L.E. COLLEGE MORBI
MECHANICAL ENGINEERING DEPARTMENT
3rd SEMESTER
ENGINEERING THERMODYNAMICS (3131905)

ASSIGNMENT: CO5 (10 Marks)

1. Define minimum air requirement in combustion.

2. State minimum air requirement for hydrogen fuel by mass and volume analysis.

3. State minimum air requirement for 1) Complete combustion of carbon to carbon dioxide, 2) Incomplete combustion of carbon to carbon dioxide, by mass and volume analysis.

4. Define 1) Excess Air, 2) Air Fuel Ratio, 3) Equivalence Ratio, 4) Weak Mixture, and 5) Rich Mixture.

5. Derive the equation for minimum air required per kg of solid fuel or liquid fuel for complete combustion.

6. Explain principle of enthalpy of formation & enthalpy of reaction.

7. What do you understand from the term adiabatic flame temperature?