09 JANUARY WEDNESDAY
009-356 • Wk 02

Due to the formation of intermolecular H-bond, water molecules are associated together by stronger force of attraction. Therefore, it has high density and is liquid at room temperature.

In H_2S, intermolecular H-bond is not formed due to larger size and less electronegativity of S. So, H_2S molecules are associated together by ~~strong force of~~ weak van der waals force, This is why, it has low density and is a gas at room temperature.

Q. In which of the following intermolecular H-bond is not formed?

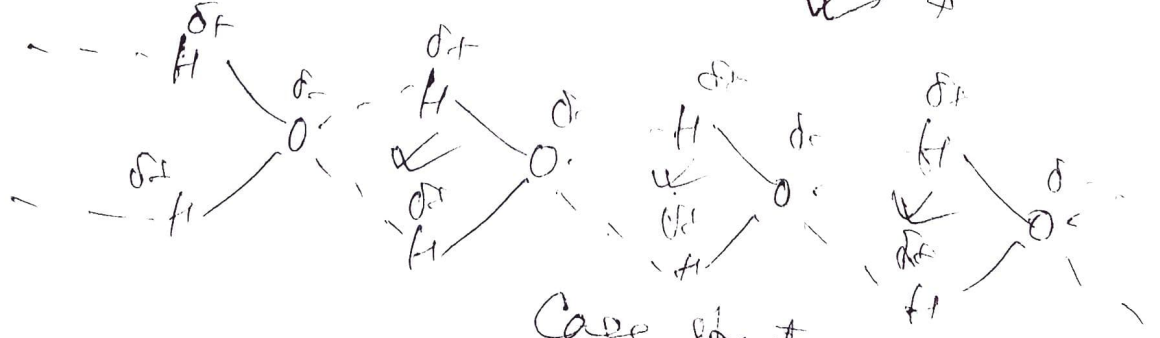
(a) liq H_2O (b) liq C_2H_5OH (c) liq NH_3
~~(d)~~ liq HCl

Q. In which of the following intermolecular H-bond is the strongest?

~~(a)~~ liq HF (b) liq H_2O
(c) liq NH_3 (d) liq HCl

Q. The maximum number of H-bonds that can be formed by a molecule of H_2O is

(a) 1 (b) 2 (c) 3 ~~(d) 4~~



Cage structure of Ice.