

Total No. of Questions : 6]

SEAT No. :

P3168

[Total No. of Pages : 2

[5245]-601

**T.Y.B.Pharmacy (Semester - VI)**

**3.6.1 (T) INDUSTRIAL PHARMACY - II**

**(2013 Pattern)**

*Time : 3 Hours]*

*[Max. Marks :70*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Answers to the two sections should be written in separate answer books.*
- 3) *Neat labeled diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** Explain coarse emulsion and micro emulsion Discuss in detail various theories proposed for stabilization of emulsion. **[10]**

OR

Explain formulation, evaluation and stability aspect of suspension.

**Q2)** Answer the following (any 5) : **[15]**

- a) Explain identification test for type of emulsion.
- b) Write a note on structured vehicle with suitable examples
- c) Explain in detail additives used in formulation of stable suspension.
- d) Give classification of disperse system.
- e) Explain in brief Kraft point.
- f) Distinguish between cracking Vs creaming Vs phase inversion.
- g) Explain any method for manufacturing of multiple emulsion.

**Q3)** Write short note on (any 2) **[10]**

- a) Preservation of emulsion
- b) Controlled flocculation
- c) Suspension for reconstitution
- d) Antacid suspension

**P.T.O**

## SECTION - II

**Q4)** Explain physicochemical properties, biopharmaceutical considerations and therapeutic aspects and their significance in design of semisolid dosage form [10]

OR

Describe in *vitro* and in *vivo* techniques for studying drug diffusion through skin.

**Q5)** Answer the following (Any 5) [15]

- a) Explain preservatives and antioxidants used in creams with suitable example.
- b) Discuss factors affecting absorption of drug from semisolids.
- c) Explain stratum corneum as rate limiting barrier.
- d) Describe layout for manufacturing of emulsion as per Good Manufacturing Practices (GMP).
- e) Explain role of triple roller mill in the manufacturing of semisolids.
- f) Write a note on gelling agents.
- g) Describe various equipments used in large scale manufacturing of suspension

**Q6)** Write short note on (Any 2) [10]

- a) Significance of flux and its measurement
- b) Drug diffusion through skin
- c) Oleaginous bases
- d) IPQC test for semisolids

