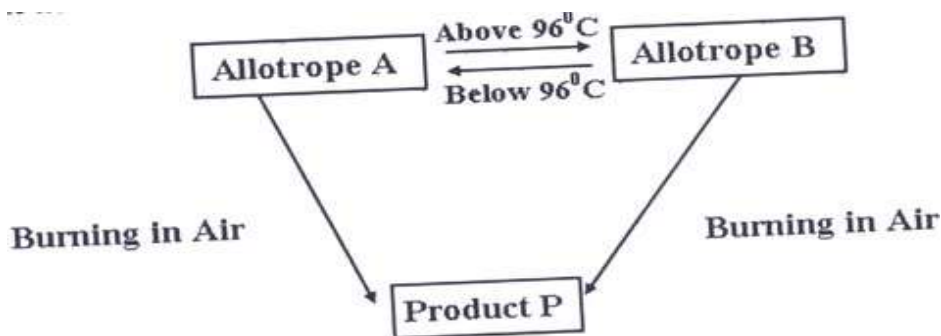


FORM FOUR CLUSTER KCSE MODEL9

CHEMISTRY PAPER 1 QUESTIONS

1. The flow chart below shows some properties of two allotropes of element Q.



i) Name element Q. (½ mark)

.....

ii) Write a chemical equation for the reaction forming product P. (1 mark)

.....

iii) What term is given to the temperature 96°C shown above? (½ mark)

.....

2. A given element E has atomic number of 14 and consists of Isotopes as shown below.

Isotope	X	Y	Z
Isotopic Mass	28	29	30
Percentage abundance	92.2	4.7	3.1

a) What are Isotopes? (1 mark)

.....

b) Determine the relative atomic mass of E. (1½ marks)

.....

.....

c) State the position of element E in the periodic table. (½ mark)

.....

3. Name the products formed when ammonia:-

a) Decomposes when heated. (1 mark)

.....

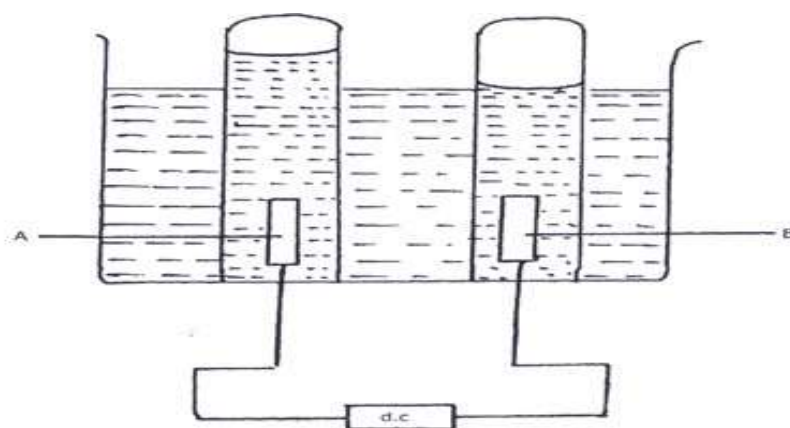
b) Is burnt in air enriched with oxygen. (1 mark)

.....

c) Is oxidized in presence of platinum catalyst. (1 mark)

.....

4. The diagram below shows the set-up in which direct electric current was passed into a dilute solution of sulphuric (VI) acid. Study it and answer the questions that follow.



Label the electrodes A and B. (1/2 mark)

B. (1/2 mark)

b) i) Name the product collected at each electrode
 A. (1/2 mark)
 B. (1/2 marks)

ii) Give a confirmatory test for the product formed at electrode A. (1 marks)

5. A mixture of activated charcoal and litmus solution was boiled then filtered. a) What is activated charcoal? (1 mark)

b) What is the colour of the filtrate. (1 mark)

c) Explain the observation in (b) above. (1 mark)

6. 80 cm³ of hydrogen gas and 60cm³ of oxygen gas were reacted together to form water vapour. a) Write the chemical equation for the reaction which took place. (1 mark)

b) Which gas was excess and by how much? (2 marks)

7.