SR 22

St. Peter's Engineering College (Autonomous) Dullapally (P), Medchal, Hyderabad – 500100. II - Mid Term Examination – JUNE 2024						Dept.	:	CSM
						Academic Year 2023-24		
Subject Code	:	AS22-2ES01	Subject	:	Basic Electrical Engineering			
Class/Section	:	B. Tech. (A)	Year	:	I	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

BLOOMS LEVEL					
Remember	L1	Understand	L2	Apply	L3
Analyze	L4	Evaluate	L5	Create	L6

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PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT - IV			
1	**a)**What are the main parts of transformer?	1M	L2	C124.4
	b)Define a transformer?	1M	L1	C124.4
	c)Define efficiency?	1M	L1	C124.4
	d)Write down the two applications of three phase induction motors.	1M	L2	C124.4
	UNIT – V			
	e)What is bare conductor?	1M	L1	C124.5
	f)Define Fuse?	1M	L1	C124.5
	g)What are the factors affecting the choice of wire?	1M	L2	C124.5
	h)Write down the advantages of Lithium-ion batteries.	1M	L2	C124.6
	UNIT – III			
	i)What is the function of Commutator?	1M	L2	C124.3
	j)What are different types of armature windings?	1M	L2	C124.3

PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT - IV			
2	a) A 500 KVA, single phase transformer has 500 turns on the primary and 200 turns on the secondary. The primary is connected to 2000 V,50Hz supply. Determine the Secondary voltage and the maximum value of flux.	4M	L3	C124.4
	a) Write down the applications of synchronous generators.	4M	L3	C124.4

	OR			
3	a) Explain the construction and working principle of a transformer.	**8M**	**L2**	**C124.4**
	UNIT – V			
4	a) Explain different types of Earthing	**4M**	**L2**	**C124.5**
	b)What are the characteristics of batteries for long life?	**4M**	**L2**	**C124.5**
	OR			
5	a) What is ELCB? Briefly explain the two different types of ELCB?	**8M**	**L2**	**C124.5**
	UNIT – III			
6	a) Write down the working principle of dc motor	**4M**	**L2**	**C124.3**
	OR			
7	a) A 4-pole lap wound dc motor has 200 armature conductors and flux per pole is 0.5 weber.The motor runs at 900 rpm. Find the back emf?	**4M**	**L3**	**C124.3**

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