FEBRUARY 2019   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 Suspensions. Explain types of suspensions and stability of suspensions.
    b) Write about the Ficks laws of diffusion.

2. a) Define viscosity. Classify viscometer with examples.
    b) Explain a method for the determination of surface area of powder.

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

1. Explain electric double layer of interface.
2. Write the methods to determine the order of reaction.
3. What is isotonicity? Write about the tonicity testing and adjustment of tonicity.
4. Significance of protein binding.
5. Explain non-Newtonian system.
6. Classify the colloidal system.
7. Du-nouy ring method
8. Describe classification of complex.

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

1. Creaming any cracking.
2. Noyes-whitney equation.
3. Accelerated stability testing.
4. Edmunson equation.
5. Thixotrophy.
6. Angle of repose.
7. Butter capacity.
8. Critical Micellar concentration.
9. Spreading coefficient.
10. Carrier mediated transport.

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