



(LQ 4256)

**FEBRUARY 2020**

Sub. Code: 4256

**B.PHARM. DEGREE EXAMINATION  
SECOND YEAR  
PAPER I – PHYSICAL PHARMACEUTICS**

*Q.P. Code: 564256*

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Define dissolution, write about factors affecting rate of dissolution.  
b) Explain one method for determining particle size.
2. a) Define complexes. Explain method of analysis of complex.  
b) What is Newtonian and non-Newtonian systems? Explain with suitable examples.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Determination of expiry date.
2. Stability of emulsion.
3. Types of suspensions.
4. Explain steady – state diffusion.
5. Write about pharmaceutical buffer and biological buffer.
6. Stability of colloidal system.
7. Isotonic solutions.
8. Electrical properties of colloids.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Gold number
2. Bancroft rule.
3. Ferrocene.
4. Critical Micellar Concentration.
5. Order of reaction.
6. Suspending agents.
7. Types of colloids.
8. Buffer equation.
9. BET Equation.
10. Stokes equation.

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