2.11 30273 THERMAL ENGINEERING

UNIT-1 STEAM NOZZLES:

1.1 flow of steam through convergent, divergent nozzle
1.2 velocity of steam leaving nozzles
1.3 critical pressure ratio
1.4 area of cross section of throat and exit for maximum discharge
1.5 Numerical problem

UNIT-2 STEAM TURBINES:

2.1 classification and industrial application of steam turbine
2.2 principle and operation of impulse and reaction turbine
2.3 compounding of turbines
2.4 reheating of steam, bleeding of steam
2.5 lubrication system for steam turbines
2.6 simple numerical problems

UNIT-3 STEAM CONDENSER:

3.1 Introduction
3.2 Type of condenser
3.3 low, high and ejector type of jet condenser
3.4 source of air leakage and its effect

UNIT-4 AIR PUMPS AND COOLING TOWER:

4.1 types of air pump
4.2 description of wet and dry type of air pumps
4.3 Type of cooling towers
4.4 Description of cooling towers

Reference books:

1. Thermal Engineering (Hindi) Verma & Gulecha
2. Thermal Engineering Vol.1 Mathur & Mehta.
3. Thermal Engineering R.K.Purohit.
4. Thermal Engineering R.S. Khurmi
5. Elements of Heat Engines -Vol.1 Patel & Karam Chandani