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PHARM121

**BPHARM**  
**THEORY EXAMINATION (SEM-II) 2016-17**  
**PHYSICAL CHEMISTRY**

**Time : 3 Hours****Max. Marks : 100****Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.****SECTION-A****1. Attempt all of the following:****(10×2=20)**

- a) Write the definition of the coefficient of viscosity of a liquid.
- b) What do you understand by order of reaction?
- c) Write the Van-der-Waals gas equation
- d) Write short note on Debye Huckel theory
- e) What is the Phase rule?
- f) Write the definition of molar conductivity
- g) What do you mean colligative properties?
- h) What is the ionic conductance?
- i) Write definition of catalysis.
- j) Write the meaning of partition coefficient.

**SECTION-B****2 Attempt any five of the following:****(10×5=50)**

- a) What is Hess's law of constant heat summation
- b) Discuss the properties of matter.
- c) Write the note on distribution law
- d) Write the note on tonicity of solution
- e) Write difference between Ideal and Real solution.
- f) Write the note on Complex Reaction.
- g) Differentiate between phase rule and reduced phase rule.
- h) Explain Faraday's laws of electrolysis.

**SECTION-C****Attempt any two of the following:****(15×2=30)**

3. What do you understand by Liquid complexes? Write characteristics of liquid crystals.
4. Discuss the Phase equilibria.
5. Define order of reaction. Derive an expression for second order reaction when both reactants are unequal.