RV Educational Institutions ®
RV College of Engineering ®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi | Approved by AICTE, New Delhi, Accredited By NAAC, Bengaluru And NBA, New Delhi

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DEPARTMENT OF MECHANICAL ENGINEERING

Date	23rd Feb 2023	Maximum Marks	10 + 50
Course Code	22ES14E	Duration	120 Min
Semester	I	CIE-II	

FUNDAMENTALS OF MECHANICAL ENGINEERING

NOTE: Answer all the Questions.

PART A (QUIZ)

Sl. No.	Questions	M	BT	CO
1	What is the significance of ROM & RAM in CNC machine	2	L1	4
2	List out the examples of closed loop control system	2	L1	4
3	What are three Phase of Mechatronic system design process	2	L1	4
4	_____ type of control systems doesn't have feedback system.	1	L1	4
5	_____ type of Automation systems is used for mass production.	1	L1	4
6	Geothermal energy is the example of_____ type of energy resources.	1	L1	3
7	Define Automation.	1	L1	4

PART B (TEST)

Sl. No.	Questions	M	BT	CO
1.	Discuss in detail the operations involved in the sequential control of a microprocessor-based washing machine.	10	L2	4
2.	What is automation? explain the all the types of automation with an example for each.	10	L2	4
3	With the detail diagram, explain the various elements of CNC Machine.	10	L3	4
4a	Discuss the major causes for ozone depletion.	5	L1	3
4b	Differentiate between conventional and non-conventional energy resources.	5	L1	3
5	What do you understand by the term 'Mechatronics'? With a neat diagram, show the basic elements of a Mechatronics system. Give examples of mechatronics systems.	10	L3	4

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

Marks Distribution	Particulars	CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Max Marks	00	00	11	49	20	20	20	00	00	00

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