

QUESTION BANK

Faculty of Engineering
Department of Chemical Engineering

Question 1

- 1. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the mass fraction of each component.
- 2. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the mole fraction of each component.
- 3. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the partial pressure of each component.
- 4. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the density of the mixture.
- 5. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the viscosity of the mixture.



Question 2

- 1. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the mass fraction of each component.
- 2. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the mole fraction of each component.
- 3. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the partial pressure of each component.
- 4. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the density of the mixture.
- 5. A gas mixture contains 10% oxygen, 20% nitrogen, 30% carbon dioxide and 40% hydrogen. Calculate the viscosity of the mixture.