

VISWABHARATI - GUDIVADA

WORK SHEET - 2

Chapters: The Periodic Table, Chemical bonding

Class: X

Time: 75min

Subject: Chemistry

Marks: 30

Name _____ Class/Sec: _____ Roll No: _____

I) Answer the following Questions

15 × 2 = 30

1. Define Ionization energy? What are the factors that influence it?
2. An element has atomic number 19. Where would you expect this element in the periodic table and why?
3. Comment on the position of Hydrogen in Periodic table.
4. Write down the characteristics of the element having atomic number 17.
A) Electronic configuration B) Period Number C) Group Number D) Element family
5. How does the periodic property atomic size changes in Groups and Periods?
6. Elements in a group generally possess similar properties but elements along a period have different properties. How do you explain this statement?
7. State Mendeleev's and modern periodic laws?
8. Write differences between Ionic bond and Covalent bond?
9. Predict the reason for low melting point for Covalent compounds when compared with ionic compounds?
10. What is octet rule? How do you appreciate role of the octet rule in explaining the chemical properties of element?
11. Why do only valence electrons involve in bond formation?
12. How bond length and bond energy of molecules helps in predicting their chemical properties?
13. Why sigma(σ) bond is stronger than pi(π) bond?
14. A, B, C are three elements with atomic number 6, 11 & 17 respectively.
 - i) Which of these cannot form ionic bond? Why?
 - ii) Which of these cannot form covalent bond? Why?
 - iii) Which of these can form both ionic as well as covalent bonds?
15. Draw Lewis Notations for following molecules.
 - a) Water(H_2O)
 - b) Ammonia (NH_3)