

**INDIRA TECHNICAL EDUCATION SOCIETY,
NASHIK**

AUTO WORKSHOP SERVICE ADVISOR (ATWSA)

THEORY PAPER I	: Syllabus for this paper is same as Certificate Course in AUTOMOBILE MECHANIC (ATM)	100 Marks
	Refer this syllabus booklet Page No. _____	
THEORY PAPER II	: Theory syllabus for this is Printed below.	100 Marks
PRACTICAL I	: One Practical Practical – I same as ATM	100 Marks
		Total : (300 marks)

(ATWSA - PAPER – II)

THEORY SYLLABUS

- 1. MOTOR VEHICLE ACT & VEHICLE INSURANCE**
M. V. Act 1988, M.V. Rules 1989 with major recent amendment, Topic of chapter / section 8 schedules, definitions in chapters, Licensing of Drivers, Registration of M. Vs. control of Transport Vehicles, State & Interstate Contractors, Private & Public Vehicles, Traffic Rules, offences & penalties, Speed limits, Road Signs in 8th & 9th schedules.
- 2. GARAGE EQUIPMENT & LAYOUT**
Layout of model Garage, Equipments used for motor vehicles, Greasing equipment, Spray Painting & Greasing machinery, Car service Hoists, Car Washing machines, Jib head crane / Electric Hoist, Air compressors etc.
- 3. DASHBOARD INSTRUMENTS & EQUIPMENTS USED FOR MEASUREMENTS**
Panel board instruments, maintenance, Fuel Gauge oil pressure Gauge – Low pressure indicator, Buzzers, Electric Horns. Lighting / Traffic Indicators / Break down switches, Its faults diagnosis & replacements. Electrically operated fuel pumps, wind screen wipers, functions operation & maintenance of each components.
- 4. INTRODUCTION TO MPFI SYSTEMS & ITS LAYOUT**
 - Types of sensors & their working.
 - 12 valves / 16 valves MPFI engines.
 - CNG / LPG engines & its layout, Advantages & disadvantages of CNG / LPG over Petrol engines. Important spares / units of CNG engines. Maintenance procedure of CNG engines.
- 5. TURBO CHARGERS**
Principles & operation of Turbo engines.
Intercoolers principles & operation. Maintenance.
- 6. CAR AIRCONDITIONING**
 - Introduction to Car Air conditioning.
 - Layout Construction & Operation of Car Air Conditioning.
 - Maintenance of Car Air Conditioner.

7. VEHICLE TESTING

- Testing maintenance & servicing.
- Inspection of vehicles & Road tests. Brake Tests.
- Fuel economy.

8. SOFT SKILLS

Administrative accounting / financial services in Dealer show rooms. Customer relations, salesmanship, Car Booking procedures, Various finance schemes, Vehicle delivery, Service & maintenance.

Examination Scheme

Theory Paper I	3 Hours	100 Marks	ATM Syllabus
Theory Paper II	3 Hours	100 Marks	
Practical	2 Hours	75 Marks	
Journal		15 Marks	
Oral		10 Marks	
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Total :		300 Marks	

