

Code: 9R01304

R09

B.Pharm II Year I Semester (R09) Supplementary Examinations November 2016

PHYSICAL PHARMACY – I

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 Define phase rule. Explain the phase equilibrium concept with a phase diagram stating the states of matter.
- 2 Explain the first law and second law of thermodynamics with applications.
- 3 Write notes on:
 - (a) Dielectric constant.
 - (b) Optical rotating dispersion with example.
- 4 Enumerate the properties of ideal and real solutions with suitable examples.
- 5
 - (a) Describe the properties of electrolyte solutions.
 - (b) Add a note on Arrhenius theory of electrolytic dissociation.
- 6
 - (a) Discuss the modern theory for acids and bases.
 - (b) Write about Sorensen's pH scale.
- 7 Define buffer capacity. Write the applications of buffers in pharmaceutical and biological system.
- 8 How to determine electromotive force using electrochemical cells?
