[LF 4256]   **AUGUST 2014**   **Sub. Code: 4256**

SECOND YEAR B.PHARM. DEGREE EXAMINATION

Paper I – PHYSICAL PHARMACEUTICS

Q. P. Code: 564256

Time: Three Hours   **Maximum: 100 Marks**

Answer All Questions

I. Essay Questions: **(2 x 20 = 40)**

1. a) What is Kinetics? Define order of reaction.

   Distinguish between the first order and zero order reaction.

   Explain the methods to determine the order of reaction.

   b) Methods to determine specific surface area of powders.

2. a) What is an emulgent. Classify emulgents with suitable example.

   Explain the mechanism of action of emulgent.

   b) Write about the Fick's laws of diffusion.

II. Short Notes: **(8 x 5 = 40)**

1. Isotonic solutions and tonicity adjustment.
2. Inorganic complexes in pharmacy.
3. Electric properties of interface.
4. Thioxtrophy.
5. Purification of colloids.
6. Stability of suspensions with sedimentation paramete
7. Explain Do-nouy ring metho
8. Significance of protein binding.

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

1. Spreading coefficient.
2. Carrier mediated transport.
3. CMC.
4. Bancraft rule.
5. Creaming and cracking.
6. Porosity.
7. Edmunson equation.
8. HLB.
9. Types of viscomete
10. Non-newtonian system.

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