**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ADM. NO.\_\_\_\_\_\_\_\_\_STREAM:\_\_\_\_\_\_\_**

**CHEMISTRY FORM ONE.**

**END TERM EXAM – TERM TWO 2015.**

**TIME 2 HOURS.**

* **Answer all the questions in the spaces provided below each question.**

1. Define the following terms as used in Chemistry. (4 marks)
2. Mixture
3. Element
4. Compound
5. Atom
6. Name three apparatus that are used for measuring volumes of liquids accurately. (3 marks)
7. State three differences between luminous and non luminous flame. (3 marks)
8. Explain how you would obtain pure ammonium chloride from a mixture of lead sulphate and ammonium chloride. (3 marks)
9. Explain how Elianto oil is obtained from maize seeds. (4 marks)
10. (a) Give two examples of:- (6 marks)
11. Temporary physical change
12. Temporary chemical change
13. Permanent change

(b) State three characterics of permanent changes. (3 marks)

1. Name the elements present in the following compounds. (5 marks)
2. Sodium carbonate
3. Iron sulphide
4. Zinc chloride
5. Potassium sulphate
6. Give the symbols of the following elements. (8 marks)
7. Copper
8. Chlorine
9. Zinc
10. Potassium
11. Carbon
12. Sulphur
13. Magnesium
14. Gold
15. Write a word equation for the following reactions between: (6 marks)
16. Carbon reacting with oxygen.
17. Sublimation of iodine.
18. Iron reacting with sulphur.
19. State how you would identify a pure liquid from an impure one from two samples. (2 marks)
20. Study the information below and answer the questions that follow.

|  |  |  |
| --- | --- | --- |
| **Solids** | **Cold water** | **Hot water** |
| S | Soluble | Soluble |
| T | Insoluble | Insoluble |
| U | Insoluble | Soluble |

Briefly explain how you can separate a mixture of solids S, T, and U. (3 marks)

1. (a) What is an indicator? (1 mark)
2. Name two types of indicator. (2 marks)
3. Samples of urine from three participants F, G and H at an international sports meeting were spotted onto a chromatography paper alongside two from illegal drugs A1 and A2. A chromatogram was run using methanol. The figure below shows the chromatogram.

X X X X X

A1  A2 F G H

1. Identify the athlete who had used an illegal drug. (1 mark)
2. Identify the athlete who did not use illegal drug. (1 mark)
3. Indicate the solvent front and base line. (2 marks)
4. Which drug is more soluble in the methanol (1 mark)
5. Name another suitable solvent that can be used instead of methanol. (1 mark)
6. The curve shown below was obtained when napthalein was heated to boiling. Study it and answer the questions that follow.

Temp.

Time in minutes.

1. Explain what changes occurred between region BC. (2 marks)
2. Name the physical state of naphthalein in region AB and DE. (2 marks)
3. On the same axis, draw a curve that would be obtained if camphor was added to naphthalein and label it K. (2 marks)
4. (a) State the kinetic theory of matter. (2 marks)

(b) Explain the difference between solid, liquid and gaseous states using the theoretical

model matter in terms of the kinetic theory. (3 marks)

**END. WISH YOU ALL THE BEST.**