

33. The following statement explain why water is denser than ice **except**:
- A. Each water molecule in ice is tetrahedrally hydrogen bonded to four other water molecules.
  - B. In ice, water molecules in an open structure.
  - C. At lower temperature, water molecules are far apart.
  - D. There are large spaces within ice.
34. The conduction of electricity in metallic bonding is due to presence of
- A. proton.
  - B. lattice.
  - C. delocalised electron.
  - D. nucleus.
35. Because of the mobility of the delocalised valence electrons, metals are
- A. not able to be deformed without breaking.
  - B. not able to be drawn into wire.
  - C. bad electrical conductor.
  - D. able to transfer heat.
36. Explain the boiling point of sodium and magnesium
- A. Sodium has lower boiling point than magnesium because sodium has lower number of valence than magnesium.
  - B. Sodium has higher boiling point than magnesium because atomic size of sodium larger.
  - C. Sodium has lower boiling point than magnesium because sodium has less proton number.
  - D. Sodium has higher boiling point than magnesium because sodium ion is larger. As the distance between valence electrons and positive nucleus get larger, attraction between the two stronger.
37. Factor(s) that influence(s) the values of boiling points of simple covalent molecule with comparable relative molecular mass is (are).
- I: molecular geometry
  - II: resultant of dipole moment
  - III: types of intermolecular forces
- A. I only
  - B. I and II
  - C. II and III
  - D. I, II and III
38. Boiling point of halogen increases down a group because
- A. Atomic size increases down a group.
  - B. Screening effect decreases down a group.
  - C. Number of proton increase, electron closer to nucleus.
  - D. Molecular size increases down a group.