

## PAU6J003|AUTOMOTIVE AIR CONDITIONING (4-0-0)

### MODULE I (9 Hours)

#### Air conditioning Fundamentals

Basic air conditioning system – Location of air conditioning components in a car – Schematic layout of a refrigeration system. Compressor components – Condenser and high pressure service ports. Thermostatic expansion valve – Expansion valve calibration – Controlling evaporator temperature – Evaporator pressure regulator – Evaporator temperature regulator.

### MODULE II (9 Hours)

#### Air Conditioning – Heating System 9 Hours

Automotive heaters – Manually controlled air conditioner – Heater system – Ford automatically controlled air conditioner and heater systems – Automatic temperature control – Air conditioning protection – Engine protection.

### MODULE III (9 Hours)

**Refrigerants:** Introduction, classification, properties, selection criteria, commonly used refrigerants, eco-friendly refrigerants, global warming and ozone forming potential of refrigerants, containers, handling of refrigerants.

### MODULE IV (9 Hours)

#### Air Routing & Temperature Control

Objectives – Evaporator care air flow through the dash re-circulating unit – Automatic temperature control – Duct system – Controlling flow – Vacuum reserve – Testing the air control and handling systems.

### TEXT BOOK

William H Crouse and Donald L Anglin, Automotive Air conditioning, McGraw Hill Inc, 1990.

### REFERENCE BOOKS:

1. Mitchell Information Services, Inc, Mitchell Automatic Heating and Air conditioning systems, Prentice Hall Inc, 1989.
  2. Paul Weisler, Automotive Air Conditioning, Reston Publishing Co Inc., 1990.
  3. MacDonald. K.L., Automotive Air Conditioning, Theodore Audel series, 1978.
- Goings. L.F., Automotive Air Conditioning, American Technical Services, 1974.