

**B PHARM**  
**(SEM-IV) THEORY EXAMINATION 2019-20**  
**PHYSICAL PHARMACEUTICS-II**

**Time: 3 Hours**

**Total 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 peptization.
- b. Explain Schulze -Hardy rule.
- c. Give two applications of thixotropy in formulation.
- d. Give example of multipoint viscometer.
- e. Define deflocculated suspension.
- f. Give two examples of Cationic and non ionic surfactant.
- g. Differentiate between true density and bulk density.
- h. What are the disadvantages of microscopic method?
- i. Write the unit of specific rate constant of zero order reaction and second orderreaction.
- j. Explain the term expiry date and half life of a drug.

**SECTION – B**

**2. Attempt any two of the following:**

**2x10 = 20**

- a. Explain the different categories of non-Newtonian fluid based on the different pattern of rheogram.
- b. Explain the working principle of Andreasen apparatus with the help of a labelled diagram.
- c. Compute the accelerated stability testing for determination of expiration dating of pharmaceutical dosage forms

**SECTION – C**

**3. Attempt any five parts of the following:**

**7 x 5 = 35**

- a. Write about the kinetic & electrical properties of colloidal dispersion.
- b. Explain the optical properties of colloids
- c. Describe the stress, strain and Heckle equation
- d. Write a note on thixotropy.
- e. Explain the working principle of Andreasen apparatus with the help of a labelled diagram.
- f. Define zero order reactions. Give equations for determining shelf life and half-life for the same.
- g. Enumerate the difference between flocculated and deflocculated suspensions