

Subject Code: B132103/R13

II B. Pharmacy I Semester Supplementary Examinations May - 2017

PHYSICAL PHARMACY-II

Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**
Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**

PART-A

1. (a) Define and differentiate solubility and dissolution.
- (b) Define the order and rate of a reaction.
- (c) Define spreading coefficient.
- (d) What is the difference between Micromeritics and Rheology?
- (e) What is kinematic viscosity and give its units of measurement?
- (f) Write about Micellar solubilization of drugs.

[4+4+3+3+3+5]

PART-B

2. (a) Explain the different factors affecting the solubility of solids in liquids.
- (b) Explain in detail about various factors influencing the solubility of gases in liquids. [8+8]
3. (a) Briefly explain the influence of light on drug stability and write about the different ways to prevent photo-degradation of drugs.
- (b) Describe the methods used to determine the order of a reaction. [8+8]
4. (a) Define and differentiate surface tension and interfacial tension. Explain why surface tension is always greater than interfacial tension.
- (b) Write different methods to determine interfacial tension and surface tension. [8+8]
5. (a) Explain the differences between bulk, true and granule densities & Explain. How do they influence the properties of tablets?
- (b) Write about the methods for the determination of surface area. [8+8]
6. (a) What is Thixotropy? How it is measured? Write about its significance in formulations.
- (b) Elaborate the importance of Rheology in pharmaceutical formulations. [10+6]
7. Describe the following properties of colloids
- (a) Electrical properties
- (b) Kinetic properties
- (c) Optical properties

[6+5+5]

