

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma in Automobile Engineering

Semester: V

Subject Name: **Diagnosis and Testing - II (Transmissions)**

Sr. No.	Course Content
1	CLUTCH Troubles in clutch units, its causes and rectification, Inspection, procedure and rectification, Reconditioning of clutch components, Clutch adjustment, Lubrication of clutch units and linkages, Troubles in fluid coupling, its causes and remedies
2	GEAR BOX (Conventional and Automatic) Troubles in gear box unit, their causes and remedies, Inspection of components of gear box, Rectification of various troubles in components.
3	PROPELLER SHAFT AND UNIVERSAL JOINT Troubles in propeller shaft assembly, Inspection procedure, Rectification of various troubles.
4	REAR AXLE ASSEMBLY Troubles in rear axle assembly and their probable causes, Inspection procedure, Rectification of rear axle assembly, Procedure for road testing for proper performance of rear axle assembly.
5	FRONT AXLE AND STEERING Troubles in front axle and steering system, and their probable causes, Inspection procedure, Rectification of various troubles, Procedure of testing for proper performance, Troubles, its causes and remedies in power steering system.
6	BRAKES Troubles in Mechanical, hydraulic and Air braking system and their causes, External checks of braking system, Internal checks of system, Rectification of various troubles, Brake performance test.
7	SUSPENSION SYSTEM Various troubles and their probable causes in suspension system, Inspection procedure, Remedial operation.
8	WHEELS AND TYRES Different troubles and probable causes, Inspection procedure, Remedial Operation, Rotation of tyre, Tyre Retarding procedure, Various troubles, causes and remedies in alloy wheels.
9	CHASIS FRAME Various troubles and causes in chassis frame, Inspection procedure, Remedial operation, Repairs and alignment of frame, Schedule for chassis lubrication, Types of instrument used.

References Books:

Sr. No.	Name of Books	Author
1.	Automotive Mechanics	W. H. Crouse
2.	Auto diagnosis and tune up	J. A. Johnson
3.	Automotive Mechanics	J. Heitner
4.	Motor vehicle calculation and science I & II	Champion and Arnold
5.	Transmission and power train	W. H. Crouse
6.	Motor vehicle technology I, II, III, IV	S. C. Mud
7.	Motor vehicle technology	K. Newton, W Steed
8.	Automobile Technology	N.K Giri