

UNIT – 11 – ATOMIC STRUCTURE**I. Answer in brief(2/3 marks)**

1. Name an element which has the same number of electrons in its first and second shell.
2. Write the electronic configuration of K and Cl
3. For an atom 'X', K, L and M shells are completely filled. How many electrons will be present in it?
4. How was it shown that atom has empty space?
5. Why do $^{35}_{17}\text{Cl}$ and $^{37}_{17}\text{Cl}$ have the same chemical properties? In what respect do these atoms differ?
6. Draw the structure of oxygen and Sulphur atoms.
7. What are nucleons? How many nucleons are present in Phosphorous? Draw its structure.
8. What are the limitations of Rutherford model?
9. Define valency.
10. What is isotopes?
11. Define isobars and isotones.

II. Answer in a paragraph (5 marks)

1. Explain Rutherford atomic model.
2. Explain Bohr's model of an atom.
3. Explain Law of multiple proportion.
4. Explain Law of Reciprocal Proportions.
5. State the Gay Lussac's law of combining volumes. Explain with an illustration.



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