

BELPAHAR ENGLISH MEDIUM HIGH SCHOOL
BELPAHAR.

2nd class test on chemical bonding

CLASS: X
Subject: Chemistry

Full Marks: 40

SECTION: A (Answer any TEN questions)

1. Arrange the elements given group wise and period wise as per their increasing basic nature. What do you mean by stable electronic configuration?
2. How the ions are formed? Why do most of the elements form ions?
3. What do you understand by the term ionic bond? State some periodic properties that are responsible for the formation of ionic bond?
4. What do you understand by the term covalent bond? State some periodic properties that are responsible for the formation of covalent bond?
5. By drawing diagrams explain the formation of ionic bond between (a) ${}_{11}\text{Na}^{23}$ and ${}_{17}\text{Cl}^{35}$. (b) ${}_{12}\text{Mg}^{24}$ and ${}_{8}\text{O}^{16}$
6. By drawing diagrams explain the formation of covalent bonds in carbon tetra chloride, nitrogen, ammonia.
7. Explain the formation of NH_4^+ ion. Write down the nature of bonds present there.
8. Why covalent compounds have relatively low melting and boiling points?
9. Why ionic compounds are crystalline solids? Explain.
10. What is lone pair effect? What kind of compounds show lone pair effect?
11. What do you mean by polar covalent compounds? Why are polar covalent compounds good conductors of electricity?

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SECTION : B (COMPULSARY)

5 x2

12. Electronic configuration of three elements are as follows:

Elements	A	B	C
Electronic configuration	2,8,8,1	2,6	2,8,18,7

- a. Write down electron-dot-diagram of A molecule.
- b. Write down the molecular formula of B explaining the types of bonding present there.
- c. Write down the formula of the compounds formed by the combination of A and B, B and C, C and A. state whether they are ionic or covalent compounds?
- d. Which of these three is (A) metal? (B) Non-metal? (C) Good conductor of electricity (D) reducing agent?