



### Hydrogen bonding

41. Which one has the highest boiling point  
 (a) Acetone (b) Ethyl alcohol  
 (c) Diethyl ether (d) Chloroform
42. Which of the following compounds has the highest boiling point  
 (a)  $HCl$  (b)  $HBr$   
 (c)  $H_2SO_4$  (d)  $HNO_3$
43. Which of the following has minimum melting point  
 (a)  $CsF$  (b)  $HCl$   
 (c)  $HF$  (d)  $LiF$
44. Hydrogen bond energy is equal to  
 (a)  $3 - 7 \text{ cal}$   
 (b)  $30 - 70 \text{ cal}$   
 (c)  $3 - 10 \text{ kcal}$   
 (d)  $30 - 70 \text{ kcal}$
45.  $H_2O$  is a liquid while  $H_2S$  is gas due to  
 (a) Covalent bonding  
 (b) Molecular attraction  
 (c)  $H$  - bonding  
 (d)  $H$  - bonding and molecular attraction
46.  $H$  - bonding is maximum in  
 (a)  $C_6H_5OH$  (b)  $C_6H_5COOH$
- (c)  $CH_3CH_2OH$  (d)  $CH_3COCH_3$
47. Select the compound from the following which dissolves in water  
 (a)  $CCl_4$  (b)  $CS_2$   
 (c)  $CHCl_3$  (d)  $C_2H_5OH$
48. When two ice cubes are pressed over each other, they unit to form one cube. Which of the following force is responsible for holding them together  
 (a) Vander Waal's forces  
 (b) Hydrogen bond formation  
 (c) Covalent attraction  
 (d) Dipole - dipole attraction
49. Which is the weakest among the following types of bond  
 (a) Ionic bond  
 (b) Metallic bond  
 (c) Covalent bond  
 (d) Hydrogen bond
50.  $H$ -bond is not present in  
 (a) Water  
 (b) Glycerol  
 (c) Hydrogen fluoride  
 (d) Hydrogen Sulphide

