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

ST. CLARE GIRLS’ HIGH SCHOOL,GATITU.

CHEMISTRY

FORM TWO

OPENER EXAMINATION 2018

TERM ONE .

INSTRUCTIONS

1.Write your name, admission number and class in the spaces provided.

2.Answer all the questions in the spaces provide below in each question in the paper.

3.All questions should be answered in English .

QUESTIONS .

1.a)Name three apparatus used to measure accurate volume in the laboratory . (3mks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

b)State how the above apparatus are adopted to measure accurate volumes . (1mk)

……………………………………………………………………………………………………..

c)Explain why most laboratory apparatus are made of glass. (3mks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

d)What is flame? (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………..

2.Explain how you would obtain lead carbonate from a mixture lead carbonate and sodium carbonate.(HINT:Lead carbonate is insoluble while sodium carbonate is soluble)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

3.The graph below shows the shape of the curve obtained when a solid of pure naphthalein was heated to boiling.

a)From the graph identify: (2mks)

i) Melting point

ii) Boiling point

iii) Condensation point

iv)Freezing point

b)What is happening at: (5mks)

i)AB……………………………………………………………………………………………………………………………………………………………….

ii)BC……………………………………………………………………………………………………………………………………………………………………..

iii)CD…………………………………………………………………………………………………………………………………………………………………………………………

iv)DE……………………………………………………………………………………………………………………………………………………………..

v)EF………………………………………………………………………………………………………………………………………………………………………..

iv)ED……………………………………………………………………………………………………………………………………………

vii)DC……………………………………………………………………………………………………………………………………………….

ix)CB………………………………………………………………………………………………………………………………………………………..

x)BC…………………………………………………………………………………………………………………………………………………

in terms of heat energy .

c)Name three criteria of purity of a substance . (3mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

4.Explain the term sublimation and deposition . (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

5The chromatography of two inks and three dyes is drawn .

1. Name the colours of ink A. (1mk)

…………………………………………………………………………………………………..

1. Suggest how separated components can be recovered . (1mk)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

c)Suggest two reasons why separation occur in this method . (1mk)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

6.State the differences between physical and chemical changes.

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

7.a)What is rusting ? (2mks)

…………………………………………………………………………………………………………………………………………………………………………………………..

b)State the conditions necessary for rusting . (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………

c)Name two factors that accelerate rusting . (3mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

8.The flow chart shows fractional distillation of liquefied air .Study bit and answer the questions that follow.

a)Name the method of separation of air in the flow chart . (1mk)

………………………………………………………………………………………………….

b)State the function of the following in the flow chart . (3mks)

i)Filters……………………………………………………………………………………………………………………………………………

ii)Sodium hydroxide solution………………………………………………………………

iii)Cooler…………………………………………………………………………………………………………………………………….

9.a)What is an universal indicator . (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………..

b)List three commonly used commercial indicators and state their color change in acid and bases .

|  |  |  |  |
| --- | --- | --- | --- |
|  | INDICATOR | COLOUR CHANGE IN ACID | COLOUR CHANGE IN BASE |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

c)Magnesium hydroxide is used as medication to relieve stomach acidity .

i)Write the word equation for the reaction that occurs in the stomach when one takes the medicine .

ii) Explain why sodium hydroxide can not be used for the same purpose . (1mk)

iii)State and explain the observation made when apiece of zinc is put into a beaker containing dilute acid. (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

iv)State the test for the gas produced when a metal reacts with an acid . (1mk)

………………………………………………………………………………………………………………………………………………………………………………………………..

10.a)List six components of air . (3mks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

b)Name the most active part of air . (1mk)

………………………………………………………………………………………………….

c)Use the diagram below to answer the questions that follow.

State and explain the observation made at the end of the experiment .(2mks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

THIS THE LAST PAGE PRINTED .

WISHING YOU SUCCESS .