

Code No.: ME604PC

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**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**  
**III-B.TECH-II-Semester End Examinations (Regular) - May- 2023**  
**CAD & CAM**  
**(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) State the hidden line elimination. [2M]
- b) Define NURBS. [2M]
- c) List the common entities of a typical surface modeler. [2M]
- d) Write down two important solid modeling techniques. [2M]
- e) What are all the problems encountered with NC system? [2M]
- f) List out some of the important NC languages. [2M]
- g) List out the stages in Group Technology. [2M]
- h) What is meant by CAPP? [2M]
- i) What are the important applications of CIM in manufacturing control? [2M]
- j) Is CIM a concept or a technology? [2M]

**PART-B**

**(50 Marks)**

2. Write the applications of CAD/CAM and explain the working principle of CRT with neat sketch. [10M]
- OR**
3. Explain the basic structure of CAD/CAM and basic configurations of CAD/CAM software. [10M]
4. Describe with the help of neat sketches the major surface entities provided by the CAD/CAM system. [10M]
- OR**
5. What is Bezier Surface? Discuss the properties of Bezier surface. [10M]
6. Explain part programming procedure with suitable example. [10M]
- OR**
7. Distinguish between numerical control and computer numerical control. [10M]
8. What are the various aspects of CAPP? Explain any one of them. [10M]
- OR**
9. Explain in detail about the Production flow analysis. [10M]
10. What is meant by CIM? Illustrate the importance of CIM in modern manufacturing system. [10M]
- OR**
11. Explain the working principle of CMM with neat sketch. [10M]

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