

PAU5J001 TWO AND THREE WHEELERS

MODULE I

The Power Unit

10 Hours

Two stroke and four stroke SI engine, merits and demerits, Symmetrical and unsymmetrical port timing diagrams. Types of scavenging processes, merits and demerits, scavenging efficiency. Scavenging pumps.

MODULE II

CHASSIS AND SUB-SYSTEMS

9Hours

Main frame, its types. Chassis and shaft drive. Single, multiple plates and centrifugal clutches. Gear box and gear controls. Front and rear suspension systems. Shock absorbers. Panel meters and controls on handle bar.

MODULE III IGNITION SYSTEM, BRAKES AND WHEELS

9Hours

Fuel system. and Lubrication system. Magneto coil and battery coil spark ignition system. Electronic Ignition System. Starting system. Kick starter system
Drum brakes, Disc brakes, Front and rear brake links lay-outs. Spoked wheel, cast wheel. Disc wheel, Disc types, Tyres and tubes.

MODULE IV

Two Wheelers

12 Hours

Case study of major Indian models of motor cycles, scooters and mopeds. Bajaj, Vespa, Lambretta Scooters. Enfield, TVS-Suzuki, Hero Honda, Yamaha RX-100, Kawasaki Bajaj Motor cycles. Kinetic Spark, Hero Majestic, TVS mopeds. Servicing and maintenance.

Three Wheelers

Case study of Indian models. Front engine and Rear engine. Auto rickshaws. Pick up van. Delivery van and Trailer.

TEXT BOOK

1. Irving . P.E., Motor cycle Engineering, Temple Press Book, London, 1992.

REFERENCE:

1. The cycle Motor Manual, Temple Press Ltd., London, 1990.
2. Encyclopedia of Motor cycling, 20 volumes, Marshall Cavensih, New York and London, 1989.
3. Bryaut. R.V., Vespa Maintenance and Repair series.
4. Raymond Broad, Lambretta – A practical guide to maintenance and repair, 1987.