**SHAH ABDUL LATIF UNIVERSTY KHAIRPUR**

**DEPARTMENT OF CHEMISTRY**

**Subject:** Inorganic Practical **Class:**  B.S (iii)/M. Sc. Previous

**Semester:** 1st **Test**  Final

**Session:** 2017 **Date:** 26- 05 -2017

**Maximum Marks** 60  **Time allowed:** 1.5 Hour

**Note: Attempt all questions**

Q. No. 1 (a) How you will prepare 500mls of 0.01N solution of CaCO3 (At Wt Ca=40, C= 30

(b)Determine the molarity of concentrated H2SO4 when its % purity is 98 and

Specific gravity is 1.5

©You are given 10 molar solution of HCl Calculate volume of that solution for

Preparation of its 100ml dilute solution of 0.1M solution

Q. No. 2 Define the following terms

(i) Chelates (ii) Titration (ii) Precipitation (iii) Buffer solution (iv) Volumetric analysis (v) Equivalent weight (vi) Hydration and hydrolysis

Q. No. 3 Give the IUPAC name to following inorganic compounds

(A) (i) CaHPO4 (ii) Hg2S (iii) HClO4 (iv) N2O5 (v) Na2S2O3

(B) Calculate the gram equivalent weight of compounds

(i) Na2CO3 (ii) BaCl2

(Na = 23 C =12 O =16 Ba =137 Cl =35.5)

Q. No. 2 Explain the following

(i) Why EDTA is used for determination of Ca2+ ions in tap water

(ii) Ammonia / Ammonium chloride solution is used in EDTA titration

(iii) EDTA is linked with central metal atom through six atoms

Q. No. 4 **Object:** Determine the permanent hardness of tape water by titrating with 0.01M solution of EDTA (Write down the Theory Procedure)