

Lesson Plan

Name of Faculty : Mr. Phool Nath
 Discipline : Automobile Engg.
 Semester : 6th
 Subject : MVA
 Lesson Plan Duration : 15 weeks (From January ,2018 to April,2018)
 Work Load (Lecture /Practical) per week in hours : Lecture 4

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
1 st	1 st	<u>1. Garage location, layout and types, and change work procedure and records</u> <ul style="list-style-type: none"> • Layout of garage 		
	2 nd	<ul style="list-style-type: none"> • Types of garage 		
	3 rd	<ul style="list-style-type: none"> • Location of garage/selection of site of garage • Inspection of faulty vehicle 		
	4 th			
2 nd	1 st	<ul style="list-style-type: none"> • Estimation of repair • Job control system 		
	2 nd	<ul style="list-style-type: none"> • Work – order or job card • Testing and test reports 		
	3 rd	<ul style="list-style-type: none"> • Costing and billing 		
	4 th			
3 rd	1 st	<u>2. Garage stores</u> <ul style="list-style-type: none"> • Definition 		
	2 nd	<ul style="list-style-type: none"> • Purpose of store keeping • Function of store keeping 		
	3 rd	<ul style="list-style-type: none"> • Location of store • Layout of store 		

	4 th			
4 th	1 st	<ul style="list-style-type: none"> • Advantage of good store – keeping and recording 		
	2 nd	<ul style="list-style-type: none"> • Procurement of store • Prevention of pilferage of store 		
	3 rd	<ul style="list-style-type: none"> • Bin card 		
	4 th			
5 th	1 st	<ul style="list-style-type: none"> • Store organisation 		
	2 nd	<p>3. Insurance of vehicle</p> <ul style="list-style-type: none"> • Meaning of vehicle insurance. 		
	3 rd	necessity of vehicle insurance		
	4 th			
6 th	1 st	<ul style="list-style-type: none"> • Types of vehicle insurance 		
	2 nd	<ul style="list-style-type: none"> • Duties of surveyor 		
	3 rd	<ul style="list-style-type: none"> • Duties of driver in case of accident and injury to a person 		
	4 th			
7 th	1 st	<ul style="list-style-type: none"> • Relation between surveyor and insurance cooperation 		
	2 nd	<ul style="list-style-type: none"> • Procedure to get accidental claim and compensation 		
	3 rd	<p>4. Driving And Highway Code</p> <ul style="list-style-type: none"> • Principle of driving • Driving procedure 		
	4 th			
8 th	1 st	<ul style="list-style-type: none"> • Driving in abnormal conditions, like hilly area, night, fog, heavy traffic and rain 		
	2 nd	<ul style="list-style-type: none"> • Driving precautions • Emergency Driving situations 		
	3 rd	<ul style="list-style-type: none"> • Driving License - purpose, importance and requirements 		
	4 th			

9th	1 st	<ul style="list-style-type: none"> • Different types of driving license • Procedure to get driving license 		
	2 nd	<ul style="list-style-type: none"> • Highway code – types with sketches with colour code 		
	3 rd	<p><u>5. Transport Management</u></p> <ul style="list-style-type: none"> • History of transport with special reference to road transport in India 		
	4 th			
10 th	1 st	<ul style="list-style-type: none"> • Modes of Road transport 		
	2 nd	<ul style="list-style-type: none"> • Organization- Service station and its functions, General layout of modern service station 		
	3 rd	Spare parts section and dealership service section, Accounts and books		
	4 th			
11 th	1 st	Different types of cards and their use in maintaining service station records		
	2 nd	<ul style="list-style-type: none"> • Structure of fleet organization 		
	3 rd	<ul style="list-style-type: none"> • State transport - optimum utilization of fleet 		
	4 th			
12 th	1 st	<ul style="list-style-type: none"> • Roadworthiness requirement 		
	2 nd	<ul style="list-style-type: none"> • Maintenance of logbook, History sheet, Causes, and prevention of Road Accident 		
	3 rd	Analysis of Accident, Economy of replacement		
	4 th			

13 th	1 st	<u>6. Motor Vehicle Act</u> <ul style="list-style-type: none"> • Definitions • Salient features of motor vehicle act 		
	2 nd	<ul style="list-style-type: none"> • Licensing of drivers and conductors of motor vehicles 		
	3 rd	<ul style="list-style-type: none"> • Registration of old and new vehicles 		
	4 th			
14 th	1 st	<ul style="list-style-type: none"> • Transfer of vehicle – local and state to state 		
	2 nd	<ul style="list-style-type: none"> • Traffic offences, penalties procedure 		
	3 rd	<ul style="list-style-type: none"> • Fitness of vehicle – meaning and purpose, provision in the act 		
	4 th			
15 th	1 st	<ul style="list-style-type: none"> • Vehicle permit – different types 		
	2 nd	<ul style="list-style-type: none"> • Imposition of penalties of violation of rules 		
	3 rd	<ul style="list-style-type: none"> • Different documents required for registration of vehicle, for driving license, and for transfer of vehicle 		
	4 th			

(Signature of the teacher concerned with date)

Name of Faculty : Yet To Be Assigned

Discipline : Automobile Engg.

Semester : 6th

Subject : **FAULT DIAGNOSIS AND TESTING LAB**

Lesson Plan Duration : 15 weeks (From January ,2018 to April,2018)

Work Load (Lecture /Practical) per week in hours : Practical -5

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
1 st	1 st			1. Basic electrical checks:- Battery connections, electrical bulbs and units, circuit protection devices and wiring connections..
	2 nd			
	3 rd			
	4 th			
2 nd	1 st			2. Testing of battery:- Specific gravity test, high rate discharge test, open circuit voltage test; charging of battery.
	2 nd			
	3 rd			
	4 th			
3 rd	1 st			3. Testing and setting of ignition timing, cam angle.
	2 nd			
	3 rd			
	4 th			
4 th	1 st			4. Testing of field winding of alternator and armature of starter motor for open circuit, short circuit and earthing.
	2 nd			
	3 rd			
	4 th			
5 th	1 st			5. Engine testing and finding out fuel consumption.
	2 nd			
	3 rd			
	4 th			
6 th	1 st			6. Diagnosing battery

	2 nd			ignition system.
	3 rd			
	4 th			
7 th	1 st			
	2 nd			
	3 rd			
	4 th			
8 th	1 st			8. Diagnosing and rectifying high fuel consumption.
	2 nd			
	3 rd	.		
	4 th			

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
9th	1 st			9. Diagnosing and rectifying engine noises and knocks.
	2 nd			
	3 rd	.		
	4 th			
10th	1 st			10. Diagnosing and rectifying engine starting troubles.
	2 nd			
	3 rd			
	4 th			
11th	1 st			11. Diagnosing and rectifying engine running faults.
	2 nd			
	3 rd			
	4 th			
12 th	1 st			12. Diagnosing and rectifying engine overheating.
	2 nd			
	3 rd			
	4 th			
13 th	1 st	.		13. Measuring of bore for wear, ovality and taperness.
	2 nd	.		
	3 rd			
	4 th			

14 th	1 st		14. Inspection of crankshaft - bearing replacement and setting of journal bearings, crank pin bearings and crank shaft bearings, measuring bearing clearances by gauges.
	2 nd		
	3 rd		
	4 th		
15 th	1 st		15. Demonstration of body repair techniques.
	2 nd		
	3 rd		
	4 th		

(Signature of the teacher concerned with date)

Name of Faculty : Yet To Be Assigned

Discipline : Automobile Engg.

Semester : 6th

Subject : **OVERHAULING LAB**

Lesson Plan Duration : 15 weeks (From January ,2018 to April,2018)

Work Load (Lecture /Practical) per week in hours : Practical -5

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
1 st	1 st			1. Diagnosing the engine for overhauling.
	2 nd			
	3 rd			
	4 th			
2 nd	1 st			2. Removal of engine from vehicle.
	2 nd			
	3 rd			
	4 th			
3 rd	1 st			3. Dismantling of engine.
	2 nd			
	3 rd			
	4 th			
4 th	1 st			4. Overhauling of petrol engine.
	2 nd			
	3 rd			
	4 th			
5 th	1 st			5. Overhauling of diesel engine.
	2 nd			
	3 rd			
	4 th			
6 th	1 st			6. Decarbonising of engine blocks, combustion chamber, piston crown and valve parts.
	2 nd			
	3 rd			

	4 th			
7 th	1 st			7. Surfacing of cylinder heads, cylinder blocks and manifolds on cylinder head refacing machine.
	2 nd			
	3 rd			
	4 th			
8 th	1 st			8. Replacing of piston and piston rings – removal and refitting.
	2 nd			
	3 rd	.		
	4 th			

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
9th	1 st			9. Practice on cylinder boring machine.
	2 nd			
	3 rd	.		
	4 th			
10th	1 st			10. Practice in fitting cylinder liners- sleeving and desleeving.
	2 nd			
	3 rd			
	4 th			
11th	1 st			11. Testing and aligning of connecting rod.
	2 nd			
	3 rd			
	4 th			
12 th	1 st			12. Overhauling of valves and valve mechanism.
	2 nd			
	3 rd			
	4 th			
13 th	1 st	.		13. Overhauling of gear box. 14. Overhauling of differential and propeller Shaft.
	2 nd	.		
	3 rd			
	4 th			
14 th	1 st			15. Overhauling of wheels and axles.
	2 nd			

	3 rd			
	4 th			
15 th	1 st			16. Overhauling of brakes. 17. Overhauling of clutch.
	2 nd			
	3 rd			
	4 th			

(Signature of the teacher concerned with date)