**CHEMISTRY FORM ONE**

**NAME……....ADM…….CLASS……...**

**TIME: I HOUR 45 MINUTES**

**INSTRUCTION: ANSWER ALL THE QUESTIONS IN THE SPACES PROVIDED**

1. Define the following terms (4marks)

a) Drug

b) Prescription

c) Nekesa visited a hospital and was given a syrup whose prescription was2×3.How should she take the syrup? 2marks)

**2**(a) Explain the following:

**(i)** It is always advisable to scoop chemical substances using a clean spatula. (1mark)

**(ii)** Flammable substances should always be kept away from flames in the laboratory. (1mark)



(b) (i) Give ***three*** differences between luminous and non-luminous flames. (3 marks)

(ii) How is the non-luminous flame produced? (1 mark)

(c) (i) Explain why solid Carbon (IV) oxide is preferred over ordinary ice for use by ice cream venders. (1 mark)

(ii) Name one piece apparatus used to measure volume of gases. (1 mark)

(iii) Draw a diagram of a deflagrating spoon and state its use (2 marks)



3. Define the following terms (5marks)

a) Solute.

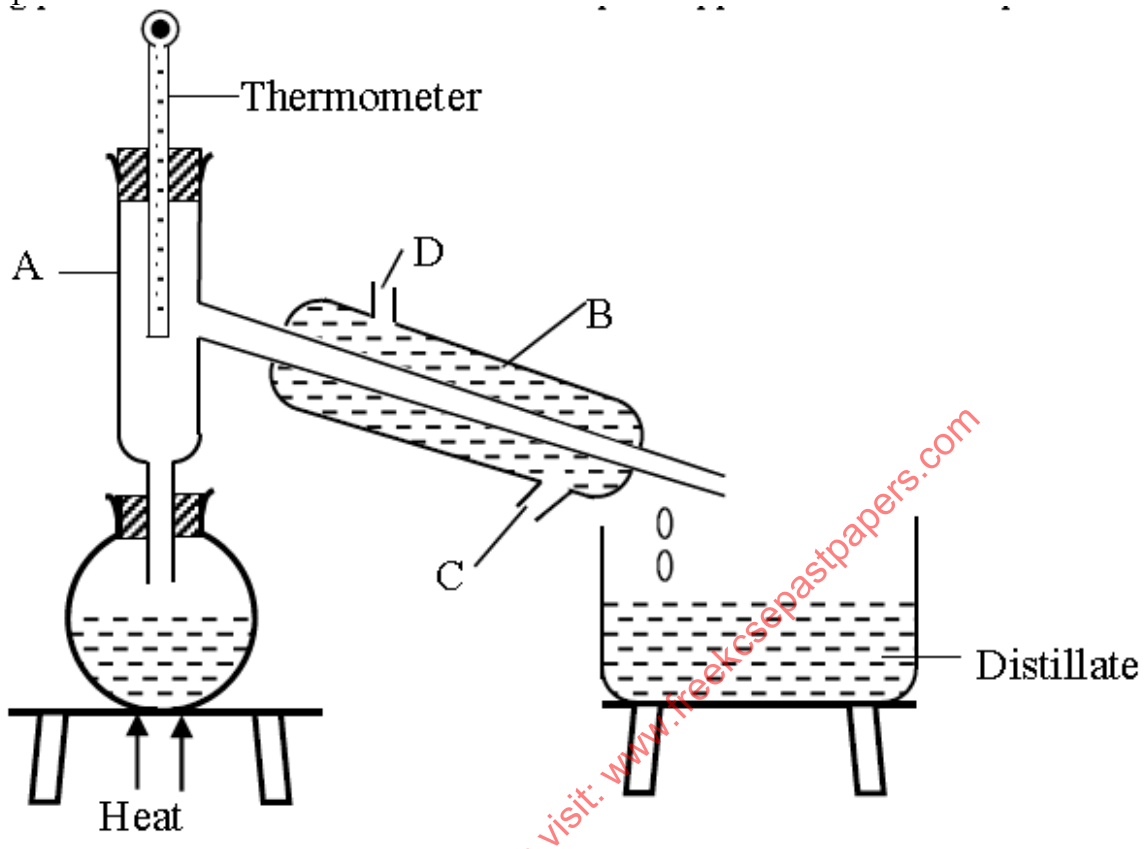
b) Solvent.

c) Solution.

d) Residue.

e) Filtrate.

4. (a) A form one had a mixture of ethanol and water. Ethanol has a boiling point of 78°C while water has a boiling point of 100°C. The student then set up the apparatus below to separate the mixture.






(i) Name the piece of apparatus labelled B. (1 mark)

(ii) What is the purpose of the thermometer in the set up? (1 mark)

(iii) Name the part labelled A and state its function (2 marks)

(iv) Which liquid was collected first? Explain (2 marks)

(v) What is the name given to the above method of separating mixtures? (1 mark)

**(vi)**What passes through parts Cand D? (2marks)

C

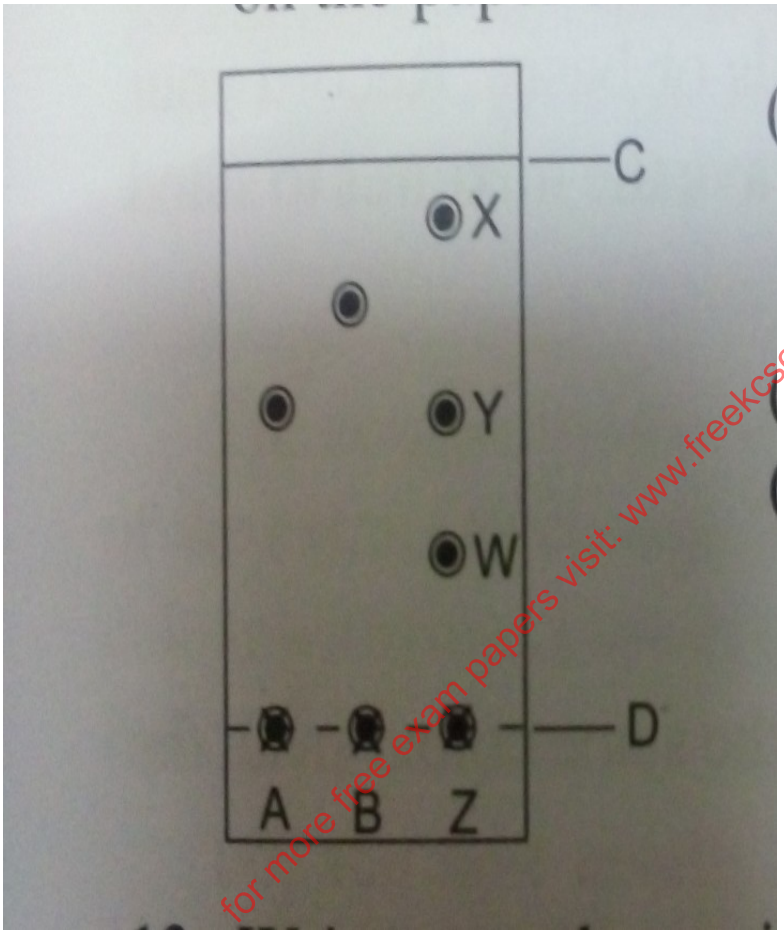
D

(vi) What property of the components of the mixture makes it possible for the components to be separated by the method? (1mark)

(vii) State one applications of the above method of separation. (1 marks)

5(a) Describe how you can extract oil from ground nuts? (3marks)

6. Spots of pure pigments A and B, and a mixture of Z were placed on a filter paper and allowed to dry. The paper was then dipped in a solvent. The results obtained were as on the chromatogram.






a) which is the ;( 2marks)

i) Base line?

ii) Solvent front?

b) Which of the pure pigments was a component of Z Explain? (2marks)

(c)(i)Name a solvent that is used in paper chromatography. (1mark)

(ii)Why is water not a suitable solvent in paper chromatography? (2marks

(iii)Give 2 applications of chromatography in our daily lives? (2marks)

7. Explain the differences between solid, liquid and gaseous states using the theoretical model (diagram) of matter in terms of the kinetic theory (6marks)



8. Define the following terms (4marks)

a) An atom

b)A molecule

c) An element

d) A compound

9. Complete the following table (4marks)

| **Element** | **Symbol** |
|---|---|
| potassium | |
| | Na |
| Silver | |
| | Au |
| Iron | |
| | Pb |
| Copper | |
| Mercury | |

10. Name the elements present in the following compounds.

a) Sodium Bromide (2marks)

b) Magnesium nitride (2marks)



11. Write a word equation for the reaction between:

a) Carbon and oxygen (2marks)

b) Sodium and sulphur (2marks)

12. Give three differences between a temporary chemical change and a permanent chemical change (3marks)

| **Temporary chemical change** | **Permanent chemical change** |
|---|---|
| | |
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