

## Lesson Plan.

Name of the Faculty : Dinesh Jain  
 Discipline : Automobile Engg.  
 Semester : 4th.  
 Subject : Chassis, Body and Transmission

Lesson Plan Duration : 15 weeks From 9th Jan 18 to Apr. 18.

Work Load (Lecture / Practicals) per week : Lecture - 03, Practicals - 01

Week	Theory		Practicals	
	Lecture Day	Topic	Practical Day	Topic
1st	1st	Classification of vehicles, types of chassis.	1st	Study & Sketch of Heavy Vehicle chassis
	2nd	Layout of conventional type of chassis, function & arrangement		
	3rd	Alternate arrangement such as engine position, drive types		
2nd	1st	Merit & demerits of various arrangement of chassis.	2nd	Study & sketch of Light Vehicle chassis
	2nd	Types of frame & Body, cross member		
	3rd	Streamlining, brackets material of frame, body upholstery		
3rd	1st	Necessity, function & requirement of clutch.	3rd	Identify & Servicing of single plate clutch & Multiplate plate clutch.
	2nd	Types of clutch. Single plate clutch.		
	3rd	Multiplate clutch, wet & dry clutch.		
4th	1st	Hydraulic power assisted clutch, clutch plate	4th	Study & sketch of Centrifugal clutch.
	2nd	Lining Materials, Centrifugal clutch		
	3rd	Semi-Centrifugal clutch.		
5th	1st	Fluid Flywheel.	5th	Servicing & Overhauling of constant mesh Gear Box.
	2nd	1st sessional Test		
	3rd	Necessity & function of Transmission.		

Week	Theory		Practical	
	Lecture Day	Topic	Practical Day	Topic
6th	1st	Sliding mesh & Constant mesh Transmission.	6th.	Servicing & overhauling of Synchronesh Gear Box.
	2nd	Synchronesh Transmission.		
	3rd.	Over Drive,		
7th	1st	over-running clutch.	7th.	- do -
	2nd	Transfer gear box.		
	3rd	Common faults & remedies.		
8th.	1st	Automatic Transmission	8th.	Visit to Auto workshop
	2nd.	Epicyclic gear box.		
	3rd.	Torque Converter,		
9th.	1st	Continuously Transmission	9th.	Servicing of U.J., slip joint & propeller shaft
	2nd	Automated Manual Transmission		
	3rd.	Propeller shaft & universal joint		
10th	1st	Hotchkiss & Torque Tube drive	10th.	Servicing of Differential
	2nd	Differential,		
	3rd	Rear Axle, common faults & remedies		
11th.	1st	Sessional Test - 2.	11th.	Study of Live Axle
	2nd	Front Axle, Stub Axle.		
	3rd.	effect of braking on axle shape.		
12th	1st	Steering Head, steering knuckle	12th.	Study of Front Axle.
	2nd	steering Mechanism, function.		
	3rd.	Davis & Ackermann's steering		
13th	1st	Steering Gear Box.	13th.	Study of Camber, Caster, KPI; Toe-in & Toe-out.
	2nd	Steering Linkages.		
	3rd.	Front wheel Geometry - Camber		
14th	1st	Caster, KPI, toe-in, toe-out.	14th.	checking & adjustment of steering Geometry
	2nd.	Cornering Force & Cornering Power		
	3rd.	over steering & under steering		
15th.	1st	Hydraulic & Electronic Power Steer	15th.	- do -
	2nd	Common Faults & Remedies		
	3rd.	Sessional Test - 3.		

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