

Roll No.....

Sub Code: BP302T

**B PHARM (SEM-III)**  
**THEORY EXAMINATION 2021-22**  
**PHYSICAL PHARMACEUTICS -I**

*Time: 3 Hours*

*Total Marks: 75*

**Note: Attempt all Sections.**

**SECTION A**

**Very Short Answer (Attempt all questions)**

**10 x 2 = 20**

- a. Enlist limitations of distribution law.
- b. Define salvation and association.
- c. Define real solution.
- d. Define diffusion.
- e. What are chelate compounds?
- f. State Raoult's Law.
- g. What is vapor pressure?
- h. Define HLB scale.
- i. What are surface and interfacial tensions?
- j. Define Sorensen's pH scale.

**SECTION B**

**Short Answer (Attempt any 5 questions )**

**5 x 7 = 35**

- a. Describe pharmaceutical and biological buffers.
- b. Define buffered isotonic solution. Describe methods of adjustment tonicity.
- c. Discuss protein binding.
- d. Explain solubilization and detergency.
- e. Describe sublimation critical point and eutectic mixtures.
- f. Discuss critical solution temperature and applications.
- g. Write short notes on liquid crystals and glassy states.

**SECTION C**

**Long Answer (Attempt any 2 questions )**

**2 x 10 = 20**

- a. Describe solubility of liquid in liquids.
- b. Describe determination and applications of dipole moment and dissociation constant.
- c. Describe classification of complexation.