

[BPHARM 0921]

SEPTEMBER 2021  
(FEBRUARY 2021 EXAM SESSION)

Sub. Code: 4256

**B. PHARMACY DEGREE EXAMINATION  
SECOND YEAR – (NON-SEMESTER)  
PAPER I – PHYSICAL PHARMACEUTICS  
Q.P. Code: 564256****Time: Three hours****Answer ALL questions****Maximum: 100 Marks****I. Elaborate on:****(2 x 20 = 40)**

1. a) Explain in detail different types of Complexes with suitable examples.  
b) Enlist the methods of analysis of Complexes and explain in detail about pH
2. a) Describe the various theories of Emulsification.  
b) Write about the instabilities of Emulsion.

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

1. Factors influencing rate of reaction.
- 2.
3. Determination of Particle size by sedimentation met
4. Describe the various methods of purification of Colloids.
5. Explain shear thinning and shear thickening system of flow.
6. Explain the principles of Gastro-intestinal absorption of drugs.
7. Theory of Micelle formation.
8. Describe controlled flocculation.

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

- 1.
2. Fick's first law of diffusion.
3. Zeta potential.
4. Classification of Colloids.
5. Isotonic solutions.
6. Spreading co-efficient.
7. Multiple emulsions.
- 8.
9. Degree of Flocculation.
10. Brownian movement.

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