

Printed pages: 02

Roll No.

--	--	--	--	--	--	--	--	--	--

Sub Code: BOP-352

PaperID:5048

BACHELORE OF PHARMACY
(SEM -V) THEORY EXAMINATION 2017-18
PHARMACEUTICS-VI
(Pharmaceutical Technology-I)

*Time: 3 Hours**Total Marks: 100***Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x10 = 20**

- a. What are the objectives of preformulation studies?
- b. Name the methods for assessment of particle size.
- c. Enlist additives frequently used in suspensions.
- d. Name two emulsifying agents.
- e. Enlist the various methods of skin permeation.
- f. What is the role of surfactants in formulation of emulsions?
- g. What are the drawbacks of oleaginous semi-solid bases?
- h. Name any two suspending agents of natural origin used in formulation of suspensions.
- i. What are pyrogens. Name a method to detect them in parenterals.
- j. Name any two propellants used in inhalation aerosols.

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

- a. Classify the various ointment bases with suitable example. Add a note on the desired properties of an ointment base.
- b. What are aerosol propellants? Classify different aerosol propellants. Add a note on in-vitro evaluation of pharmaceutical aerosols.
- c. Define pharmaceutical suspension and discuss in brief about the additives used in formulation of suspensions.
- d. Why sterility is necessary for parenteral preparations? Discuss in detail the evaluation parameters for parenterals.
- e. What is displacement value for suppositories? Add a note on suppository bases.

SECTION C**3. Attempt any two parts of the following: 5 x 2 = 10**

- (a) Write short note on sterile water for injection.
- (b) Write short note on emulsifier.
- (c) Discuss in brief about dissolution study.

4. Attempt any two parts of the following: 5 x 2 = 10

- (a) Write a short note on ICH guidelines for stability study.
- (b) Discuss in brief about suspending agents.
- (c) Discuss in brief about formulation and evaluation of ophthalmic products.

5. Attempt any two parts of the following: 5 x 2 = 10

- (a) Write a note on multiple emulsion.
- (b) What is the significance of partition coefficient in preformulation studies.
- (c) Regulatory requirement for veterinary products.

6. Attempt any two parts of the following: 5 x 2 = 10

- (a) State the method for estimation of solubility of drugs..

- (b) Write a short note on nanosuspension.
- (c) Discuss about evaluation of suppositories.

7. **Attempt any two parts of the following:**

5 x 2 = 10

- (a) Discuss about formulation of pharmaceutical gels for topical administration.
- (b) Write short notes on structured vehicles. State few examples of the same.
- (c) What are the various advantages of pharmaceutical aerosols.