**SHAH ABDUL LATIF UNIVERSTY KHAIRPUR**

**INSTITUTE 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 Determine amount of KMnO4 for the preparation of its 0.1N solution in 100mls.

Q. No. 2 You are given 1 molar stock solution of H2SO4 determine volume of that solution for preparation of 100mls of 0.1N and 0.05N solutions.

 Q. No. 3 (a) How you will prepare 500 mls 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. 4 Define the following terms

 (i) precipitation (ii) Solubility (iii) Saturated solution (iv) Oxidizing agent

 (v) Molarity (vi) Chelates (vii) Titration (viii) Buffer solution (xi) Volumetric analysis

Q. No. 5 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. 6 **Object:** Determine the permanent hardness of tape water by titrating with 0.01M solution of EDTA (Write down the Theory & Procedure)