

## CHAPTER-4 | Structure of the Atom

QUIZ  
PART-01

1. Which subatomic particle has negative charge?

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

**Explanation:** Electron is the negatively charged subatomic particle.

2. Who discovered the electron?

- A. J. Chadwick
- B. E. Goldstein
- C. J. J. Thomson
- D. Rutherford (C)

**Explanation:** J. J. Thomson discovered the electron by cathode ray experiment.

3. Proton was discovered by:

- A. E. Goldstein
- B. J. J. Thomson
- C. Niels Bohr
- D. James Chadwick (A)

**Explanation:** E. Goldstein discovered positive rays linked with proton.

4. Neutron was discovered by:

- A. Rutherford
- B. Chadwick
- C. Thomson
- D. Dalton (B)

**Explanation:** James Chadwick discovered the neutron.

5. Charge on neutron is:

- A. +1
- B. -1
- C. 0
- D. 2 (C)

**Explanation:** Neutron is electrically neutral.

6. Thomson's atomic model is also called:

- A. Nuclear model
- B. Planetary model
- C. Plum pudding model
- D. Quantum model (C)

**Explanation:** Thomson's model is known as the plum pudding model.

7. In Thomson's model, electrons are embedded in a:

- A. Negative sphere
- B. Positive sphere
- C. Neutral shell
- D. Nucleus only (B)

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

8. Rutherford used \_\_\_\_\_ in his scattering experiment.

- A. Silver foil
- B. Copper foil
- C. Gold foil
- D. Iron foil (C)

**Explanation:** Rutherford bombarded alpha particles on a thin gold foil.

9. Most alpha particles passed through gold foil because:

- A. Atom is solid
- B. Atom is mostly empty space
- C. Nucleus is large
- D. Electrons are heavy (B)

**Explanation:** This showed that most of the atom is empty space.

10. Rutherford's experiment led to the discovery of:

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

**Explanation:** Rutherford's alpha-particle experiment showed the presence of a small dense nucleus.