

AUTOMOBILE MAINTENANCE (AUMT)

General Information:

1. Name of the Trade : Automobile Maintenance
2. Entry Qualification : Passed Class VIII
3. Duration of Training : 06 Months [Under Vocational Short Term Course]

Objective of the Course :

Automobile Maintenance for both two wheelers and four wheelers are used extensively as a means of transport in our daily life. The maintenance of Chassis and overall maintenance has been developed rapidly. Lacks of trained persons in rural, semi rural and even in urban area is felt by users for looking the automobile maintenance, as well as painting.

A Vocational curriculum on 'Automobile Maintenance' will ensure the performance at the highest level. The course will produce skilled worker on Automobile Maintenance who can meet the challenges by the developments in technology.

Course Break-up:

- | | | |
|----------------------------------|---|------------|
| (a) Practical instruction | : | 288 Hours. |
| (b) Theoretical instruction | : | 67 Hours |
| (c) Entrepreneurial Institution: | : | 05 Hours |

Marks Alloted :

- | | | |
|---------------|---|------------|
| (a) Practical | : | 400 |
| (b) Theory | : | 100 |
| Total | : | 500 |

The course content is to be covered in less than 26 weeks since some weeks will be used for enrolment procedures, Leave of the instructors, holidays, examination and tests, industrial visits etc.

Industrial Visit :

Industrial visit to at least two different industries is necessary.

Course Curriculum

Group – 'A'

Module – 1 (Chassis & Body)

- (1) Layout of conventional automobile chassis.

(2) Monocoque chassis.

(3) Chassis frame.

Module – 2 (Engine)

(1) Working principles of I.C. engine.

(2) Concept of two & four stroke petrol & diesel engine.

(3) Working principles of carburetor (in petrol) & fuel injection pump (diesel engine).

Module - 3 (Clutch)

(1) Necessity & function of clutch.

(2) Types of clutch (Single plate, Pressure plate, Friction material, Clutch spring).

Module - 4 (Gear Box)

1) Necessity & function of a Gear Box.

2) Types of Gear Box.

Module - 5 (Front axle & steering)

1) Concept of live axle & dead axle.

2) Front axle assembly.

3) Steering mechanism.

Module - 6 (Propeller Shaft)

1) Function of propeller Shaft.

Module - 7 (Rear axle & Differential)

1) Function of differential and final drive.

Module - 8 (Automobile Brakes)

1) Purpose of brakes & classification.

2) Layout of hydraulic brake and its components.

3) Air brakes.

Group_ - 'B'

Module - I (Maintenance Management)

1) Preventive / Schedule maintenance system.

2) Breakdown maintenance system.

3) Comparison between preventive & breakdown maintenance.

Module - 2 (Chassis Maintenance)

- 1) Maintenance of tyre, repairing of tyres & tubes.
- 2) Factors affecting life of tyres, tubes, flaps.
- 3) Maintenance of electrical accessories like horn, wipers, head light, indicator etc.
- 4) Dismantling & assembling of leaf & coil spring.

Module - 3 (Painting)

- 1) Purpose of painting.
- 2) Surface cleaning / phosphating
- 3) Types of painting & painting equipment.

ENTREPRENEURIAL INSTRUCTION

SL No.	Course Curriculum	Hours
1.	Brief idea on nature of small business management and Industrial Technical skill.	
2.	Preparation of schemes and vetting to Financial Institutions/ Lead Bank for obtaining loans.	
3.	Rules for setting up of business / production Unit.	
4.	Maintenance of Accounts; Labour Capital etc.	
5.	Man Management, Communication, Motivation.	
6.	Operational Management.	
7.	Market Survey.	
8.	Quality Control.	
9.	Visit to Industrial units for gathering idea to start the unit.	
10.	Choice of technology as per demand of local people of the District / State.	
11.	Knowledge of Sales Tax etc.	
12.	Brief idea for Registration of SSI, Trade License, Project Report, Proposal for loans etc.	
		Total 05