PAPER ID-411903

Roll No:

B.PHARMA
(SEM III) THEORY EXAMINATION 2023-24
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 the term critical solution temperature with example
b.	Define diffusion
c.	Define the term eutectic mixtures with examples
d.	What is ideal gas equation?
e.	What is spreading coefficient and its formulae
f.	Define term solubilization
g.	Define adsorption
h.	Define detergency
i.	What are chelating agents with examples.
j.	Define buffer capacity.

SECTION B

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

a.	Define tonicity. Differentiate between iso-osmotic and isotonic solutions. Describe methods that are used to adjust the pH and tonicity.
b.	Explain Refractive Index by Snell's Law. Draw the diagram and explain working of Abbes Refractrometer and its applications.
c.	Describe in brief about Solubility of liquids in liquids.

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SECTION C

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

a.	Discuss diffusion mechanism in biological system with example.
b.	Differentiate between crystalline solids and amorphous solids.
c.	Explain in brief about isotherm with diagram.
d.	Discuss various methods of analysis of complexation.
e.	Elaborate electrometric and calorimetric pH determination method
f.	Discuss the distribution law along with its applications
g.	Explain critical solution temperature and its applications using example.