

Code No: R7-102-BP



**B. Pharmacy I Year Regular Examinations, June 2009**  
**PHYSICAL PHARMACY**

**Time : 3 hours**

**Max. Marks: 80**

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

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1. a) Discuss the applications of the phase rule.  
b) Explain in detail about triple point. [8+8]
2. a) What is Joule-Thomson effect? Write its experiment.  
b) Write comparisons between Isothermal and Adiabatic expansions. [8+8]
3. a) Elaborate on refractive index and molar refraction.  
b) Define polarity and explain working of polarimeter. [8+8]
4. a) Explain in detail Depression of Freezing point.  
b) Write in detail its significance and one method to determine depression of freezing point. [8+8]
5. Explain Modern Theories of strong Electrolytes. [16]
6. a) Elaborate on acidity constants.  
b) Write its significance in detail. [6+10]
7. a) Define Buffer. Explain in detail buffer capacity.  
b) Write applications of Buffers. [8+8]
8. a) How do measure the emf of cells?  
b) What is Nernst equation? Derive and explain. [8+8]