Code No.: ME851PE	R20	H.T.No.			8	R						

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–II–Semester End Examinations (Regular) – April - 2025
CNC TECHNOLOGY
(MECH)

[Time: 3 Hours] **[Max. Marks: 70]**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A **(20 Marks)**

1. a)	Classify the NC systems.	[2M]
b)	Compare Open and closed loop system in CNC.	[2M]
c)	List Work Holding Devices For CNC Machines.	[2M]
d)	What are Automatic Tool Changer Advantages?	[2M]
e)	Explain briefly Construct Motion statements.	[2M]
f)	Define the Select Auxiliary statements.	[2M]
g)	What is DNC?	[2M]
h)	Illustrate Basic Structures of Adaptive Control System.	[2M]
i)	What is the Propose of Microcontrollers?	[2M]
j)	Explain Importance of Memory elements in a PLC system.	[2M]

PART-B **(50 Marks)**

2.	Compare the major advantages of NC Machine. Over conventional Machine.	[10M]
	OR	
3.	Explain different types of the NC Machines.	[10M]
4.	What are Cutting tools used for CNC machines and their design features?	[10M]
	OR	
5.	What are Work holding devices for CNC machines?	[10M]
6.	Explain Examples to Specify the Post-processor Statements.	[10M]
	OR	
7.	Illustrate Part Geometry Commands In APT With Example.	[10M]
8.	Compare Advantages and disadvantages of DNC.	[10M]
	OR	
9.	Explain Adaptive control of machining turning processes.	[10M]
10.	Identify Applications of microcontrollers.	[10M]
	OR	
11.	Design The basic internal architecture of a PLC.	[10M]

****