

Roll No

PY-302

B.Pharm., III Semester

Examination, December 2016

Choice Based Credit System (CBCS)

Physical Pharmaceutics - II

Time : Three Hours

Maximum Marks : 60

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Differentiate between zero order and first order reaction kinetics.
b) Describe various methods for determination of order of reaction.
2. a) Discuss plastic, pseudoplastic and dilatant flow of fluids.
b) Describe various viscometers used in determination of Newtonian flow of fluids.
3. a) What are colloids? Discuss electrical properties of colloids.
b) Discuss pharmaceutical applications of colloids.
4. a) Discuss the methods for determination of surface and interfacial tension.
b) What is HLB scale? Discuss its importance in pharmacy.

5. a) Discuss the effect of temperature and acid-base catalysis on the chemical degradation of pharmaceutical products.
b) Discuss application of accelerated stability testing in determination of shelf life of pharmaceutical dosage forms.
6. a) Discuss various theories of emulsification.
b) Write a note on formulation of pharmaceutical suspension.
7. a) Discuss mechanical properties of solids and its importance in pharmaceutical industry.
b) Discuss physical stability of emulsion.
8. Write short notes (any three) :
 - a) Thixotropy
 - b) Protective colloids
 - c) Heckel equation
 - d) Photolytic degradation and its prevention

262