

COURSE TITLE : PETROL ENGINE SERVICE LAB
COURSE CODE : 3058
COURSE CATEGORY : B
PERIODS/WEEK : 6
PERIODS/SEMESTER : 90
CREDITS : 4

TIME SCHEDULE

Module	Topic	Periods
1	Know the safety precautions to be followed in an Automobile workshop	22
2	Carryout dismantling and assembling two stroke and four stroke petrol engines	23
3	Perform the dismantling, cleaning and testing of A.C. mechanical pump	22
4	Perform dismantling, cleaning and assembling of water pump	23
TOTAL		90

GENERAL COURSE OUTCOME

Module	G.O	Student will be able to
1	1	Understand various precautions to be followed in an Automobile workshop.
	2	Understand various tools, gauges and equipments.
2	1	Understand various components in petrol engine fuel system.
	2	Dismantle and assemble two stroke and 4 stroke petrol engines and its components.
	3	Check defects in engine components.
3	1	Dismantle, clean and tune a carburetor.
	2	Check and adjust fan belt tension.
	3	Understand the setting of ignition timing.

SPECIFIC COURSE OUTCOME

MODULE I

- 1.1.1 Know the safety precautions to be followed in an automobile workshop
- 1.1.2 Select the appropriate tools, gauges and equipment
- 1.1.3 Carryout cleaning, greasing and oiling of equipment

MODULE II

- 2.1.1 Carryout dismantling and assembling of two stroke and four stroke petrol engines
- 2.1.2 Carryout inspection of various engine components and methods of reconditioning

MODULE III

- 3.1.1 Perform the dismantling, cleaning and testing of A.C. mechanical pump
- 3.1.2 Perform the dismantling, cleaning and tuning of carburetor and servicing of air cleaner
- 3.1.3 Flush and inspect the lubricating and cooling systems and oil pumps

MODULE IV

- 4.1.1 Perform dismantling, cleaning and assembling of water pump
- 4.1.2 Check and adjust fan belt tension
- 4.1.3 Perform trouble shooting in petrol engines-setting the ignition timing and starting the engine.

CONTENT DETAILS

MODULE I

- 1. Study the various safety precautions to be followed in an automobile workshop.
- 2. Identify the various tools, gauges and equipments to be used in an automobile workshop.
- 3. Study the maintenance procedure of workshop equipments

MODULE II

- 1. Dismantle and assemble the four stroke petrol engine.
- 2. Remove, inspect and refit the cylinder head.
- 3. Dismantle, inspect and assemble the valve assembly.
- 4. Perform the Valve tappet clearance adjustment.

MODULE III

1. Conduct various tests on AC mechanical pump. Dismantle and assemble the AC mechanical pump.
2. Dismantle, clean, assemble and tune the carburettor.
3. Perform the servicing of Air cleaner.
4. Flush and inspect the lubrication system and oil pumps.
5. Flush the cooling system.

MODULE IV

1. Perform the servicing of water pump.
2. Check and adjust fan belt tension.
3. Set the ignition timing and start the engine.

REFERENCE

[N. Malhotra](#) - Automobile Engineering Practical (2nd Edition) - Computech Publications Limited