

Date : 06/01/2024

Course : B.Pharmacy

Semester: IV

Subject Name: Physical Pharmaceutics II

Subject Code: BP403T

Max Marks : 75 <https://pharmacyindia.co.in/>

Duration: 3Hr.

**Instructions:**

Get Latest Pharma Private/ Govt. Job updates | [Download B. Pharma/ D. Pharma University Exam Papers](#) | [Previous Pharmacist/ DI/ GPAT/ NIPER Papers](#) | [Pharma News Updates](#) | [D. Pharma Notes](#) | [Pharmacy College Informations](#) | [Pharma Industry Updates](#)

1. All questions are compulsory

Visit: <https://pharmacyindia.co.in>

2. Draw diagrams/figures wherever necessary

3. Figures to right indicate full marks

**1. Objective Type Questions (Answer all the questions)**

(10 x 2) = 20 Marks

- i. Define peptization with example.
- ii. State Bancroft's rule. Draw HLB scale. <https://pharmacyindia.co.in/>
- iii. Differentiate molecular dispersion and colloidal dispersion with example.
- iv. What do you mean by "Pseudo-Zero Order Kinetics"?
- v. Draw rheograms of thixotropic material showing bulge and spur.
- vi. Define angle of repose and give its importance.
- vii. Define porosity. Give applications in Pharmacy.
- viii. Distinguish between flocculated and deflocculated suspension.
- ix. Explain the need for stability testing? <https://pharmacyindia.co.in/>
- x. Define Viscosity and Fluidity with examples.

**2. Long Answers (Answer 2 out of 3)**

(2 x 10) = 20 Marks

- i. Define first order reaction. Deduce an equation for determining the rate constant, half life and shelf-life of a zero order reaction.
- ii. Explain in detail about plastic flow, pseudo-plastic flow and dilatant flow with suitable graph. <https://pharmacyindia.co.in/>
- iii. Describe types of physical instability in emulsion. Differentiate between wet and dry gum methods for preparation of emulsion. <https://pharmacyindia.co.in/>

**3. Short Answers (Answer 7 out of 9)**

(7 x 5) = 35 Marks

- i. Discuss different tests to evaluate the flowability of powder
- ii. Write in detail about the formulation of suspension.
- iii. Differentiate between lyophilic and lyophobic Colloids.
- iv. Explain sedimentation method of particle size determination alongwith its advantages and disadvantages. <https://pharmacyindia.co.in/>
- v. Explain the preventive measures for chemical degradation due to hydrolysis and oxidation. <https://pharmacyindia.co.in/>
- vi. Define : 1.Surface diameter, 2.Volume diameter, 3.Projected diameter 4.Stoke's diameter & 5. Sieve diameter
- vii. Explain determination of viscosity by using multi point viscometer.
- viii. Describe Optical and Kinetics properties of colloids.
- ix. State Hooke's law. Differentiate between strain and stress. <https://pharmacyindia.co.in/>

-----END OF THE PAPER-----