DISCIPLINE – ELECTRICAL ENGG	SEMESTER 4TH	NAME OF THE TEACHING FACULTY- JYOTIRMAYEE SETHY,LECT(ELECT.)	
SUB-AC M/C LAB	No Of Days Per Week Class Alloted-8	SEMESTER FROM 22.12.2025 to 18.04.2026 NO OF WEEK – 16 WEEKS	
WEEK	CLASS DAY	THEORY	STATUS
1ST WEEK	1ST day (Gr-1)_ 2nd day (Gr-2)	Identify the different parts (along with function and materials) for the given single Phase and three phase induction motor.	
2nd WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Connect and run the three phase squirrel cage induction motors (in both directions) Using the DOL, star-delta, auto-transformer starters (any two)	
3RD WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Perform the direct load test on the three phase squirrel cage induction motor and plot The I) efficiency versus output, ii) power factor versus output, iii) power factor versus Motor current and iv) torque – slip/speed characteristics	
4TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Conduct the No-load and Blocked-rotor tests on given 3-f squirrel cage induction Motor and determine the equivalent circuit parameters.	
5TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Control the speed of the given three phase squirrel cage/slip ring induction motor Using the applicable methods: i) auto-transformer, ii) VVVF.	
6TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Conduct the direct load test to determine the efficiency and speed regulation for Different loads on the given single phase induction motor; plot the efficiency and	

		Speed regulation curves with respect to the output power.	
7TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Continue	
8TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Perform the direct loading test on the given three-phase alternator and determine the Regulation and efficiency.	
9TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Determine the regulation and efficiency of the given three phase alternator from OC And SC tests (Synchronous impedance method)	
10TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Conduct the test on load or no load to plot the 'V' curves and inverted 'V' curves (at No-load) of 3-f synchronous motor.	
11TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	. Continue	
12TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Dismantling and reassembling of single-phase motors used for ceiling fans, universal Motor for mixer.	
13TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Control the speed and reverse the direction of stepper motor	
14TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	Control the speed and reverse the direction of the AC servo motor	

15TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	**Control the speed and reverse the direction of the DC servo motor**	
16TH WEEK	1ST day(Gr-1)_ 2nd day(Gr-2)	**Sessional exam**	

24/12/2025