

NKULA COMMUNITY DAY SECONDARY SCHOOL**2018-2019 FORM TWO END OF TERM ONE EXAMINATION****CHEMISTRY*****Time Allowed: 2hrs******Instructions***

- *The paper contains 8 pages, please check*
- Make sure you write your **name** in the spaces provided on all the pages of this paper before you start **answering the questions**.
- **Follow the instruction for each question number**

SECTION A**QUESTION 1 (TO BE ANSWERED BY INTERNAL CANDIDATES ONLY)**

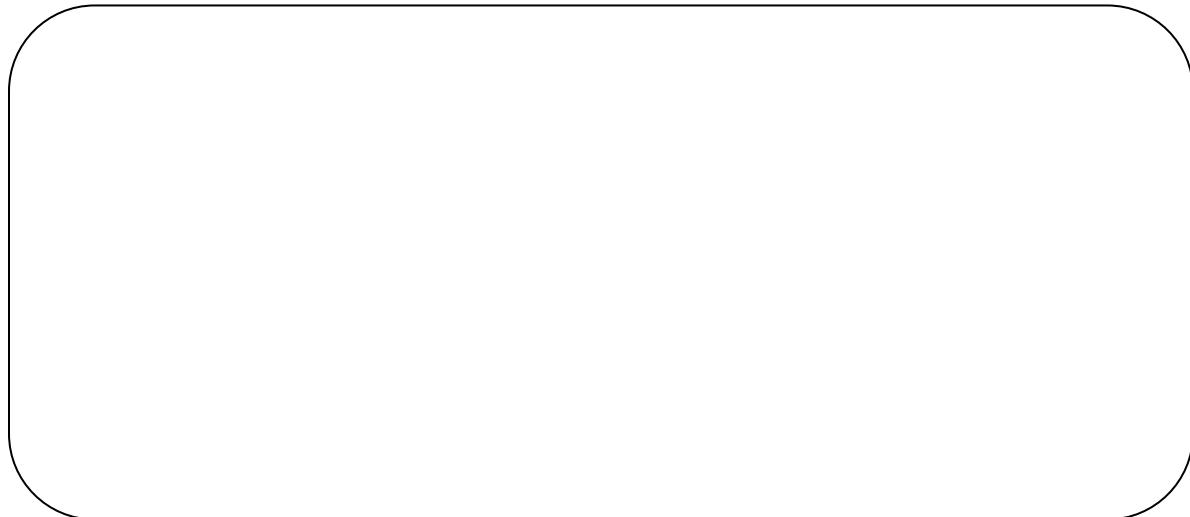
(a). Which is the best method to use when separating the following mixtures?

(i) Iron filling with sand _____ (1 mark)

(ii) Water with ethanol and ethanoic acid

_____ (1 mark)

(b). Draw a well-labeled filtration apparatus. (4 marks)



(c) Using a clearly labeled diagram, describe how chromatography could be used to show that ink contains a mixture of dyes.

QUESTION 2 (TO BE ANSWERED BY ALL CANDIDATES)

In the following sentences one word is wrongly used. Correct the sentences by replacing the wrong word with only one correct word

(a). Sugar melts in water

(1 mark)

(b). When a liquid changes into a solid we say it vaporises.

(1 mark)

(c). Water is a solute for common salt

(1 mark)

QUESTION 3 (*TO BE ANSWERED BY INTERNAL CANDIDATES ONLY*)

(a). What is a solution?

(1 mark)

(b). Give an example of a solution of a

(i). liquid in liquid

(1 mark)

(ii). gas in a liquid

(1 mark)

(iii). gas in a gas

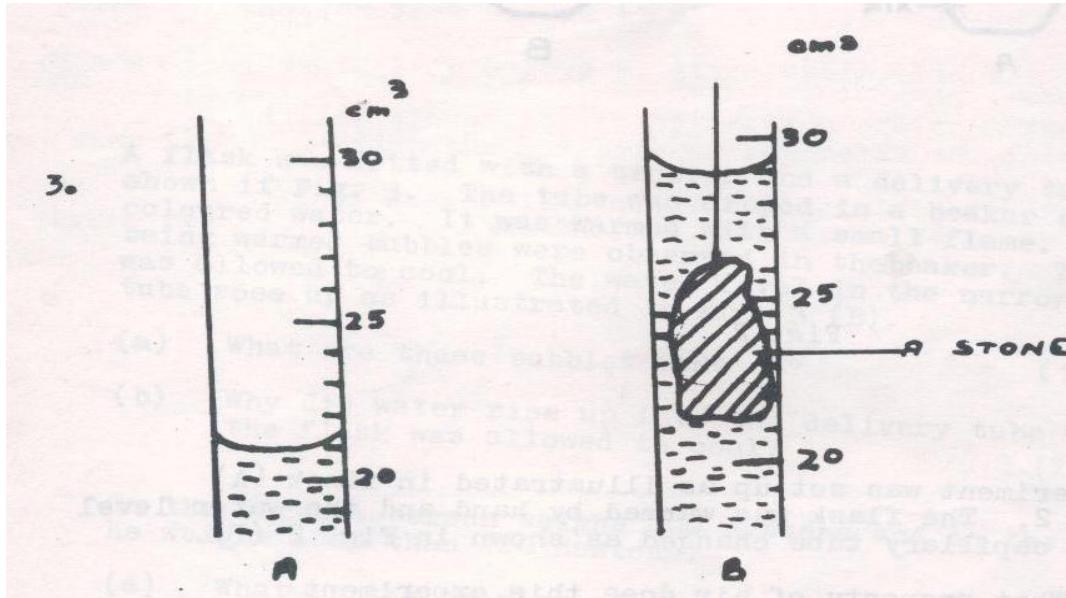
(1 mark)

(c). What name is given to a solution of a metal in another metal?

(1 mark)

QUESTION 4 (TO BE ANSWERED BY ALL CANDIDATES)

Figure below shows part of a measuring cylinder containing water.



(a). What name is given to the curved surface formed by water in the measuring cylinders?

(1 mark)

(b). What is the volume of the stone?

(1 mark)

(c). If the stone has a mass of 20 g calculate the density of the stone.

(3 marks)

QUESTION 5 (TO BE ANSWERED BY ALL CANDIDATES)

(a) Convert 73 minutes to seconds

(3 marks)



(b) Discuss any two importances of units of measurements

(4 marks)

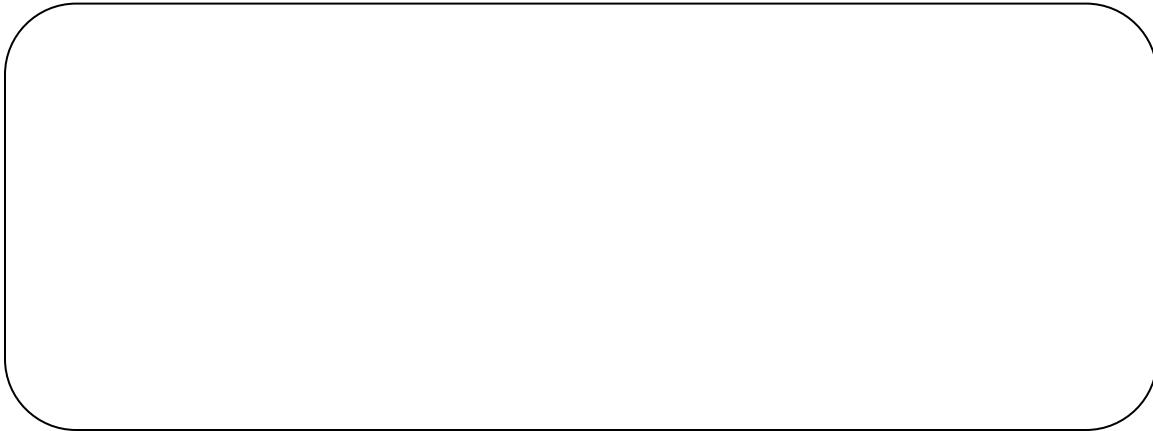
QUESTION 6 (TO BE ANSWERED BY ALL CANDIDATES)

(a) What warning does the following symbol mean in the laboratory?



(1 mark)

- (b) Apart from this symbol, draw any safety symbols commonly used chemistry laboratory and its meaning



QUESTION 7 (TO BE ANSWERED BY ALL CANDIDATES)

- (a) List down any two categories of laboratory apparatus

(2 marks)

- (b) A Form 1 student at Lunzu Secondary School was asked to measure exactly 10 ml of sulphuric acid solution. List down two apparatus she could use to measure the required volume

(2 marks)

- (c) Which apparatus can you use to measure 10 grams of sodium chloride (table salt) in the laboratory?

(1mark)

QUESTION 9 (TO BE ANSWERED BY ODL CANDIDATES ONLY)

- (a) Define the following terms

(i) Atomic radius

(2 marks)

(ii) Electron affinity

(2 marks)

(b) Table below shows the first 20 elements of the periodic table

H							He
Li	Be	B	C	N	O	F	Ne
Na	Mg	Al	Si	P	S	Cl	Ar
K	Ca						

(i) Write down the atomic number of Si

(1mark)

(ii) Work out the electron configuration of K given that its atomic number is 19

(1mark)

(iii) How can aluminum (Al) attain an inert gas configuration?

(1mark)

(iv) Explain what happens to the atomic radius as you move from Na to Cl

(2 marks)

(c) Explain why fluorine is more reactive than chlorine.

(3 marks)

(d) Discuss why the second ionization energy for Mg is greater than its first ionization energy

(3 marks)

SECTION B (*TO BE ANSWERED BY ALL CANDIDATES*)

10. Design an experiment that could be conducted to determine density of an irregular solid **(10 marks)**

11. Discuss the importance of five chemistry careers in the society. **(10 marks)**

END OF QUESTION PAPER

HAVE A NICE HOLIDAY