



Mid Semester Examination – October - 2017

Branch: F. Y. B. Tech (Group B)

Sem.: I

Subject with Subject Code:- Engg. Chemistry (CHM103)

Marks: 20

Date:- 4/10/2017

Time:- 1 Hr.

Instructions:-All questions are compulsory.

(Marks)

Que. No. 1 Multiple Choice Questions.

(06)

- I. For regeneration of Zeolite ----- solution is used.
a. HCl b. NaOH c. KCl d. NaCl
- II. To remove temporary hardness of water ----- is used.
a. $MgCl_2$ b. $CaCl_2$ c. $Ca(OH)_2$ d. $Mg(HCO_3)_2$
- III. If only one Phase is present in one component system then the no of degree of freedom will be -----
a. 0 b. 1 c. 2 d. 3
- IV. Which indicator is used to determine COD -----,
a. Starch b. ferroin c. Methyl orange d. none
- V. In Pb-Ag alloy system ----- is the temperature at Eutectic point.
a. $303^\circ C$ b. $300^\circ C$ c. $325^\circ C$ d. $350^\circ C$
- VI. In water system, the curve which represent equilibrium between ice and water vapour is called -----,
a. Vaporisation curve b. Sublimation curve c. fusion curve d. None

Que. No. 2 Attempt any one of the following:

(06)

- a.) Define softening of water. Explain Zeolite process of softening of water with its advantages and disadvantages.
- b.) Draw Phase diagram of Sulphur system and explain the curves, areas and triple points in it.

Que. No. 3 Attempt any two of the following

(08)

- a.) Write a note on Chemical Oxygen Demand (COD).
- b.) What is Phase rule equation? Explain the term Phase involved in Phase rule equation.
- c.) Explain types of water.

