Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
MID TERM EXAMINATION - OCT 2023

Semester : Semester III - 2022
Course Code : MEC3034
Course Name : Sem III - MEC3034 - Computer Integrated Manufacturing
Program : MEC, MCM, MAM

Date : 30-OCT-2023
Time : 11:30AM - 1:00PM
Max Marks : 50
Weightage : 25%

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. Define computer integrated manufacturing (CO1) [Knowledge]
2. What is Process planning? (CO1) [Knowledge]
3. List the three distinguished components of CIM (CO1) [Knowledge]
4. Write Generative CAPP Examples (CO5) [Knowledge]
5. Write process planning activity (CO5) [Knowledge]

PART B

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

6. Explain the Nature and Role of the Elements of CIM System (CO1) [Comprehension]
7. Explain the Aproaches of CAPP in detail (CO5) [Comprehension]

PART C

ANSWER THE FOLLOWING QUESTION **(1 X 20 = 20M)**

8. a) A production machine operates 90 hr/wk (two shifts,5 days) at full capacity.Its production rate is 30 units/hr.During a certain week,the machine produced 30000 parts and was idle the remaining time (Determine the production capacity of machine (b) What was the utilization of the machine during the week under consideration?

b) The furred lathe section has 6 machines,all devoted to the productions of the same part.The section operates 10shifts/wk.The no.of hours/shift averages 8.0 average production rate of each machine is 17 units/hr.determine the weekly production capacity of the turrets lathe section. Actual production is 8000 units/week.Findout the utilization of machine

(CO1,CO5) [Application]