

GYANMANJARI INSTITUTE OF TECHNOLOGY
MECHANICAL ENGINEERING DEPARTMENT
CLASS TEST No.1

Subject: Elements of Mechanical Engg.
Semester: 1ST
Time: - 3.30 to 4.30

Date: 22-8-2015
Marks: 30

A	B	Mark
1. Write similarities between heat transfer and work transfer.	1. Classify thermodynamic system and give example of each.	05
OR		05
1. Define following term 1. specific heat 2. Tripple point 3. Critical point 4. Enthalpy 5. Latent heat		
2. Explain with neat sketch construction and working of a Cochran boiler.	2. Explain with neat sketch the construction and working of Babcock and Wilcox boiler.	07
3. Derive $PV/T=C$ with usual notation	3. Derive $C_p - C_v = R$ with usual notation	07
4. Define Pressure and explain Absolute Pressure, Gauge Pressure and Atmospheric pressure	4. Explain Zeroth Law and First law of thermodynamics.	05
5. Define prime mover and give classification of Prime Mover		06