


"PVC" NSSK G.P. BILASPUR at KALOL		Department :- Mechanical Engg. (6th sem)		Subject- Automobile Engg.		
SYLLABSE COVERAGE		Course- Diploma		Duration -3 Years		
		Total Periods -56		Theory-56		
Sr no.	Period No's	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
1	1-3	Introduction	Components of an automobile Classification of automobiles Layout of chassis Types of drives-front wheel, rear wheel, four wheel, left hand, right hand Introduction to electric vehicle	Automobile Engineering by Kirpal Singh, Standard Publishers	Automobile Engineering by GBS Narang, Khanna Publishers	
2	4-20	Transmission System	Clutch Function, Constructional details of single plate and multi plate friction clutches, Centrifugal and semi centrifugal clutch Gear Box: Function, Working of slide mesh, constant mesh and synchro mesh gear box, Torque converter and overdrive Propeller shaft and rear axle Function, Universal joint, Differential, Rear axle drives and different types of rear axles Wheels and Tyres Types of wheels- disc wheels and wire wheel, Types of tyres used in Indian vehicles, Causes of tyre wear, Toe in, Toe out, Camber, Caster, Kingpin inclination, Tube less tyres	-----do-----	-----do-----	
3	21-25	Steering System	Function and principle Ackerman and Davis steering gears Types of steering gears- worm and nut, worm and wheel, Rack and pinion type Introduction to power steering	-----do-----	-----do-----	
4	26-31	Braking System	Constructional detail and working of hydraulic and vacuum brake. Concept of brake adjustment & Bleeding Introduction to ABS, EBD and hill ass system Introduction to Traction control	-----do-----	-----do-----	
5	32-35	Suspension System	Function Types Working of coil spring, leaf spring Shock absorber	-----do-----	-----do-----	
6	36-40	Battery	Constructional details of lead and cell battery Specific gravity of electrolyte Effect of temperatures, charging and discharging on specific gravity Capacity and efficiency of battery Battery charging Maintenance of batteries Checking of batteries for Voltage and specific gravity	-----do-----	-----do-----	

Pankaj
Pankaj Kumar
lect. M.E.

abhishek
13/02/23
HOD, ME

7	41-46	Dynamo and Alternator	Dynamo, Function and details, Regulators-voltage, current and compensated type, Cut out-Construction, working and their adjustment. Alternator, Construction and working, Charging of battery from alternator	-----do-----	-----do-----
8	47-50	Introduction to special purpose vehicles	Tractors Forklift Cranes & Recovery vehicles	-----do-----	-----do-----
9	51-56	Lighting System and Accessories	Introduction to Lighting system of automobile Windscreen Wiper Horn Speedometer HVAC system	-----do-----	-----do-----


 Pankaj Kumar
 Lect. M.E.

Approved	HOD Sign
Date : 13/02/2023	