

Imp

BME (GTU)

Date: / /

Page No.

[Ch=1]

- Definition of prime movers (1)
- Types of prime movers (1)
- All Definition of ch=1
- 0, 1, 2 law of Thermodynamics (12, 13)
- Thermodynamic system & properties (14, 15)

[Ch=2]

- Solid fuels (30)
- Advantages & disadvantages of gas fuels (33)
- LPG & CNG (34)
- Solar & Wind Energy (36)
- Global warming (39)

[Ch=3]

- Combined Gas Law (47)
- Imp → C_p & C_v (Mayer's equation) (50)
- Adiabatic process (57)
- Imp → Law of Adiabatic process (58)
- Examples of ch=3

↑(Or)↓

[Ch=4]

- Steam formation (with T-S diagram) (108)
- calorimeter: (i) Bucket, (ii) Throttling (117, 119)
- Example of ch=4

[Ch=5]

- Imp → cycle & efficiency: Carnot, Rankine, Otto, Diesel
- Imp → Example of Carnot cycle

Ch = 6

- Boiler: Babcock & Wilcox, Cochran (212, 209)
- Boiler mountings and accessories (215, 224)
- Fusible plug (220)
- Superheater, Air preheater (228, 231)

Ch = 7

- I.C. Engine Terminology (243)
- Otto four stroke cycle (245)
- Diesel four stroke cycle (247)
- Difference between S.I./C.I. (249)
- Two stroke cycle Engines (250)
- Type → Example: (268) → 7.11, (269) → 7.12, (265) → 7.8

Ch = 8 (Figure importante)

- operation of single & double acting reciprocating pump (282, 283)
- Centrifugal pumps (286)
- Vane pump (295)

Ch = 9

- Multistage reciprocating compressors (313)
- Centrifugal compressors (314)
- Axial flow compressors (315)
- Comparison between Reciprocating and Rotodynamic compressors (320)

Ch = 10

- Refrigeration Definition (328)
- COP (330)
- VCR (330)
- VAR (333)
- Comparison between VCR and VAR (336)
- window Air conditioner (338)
- advantages of split air conditioner (340)

Ch = 11

- Flange Coupling (347)
- Oldham's coupling (349)
- Disc clutch (351)
- Cone clutch (352)
- Imp → Internal expanding shoe brake (357)
- Difference between a brake & clutch (359)

Ch = 12

- GTO write

Ch = 13

- All properties
- Non-metallic materials (418)
- Composite materials (421)