

[LC 4256]

FEBRUARY 2013

Sub. Code: 4256

**SECOND YEAR B.PHARM. EXAM**  
**Paper I – PHYSICAL PHARMACEUTICS**

*Q.P. Code: 564256*

**Time : Three hours**  
**(180 Min)**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40 marks)**

1. Describe about the different methods of analysis of complexes with examples.
2. Discuss about the preparation and evaluation of pharmaceutical suspensions.

**II. Write notes on:**

**(8 x 5 = 40 marks)**

1. Explain the principles of gastro intestinal absorption of drugs.
2. What is buffer capacity? How do you determine the buffer capacity?
3. Describe the derived properties of powders.
4. Write the applications of rheology in pharmacy.
5. Explain the factors influencing rate of reaction.
6. Write notes on spreading coefficient.
7. Discuss about instabilities of emulsion.
8. Describe the optical properties of colloids.

**III. Short Answers:**

**(10 x 2 = 20 marks)**

1. Half life.
2. Thixotropy.
3. Protein binding of drugs.
4. Applications of colloidal system.
5. Solubilization.
6. Hydrophilic lipophilic balance.
7. Viscosity.
8. Multiple emulsions.
9. Protective colloids.
10. Examples of pharmaceutical buffers.

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