Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023

Semester : Semester VI - 2020
Course Code : MEC3034
Course Name : Sem VI - MEC3034 - Computer Integrated Manufacturing
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 **(5 X 2 = 10M)**

1. List any four features of flexible automation system. (CO1) [Knowledge]

2. Define In-line configuration system of transfer line used in transferring work parts. (CO2) [Knowledge]

3. List any four objectives of cellular manufacturing. (CO3) [Knowledge]

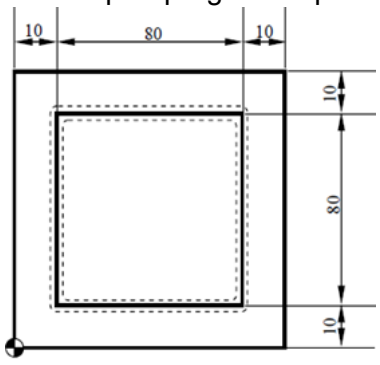
4. List varius types of layouts commonly used in FMS. (CO4) [Knowledge]

5. State any 2 approaches to CAPP. (CO5) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **(6 X 10 = 60M)**

6. Write a part program to perform the linear slotting operation on the component as shown in the figure.



CO3) [Comprehension]

7. Discuss about the subsystems of Computer Integrated Manufacturing. (CO1)[Comprehension]

8. Explain the method of selecting the right automation manufacturing system. (CO4) [Comprehension]

9. Write a manual part program for Simple facing operation of around 2 mm for the component having 22 mm dia and length 60mm.

(CO4) [Comprehension]

10. Discuss the continous transfer of work parts in an automated flow.

(CO2) [Comprehension]

11. Explain the working of cam mechanism in the process of transferring parts.

(CO5) [Comprehension]

PART C

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

12. Interpret the method of using visual inspection technique to identify similar parts using a sutable example.

(CO5) [Application]

13. Illustrate the working of generative process of CAPP using a diagram.

(CO5) [Application]