

FACULTY OF BASIC & APPLIED SCIENCES

DEPARTMENT OF PHYSICAL AND CHEMICAL SCIENCES

2016/2017 ACADEMIC SESSION:

FIRST SEMESTER EXAMINATIONS

COURSE CODE: CHM 207

COURSE TITLE: EXPERIMENTAL CHEMISTRY I

HOD's SIGNATURE

INSTRUCTIONS:

DURATION: THREE (3) HOURS

ATTEMPT ALL QUESTIONS.

- ENSURE YOUR MATRIC NUMBER IS WRITTEN CLEARLY ON YOUR ANSWER BOOKLET.
- BORROWING OF WRITING MATERIALS, ELECTRONIC CALCULATORS OR LENDING OF ANY SORT IS STRICTLY PROHIBITED

ATTEMPT ALL QUESTIONS

QUESTION ONE

[20marks]

1. Sample A is an organic compound. Using the reagents provided carry out chemical test to identify and label the sample. Present your observations and inferences in a tabular form.

OUESTION TWO

[30marks]

2. Samples B and C are solutions of inorganic salts. Carry out possible preliminary and confirmatory tests to identify the anions and cations present in these samples.

QUESTION THREE

[10marks]

3.

- a. What effect will drying out the silica gel have on the partitioning of your components in column chromatography?
- b. What instrument will you use to remove a hot crucible from the furnace
- c. Why is buffer pH 10 employed for the determination of hardness of water?