### THE UNITED REPUBLIC OF TANZANIA

### PRESIDENT'S OFFICE

# REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT DODOMA REGION

## DODOMA CATHOLIC SECONDARY SCHOOL ASSOCIATION (DOCASSA)

### FORM ONE MID-TERM EXAMINATION

032 CHEMISTRY

TIME: 2:3 hours April, 2025

### **INSTRUCTIONS:**

- 1. This paper consists of section A and B and C
- 2. Answer all questions in section A and B. Answer ONE question from section C
- 3. All answer should be written in the answer sheet(s) provided.
- 4. Cellular phones and any unauthorized materials are not allowed in the examination room
- 5. Write your name/candidate number on every page of your answer sheet(s)

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

SECTION A (15 MARKS)
Answer all questions in this section

1.	1. For each of the item $(i) - (x)$ choose the correct answer from among the given alternatives and write its letter beside the item number			mong the given alternatives and write
	i.	Chemistry is defined as:  A. The scientific study of matter, compound an B. The scientific study of compounds, mixture C. The scientific study of composition, structure D. The study of relation between human being.	and org	anic substances roperties of matter
	ii.	Why is water a universal solvent?  A. It is neither acidic nor basic than any other IB. It dissolves more substances than any other C. It occurs naturally in all the three states of nD. It dissolves both organic and inorganic solutions.	known l natter th	liquid an any other liquid
	iii.	Technicians prefer to use blue flame in welding A. It is bright and non-sooty B. It is light and non-sooty	C. It is	e very hot and large very hot and non-sooty
	iv.	All domestic utensils made of iron undergo rust A. Air and fire B. Air and oil	C. Air	en exposed to: and water er and oil
	v.	An important property of oxygen which disting A. Supports combustion but does not burn B. Burns and support combustion	C. Burn	from other gases is that it: as but does not support combustion ther burns nor support combustion
	vi.	The choice of the source of heat depends on the A. Colour of the flame B. Quantity of heat produced	C. Sub	stance to be burned or boiled e and shape of flame
	vii. viii. Yo	Which state is involved when drying wet clothe A. Liquid to solid B. Solid to gas ur friends were arguing about the scientific process.	C. Gas D. Liqu	to liquid uid to gas at follows after experimentation. Which stage
		aggest your friends?		
		A. Hypothesis	B.	Data interpretation
	ix.The	C. Data collection e flame which is generally used in the laboratory	D. is the or	Experimentation ne with:
		A. two zones.	B.	four zones.
	x.The	C. one zone. branch of chemistry that deals with the study of  (a) Physical chemistry (b) Analyt  (c) Organic chemistry (d) Inorgan	ical cher	mistry

i	ii	iii	iv	v	vi	vii	viii	ix	X

2.(a) Match the items in **List A** with a correct response in **List B** by writing the letter of the correct response below the corresponding item number in the table provided.

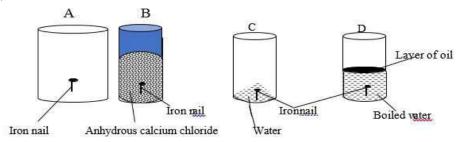
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List A	List B	
The blockage of the upper part of the airways by food or drink.	A	Suffocation
A skin injury that causes a change in colour of the skin.	В	Shock
A sudden loss of consciousness caused by lack of sufficient blood and	C	Bruises
oxygen to the brain.	D	Choking
A condition in which the body system is unable to take enough blood to	E	Fainting
the vital organs.	F	Burns
A condition in which the lungs are not getting enough oxygen	G	Bleeding

i	ii	iii	iv	V

**SECTION B (70 MARK)** Answer all question in this section

(a) Define the term laboratory safety
(b) Laboratory safety measures are very important and should be considered for accurate laboratory works, as a form one student briefly state the important of the following measures during scientific experiments.  (i) Cupboards, storage cabinets and drawers should have locks.
(ii) Refrigerators and freezers used should be labeled for chemical use only
(iii) If there is a smoke to the extent of not being able to access the exist, it is advised to lie on the floor while searching for exist points
(iv) The laboratory should be well ventilated and door should open outward
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•
(c). Bleeding is the loss of blood and other fluids from the body when the skin breaks. As a form two student
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4. You are provided with the following diagram below, study it carefully and answer the question that follows;



(a) (i) Give sort and clear description about what will be observed in each beaker A-D after 2 or 3 days

	n beaker A
I	n beaker 3
I	n beaker
I	n beaker O
	ii) What is the aim of experiment set up in above diagram?
	iii) Write one effect of the process taken in the experiment above in our daily life activities.
(b) H	Briefly explain why corrugated iron sheet at coastal region like Dar es Salaam rust very fast compared to that at central regions like Dodoma?
	Some metals such as aluminum, lead and zinc do not rust easily, explain why
(i) It	plain the following phenomena based on the idea of particles: is easy to pour a liquid
	gas will completely fill any container
(iii). <i>A</i>	A solid expands when heated
• • • • • • • • •	

	water	po placed a large crystal of potassium permanganate in the bottom of the beaker of cold in chemistry laboratory and left it for several hours, according to kinetic theory of matter explain about the following;
	(i)	What she must have observed after five minutes
	(ii)	What she likely to observed after several hours
	(iii)	Name the two process which have taken place?
	(iv)	From that experiment give conclusion about matter
(c) S	State t	he principle of kinetic theory of matter
` /		rell labeled diagram of a small laboratory heat source consisting of vertical metal tube gas source.
(b) Desc	ribe h	ow you will light a device drawn above
i	)	
ii	i)	
ii	ii)	
	v)	
	······································	

i)	
ii)	
iii)	
` '	nistry is not an isolated discipline, with vivid example s explain this statement by five points.
( )	
(ii)	
(iii)	
•••••	
(1V)	
•••••	
(v)	
(v)	
•••••	
(b) Use the (i) Agri	e relevant examples to state about the following statement. iculture and chemical industry can work together
	emistry has contributed to environmental hazards
(c).i) Who	o is alchemist?
ii) Me	ention two interest of alchemist
8. (a) What	is laboratory apparatus?
When she goes th	ing was asked by the teacher to go to wash the apparatus in the chemistry laboratory. Here, she was surprised to see the most of apparatus are made up of glass. She was bit
onfused why it's naterials in chem	s like this. You as educated student briefly outlines five disadvantages of using glass histry laboratory.
(i)	
(*)	

(c) Burning back of the device drawn above is corrected as follows

(c) Draw a well, smart diagram of the following laboratory apparatus and give one function for each

Thistle funnel  Round bottomed flask		Diagram	Function	
Round bottomed flask  Measuring syringe  L(a) a) Differentiate first aid from first aid kit	Burette			
Round bottomed flask  Measuring syringe  L(a) a) Differentiate first aid from first aid kit				
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SECTION C (15 MARKS)
Answer question number 10 from this section.

10. (a) Form one students reads a statement from a certain book that "If the clothes worn by your friend catch fire, cover them with fire blanket"
(i) What materials composes the fire blanket?
(ii)Why fire blanket is to be used in that case?
(iii) Briefly explain how it is used to put off the fire.
(iv). What type of class of fire occurred to the clothes? Explain your choice.
(b) Outlines general five safety precautions you have to keep in mind when using fire extinguishers;
(i)
(ii)
(iii)
(iv)
(v)
<ul><li>(c). State the chemical composition of the extinguishing agent of each of the following portable fire extinguishers;</li><li>(i) Dry chemical fire extinguisher.</li></ul>
(ii) Carbon dioxide fire extinguisher
(iii) Wet chemical extinguisher.
(iv).ABC fire extinguisher.
(v). Halon fire extinguisher.
(vi). Foam fire extinguisher