

Total No. of Questions : 6]

SEAT No. :

**P1457**

**[5049]-601**

[Total No. of Pages :2

**T.Y.B.Pharmacy**  
**INDUSTRIAL PHARMACY-II**  
**(2013 Pattern) (Semester-VI)**

*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)** Write about various approaches adopted to stabilize suspensions. Add a note on Wetting. **[10]**

OR

What are instabilites of emulsion? Explain in detail reasons and precaution measures to avoid instability of emulsion.

**Q2)** Answer the following(Any5) **[15]**

- a) Enlist and explain identification test for type of Emulsion.
- b) Explain in detail Suspensions for reconstitution.
- c) Describe different Drug release mechanisms from Emulsion as a dosage form.
- d) Write a note on Formulation of Suspensions based on low and high solid content.
- e) Describe layout for manufacturing of Suspension as per Schedule M.
- f) Explain in detail concept Thermodynamic vs Kinetic stability of dispersed systems.
- g) Enlist and describe in detail any one method for manufacturing of Multiple emulsion.

**P.T.O.**

**Q3)** Write short note on any Two: [10]

- a) Preservatives in Emulsions
- b) Controlled flocculation
- c) Role of HLB in selection of emulsifying agent
- d) Stoke's law in relation with stability of suspension

**SECTION-II**

**Q4)** Give a detail account of evaluation of dermatologicals [10]

OR

Give an account of routes of percutaneous absorption of drugs.

**Q5)** Answer the following(Any5) [15]

- a) Describe the role of electrolytes in stabilizing an emulsion.
- b) What are diffusion cells? What is their use in evaluation of dermatological preparations?
- c) "Methyl paraben and propyl paraben is used in combination in dermatological preparations"-explain.
- d) What are emollients and humectants? What is their use in dermatological preparations?
- e) What is phase inversion temperature? Why an emulsion that undergoes phase inversion has better stability?
- f) What are the different types of structures observed in gels?
- g) How spreadability and stickiness of a dermatological preparation is evaluated?

**Q6)** Write short note on any Two: [10]

- a) Types of ointment bases
- b) Penetration enhancers
- c) Antioxidants in dermatological formulations.
- d) Gel forming agents.

