

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026***Fourth Semester**Department of Electrical and Electronics Engineering***EE3405 – ELECTRICAL MACHINES - II***Regulations – 2021***Duration : 3 Hrs****Maximum: 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	List the condition of parallel operation of an alternator.	L1	1	2
2.	What is voltage regulation in induction motor?	L1	1	2
3.	List the main parts of synchronous motor.	L1	2	2
4.	Name the starting methods of induction motor.	L2	2	2
5.	Classify the types of induction motor.	L2	3	2
6.	How can the direction of rotation of a three phase induction motor be reversed?	L1	3	2
7.	What is the need of starter in induction motor?	L1	4	2
8.	Specify the advantages of rotor resistance control of induction motor speed control.	L2	4	2
9.	Single phase induction motor is not a self-starting motor. Justify the statement.	L2	5	2
10.	List the application of induction motor.	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a With neat diagram, describe the construction and working of alternator.	L2	1	16
	Or			
	b Discuss the parallel operation of two alternators with identical speed/load characteristics.	L2	1	16
12.	a Explain briefly the constructional features and principle of operation of three phase synchronous motor.	L2	2	16
	Or			
	b What is the need for starter? Explain various methods used for starting a synchronous motor.	L2	2	16
13.	a Discuss how the circle diagram is constructed through the No load and blocked rotor tests in three phase induction motor.	L3	3	16
	Or			
	b Explain the construction, working principle and parts of three phase induction motor.	L3	3	16
14.	a i Explain the rotor resistance starter in 3 phase induction motor with neat sketch.	L2	4	8
	ii Explain the DOL starter in 3 phase induction motor with neat sketch.	L2	4	8
	Or			
	b Briefly discuss the operation of static Kramer's and static Scherbius drives with neat sketch.	L2	4	16
15.	a Explain how the No load and blocked rotor tests operation done in single phase induction motor.	L3	5	16
	Or			
	b Discuss the operation of linear induction motor with neat sketch.	L3	5	16