

## CHAPTER-4 | Structure of the Atom

QUIZ  
PART-05

1. Which particle is present outside the nucleus?

- A. Proton
- B. Neutron
- C. Electron
- D. Nucleon (C)

**Explanation:** Electrons are present outside the nucleus.

2. Which particle is neutral?

- A. Electron
- B. Proton
- C. Neutron
- D. Nucleus (C)

**Explanation:** Neutron has no charge.

3. Thomson's model states that atom is a:

- A. Small dense nucleus only
- B. Positively charged sphere with electrons embedded
- C. Group of shells only
- D. Neutral solid ball (B)

**Explanation:** Thomson proposed a positively charged sphere with electrons embedded in it.

4. In Bohr's model, electrons revolve in:

- A. Random paths
- B. Discrete orbits
- C. Nucleus
- D. Straight lines (B)

**Explanation:** Bohr said electrons move in fixed discrete orbits.

5. Valency means:

- A. Atomic mass
- B. Combining capacity
- C. Number of neutrons
- D. Mass number (B)

**Explanation:** Valency is the combining capacity of an element.

6. Electronic configuration of Na is:

- A. 2, 8
- B. 2, 8, 1
- C. 2, 1, 8
- D. 8, 2, 1 (B)

**Explanation:** Sodium has atomic number 11, so its configuration is 2, 8, 1.

7. Average atomic mass of bromine is:

- A. 79 u
- B. 79.5 u
- C. 80 u
- D. 81 u (C)

**Explanation:** Using 79 and 81 with given abundances, the average atomic mass is 80 u.

8. If  $Z = 3$ , the element is:

- A. Beryllium
- B. Lithium
- C. Boron
- D. Helium (B)

**Explanation:** Atomic number 3 belongs to lithium.

9. Two species with same protons but different neutrons are:

- A. Isobars
- B. Isotopes
- C. Isotones
- D. Ions (B)

**Explanation:** Same atomic number but different mass number means isotopes.

10. An atom with 6 electrons in outermost shell will gain electrons to form ion of charge:

- A. 2+
- B. 1+
- C. 1-
- D. 2- (D)

**Explanation:** It needs 2 more electrons to complete octet, so it forms a 2- ion.