

**I B.Pharmacy I Semester Supplementary Examinations, Oct/Nov 2013**  
**PHYSICAL PHARMACY-I**

**Time: 3 hours**

**Max Marks: 75**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Describe the methods of filling the container in aerosols. List out various applications of aerosols. [15]
2. Describe the applications of phase rule to the equilibrium between different phases of water. [15]
3. Mention different types of thermodynamics systems? Explain each one with example and also mention their applications. [15]
4. Define an entropy of a system? What are its units? Describe its importance and applications in pharmacy. [15]
5. (a) Write short note on Optical rotatory dispersion and its applications.  
(b) Write a note on Dielectric constant and Induced polarization. [7+8]
6. (a) Explain the method of determination of Optical activity.  
(b) Write a note on Induced Dipole moment. [8+7]
7. Discuss about the following  
(a) Elevation of boiling point.  
(b) Relative lowering of vapour pressure. [7+8]
8. (a) Explain in detail how Osmotic Pressure is determined?  
(b) Explain the Lands Berger method for the determination of molecular mass of the solute with the help of labelled diagramme. [7+8]

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