PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023

Semester : Semester VI - 2020
Course Code : MEC3036
Course Name : Sem VI - MEC3036 - Flexible Manufacturing System
Program : MEC

Date : 19-JUN-2023
Time : 9.30AM - 12.30PM
Max Marks : 100
Weightage : 50%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS   **(10 X 2 = 20M)**

1. Write the four qualifiying test in FMS   (CO2) [Knowledge]

2. List the Components of a manufacturing system   (CO1) [Knowledge]

3. Define Tool magazine in Tool Management   (CO3) [Knowledge]

4. What is Tool Migration   (CO3) [Knowledge]

5. Define TOOL MANAGEMENT: (CO4) [Knowledge]

6. List the Element of 5 s   (CO5) [Knowledge]

7. Define Value   (CO5) [Knowledge]

8. What is Incremental Positioning   (CO1) [Knowledge]

9. What is Group Technology: (CO2) [Knowledge]

10. Explain the importance of cutting tool management

                    (CO4) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS   **(5 X 10 = 50M)**

11. Write a note on Machine Control Unit (MCU) in CNC

(CO1) [Comprehension]

12. With a neat sketch Explain any two FMS Layouts

(CO2) [Comprehension]

13. write a note on Parts Classification and Coding in Group Technolgy

(CO2) [Comprehension]

14. List the Storage Methods and equipment Classifications in Material Handling system

(CO3) [Comprehension]

15. Describe using a suitable example Sensors monitoring tools

(CO4) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS   **(2 X 15 = 30M)**

16.
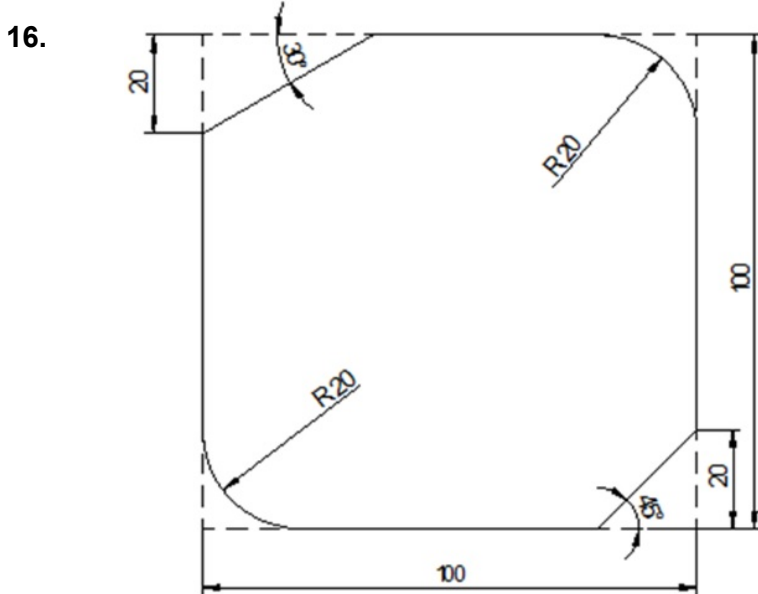
write the NC Coding for the following fig

(CO1) [Application]

17. The Figure shows 4 x 4 machine component incidence matrix. Form machine cells and part family using ROC method.

		Components			
		1	2	3	4
	1	1	1	0	0
	2	0	0	1	1
Machines	3	0	0	1	1
	4	1	1	0	0

(CO2) [Application]