Paper Id: | 910028 | **Roll No:** ☐☐☐☐☐☐☐☐☐☐☐☐☐

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