

LECTURE SCHEDULE

Academic Year: 2020-21

Semester: 7th

Course Title: **Electrical Drives**

Course Code: **EE-722**

Name of Faculty: **Mr. Ahmed Riyaz**

S. NO.	Competencies	Topic	Schedule		Remarks
			No. of Lectures	Date (s) & Time*	
Unit.1	This unit gives introduction about Converter fed D.C Drives.	<ul style="list-style-type: none"> • Phase-controlled converter fed D.C Drives • Analysis and performance of drive in continuous and discontinuous conduction modes • Harmonics and p.f, methods of improvement of i/p p.f in phase-controlled converter fed d.c drives • PWM rectifiers 	2	18.08.20 (L5) 19.08.20 (L3)	
			3	20.08.20 (L2) 21.08.20 (L1) 24.08.20 (L1)	
			3	25.08.20 (L5) 26.08.20 (L3) 27.08.20 (L2)	
			2	28.08.20 (L1) 31.08.20 (L1)	
Unit.2	This unit discusses about Chopper Fed D.C Drive.	<ul style="list-style-type: none"> • Chopper-controlled D.C Drives • single and multi-quadrant operation in continuous and discontinuous modes • dynamic, regenerative and composite braking (more stress on self-commutated devices) • Closed loop control of D.C. drives. 	3	01.09.20 (L5) 02.09.20 (L3) 03.09.20 (L2)	
			2	04.09.20 (L1) 07.09.20 (L1)	
			3	08.09.20 (L5) 09.09.20 (L3) 10.09.20 (L2)	
			2	11.09.20 (L1) 14.09.20 (L1)	
SESSIONAL-I					
Unit.3	This unit gives introduction about Adjustable-	<ul style="list-style-type: none"> • Frequency control of induction motor drives (v/f control) using VSI, CSI • PWM VSI 	3	18.09.20 (L1) 21.09.20 (L1) 22.09.20 (L5)	
			2	23.09.20 (L3)	

	voltage control of induction motor drives.	<ul style="list-style-type: none"> • PWM CSI inverters • Cyclo-converter-controlled AC drives. 	2 2	24.09.20 (L2) 25.09.20 (L1) 28.09.20 (L1) 29.09.20 (L5) 30.09.20 (L3)	
Unit.4	This unit gives a brief introduction of Slip power controlled induction motor drives	<ul style="list-style-type: none"> • Slip power controlled induction motor drives • Static rotor-resistance control • Static Kramer drive • Mathematical modeling of induction motor drives • transient response and stability analysis 	3 1 1 3 2	01.10.20 (L2) 05.10.20 (L1) 06.10.20 (L5) 07.10.20 (L3) 08.10.20 (L2) 09.10.20 (L1) 12.10.20 (L1) 13.10.20 (L5) 14.10.20 (L3) 15.10.20 (L2)	
SESSIONAL-II					
Unit.5	This unit gives discusses Synchronous motor drives	<ul style="list-style-type: none"> • Synchronous motor drives • SRM drives • Static excitation scheme of alternators. 	3 2 5	19.10.20 (L1) 20.10.20 (L5) 21.10.20 (L3) 22.10.20 (L2) 23.10.20 (L1) 26.10.20 (L1) 27.10.20 (L5) 28.10.20 (L3) 29.10.20 (L2) 02.11.20 (L1)	

* **L1-** 10:00 AM-11:00 AM, **L2-** 11:00 AM-12:00 Noon, **L3-** 12:00 Noon-01:00 PM,
L3- 02:00 PM-03:00 PM, **L4-** 03:00 PM-04:00 PM.

(Faculty In-charge)