



Roll No:

**BPHARMA**  
**(SEM IV) THEORY EXAMINATION 2023-24**  
**PHYSICAL PHARMACEUTICS II - THEORY**

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 peptization.
b.	Write the importance of pseudo plastics
c.	Define young's modulus.
d.	Write some factors affecting stability of emulsions.
e.	Define dynamic viscosity.
f.	Define porosity.
g.	How dielectric constant affects drug stability.
h.	Write the principle of rotational viscometer.
i.	Write the effect of temperature on viscosity.
j.	Write the optical properties of colloids.

**SECTION B**

2. Attempt any two parts of the following:

2 x 10 = 20

a.	Why colloidal dispersions show electrical properties? Describe some electrical properties of colloids.
b.	How particle size distributions influence the behavior and properties of colloidal systems? Compare between monodisperse and polydisperse.
c.	Enlist the physical factors influencing the chemical degradation of pharmaceutical products.

**SECTION C**

3. Attempt any five parts of the following:

7 x 5 = 35

a.	Explain the kinematic viscosity; How the kinematic viscosity can be measured?
b.	Define deflocculated suspension. Write the properties and method of preparation of deflocculated suspension.
c.	Explain the derived properties of powders.
d.	Write the way to stabilize the medicinal agents against oxidation.
e.	Discuss the accelerated stability testing for pharmaceutical dosage forms.
f.	Define micro emulsion; Write the types and components of micro emulsions.
g.	Compare between plastic and elastic deformation of solids.