

Total No. of Questions : 6]

SEAT No. :

P1996

[5145]-601

[Total No. of Pages : 2

Third Year B.Pharmacy

**3.6.1 (T): INDUSTRIAL PHARMACY - II
(2013 Pattern) (Semester - VI)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Answer 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) Discuss stability of suspension with the help of DLVO theory. Describe evaluation of suspensions. **[10]**

OR

Explain various stability issues of emulsion and describe in detail reasons and preventive measures to avoid instability.

Q2) Answer the following (Any 5) **[15]**

- a) Describe in detail role of particle size, density and viscosity in development of stable suspension.
- b) Write in brief electrostatic and stearic stabilization of emulsion.
- c) Enlist and explain IPQC test for antacid suspension.
- d) Differentiate between flocculated and deflocculated suspension.
- e) Explain in detail suspensions for reconstitution.
- f) Enlist and explain any equipment used in manufacturing of emulsion.
- g) Explain in brief cloud point.

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

- a) Stoke's law of sedimentation
- b) Multiple emulsion
- c) Flocculating agents
- d) Identification test for type of emulsion

P.T.O.

SECTION - II

Q4) Explain percutaneous absorption of drug. Give probable mechanisms for increase in penetration of drug through the skin. **[10]**

OR

Classify types of semisolids with examples. Explain in detail formulation aspect of any two types in detail.

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

- a) Define flux and explain procedure for measurement of flux.
- b) Enlist and explain any two safety evaluation parameters for dermatological semisolids.
- c) Explain quality control parameters for eye ointment.
- d) Explain role of colloid mill in the manufacturing of semisolids.
- e) Describe layout for manufacturing of semisolid department as per GMP.
- f) Discuss in brief gelling agents.
- g) Describe various equipments used in large scale manufacturing of disperse system.

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

- a) Hydrocarbon bases
- b) Skin irritation test
- c) Additives used in semisolid
- d) Spreadability test.

