

NAME:		ROLL NO:		TIME:	30: MIN
SUB:	Chemistry	Date:		CLASS:	1 st Year
SYLLABUS	Chp. 1 (Periodic Table and Periodic Properties)	T. MARKS	26	OBT. M	

Q. 1 Choose the Correct Answer. Cutting, Erasing, Double Selection is Strictly Prohibited. 1x26=26

1. Which scientist first time observed the periodicity in the elements?

- (A) J. Newlands (B) L. Meyer (C) J.W. Döbereiner (D) D.I Mendeleev

2. Recognize the element if it has 3 electron shells belongs to "s" block and has 2 electrons in its outer most shell.

- (A) Calcium (B) Sodium (C) Magnesium (D) Potassium

3. Which one do you think is correct about metallic character?

- (A) It decreases from top to bottom in a group.
 (B) It increases from top to bottom in a group.
 (C) It remains constant from left to right in a period.
 (D) It increases from left to right in a period.

4. Which property increases as you go down a group in the periodic table?

- (A) Atomic radius (B) Electron Affinity (C) Electronegativity (D) Ionization energy

5. Which set of the following conditions results in higher ionization energy?

- (A) Smaller atom and greater nuclear charge (B) Smaller atom and smaller nuclear charge
 (C) Larger atom and greater nuclear charge (D) Larger atom and smaller nuclear charge

6. Which of the following atoms show more than one (variable) oxidation states?

- (A) Sodium (B) Magnesium (C) Aluminum (D) Phosphorous

7. Which is correct general trend in the variation of electron affinity in a group?

- (A) It becomes less negative from top to bottom.
 (B) It becomes more negative from top to bottom.
 (C) It remains the same.
 (D) It has no definite trend and changes irregularly.

8. What is the oxidation state of sulphur in the sulfate ion (SO_4^{2-}).

- (A) +4 (B) +2 (C) +6 (D) 0

9. Which is the correct trend in variation of Electronegativity along a period of the periodic table?

- (A) It decreases from left to right across a period.
 (B) It increases from left to right across a period.
 (C) It remains constant.
 (D) It has no definite trend.

10. The atomic radius generally _____ across a period in the periodic table.

- (A) Increases (B) Decreases
 (C) Remains constant (D) First increases then decreases

11. Which one of the following elements has the highest ionization energy?

- (A) Sodium (Na) (B) Magnesium (Mg) (C) Aluminum (Al) (D) Argon (Ar)

NAME:		ROLL NO:		TIME:	30: MIN
SUB:	Chemistry	Date:		CLASS:	1 st Year
SYLLABUS	Chp. 1 (Periodic Table and Periodic Properties)	T. MARKS	26	OBT. M	

12. Livermorium (Lv) is an element which is present in:

- (A) Group 1, Period 2 (B) Group 2, Period 3
(C) Group 16, Period 7 (D) Group 17, Period 7

13. The period number of an element shows:

- (A) Group number (B) Number of valence electrons
(C) Type of block (D) Number of occupied shells

14. Which of the following has the configuration $1s^2 2s^2 2p^6 3s^2 3p^1$?

- (A) Na (B) Mg (C) Al (D) Si

15. The element in group 2 and period 4 has which configuration?

- (A) $[Ar] 3d^2$ (B) $[Ar] 4s^2$ (C) $[Ar] 4s^1$ (D) $[Ar] 3s^2$

16. An unknown gas forms a -1 ion and is highly reactive. It likely belongs to:

- (A) Group 1 (B) Group 14 (C) Group 17 (D) Group 18

17. An element reacts with water to form a strong base and hydrogen gas. It is likely:

- (A) A noble gas (B) An alkali metal (C) A halogen (D) A metalloid

18. Which property increases down Group 1 elements?

- (A) Electronegativity (B) Reactivity (C) Ionization energy (D) Non-metallic character

19. Why do Group 1 elements have low ionization energy?

- (A) Small size (B) High nuclear charge (C) Large atomic radius (D) High shielding

20. Which factor mainly determines an element's metallic character?

- (A) Number of neutrons (B) Atomic mass (C) Valence electrons (D) Density

21. Which oxide forms a basic solution in water?

- (A) SO_3 (B) CO_2 (C) MgO (D) P_2O_5

22. Which of the following oxides is acidic in nature?

- (A) CaO (B) Na_2O (C) SO_3 (D) MgO

23. Which hydroxide is slightly soluble and weakly basic?

- (A) $NaOH$ (B) $Mg(OH)_2$ (C) $Ca(OH)_2$ (D) KOH

24. Which chloride forms an acidic solution in water due to hydrolysis?

- (A) $NaCl$ (B) $AlCl_3$ (C) KCl (D) $MgCl_2$

25. Which equation correctly shows magnesium reacting with chlorine?

- (A) $Mg + Cl \rightarrow MgCl$ (B) $Mg + Cl_2 \rightarrow MgCl_2$ (C) $Mg + 2Cl \rightarrow MgCl_2$ (D) $Mg + 2Cl_2 \rightarrow MgCl_4$

26. Why is MgO more ionic than Al_2O_3 ?

- (A) Al is more reactive (B) Mg has fewer electrons
(C) Mg is less electronegative than Al (D) Al has more orbitals



NAME:				ROLL NO:		TIME:	30: MIN
SUB:	Chemistry	Date:			CLASS:	1 st Year	
SYLLABUS	Chp. 1 (Periodic Table and Periodic Properties)			T. MARKS	26	OBT. M	

Answer Key

1	A	2	A	3	B	4	A
5	A	6	D	7	A	8	C
9	B	10	B	11	D	12	C
13	D	14	C	15	B	16	C
17	B	18	B	19	C	20	C
21	C	22	C	23	B	24	B
25	B	26	C				