

# A+ BLOG-UNIT EXAMINATION

STD: IX

## CHEMISTRY STRUCTURE OF ATOM

Time: 45 Min

Total score: 20

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**Each question carries 1 score. (1 x 3 = 3)**

1. The maximum number of electrons that can be accommodated in the outermost shell of an atom is .....
2. Negatively charged particles in the atoms are known as .....
3. Name the part of an atom that contains protons and neutrons?

**Each question carries 2 scores. (2 x 2 = 4)**

4. The maximum number of electrons that can accommodate in K is 2 and that in L shell is 8.
  - a) Write down the formula used to find the maximum number of electrons that can be accommodated in any given shell?
  - b) Find the maximum number of electrons that can be accommodated in the fourth shell of an atom.
5. Certain ideas of Dalton atomic theory are given below. Find the wrong ones and rewrite them correctly.
  - a) Molecules are the smallest particles that can take part in chemical reactions.
  - b) Atoms of the same elements are not identical in properties, size and mass.
  - c) Matter is made up of minute particles called atoms.
  - d) Compounds are formed when atoms of two or more elements combine in a simple ratio.

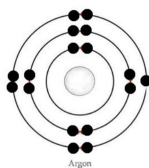
**Each question carries 3 scores (3x 3 = 9)**

6. Find the relation and match suitably.

A	B	C
Sir Humphrey Davy	Father of electricity	Nucleus of an atom
Michael Faraday	Gold foil experiment	Sodium
Rutherford	The presence of electric charges in substances	Law of Electrolysis

7. There are three shells in the atom of an element. It's the outermost shell contains three electrons. Mass number of the element is 27.
    - a) What is the atomic number of these elements?
    - b) Write the Electronic configuration
    - c) Draw the Bohr model of the atom.
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8. Given below the Bohr model of Argon atom, drawn by a student. If there is any mistake in the diagram,  
draw the correct one. ( ${}_{18}^{40}\text{Ar}$ ).



Each question carries 4 scores. ( $4 \times 1 = 4$ )

9. Complete the Table.

Element	Atomic Number	Protons	Electrons	Electronic configuration
${}^4_2\text{He}$	2	2	2	2
${}^{40}_{18}\text{Ar}$	a	b	18	c
${}^{20}_{10}\text{Ne}$	10	d	e	f
${}^{12}_6\text{C}$	6	g	h	2, 4