QUESTION BANK

UNIT-II (CO-II) PHASE RULE

1. State phase rule and explain the terms involved with suitable examples? **3M Q4, June 2011(Main)**

2. What is phase of system? How many phases are present in each of the following systems?

a) Mixture of N2, H2 and O2.

b) A piece of molten ice.

c) Mixture of monoclinic and rhombic sulphur.

3. Explain the term component. How many components are present in the following systems?

i. Water in equilibrium with water vapor

ii. Aqueous NaCl solution

4. State phase rule calculate the degree of freedom for the following systems?

a) Solid ice in equilibrium liquid water b) mixture of N2 and O2.

7. Explain with a neat labeled phase diagram for one component-water system. What is triple point? 6. What is meant by condensed system? Draw a neat sketch of phase diagram of Pb-Ag system (two component system).

8. What is eutectic mixture? Give its commercial importance.

9. Discuss Pattinson's process for desilverization of Argentiferrous Lead. 10. Write a note on Cu – Ni system with a neat labelled diagram.Apply phase rule equation to each region and calculate the number of degrees of freedom?

11. Define the term (1) Phase (2) Degree of freedom **2M, Q2 Dec 2016(Main)**

12. Define the term (1) Triple point (2) Eutectic point **2M, Q3 Dec 2016(Main)**

13. State phase rule and discuss the salient features of the phase diagram of water system

**5M, Q12(a) Dec2016(Main)**

14. Define phase and component **2M, Q9 June 2015(Main)**

15. Draw a neat diagram of water system and label the parts. Calculate degree of freedom at triple point. **5M, Q15(b) June 2015(Main)**