

OPERATION & MAINTENANCE OF AIR-CONDITIONING AND MECHANICAL VENTILATION (ACMV) COMPETENCY COURSE – LEVEL 1

DAY 1

Time	Topic	Duration
8.30-8.45am	Registration	20Min
8.45-9.00am	Opening Speech	10Min
9.00-10.30am	Chapter 1: Introduction to Air Conditioning & Mechanical Ventilation <ul style="list-style-type: none">• Principle of Refrigeration• ACMV Terminology	1Hr 30Min
10.30-10.45am	Morning Tea Break	15Min
10.45am-12.15pm	Chapter 2: Refrigerant & Pressure Enthalpy (P-H) Diagram <ul style="list-style-type: none">• Refrigerants• Rules & Regulations• P-H Diagram	1Hr 30Min
12.15-1.00pm	Chapter 3: Refrigeration Cycles & Its Components <ul style="list-style-type: none">• Single Stage Cycle• Double Stage Cycle• Cascade Systems• Components	45Min
1.00-2.00pm	Lunch Break	1Hr
2.00-3.30pm	Chapter 4: Vacuuming Procedures & Tools <ul style="list-style-type: none">• Basic RAC Tools & Equipment• Vacuuming Procedures	1Hr 30Min
3.30-3.45pm	Afternoon Tea Break	15Min
3.45-5.15pm	Practical Activities <ul style="list-style-type: none">• Refrigeration Cycle Analysis• Vacuuming Procedures	1Hr 30Min
5.15-5.45pm	Question & Answer	30Min
5.45pm	End Of Day 1	-



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DAY 2

Time	Topic	Duration
8.30-10.15am	Chapter 5: Refrigerant Charging in Air Conditioning Systems <ul style="list-style-type: none">• Overview of the Refrigeration Cycle• Understanding the Pressure-Enthalpy (P-h) Diagram• Applying Target Superheat & Subcooling in System Charging	1Hr 45Min
10.15-10.30am	Morning Tea Break	15Min
10.30am-12.45pm	Practical Activities <ul style="list-style-type: none">• Refrigeration Cycle Analysis• Charging Procedures• Troubleshooting a Simulated System	2Hr 15Min
12.45-1.45pm	Lunch Break	1Hr
1.45-2.45pm	Theoretical Examination	1Hr
2.45-5.45pm	Afternoon Tea Break & Practical Assessment	3Hr
5.45pm	End Of Day 2	-

