

STUDY PLAN

Thermodynamics		Power Plant Engineering		IC Machine	
Topic	Timing	Topic	Timing	Topic	Timing
Basics Concept-1	Recording-1	Basic Introduction	Recording-1	Basic Introduction & Terminology	Recording-1
Basics Concept-2	Recording-2	Types of Coal & Fuels	Recording-2	Air Standard Cycle + Otto Cycle Intro	Recording-2
Heat and work-1	Recording-3	Coal Detailed Study	Recording-3	Otto Cycle Detailed	Recording-3
Heat and work-2	Recording-4	Steam Power Plant (Thermal) - Analysis-1	Recording-4	Diesel Cycle	Recording-4
	Recording-5	Steam Power Plant (Thermal) - Analysis-2	Recording-5	Dual Cycle + Numericals	Recording-5
First law of thermodynamics-1	Recording-6	Steam Power Plant (Thermal) - Analysis-3	Recording-6	Efficiency Comparison of Cycles-1	Recording-6
First law of thermodynamics-2	Recording-7	Rankine Cycle-1	Recording-7	Efficiency Comparison of Cycles-2	Recording-7
First law of thermodynamics-3	Recording-8	Rankine Cycle-2	Recording-8	Performance Analysis-1	Recording-8
First law of thermodynamics-4	Recording-9	Boilers-1	Recording-9	Performance Analysis-1	Recording-9
First law of thermodynamics-5	Recording-10	Boilers-2	Recording-10	SI Engine Combustion-1	Recording-10
Second law of thermodynamics-1	Recording-11	Boilers-3	Recording-11	SI Engine Combustion-2	Recording-11
Second law of thermodynamics-2	Recording-12	Steam Turbine	Recording-12	CI Engine Combustion-1	Recording-12
Entropy part-1	Recording-13	Nozzle & Compressor-1	Recording-13	CI Engine Combustion-2	Recording-13
Entropy part-2	Recording-14	Nozzle & Compressor-2	Recording-14	Carburetor	Recording-14
Entropy part-3	Recording-15	Nozzle & Compressor-3	Recording-15	Fuel Quality & A/F Ratio	Recording-15
Entropy part-4	Recording-16	Miscellaneous Numericals-1	Recording-16	Octane & Cetane Number	Recording-16
Properties of pure substance part 1	Recording-17	Miscellaneous Numericals-2	Recording-17	Cooling System	Recording-17
Properties of pure substance part 2	Recording-18			Lubrication System	Recording-18
Properties of pure substance part 3	Recording-19				
Properties of pure substance part 4	Recording-20				

RAC		Engineering Mechanics	
Topic	Timing	Title	Timing
Basic Introduction	Recording-1	Basic of forces-1	Recording-1
VCRS Intro + Ideal Refrigeration Cycle	Recording-2	Basic of forces-2	4PM-5PM
VCRS Cycle Analysis (COP etc.)	Recording-3	Basic of forces-3	4PM-5PM
VCRS Performance Analysis	Recording-4	Basic of forces-4	4PM-5PM
Reverse Brayton (Bell-Coleman) Cycle	Recording-5	Basic of forces-5	4PM-5PM
Cascade Refrigeration System	Recording-6	Types of beam-1	4PM-5PM
Refrigerants Definition	Recording-7	Types of beam-2	4PM-5PM
Properties of Refrigerants	Recording-8	Concepts of friction-1	4PM-5PM
Psychrometry Introduction	Recording-9	Concepts of friction -2	4PM-5PM
Psychrometric Chart Processes	Recording-10	Concepts of friction -3	4PM-5PM
Psychrometric Chart Numericals	Recording-11	Moment of Inertia-1	4PM-5PM
Refrigeration Devices (Working & Material)	Recording-12	Moment of Inertia-2	4PM-5PM
		Moment of Inertia-3	4PM-5PM
		Conservation of momentum and energy-1	4PM-5PM
		Conservation of momentum and energy-2	4PM-5PM