

INTERSECONDARY SCHOOLS EXAMINATION SERIES
ISESE
FORM TWO OPENING TEST
CHEMISTRY

TIME 2:30 HRS

Instructions

1. This paper consist of section A, Band C with a total **of ten (10)** questions
2. Answer all questions in the space provided
3. Section A and C carry **fifteen (15)** Marks each and section B carries **seventy (70)** Marks
4. All communication devices and any unauthorized materials are **NOT** allowed in the examination room
5. All answers must be in blue or black ink **EXCEPT** diagrams which must be in pencil

FOR EXAMINERS USE ONLY		
QUESTION NUMBER	SCORE	EXAMINER'S INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S INITIALS		

SECTION A (15 MARKS)

Answer ALL questions

1. For each of the items (i) – (x) choose the correct answer from among given alternatives and write it on the space provided
 - i. Identify the skill not acquired during chemistry study.....
 - A. Careful and thorough observations
 - B. Accurate recording of what has been observed
 - C. Drawing conclusions from observations
 - D. Thorough observations and map reading skill
 - ii. _____ Access to safety equipment should never be blocked by any object because
 - A. It's a just simple law
 - B. There must be spaces for people to move around in the laboratory
 - C. The equipment is used in every day
 - D. It is important to reach safety equipment quickly in case of an accident
 - iii. The following apparatus is used to keep test tubes in the laboratory
 - A. Test tube rack
 - B. Beaker
 - C. Tongs
 - D. Test tube holder
 - iv. Factors in an experiment that can be manipulated to get desired results are called
 - A. Controlled variables
 - B. Manipulated variables
 - C. Dependent variables
 - D. Independent variables
 - v. Which of the following is an example of a chemical change
 - A. Melting butter
 - B. Breaking glass
 - C. Mixing milk and water
 - D. Burning leaves
 - vi. When a small amount of common salt is dissolved in water, the mixture so formed is
 - A. Homogeneous
 - B. Immiscible
 - C. Heterogenous
 - D. Suspension
 - vii. Which term describes a rapid chemical reaction that releases energy in form of light and heat?
 - A. Ignition
 - B. Reactivity
 - C. Combustion
 - D. Heating
 - viii. Are those people who study chemistry practically in the past_____
 - A. Chemists
 - B. Alchemist
 - C. Al-chemistry
 - D. Scientist
 - ix. Is the systematic study of nature:-
 - A. Science
 - B. Technology
 - C. Chemistry
 - D. Contamination

x. Syrups are examples of

A. Solution

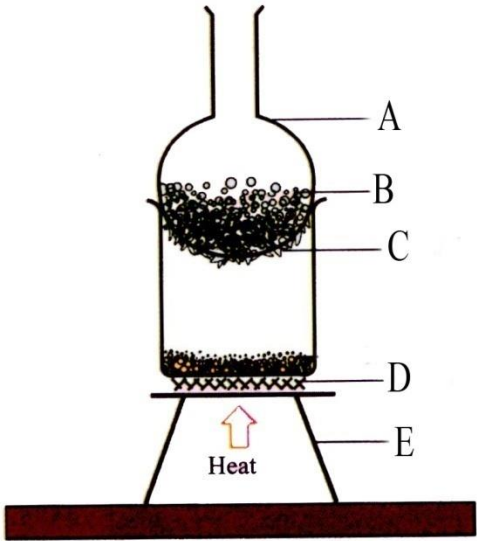
B. Suspensions

C. Homogeneous mixtures

D. Filtrate

i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.

2. Match the item in **list A** with the corresponding responses in **list B** by writing the letter of the correct response besides the item number

LIST A	LIST B
 <p>The diagram shows a round-bottomed flask (A) containing a mixture of sand and iodine (B). The flask is placed on a wire gauze (C) supported by a tripod stand (D). A Bunsen burner (E) is heating the flask from below, with an arrow labeled 'Heat' pointing upwards.</p>	<p>i) Round bottomed flask ii) Ice cubes iii) Crystals of iodine iv) Wire gauze v) Tripod stand vi) Mixture of sand and iodine vii) Heat viii) Sublimation</p>

LIST A	A	B	C	D	E
LIST B					

SECTION B (70 MARKS)

3. (a) Is air a mixture or a compound? Argue this statement by using four points,
 (b) Solvent extraction is the method of separating one substance from one more substance by using a solvent, but the solvent must fulfill four conditions. What are they?
- i. _____
 ii. _____
 iii. _____
 iv. _____
4. (a) Draw a well labeled diagram to show a method responsible for separation a mixture of ethanol and water.

(b) Briefly explain why in the method above the thermometer is fitted at the top of fractionating column?

5. a) What is your answer when someone ask you to write the Latin name and symbol of Mercury, Tin and Tungsten

(b) List down five elements with their corresponding chemical symbols which starts with letter C

- i).

- ii).

- iii).

- iv).

6. a) On your way back to home, you hear two students arguing that chemical symbols has no importance because it confuse scientists. How will you correct their argument by using four points?

- i.

- ii.

- iii.

- iv.

b) Complete the given table below

TERM	MEANING
i) Ductile	<hr/>
i) Sonorous	<hr/>
ii) Malleable	<hr/>
iii) Lustrous	<hr/>

7. (a) Describe three examples which shows that matter is made up of particles that are in constant motion

- i.

- ii.

- iii.

(b) Describe how the importance of matter changing from one state to another can be explained in terms like metallurgy and steam engines

8. (a) Cars and corrugated iron sheet in coastal towns like Dar- es- salaam, Tanga and Zanzibar are found to rust more quickly than in other cities in Tanzania like Songea, Mwanza or Arusha. Why is this?

(b) A saturated solution is the one in which the solvent can dissolve no more solute at a given temperature and pressure also the concept of saturation can be applied when

i) _____

ii) _____

9. How can the following mixture be separated

(i) Sugar solution

(ii) Mixture of rice and sand

(iii) Mud from muddy water

(iv) Chlorophyll from green leaves

(v) Water from mixture of water and alcohol

(vi) Water from mixture of water and paraffin

(vii) Pure water from impure water

(viii) Iodine from mixture of iodine and sodium chloride salt

(ix) Water and salt

(x) Ammonium chloride and sodium chloride salt

SECTION C (15 Marks)

Answer question **number 10** in this section

10. (a) At your home the fire break out suddenly and you are chosen to put off that fire by using fire extinguisher. Explain, how can you use a fire extinguisher and what precautions can you take so as to avoid occurrence of other accident.

(b) Why is not advised to use water for extinguish class B and C fires?

U.B.N COOPERATION O-LEVEL EXAMINATION SERIES 2025
TIME TABLE FOR ALL SUBJECTS
FORM TWO AND FORM FOUR
JANUARY SERIES

ALL SUBJECTS	DATE	TIME
SERIES – 01	20 th January 2025	03:00 – 6:00 pm
SERIES – 02	27 th January 2025	03:00 – 6:00 pm

CONTENTS COVERED

1. SERIES FORM TWO

(ALL TOPICS IN FORM ONE AND ONLY ONE TOPIC IN FORM TWO)

2. FORM FOUR

(ALL TOPICS IN FORM ONE, FORM TWO, FORM THREE AND ONLY ONE TOPIC IN FORM FOUR)

ADA : FORM TWO 15,000 MUHULA MZIMA

: FORM FOUR 15,000 MUHULA MZIMA

OFA : UKIFANYA MALIPO YA SERIES KABLA YA TAREHE 13 JANUARY MALIPO NI TSH 10,000 KWA KILA KIDATO

NB : *MWISHO WA MALIPO NI TAREHE 20/01/2025**

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O-LEVEL MONTHLY TEST 2025
FORM TWO AND FORM FOUR**

OFA OFA

U.B.N COOPERATION TUNATOA OFA MAALUM YA KUJIUNGA NA GROUP LETU LA “U.B.N COOPERATION” KWA WAKUU WA SHULE NA WATAALUMA KWA TSH 100,000/= KWA KIDATO KIMOJA AMBAPO UTAPATA MITIHANI YA KILA MWEZI (MONTHLY TEST NA MARKING SCHEMES ZAKE) KWA MASOMO YOTE NDANI YA MIEZI SITA (MWEZI JANUARI – JUNE). OFA HII NI KWA KIDATO CHA PILI NA CHA NNE TUU. MWISHO WA KUJIUNGA NA OFA HII NI TAREHE 15/01/2025

**KWA MAWASILIANO TUCHEKI KWENYE NAMBA
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