

# Adabistan-e-Soophia

Code: 1011

Test No.: 2

Paper: Chemistry

Name: \_\_\_\_\_

Class: IX Sec: \_\_\_\_\_

Syllabus: Ch. 2

Question Numbers	1	2	3			Total	Grade	%age
Maximum Marks	09	22	09			<b>40</b>		
Marks Obtained								

Remarks: \_\_\_\_\_

Time Allowed: 15 mins

(Objective Type)

Max. Marks: 09

A	B	C	D	Write Correct option	
1	A	B	C	D	
2	A	B	C	D	
3	A	B	C	D	
4	A	B	C	D	
5	A	B	C	D	
6	A	B	C	D	
7	A	B	C	D	
8	A	B	C	D	
9	A	B	C	D	
10	A	B	C	D	
11	A	B	C	D	
12	A	B	C	D	
13	A	B	C	D	
14	A	B	C	D	
15	A	B	C	D	
16	A	B	C	D	
17	A	B	C	D	
18	A	B	C	D	

**Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more times result in zero mark in that question.**

Q.1	Questions	(A)	(B)	(C)	(D)
1.	Neil Bohr presented his atomic model in:	1886	1878	1913	1897
2.	Value of plank's constant is:	$6.63 \times 10^{34} Js$	$6.63 \times 10^{-34} Js$	$6.63 \times 10^{-34} Js$	$6.63 \times 10^{23} Js$
3.	Angular momentum (mvr) of 1 <sup>st</sup> orbit is equal to:	$1.0 \times 10^{-34} kgm^2s^{-1}$	$1.0 \times 10^{-34} Js$	$1.0 \times 10^{34} kgm^2s^{-1}$	$1.0 \times 10^{34} kgm^2Js$
4.	The number of electrons that a shell can accommodate is given by:	$n$	$s, p, d, f$	$K, L, M, N$	$2n^2$

Q.1	Questions	(A)	(B)	(C)	(D)
5.	Electronic configuration of $P^{3-}$ is:	$1s^2, 2s^2, 2p^6, 3s^2, 3p^1$	$1s^2, 2s^2, 2p^6, 3s^2, 3p^3$	$1s^2, 2s^2, 2p^6, 3s^2, 3p^6$	$1s^2, 2s^2, 2p^6$
6.	An atom having 7 electron in M shell has atomic number:	13	15	17	9
7.	${}^{37}_{17}Cl$ has number of neutrons:	20	17	18	None of these
8.	Max plank was awarded by noble prize in:	1913	1918	1920	1932
9.	Electronic configuration of $N^{3-}$ is:	$1s^2, 2s^2, 2p^6, 3s^2, 3p^1$	$1s^2, 2s^2, 2p^6, 3s^2, 3p^3$	$1s^2, 2s^2, 2p^6, 3s^2, 3p^6$	$1s^2, 2s^2, 2p^6$
10.	The concept of orbit was used by:	J.J Thomson	Rutherford	Bohr	Plank
11.	In M-shell the number of sub-shells are:	1	2	3	4
12.	In Rutherford's atomic model the number of alpha particles bombarded on gold foil were:	2000	4000	20000	200
13.	In Rutherford's atomic model the elements used for the bombardment of alpha particles were:	Polonium & Sodium	Radium & Potassium	Polonium & Radium	Radium & Calcium
14.	Deuterium is used to make:	light water	heavy water	soft water	hard water
15.	The alpha particle are nuclei of:	H	Li	He	Na
16.	An atom having 2 electrons in outer shell (N) will be:	Be	Mg	Ca	Zn
17.	When an atom gains electron it will become:	Anion	Cation	Alpha particle	Both (a) and (c)
18.	When an electron jumps from lower to higher energy orbital it:	Gains energy	Loses energy	Becomes stable	Becomes reactive

## (Section - I)

## 2. Write short answers to the following questions.

(11×2=22)

- i. Write down the observations of Rutherford's atomic model.
- ii. Define electronic configuration.
- iii. What are the basic requirements to write the electronic configuration of elements?
- iv. Differentiate between shell and subshell.
- v. Write down the electronic configuration, number of electrons, protons and neutrons of (Ne).
- vi. An element has an atomic number 17. How many electrons are present in K, L and M shells of the atom?
- vii. Write down the electronic configuration of  $Al^{3+}$ . How many electrons are present in its outermost shell?
- viii. Magnesium has electronic configuration 2, 8, 2,
  - a. How many electrons are in the outermost shell?
  - b. In which subshell of the outermost shell electrons are present?
  - c. Why magnesium tends to lose electrons?
  - d. Will Magnesium obey duplet or octet rule?
- ix. What are the defects of Rutherford's atomic model?
- x. Write down any two differences between Rutherford's and Bohr's atomic model.
- xi. What do you mean by quantum?

## (Section - II)

**Note: Give detailed answers of the following questions.****(9)**

3. a) Write down the postulates of Bohr's atomic model.

**(5)**

b) What are the results of Rutherford's atomic model?

**(4)**