## **Question 5**

5. Rank the following in the increasing strength of intermolecular forces CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, CH<sub>3</sub>CH<sub>2</sub>OH, He

## **Answer:**

The only intermolecular forces present in helium gas are **dispersion forces**, which are the weakest.

The type of bonding present in n-butane is **London Dispersion Forces**. This is because this alkane is considered to be non-polar in nature and the London dispersion forces are considered to be weak forces.

CH<sub>3</sub>CH<sub>2</sub>OH have both dispersion forces and hydrogen bonds

CH<sub>3</sub>CH<sub>2</sub>OH > CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub> > He