



CHEMISTRY

CH:3 CLASSIFICATION OF ELEMENTS

Class: XII

Answer the following

1. What are representative elements?
2. Write the IUPAC name and symbol for the elements with atomic numbers 109 and 114.
3. Define covalent and metallic radius.
4. An element is present in the third period of p block. It has 5 electrons in its valence shell. Predict its group. How many unpaired electrons does it have?
5. Define the following and explain how do they vary along a period and down a group.
 - a) ionization enthalpy
 - b) electron gain enthalpy
 - c) Atomic radius
 - d) electron gain enthalpy
 - e) Electronegativity
6. An element is present in the third period of p block. It has 5 electrons in its valence shell. Predict its group. How many unpaired electrons does it have?
7. Electron gain enthalpy of noble gases is zero. Why?
8. Which one of the following pairs would have a larger size? Explain.
 - i) K or K^+
 - ii) Br or Br^-
 - iii) Li^+ or Na^+
 - iv) Na^+ or Mg^{2+}
9. What are lanthanoids and actinoids?
10. First member of each group of representative elements shows anomalous behavior. Illustrate with examples.
11. Explain diagonal relationship and give examples.