

COURSE TITLE : **INDUSTRIAL MAINTENANCE & SERVICING LABORATORY**
COURSE CODE : **5028**
COURSE CATEGORY : **A**
PERIODS/ WEEK : **4**
PERIODS/ SEMESTER : **60**
CREDIT : **2**

TIME SCHEDULE

MODULE	TOPIC	PERIODS
1	General purpose tools and equipments	15
2	Automobile system (Petrol and Diesel engine)	15
3	Machine tools and Air conditioners	15
4	Refrigerator Pumps	15
TOTAL		60

COURSE OUTCOME :

sl.no.	sub	student will be able to
1	1	Select the general purpose tools and equipments.
	2	Perform the dismantling, assembling and overhauling of I C engines.
	3	Perform the servicing and maintenance of machine tools and air conditioners.
2	4	Carryout the servicing of car air conditioners.
3	5	Carryout the servicing of refrigerators and pumps.

CONTENT DETAILS

MODULE I

Use of tools and equipment in general purpose servicing
 Perform the Maintenance of Bench Vice, Screw Jack.
 Perform the Maintenance of Hydraulic jacks, Trolley jacks,
 Perform the Maintenance of Bucket grease guns, pressure control valves
 Servicing and maintenance of water pumps

MODULE II

Dismantling, assembling and overhauling of different IC Engines parts
 Dismantling, assembling and overhauling of automobile systems such as fuel feed pumps, Distributor & Carburettor
 Dismantling, assembling and overhauling of oil pumps and fuel pumps
 Dismantling, assembling and overhauling of fuel injectors
 Dismantling, assembling and overhauling of rocker shafts, cylinder heads, cylinder blocks, crank shafts
 Dismantling, assembling and overhauling of clutch assembly,

Dismantling, assembling and over hauling of Gear box
Dismantling, assembling and over hauling of Differential assembly,
Dismantling, assembling and over hauling of slider joints,
Dismantling, assembling and over hauling of Master Cylinder,
Dismantling, assembling and over hauling of Brake & wheel cylinders.

MODULE III

Familiarization of air-conditioners maintenance tools
Servicing and maintenance of air-conditioners.
Practice operations such as tube bending, cutting, flaring, jointing, leak testing, leak prevention
Practice operations such as vacuum testing, charging.

MODULE IV

Familiarization of refrigeration maintenance tools
Servicing and maintenance of refrigerators.
Practice operations such as tube bending, cutting, flaring, jointing, leak testing, leak prevention
Practice operations such as vacuum testing, charging.

TEXT BOOKS

1. Mechanical Workshop & Laboratory Manual By K. C. John