MT EDUCARE LTD.

ICSE X SUBJECT : **CHEMISTRY**

CHEMICAL BONDING

Assignment Sheet

STEP UP ANSWERSHEET

16. Co-ordinate bond **[2013]**

17. (i) (B) Ammonium chloride **[2013]**

(ii) (C) They are insoluble in water **[2013]**

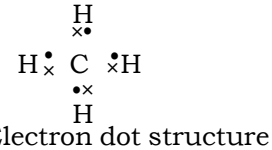
18. **[2013]**

	Carbon Tetrachloride	**Sodium Chloride**
(i) Solubility in water. (ii) Electrical conductivity	Insoluble in water Non-conductor of electricity.	Soluble in water. Good conductor of electricity in molten state and in aqueous solution state.

19. (i) (B) A low melting point and low boiling point. **[2014]**
(ii) (D) nitrogen **[2014]**

20. Ionization **[2014]**

21. (i) To attain the stable electronic configuration of the nearest noble gas, carbon needs four electron and hydrogen needs one electron. Therefore, in the methane molecule formation one atom of carbon shares four electrons, one with each of the four atoms of hydrogen resulting in the formation of four single covalent bond between them. The electron sharing can be illustrated using electron dot structure which is as follows :



× = electron of carbon atom
• = electron of hydrogen atom

Electron dot structure of Methane molecule

(ii) (1) Barium (Ba) will form ions most readily because its ionisation potential is lowest in the group. Hence, the removal of electrons is easy.
(2) All these elements have two electrons in their valence shell.
[2015]

22. (i) Na_2O, MgO
(ii) SO_2

(iii) Al_2O_3
(iv) SiO_2 **[2015]**

23. (i) Covalent bonding since L consists of molecules.
(ii) L is getting reduced. **[2015]**

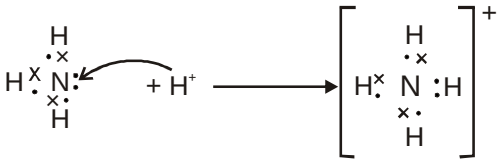
24. High **[2016]**

25. A. 17 **[2016]**

26. (i) 1. Ionic bond
2. Covalent Bond

(ii) 1. ZX
2. WX **[2016]**

27. **[2016]**



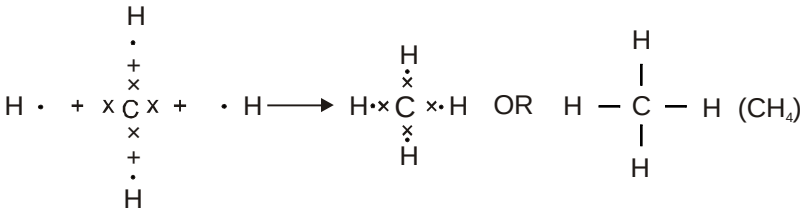
28. carbon tetrachloride **[2017]**

29. (B) consists of molecules **[2017]**

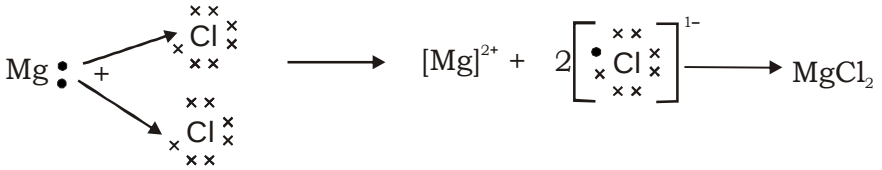
30. (i) 15
(ii) 19
(iii) 8
(iv) 4
(v) 2 **[2017]**

31. (i) Covalent bonding
(ii) Ionic bonding **[2017]**

32. (i)



(ii)



[2, 8, 2] Magnesium atom

[2, 8, 7] Chlorine atom

Magnesium chloride

[2017]

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