(LM 4256) **FEBRUARY 2018** 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. Define and classify Colloids with suitable examples. Discuss their electrical properties.

2. a) Explain the term Rheology. Differentiate newtonian and non newtonian fluids with examples.
   b) Describe the derived properties of powders.

II. Write notes on: **(8 x 5 = 40)**

1. Give an account of various factors affecting dissolution rate.
2. Describe the controlled flocculation.
3. Derive first order rate constant.
4. Discuss briefly about protein binding of drugs and its significance.
5. Write a note on accelerated stability studies.
6. Describe air permeability technique for measurement of specific surface.
7. Explain isotonic solution and methods of adjusting tonicity.
8. Spreading co-efficient.

III. Short answers on: **(10 x 2 = 20)**

1. Zeta potential.
2. Buffer capacity.
3. Porosity.
4. Polymorphism.
5. Dissolution.
6. Bancroft's rule.
7. HLB.
8. Kraft point.
9. Micro emulsion.
10. Chelates.

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