Subject Code: BP302T

PAPER ID-311878

Roll No:

BPHARM
(SEM III) THEORY EXAMINATION 2024-25
PHYSICAL PHARMACEUTICS I

TIME: 3 HRS **M.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 Solvation and Association.
b.	Define critical solution temperature.
c.	Define Sorensen's pH scale.
d.	Explain eutectic mixtures.
e.	What are chelating agents?
f.	Explain the term solubilization.
g.	What is critical micellar concentration?
h.	Define Nernst potential and Zeta potential.
i.	Explain the term "Detergency".
j.	Describe Molarity and Normality.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Describe the solubility of liquids in liquids.
b.	Derive Raoult's Law and discuss deviation from Raoult's Law giving examples.
c.	Demonstrate various methods used for the determination of surface and interfacial tension.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

a.	Define tonicity. Differentiate between isosmotic and isotonic solutions. Describe the methods that are used to adjust pH and tonicity.
b.	Describe the classification of complexation in detail.
c.	Classify surface active pharmaceutical system.
d.	Explain buffer action and application of buffer in pharmaceutical and biological system.
e.	Explain the differences between solid-crystalline and amorphous states.
f.	Discuss the distribution law along with its applications and limitations.
g.	Discuss protein binding.

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