteral preparation.

(b) What are the challenges for topical semisolid preparations? Discuss about the different chemical and physical skin permeation enhancement methods.