

M.Tech. Mechanical Engineering Design (CBCS) Semester-I
MED14 - Computer Aided Mechanical Design

P. Pages : 1

Time : Three Hours



GUG/S/25/14189

Max. Marks : 70

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- Notes :
1. All questions carry equal marks.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Illustrate your answers wherever necessary with the help of neat sketches.
 5. Solve **any five** questions.

1. a) Sketch and describe working of Raster refresh display. 7
b) Enlist and Explain the various steps which are used in computer Aided Design process. 7
2. a) Develop the DDA algorithm to draw a line with slope such that $-\infty < m < -1$. 7
b) Explain with examples role of CAD in following areas of design. 7
 - i) Geometric modeling.
 - ii) Engineering Analysis
3. a) Enlist various graphic input devices and explain any one of them. 7
b) Explain the term : Product life cycle 7
4. a) Elaborate the concept of generation of several alternate design and evaluation in CAD. 7
b) Explain the role of computers in the design process 7
5. a) What are the various hardware components in the CAD system? 7
b) Discuss the conventional CAD system configuration and current CAD system configuration. 7
6. a) Explain assembly modeling. 7
b) What do you mean by Geometric modeling? 7
7. a) What do you understand by B spline curves 7
b) What is Bezier curve? How it is defined and Where it is used? 7
8. Write short note on : 14
 - i) Stoke writing
 - ii) Raster scan
