

[illegible]

DEPARTMENT OF MECHANICAL ENGINEERING

Date	21 st March 2023	Maximum Marks	10+50
Course Code	22ES14E	Duration	120 Min
Semester	I	CIE- Improvement Test	
FUNDAMENTALS OF MECHANICAL ENGINEERING			

Answer all the Questions

PART A (QUIZ)

Sl. No.	Questions	M	BT	CO
1	Write the basic parts of robots.	2	L1	4
2	Write any 2 applications of FRP composites.	2	L1	1
3	List out the examples of thermoset type of polymers.	2	L1	1
4	Define composite materials.	1	L1	1
5	Polyester is the example of _____ type of polymer	1	L1	1
6	Concrete which contains steel rods in a matrix of cement, sand and crushed stones is a example of _____ type of composite material	1	L1	1
7	The polar configuration of the robot is also called _____ robot	1	L1	4

PART B (TEST)

Sl. No.	Questions	M	BT	CO
1.	Define Engineering materials. Give the detailed classification of materials, along with their applications	10	L2	4
2.	Discuss the industrial applications of robots in manufacturing process.	10	L2	1
3	Explain the general characteristics of polymers	10	L2	1
4a	Differentiate between thermosets and thermoplastics.	5	L2	1
4b	Explain the properties of composite materials	5	L2	1
5	Classify and explain the types of robots based on configurations.	10	L3	4

BT-Blooms Taxonomy, CO-Course Outcomes, M-Marks

Marks	Particulars	CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
Distribution	Max Marks	37	00	00	23	10	40	10	00	00	00