

Name.....

S3 END OF TERM I EXAMINATION, 2024

CHEMISTRY PAPER 1

Duration : 1 hour 30 minutes

SECTION A

Answer *all* items in this section

Item 1

John, a senior one student came across a chart in the laboratory. The chart had many symbols of elements with some numbers, written in tabular form with rows and columns. He started wondering. What is this chart all about? Why are these elements arranged this way? He picked interest in the element that was in the second column and the fourth row.

group	1*																	18			
period	1	2																	2		
1	1																				
2	3	4																	10		
3	11	12	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54			
6	55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86			
7	87	88	89	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118			
lanthanoid series		6	58	59	60	61	62	63	64	65	66	67	68	69	70	71					
actinoid series		7	90	91	92	93	94	95	96	97	98	99	100	101	102	103					

Task

As a chemistry learner ;

(a) Assist him know what the chart is and what the columns and rows mean. (02 scores)

(b) Explain to John why the element of interest is in that position of the chart. (03 scores)

(c) Help John understand the importance of the chart in chemistry. (05 scores)

[illegible]

SECTION B

Part I

*Answer **one** item from this section*

Item 2

Charcoal, Petrol, diesel and other carbon-based fuels are easy to get and are used on a large scale. However they have the sustainability challenge. The minister of energy and mineral development has organized a conference for students from all over the country with the theme **“Sustainability of Carbon based fuels Visa vie the Environment”**.

You have been chosen to represent the school in the conference and address the conference about the issue.



Task

Write a speech that you will present to the congregation.

Part II

*Answer **one** item from this section*

Item 3

During the COVID-19 pandemic there was a shortage of oxygen in hospitals for treating patients in the whole country, yet oxygen is naturally available in air at a considerable 21%. Doctors in the country are trying to prevent the problem from re-occurring. They are looking for ideas on how the oxygen in air can be harvested and stored properly for use when it is needed.



Task

As a chemistry student, make a write up of the process that can be used to get the oxygen from air and stored properly.

END