

1. **June/2022/Paper_11/No.8**

For which pair is the boiling point of the first compound **higher** than the boiling point of the second compound?

- A $\text{CH}_3\text{CH}_2\text{OH}$ and $\text{CH}_3\text{CH}_2\text{SH}$
- B $\text{CH}_3\text{CO}_2\text{CH}_3$ and $\text{CH}_3\text{CH}_2\text{CO}_2\text{H}$
- C CH_3OCH_3 and $\text{CH}_3\text{CH}_2\text{OH}$
- D $\text{CH}_3\text{CH}_2\text{CHO}$ and $\text{CH}_3\text{CH}_2\text{CO}_2\text{H}$

2. **June/2022/Paper_12/No.7**

Which gas will behave **least** like an ideal gas at 150°C and 101 kPa?

- A ammonia
- B fluorine
- C krypton
- D steam

3. **June/2022/Paper_12/No.8**

When an evacuated glass bulb of volume 200 cm^3 is filled with a gas at 300 K and 101 kPa, the mass of the bulb increases by 0.68 g. The gas obeys the ideal gas equation.

What is the identity of the gas?

- A argon
- B krypton
- C neon
- D nitrogen

4. **June/2022/Paper_13/No.7**

This question is about buckminsterfullerene, graphite, iodine and diamond.

How many of these substances have a simple molecular structure?

- A 0 B 1 C 2 D 3