

Roll No

PY-111

B.Pharm., I Semester (Old Scheme)

Examination, December 2016

Choice Based Credit System (CBCS)

Physical Pharmacy - I

Time : Three Hours

Maximum Marks : 60

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

1. a) Define the following terms:
Crystalline state, amorphous solids, polymorphism
b) Explain ideal gas law and kinetic molecular theory.
2. What is phase equilibria? Discuss phase rule citing an example of two component systems.
3. a) How physical properties of a solution can be classified?
b) Discuss various colligative properties with special reference to elevation of boiling point.
4. a) Describe common ion effect with suitable examples.
b) How buffer capacity is calculated?
5. Explain different law of thermodynamics along with their applications in pharmacy.

6. a) What do you understand by degree of dissociation and osmolality?
b) Explain arrhenius theory of electrolytic dissociation.
7. Discuss general principles of affecting solubility and distribution of any drug in any solvent.
8. Write short notes on: (any two)
a) Solid dispersion
b) Buffers in pharmacy
c) pH
