GOVT. POLYTECHNIC HAMIRPUR

	LESSON	PLAN F	OR: VEHICUL	AR SYSTEMS (SESSION: AUGU	CT DEC. CO.
MECHANICAL ENGINEERING (SEMESTER - 5TH) (SESSION: AUGUST-DEC. 2024)					
S.N O.	MONTH	WEEK	DATE	CONTENT (THEORY)	REMARKS
1	AUGUST	3rd	12,13,17	Unit I Introduction Types of automobiles, different layouts of vehicle, chassis, frame and body, Spark Ignition (SI) & Compression Ignition (CI) engines.	
		4th	19,20,22,24		
		5th	27,29,31		
2	SEPT.	1st	2,3,5,7	Unit II Automotive Engine Parts Cylinder – arrangements and their relatives merits, Liners, Piston, connecting rod, crankshaft, valves, valve actuating mechanisms. Unit III Transmission Systems Clutch-types and construction of single plate clutch, propeller shaft, slip joints, universal joints, Differential, and rear axle.	
		2nd	9,10,12		
		3rd	16,17,19,21		
		4th	23,24,26,28		
		5th	30		
3	ост.	1st	1,3,5	Unit IV Brakes and Suspension Systems Requirements, leaf spring, coil spring. Types	
	4	2nd	7,8,10	of brakes, mechanical and hydraulic braking systems, brake shoe arrangements, Disk brakes, drum brakes, Antilock –Braking systems, purpose and operation of antilock-braking system.	
		3rd	14,15,19		
		4th	21,22,24,26		
		5th	28,29		
4	NOV.	1st	1	Unit V Safety and Comfort Systems Passive Safety Systems – Airbags, Seatbelts,	
			4,5,7	Crumple Zones, Active Safety Systems – Automatic Driver Assist Systems (ADAS), Antilock Braking System, Reverse parking system, Anti-collision system, Traction control system, Comfort Systems – Cruise control system, Heating, ventilation and Air- conditioning system (HVAC), Autonomous Driving Cars – Level of Driving Automation.(Basic definitions and functions only)	
		3rd	11,12,14,16		
		4th	18,19,21,23		
		7.5	25,26,28,30		
5	DEC.	1st	2		

(Sr. Lect. Mech. Engg.)

HOD (ME)