Name ..... Class ..... ADM.Number .....

ALLIANCE HIGH SCHOOL

Form 1 Chemistry Exam, March, 2016

Time: 2 hours

Instructions:

Attempt all the questions in the spaces provided.

1. a) Define the term Chemistry (1mark)

b) State 3 ways in which Chemistry has benefited society (3marks)

c) State one way in which the knowledge of chemistry has been used to harm mankind (1mark)

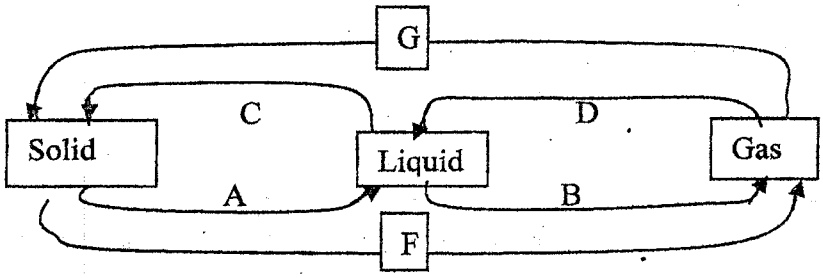
2. a)What is a drug? (1mark)

b) State two effects of drug abuse to one's body (2marks)

c) List 3 measures that can be taken to curb drug abuse. (3marks)

3. a)What is matter? (1mark)

b) The flow chart below shows the physical changes of matter. Use it to answer the questions that follow



i. Identify processes A, B, C, D, F and G (6marks)

A ..... D .....

B ..... F .....

C ..... G.....

ii. Give two examples of substances that undergo processes F and G (1mark)

4. Distinguish the following terms as used in Chemistry

a) Homogenous solution and Heterogenous mixture (2marks)

b) Distillate and Filtrate (2marks)

5. a)State 3 safety rules that should be observed when heating substances in the Laboratory (3marks)

c) Name the area in the lab where experiments that include the use of poisonous reagents are carried out. (1mark)

d) How does the area work to reduce chances of poisoning? (1mark)

6. Name and draw the apparatus used to
   a) Scoop solid chemicals from containers (2marks)

b) Used to collect gases produced in a chemical reaction (2marks)

c) Used in procedures that involve heating of liquid chemicals (2marks)

7. A form one student accidentally poured water on Copper (II) Sulphate crystals in a beaker and all of it dissolved.

a) What method should he use to get the crystals back? (1mark)

b) Outline the steps he should take in order to form crystals of the salt (3marks)

c) What is the industrial application of the method he used (1mark)

8. a) What is a mixture? (1mark)

b) State three physical properties which are used in the separation of mixtures (3marks)

c) Name the most suitable method you can use to separate;

i. Xanthophyll and chlorophyll in green leaves. (1 mark)

ii. Oil from simsim seeds. (1 mark)

iii. Water and sand (1mark)

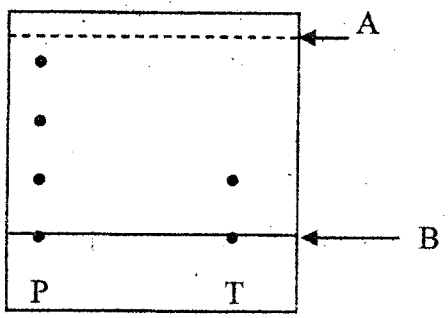
d) Describe three different ways in which a mixture of Iodine and Iron can be separated (6marks)

I.

II.

III.

9. The following is a chromatogram showing the results obtained after separating two substances P and T.



(a) Name lines :

A _____ ($^1/_2$ mark)

B _____ ($^1/_2$ mark)

(b) Name a possible solvent which can be used in the above process. (1 mark)

_____

(c) Which of the two substances is pure? why? (2 marks)

_____

_____

(d) List two areas for the industrial application for chromatography (2marks)

_____

_____

10. State the uses of the following apparatus

i. Beehive shelf (1mark)

_____

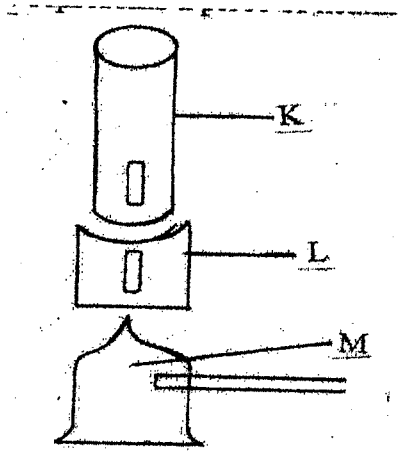
ii. Droping funnel (1mark)

_____

iii. Pipette (1mark)

_____

11. The diagram below represents a piece of heating apparatus. Study it and answer the questions below.



(b)Name and State the function of parts L ,M and K. (3 marks)

L

M

K

c) What is a flame? (1mark)

d) Identify the two types of flame that can be formed in a Bunsen burner (2marks)

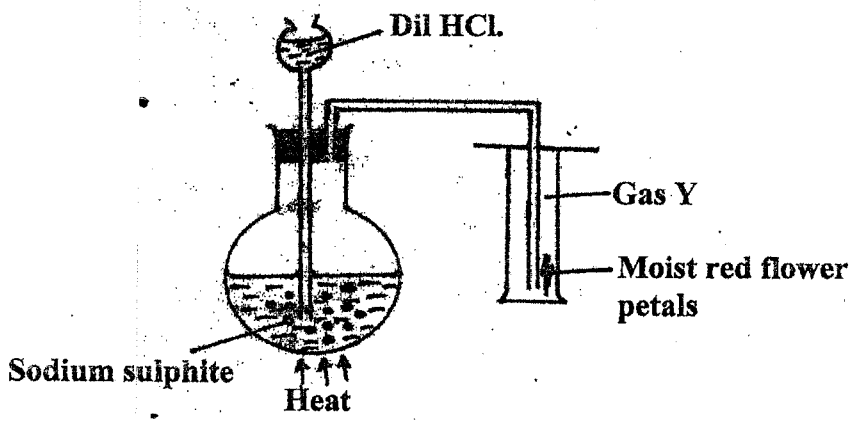
_____

_____

e) State four differences in the two types of flames. (4marks)

Luminous	Non-luminous
1.	1.
2.	2.
3.	3.
4.	4.

12. The diagram below is a set up used the preparation of Sulphur (IV) Oxide gas. Use it to answer questions that follows



a) Identify Four apparatus used in the set up (4marks)

b) Other than the Bunsen burner which other source of heat can be used in the set up(1mark)

13. State the method of separation for

a) water (boiling point 100^0C) and propanone (b.p 56^0C) (1mark)

b) Ethanol(boiling point 78^0C) and Propanol (boiling point 98^0C) (1mark)

c) Give two places where the process Stated in (b) is used in industry (2marks)

Have a blessed Easter