

FORM 1 TERM 2 NOVEMBER 2021

CHEMISTRY

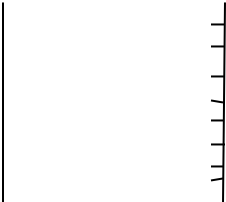
1(a). Name three frequently abused drugs. (3mks)

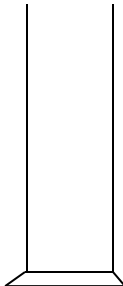
(b).State two long term effects of drug abuse. (2mks)

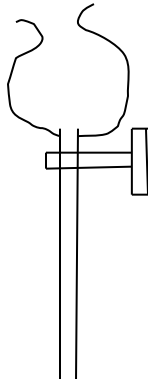
2. (i).Define Chemistry. (1mk)

(ii) Give three importance of studying Chemistry. (3mks)

3(a). The following are laboratory apparatus used in Chemistry. Name them and give their uses.

(i)  name (2mks)
use.

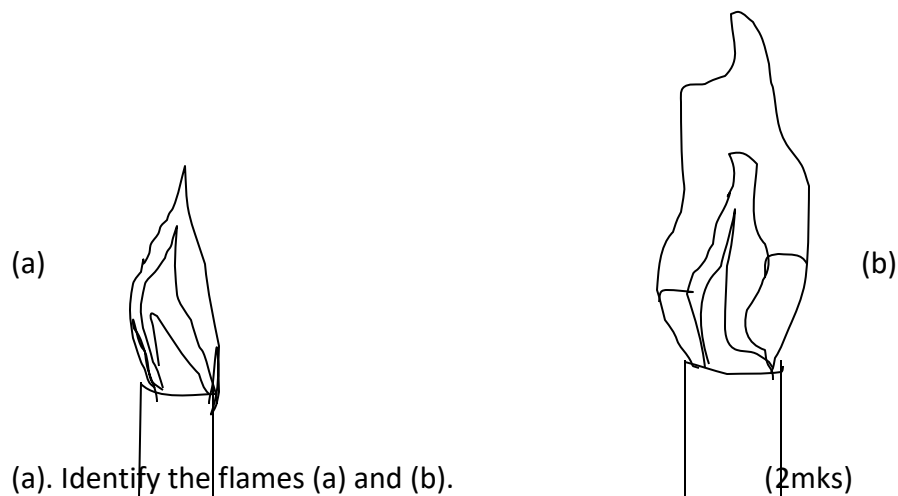
(ii)  name (2mks)
Use.

(iii)  Name (2mks)
Use.

(b). Give two reasons why most laboratory apparatus are made of glass. (2mks)

4.(i) What is a flame? (1mk)

(ii). The following diagrams represent the two types of flames produced by a bunsen burner.

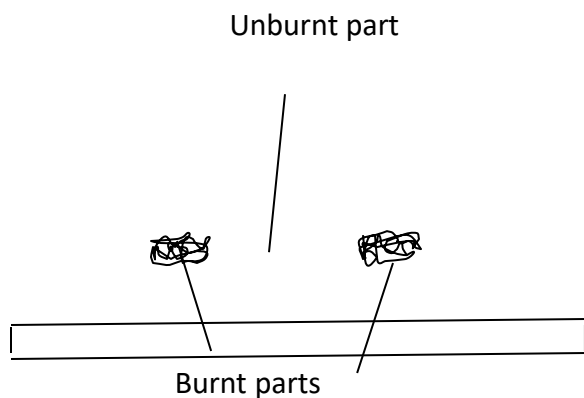


(b). Which type of the flames identified above is preferred for heating? Give a reason for your answer. (2mks)

(c). Give four differences between the flames (a) and (b) above. (4mks)

(d)(i). Give two reasons why flames (a) and (b) in 4(ii) above differ. (2mks)

(ii).A wooden splint was slipped through a region of a particular flame of the Bunsen burner in the laboratory. The splint was burnt as shown in the diagram below.



(a). Name the type of flame the splint was slipped through. (1mk)

(b). Explain why the splint was burnt the way it is shown in the diagram. (2mks)

(iii). After use, the non-luminous flame should be put off or adjusted to luminous flame. Explain. (2mks)

(iv). Putting off flames is one of the laboratory safety rules. State four other rules. (4mks)

(v). What is a mixture? (2mks)

(vi). State two physical means of separating a mixture. (2mks)

5. Obiero, a form one student at Buka academy accidentally mixed sulphur and iron filings.

(a). Suggest an appropriate method of separation you would advise him to use to separate the mixture. (1mk)

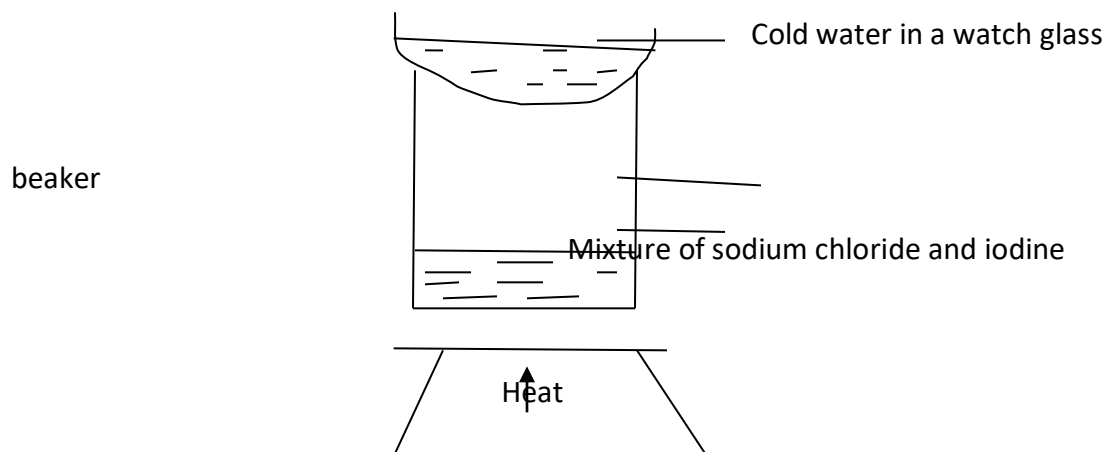
(b). Give a reason for the choice of your answer. (2mk)

(c). Describe how he would use the method named in 5(a) above to separate the sulphur and iron filings. (4mks)

(d). Name two substances that sublime when heated. (2mks)

(e). Give two reasons why dry ice (solid carbon (IV) oxide) is preferred to be used in cold boxes by ice cream vendors over ordinary ice. (2mks)

6. Majaliwa, a form one student at Kanga High School wanted to separate and obtain iodine and sodium chloride (common table salt) from a mixture of the two. he set the experimental set up shown below.



(a). the mixture was heated for some time and left to cool. On cooling, shiny black crystals and white crystals were observed on the surface of the watch glass and in the beaker respectively.

Name:

I. Shiny black crystals

II. White crystals.

(2mks)

(b). What was the purpose of the cold water in the watch glass?

(2mks)

(c). Explain how the shiny black crystals on the surface of the watch glass is formed.

(3mks)

(d). What property of iodine makes it be collected on the watch glass as shown? (1mk)

(e). Explain why it is possible to separate a mixture of iodine and sodium chloride.(1mk)

7(a). Define the following terms:

I. A saturated solution. (11/2mks)

II. Crystallization. (11/2mks)

(b)(i). Describe how copper (II) sulphate crystals can be obtained from copper (II) sulphate solution. (4mks)

(ii). Give two industrial applications of crystallization as a method of separating soluble substances from their solutions. (2mks)