II Year B.Tech
Thermodynamics
II-Assignment Questions

1. Derive an expression for efficiency of an Otto cycle and draw P-V and T-s diagrams in terms compression ratio?

2. Derive an expression for efficiency of a Diesel cycle and draw P-V and T-s diagrams in terms compression and cut-off ratio?

3. Calculate enthalpy and entropy of steam at 15bar, when it is
   a) Dry saturated steam
   b) 0.95 dry
   c) Super heated steam at 460^0
      Take C_p of steam 2.85KJ/Kg-K.

4. Explain the working principle of Barrel calorimeter and throttling calorimeter with neat sketch.

5. Draw Mollier and TS diagram and explain in detail?