

NAME.....ADM.NO.....CLASS.....

GATITU GIRLS' SECONDARY SCHOOL P.O. BOX 327-01030 GATUNDU

END OF TERM TWO EXAMINATION YEAR 2016

CHEMISTRY FORM TWO

INSTRUCTIONS

- 1). Write your name ,class and admission no . in the spaces provided above
- 2). Answer all the questions in the spaces provided in the question paper
- 3) Any act of cheating will render to examination nullified

QUESTIONS

1(a) Why are most chemistry laboratories apparatus made of glass. (3mks)

b) State three differences between luminous and non-luminous flame. (3 marks)

c) Name the methods that can be used to separate the following mixtures . (5 Marks))

- i) Kerosene and water
- ii) Kerosene from crude oil
- iii) Coloured extracts from grass
- iv) Iron fillings and sulphur powder

v) Sand and iodine

2) The table below shows some information about atoms .The symbols are not the actual symbols of elements.

ELEMENT	ELECTRON ARRANGEMENT	ATOMIC RADIUS	IONIC RADIUS
A	2.1	0.152	0.060
B	2.8.1	0.186	0.095
C	2.8.2	0.160	0.065

a(i) Identify the elements in the same period of the periodic table .Explain (2marks)

ii) Identify the elements in the same group of the periodic table. Explain (2mks)

iii) Draw a diagram to illustrate the atomic structure of the element B using dot (.) or cross (x) for electron . (2mks)

B)Write the chemical formulae of

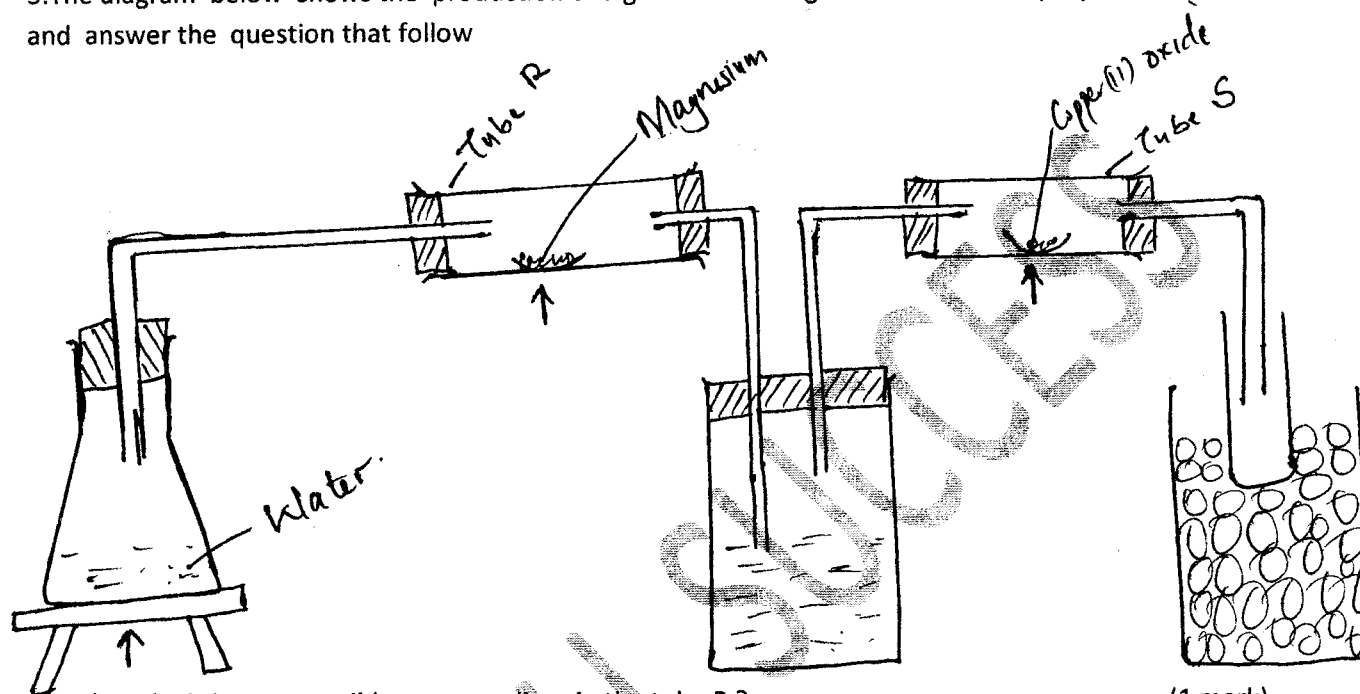
i)Chloride of C (1mk)

ii) Chloride of B (1mk)

iii) Nitrate of C (1mk)

c) Explain the trend in the values of the atomic radii of the element B and C. (2marks)

3. The diagram below shows the production of a gas and investigation of chemical properties. Study it and answer the question that follow



a) Why is it not possible to use sodium in the tube R? (1 mark)

b) Write the equation for the reaction taking place in tube R (1mk)

c) Explain the observation made in tube S (1 mark)

d) Identify substance P (1mk)

e) State the role of ice cold water in the experiment. (1mk)

f) Substance Q acts as a drying agent in the experiment. Give substance that can be used as Q (1mk)

g) State two commercial uses of the gas produced in R

(2mks)

h) Using dot (.) and cross(x) for electrons draw a diagram to show the bonding in (g) above. (2mks)

4). Define the following terms :

(5mks)

a) Catalyst

b) Element

c) Sublimation

d) Oxidation

e) Reduction

5. The table below shows the pH values of solutions W, X, Y and Z

Solution	W	X	Y	Z
pH	2.0	13	9.8	7.0

(4marks)

Which of the following solutions could be

i) Distilled water

ii) Potassium hydroxide

iii) Dilute hydrochloric acid

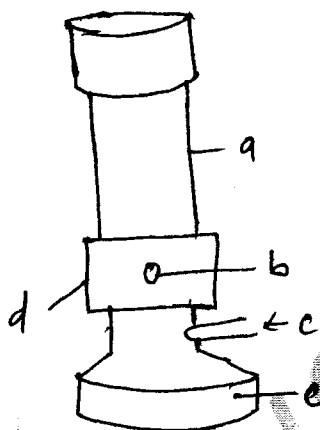
iv) Wood ash solution

6).State five safety laboratory apparatus rules

(5mks)

7).Name the parts of Bunsen Burner labeled a to e

(5marks)



- a.....
- b.....
- c.....
- d.....
- e.....

8.The table below gives the elements represented by letters J,K,L,M,N and O .Use it to answer the questions that follow .

Element	J	K	L	M	N	O
Atomic no.	12	13	14	15	16	17
Electron configuration						

- a) Complete the table by giving the electron configuration of each element (2mks)
- b) In which period of the periodic table do these elements belong ?Give a reason (2mks)
- c) Of the two elements J and N .Which one has a larger atomic radius ?Explain (2mks)
- d) Which of the ions N^{2+} and N^{2-} is stable ?Explain (2mks)

e) Using dot (.) and cross (x) for electrons. Show the bonding in compound between elements L and Q (2mks)

9. The grid below shows part of a periodic table. Use it to answer the questions that follow. Letters do not represent actual symbols of the element.

P	R			S	U	V	
Q			T			W	

a) Which element has the largest atomic radius. (1mk)

b) Identify the most reactive nonmetal (1mk)

c) Give the electron configuration of :

i) Element S (1/2mk)

ii) Element T (1/2mk)

d) Explain why atom of W than that of V (1mk)

e) Give the formula of one stable ion with electron configuration of 2.8 which is

i) negatively charged (1/2mk)

ii) Positively charged (1/2mk)

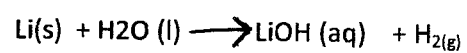
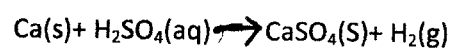
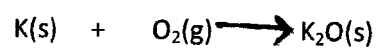
f) Write an equation for their reaction between:

i) Element P and U (1/2mk)

ii) Element R and U (1/2mk)

10. Balance the following equations

(3mks)



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GOOD LUCK FROM CHEMISTRY DEPARTMENT