

## Chemical Bonding

Sr	Questions	Answers Choice
1	Identify the compound which is not soluble in water	A. KBr B. MgCl <sub>2</sub> C. C <sub>6</sub> H <sub>6</sub> D. NaCl
2	Which of the following atoms will not form cation or anion.	A. Atomic no. 16 B. Atomic no. 18 C. Atomic no. 17 D. Atomic No. 19
3	When molten copper and often zinc are mixed together, they give rise to a new substance called brass. Predict what type of bond is formed between copper and zinc.	A. Ionic bond B. Coordinate Covalent bond C. Metallic bond D. Covalent Bond
4	Noble gases are non-reactive, because they do not.	A. Gain electrons B. Lose electrons C. Share electrons D. All of these
5	Keeping in view the intermolecular forces of attraction, indicate which compound has the highest boiling point	A. H <sub>2</sub> S B. HF C. NH <sub>3</sub> D. H <sub>2</sub> O
6	Which of the following is an example of polar covalent compound.	A. Cl <sub>2</sub> B. H <sub>2</sub> C. O <sub>2</sub> D. HCl
7	The boiling point of alcohol is	A. $44^{\circ}\text{C}$ B. $78^{\circ}\text{C}$ C. $53^{\circ}\text{C}$ D. $19^{\circ}\text{C}$
8	An atom having six electrons in its valence shell will achieve noble gas electronic configuration by	A. Gain one electron B. Gaining two electrons C. Losing all electrons D. Losing two electrons
9	Hydrogen and Helium follow.	A. Octet rule B. Triple rule C. Duplet rule D. None of these
10	Number of electrons in nitrogen molecule is.	A. 2 B. 4 C. 6 D. 8
11	Octet rule is	A. Attaining of eight electrons in its valence shell B. Description of eight electrons C. Picture of electronic configuration D. Pattern of electronic configuration
12	During the formation of ionic bond heat is.	A. Remains same B. Absorbed C. Released D. Both a and b
13	Hydrogen bonding is always found in	A. Non-polar molecules B. Homatomic molecules C. Polar Molecules D. All of the above
14	Ionic compounds are good conductors of electricity in	A. Solution B. Molten state C. Solid state D. both a and b
15	Ionic compounds have	A. Low melting and high boiling points B. Low melting and boiling point C. High melting and boiling points

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16 Which compound contains both covalent and ionic bonds.

A.  $MgCl_2$   
B.  $PCl_5$   
**C.  $NH_4Cl$**   
D.  $CaO$

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17 Which of the following bonds is expected to be the weakest.

A.  $Cl-Cl$   
B. C-C  
**C. F-F**  
D. O-O

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18 A covalent bond formed by two similar atoms is known as.

A. Polar Covalent bond  
B. Metallic bond  
C. Double covalent bond  
**D. Non-polar covalent bond**

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19 Why is  $H_2O$  a liquid while  $H_2S$  is a gas?

A. Because in water, the atomic size of oxygen is smaller than that of Sulphur  
B. Because water can easily freeze into ice  
**C. Because water is a polar compound and there exists strong forces of attraction between its molecules**  
D. Because  $H_2O$  molecule is lighter than  $H_2S$

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20 Attaining two electrons in the valence shell is called.

A. Octet rule  
**B. Duplet rule**  
C. Triplet rule  
D. All of these