

[LB 4256]

AUGUST 2012

Sub. Code: 4256

SECOND YEAR B.PHARM. EXAM

Paper I – PHYSICAL PHARMACEUTICS

Q.P. Code: 564256

Time: Three hours

Maximum: 100 Marks

(180 Min) Answer ALL questions in the same order

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

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|---|----|----|----|
| 1. a. Define interfacial tension? Discuss the classification & application of surfactant? | | | |
| b. Explain about types of colloids. | 19 | 33 | 20 |
| 2. a. What is meant by Rheology? Give an account of shear thickening system? | | | |
| b. Write briefly about various methods of determining particle size. | 19 | 33 | 20 |

II. Write notes on:

- | | | | |
|---|---|---|---|
| 1. Noyes Whitney equation. | 3 | 8 | 5 |
| 2. Spreading coefficient. | 3 | 8 | 5 |
| 3. Cup and Bop viscometer | 3 | 8 | 5 |
| 4. Diffusion layer model theory. | 3 | 8 | 5 |
| 5. Controlled flocculation. | 3 | 8 | 5 |
| 6. How do you predict shelf life. | 3 | 8 | 5 |
| 7. Define micro merits. Discuss the applications. | 3 | 8 | 5 |
| 8. Inclusion complexes. | 3 | 8 | 5 |

III. Short Answers:

- | | | | |
|---------------------------|---|---|---|
| 1. Define Emulsion. | 1 | 5 | 2 |
| 2. Yield value. | 1 | 5 | 2 |
| 3. Dielectric constant. | 1 | 5 | 2 |
| 4. Zero order reactions. | 1 | 5 | 2 |
| 5. Stability of emulsion. | 1 | 5 | 2 |
| 6. Polymorphism. | 1 | 5 | 2 |
| 7. Kraft. | 1 | 5 | 2 |
| 8. Kinematic viscosity. | 1 | 5 | 2 |
| 9. Specific gravity. | 1 | 5 | 2 |
| 10. Porosity. | 1 | 5 | 2 |
