Subject Code: BP403T

PAPER ID-310191

Roll No: | | | | | | | | | | | | | |

BPHARM

(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.	What is Tyndall effect
b.	Explain Spurs with example.
c.	Define phase inversions
d.	State Edmundson's equation
e.	Give expressions for rate constant and half-life of zero and first order rate of a reaction
f.	What is gold number?
g.	Define dilatancy with examples
h.	Draw flow curve for anti-thixotropy flow and explain its mechanism.
i.	Explain ferret diameter and projected diameter
j.	Define half-life. Explain concept of half-life in first order reaction

SECTION B

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

a.	Define stability studies. Explain in detail how the shelf life of pharmaceutical product is determined.
b.	Discuss in detail the theories of emulsion.
c.	Define Viscosity. Classify different viscometers with examples. With the help of neat diagram explain the principle and working of any one single point viscometer.

SECTION C

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

a.	Explain optical properties of colloids
b.	Discuss plastic and pseudoplastic system of flow
c.	With the help of neat diagram explain principle and working of coulter counter method to determine the particle size
d.	Explain physical degradation of pharmaceuticals and its preventive measures.
e.	Explain the different methods to evaluate the stability of suspensions.
f.	What are association colloids? Mention the mechanism of formation of micelles with suitable example.
g.	Explain electrical properties of colloids.