



# ST. MARY'S GIRLS' SCHOOL –RUNDA

Name.....

Class.....

Adm. No.....

## 2024 APRIL HOLIDAY ASSIGNMENT

FORM 1 CHEMISTRY

TIME 2 HOURS

1(a). Name one frequently abused drug (1mk)

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

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

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(ii) Give two importance of studying Chemistry.



**(2mks)**

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

Apparatus	Use
	<b>1mk</b>
	<b>1mk</b>

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

**(2mks)**

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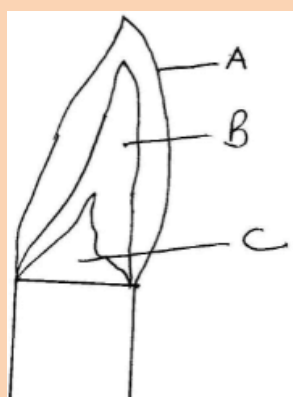
4.(i) What is a flame?

(1mk)

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(ii). The following diagram represent a type of flame produced by a Bunsen burner.



(a) Name the type of flame

1mk

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(b). The flame should be put off immediately after use or adjusted to another type of flame. Explain

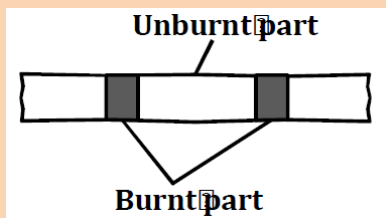
(2mks)

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(iii). A wooden splint slipped through region B of the above flame laboratory. The splint was burnt as shown in the diagram below.



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

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5. Heating solids in a test tube or boiling tube is part of the task a learner is supposed to undertake in a given class experiment. Explain the two precautions a learner should observe

(2mks)

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6. a) What is a mixture?

(2mks)

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

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7. A form one student 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. **(1mk)**

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c) Describe how he would use the method named in a above **3mks**

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8. (a). Name two substances that sublime when heated. **(2mks)**

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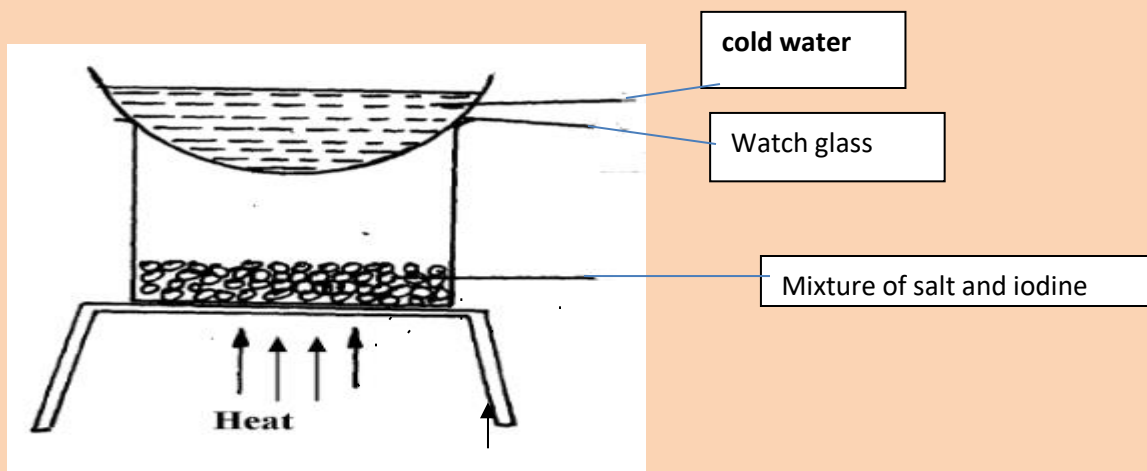
(b). Give two reasons why dry ice (solid carbon (IV) oxide) is preferred to be used in cold boxes by ice cream vendor over ordinary ice. **(2mks)**

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9. A form one student at 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

**(1mks)**

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II. White crystals.

**(1 mks)**

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(b). What was the purpose of the cold water in the watch glass? **(2mks)**

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(c). Explain how the shiny black crystals on the surface of the watch glass is formed. **(2mks)**

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

**(1mk)**

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**10.** (a). Define the following terms:

I. A saturated solution.

**(1mks)**

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II. Crystallization. **(1mks)**

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(b)(i). Describe how copper (II) sulphate crystals can be obtained from copper (II) sulphate solution. **(3mks)**

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

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**11.** The following are hazard symbols were observed by a student in one of the stock bottle in chemistry laboratory. Identify the symbols



	Symbol	
A		<b>1mk</b>
B		<b>1mk</b>

**12.** State what students should do in case of a major accident such as fire outbreak in the chemistry laboratory **(3mks)**

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**13.** Give two differences between luminous and non luminous flames **(2mks)**

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**14.** Give the method used in separating the following mixtures **(3mks)**

a) Sand and water.....

b) Petroleum from crude oil.....

c) Oil from groundnuts seeds.....

**15.** a) Explain why water is not used as a solvent in extraction of nuts.

**2mks**

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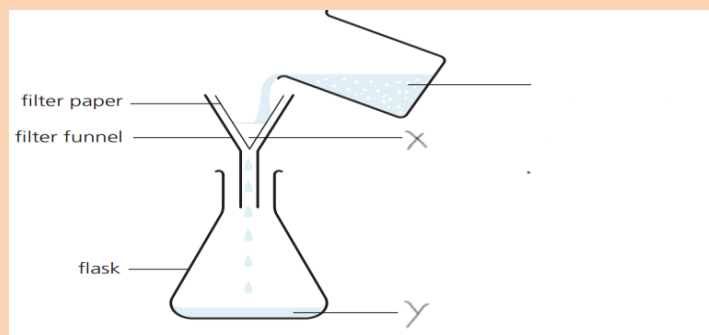
b).Name the solvent that is used in extraction of nuts.

**1mk**

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**16.** The following set up was used to separate sand and water .study it and answer the questions that follows.



i. Identify the method of separation.

**1mk**

ii. \_\_\_\_\_

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iii. Give a special name given to solid X and liquid Y.

**2mks**

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iv. State an advantage of this method over decantation.

**1mk**

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**17.** State two major differences between those of solids and those of gases  
**(2mks)**

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**18.** Salt is normally sprinkled on roads during winter in temperate countries

a) State and explain why salt is put on roads during winter

**(2mks)**

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b) Why is this practice of great concern to motorist

**(1mk)**

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**19.** Substance **A** is highly soluble in propane while **B** has low in propane.

a) Which of the two substances will travel the shortest distance on an adsorbent material during paper chromatography? Explain **2mk**

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b) Which other property determine the distance travelled by the substance? **1mk**

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c) What is chromatography? **1mk**

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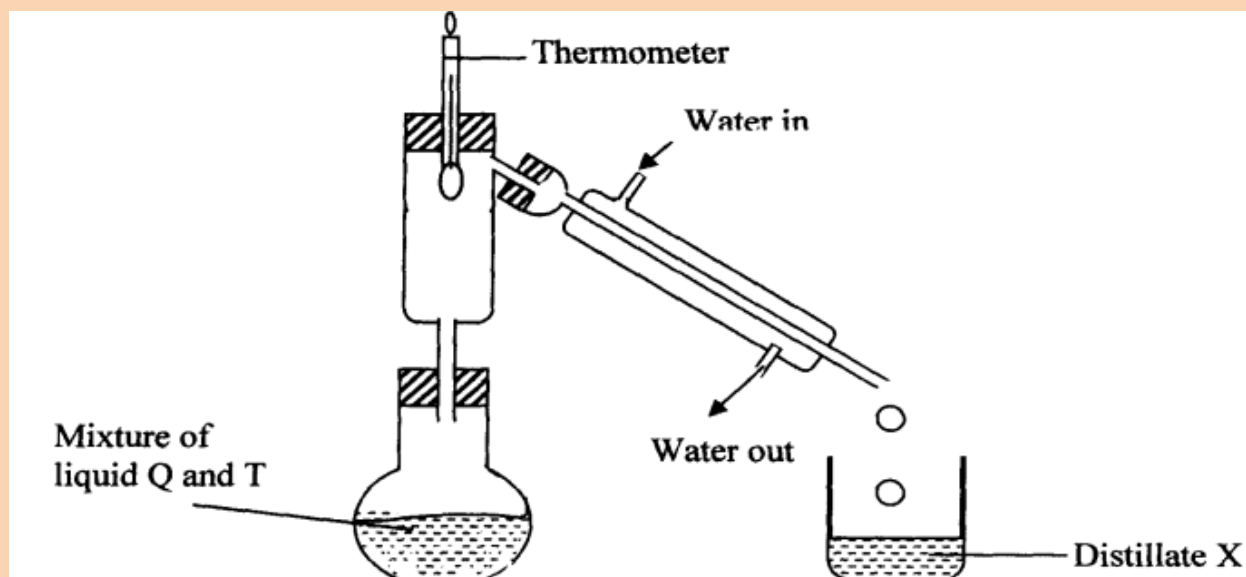
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Give two applications of chromatography

**1mk**

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20. The setup below was used to separate two miscible liquids Q and T  
(Boiling points; Q =98° C, T=78°C)



(a) Identify the mistakes in the setup above

**2mk**

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(b) Identify Distillate X

**1mk**

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21. The laboratory rules that should be applied to prevent the following accidents

a) Mistaking hydrochloric acid to be distilled water **1mk**

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b) A student got burnt after secretly lighting up a magnesium ribbon **1mk**

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c) A student got severe stomach ache after eating some bread during chemistry laboratory session **1mk**

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