



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Lesson Plan & Work-done Diary for AY:2026-27, ODD Semester

Faculty: KAVYASHREE S

Semester & Section: VII

Class No.	Date planned (DD/M M)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
Module 1								
1		Electrical Drives: Introduction, Advantages of Electrical Drives	ICT					
2		Parts of Electrical Drives, Choice of Electrical Drives, Status of dc and ac Drives.	ICT					
3		Dynamics of Electrical Drives: Fundamental Torque Equations, Components of Load Torque	Chalk & Talk					
4		Speed Torque Conventions and Multi- quadrant Operation	Chalk & Talk					
5		Nature and Classification of Load Torques, Equivalent Values of Drive Parameters	Chalk & Talk					
6		Problems on Load Torque, Equivalent values of drive parameters	Chalk & Talk					
7		Calculation of Time and Energy Loss intransient Operations and Problems	Chalk & Talk					
8		Steady State Stability, Load Equalization	Chalk & Talk					
9		Steady State Stability, Load Equalization Control Electrical Drives: Modes of Operation	Chalk & Talk					
10		Speed Control and Drive Classifications and Closed loop Control of Drives	Chalk & Talk					
11		Summary of Module-1 VTU paper Discussion	ICT					



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 2								
12		Direct Current Motor Drives: Controlled Rectifier Fed dc Drives, Single Phase Fully Controlled Rectifier Control of dc Separately Excited Motor	ICT					
13		Continued with Full Controlled rectifier	Chalk & Talk					
14		Single Phase Half Controlled Rectifier Control of dc Separately Excited Motor, Three Phase Fully Controlled	Chalk & Talk					
15		Continued with Half Controlled rectifier derivation	Chalk & Talk					
16		Three Phase Half Controlled Rectifier Control of dc Separately Excited Motor	Chalk & Talk					
17		Multi quadrant Operation of dc Separately Excited Motor Fed Form Fully Controlled Rectifier	Chalk & Talk					
18		Multi quadrant Operation of dc Separately Excited Motor Fed Form Fully Controlled Rectifier	Chalk & Talk					
19		Rectifier Control of dc Series Motor, S supply Harmonics	Chalk & Talk					
20		Power Factor and Ripple in Motor Current, Chopper Control of Series Motor	Chalk & Talk					
21		Chopper Control of Separately Excited dc Motor	Chalk & Talk					
22		Summary of Module-2 - VTU QPS	ICT					



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No	Date of Conduct ion DD/MM	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-3								
23		Induction Motor Drives: Analysis and Performance of Three Phase Induction Motors	ICT					
24		Operation with Unbalanced Source Voltage Single Phasing, Unbalanced Rotor Impedances	ICT					
25		Analysis of Induction Motor Fed From Non-Sinusoidal Voltage Supply	Chalk & Talk					
26		Numerical on Performance of 3 phase IM+ Starting, Braking, Transient Analysis	Chalk & Talk					
27		Speed Control Techniques Stator Voltage Control Variable Voltage Frequency Control from VS	Chalk & Talk					
28		Voltage Source Inverter (VSI) Control	ICT					
29		Cycloconverter Control, Closed Loop Speed Control and Converter Rating for VSI and Cycloconverter Induction Motor Drives	Chalk & Talk					
30		Variable Frequency Control from a Current Source, Current Source (CSI) Control	Chalk & Talk					
31		Current regulated voltage source inverter control, speed control of single phase induction motors.	Chalk &					



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 4								
32		Synchronous Motor Drives: Operation from fixed frequency supply-starting	ICT					
33		Synchronous motor variable speed drives.	Chalk & Talk					
34		Variable frequency control of multiple synchronous motors	Chalk & Talk					
35		Self-controlled synchronous motor drive employing load commutated thruster inverter	Chalk & Talk					
36		Starting Large Synchronous Machines, Permanent Magnet ac (PMAC) Motor Drives	Chalk & Talk					
37		Sinusoidal PMAC Motor Drives, Brushless dc Motor Drives	Chalk & Talk					
38		Stepper Motor Drives: Variable Reluctance, Permanent Magnet	Chalk & Talk					
39		Important Features of Stepper Motors	ICT					
40		Drive Circuits for Stepper Motor.	ICT					
41		Torque Versus Stepping rate Characteristics	Chalk & Talk					
42		Summary and VTU Questions discussion	ICT					



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 5								
43		Energy conservation in Electrical Drives: Losses in electrical drive system	ICT					
44		Measures for energy conservation in Electrical drives, Energy efficient operation of drive	Chalk & Talk					
45		Use of right rating motors, improvement of quality of supply.	Chalk & Talk					
46		Solar powered Drives: Solar powered pump drives	Chalk & Talk					
47		solar powered Electric vehicles	Chalk & Talk					
48		Industrial Drives: Textile Mills, Steel Rolling Mills, Cranes and Hoists	ICT					
49		Machine Tools, use of single to three phase semiconductor converters in rural applications.	ICT					
50		SRS Conduction and Revision	ICT					



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

	Activity	Planned	Actual	Remarks
1	Theory Classes	50		
2	Assignments/Quizzes/ Self study	Ms Quiz: 5 Write up: 1 Group Assignment :1		
3	Tutorials/ Extra classes	-		
4	Internal Assessments	3		
5	ICT based Teaching (% of usage in Curriculum)	16/50= 32%		
Planning			Execution	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	