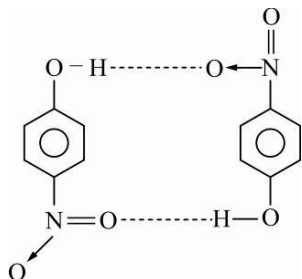


**Daily Tutorial Sheet-15**

**Level - 3**

**159.(BD)** The heat of fusion and heat of vaporisation depends upon the strength of intermolecular forces.

**160.(A)** Intermolecular H – bonding.



**161. (A)-p ; (B)-r ; (C)-q ; (D)-s**

Ethyne  $\rightarrow \text{HC} \equiv \text{CH} \Rightarrow \text{C}-\text{H}$  is  $\text{sp}-\text{s}$  overlap

$\text{POCl}_3 \rightarrow \text{P}$  is  $\text{sp}^3$  hybridised

$\text{Br}_3^{-1} \rightarrow$  Central Br atom is  $\text{sp}^3\text{d}$  hybridised

**162.(B)**  $\text{XeF}_2 : 8\text{p}^3\text{d}$

$\text{XeO}_3 : \text{sp}^3$

$\text{XeOF}_4 : \text{sp}^3\text{d}^2$

$\text{XeO}_2\text{F}_2 : \text{sp}^3\text{d}$

**163.(B)** The solubility of noble gases is due to dipole-induced dipole attractions where strength increases as the size of atoms increases down the group.

**164.(A)**  $\text{XeF}_6$  has  $\text{sp}^3\text{d}^3$  hybridization –6  $\sigma$  bonds & 1 lone pair. So, it has distorted octahedral structure.