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**

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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 rnethods 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]

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