Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
MID TERM EXAMINATION - OCT 2023

Semester : Semester VII - 2020
Course Code : MEC3034
Course Name : Sem VII - MEC3034 - Computer Integrated Manufacturing
Program : B.TECH

Date : 30-OCT-2023
Time : 11:30AM - 1:00PM
Max Marks : 60
Weightage : 30%

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. What are the challenges in Computer integrated manufacturing(CIM)?
(CO1) [Knowledge]
2. What are the devices and equipment required for implementation of CIM in any organization
(CO1) [Knowledge]
3. List out the three important components of CIM that distinguish from the other manufacturing system
(CO1) [Knowledge]
4. What are the advantages of process plan?
(CO5) [Knowledge]
5. Define process plan in CAPP?
(CO5) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **(4 X 5 = 20M)**

6. The furred lathe section has 8 machines, all devoted to the productions of the same part. The section operates 10shifts/wk. The number of hours'/shift averages 8.0. average production rate of each machine is 20 units/hr. determine the weekly production capacity of the turrets lathe section. Actual production is 8000 units/week.Findout the utilization of machine
(CO1) [Comprehension]
7. CIMOSA provides a solution for business integration with four types of products. Briefly explain the products
(CO1) [Comprehension]

8. Computer managed Process plan (CMPP) is a generative system capable of automatically making process. Draw neat flow chart of CMPP system overview

(CO5) [Comprehension]

9. What are the role of process panning in CAD/CAM integration. Explain in detail.

(CO5) [Comprehension]

PART C

ANSWER THE FOLLOWING QUESTION **(2 X 15 = 30M)**

10. CIM system uses different computer techniques to manufacture a product. Explain any five computer aided techniques that can be implemented in CIM

(CO1) [Application]

11. Advanced manufacturing planning attempts to forecast the new products that will be introduced in the next 2 to 10 years. Describe the concept with flow diagram.

(CO5) [Application]