

GOVERNMENT COLLEGE OF ENGINEERING AURANGABAD

An Autonomous Institute of Government of Maharashtra

BE Mechanical End Semester Examination Nov 2016 **21 NOV 2016**

Course Code ME 444

Subject CAD\CAM

Max Marks 60

Check whether you are get correct question paper

- Assume suitable data wherever necessary and specify it
- Figure to right indicate full Marks
- Q1 and Q4 is compulsory attempt Q2 OR Q3 and Q5 OR Q6
- Use of non-programmable calculator is allowed

Q1

[15]

- 1) The triangle ABC has vertices A(15,15) B(20,15) C(30,25) with global coordinate system. Calculate the new vertex position for local coordinate system X'-Y'. The local system has the origin at point O' having global coordinate (10,12) and positive X' axis makes an angle 45° with global axis. If the triangle is uniformly scaled by factor 0.5 about local coordinate system find vertices of this scaled triangle in local and global term
- 2) Differentiate between solid modeling and wire frame modeling

Q2

[15]

- 1) Write note on B Spline surfaces and surface manipulation.
- 2) What are the Knot values in B spline curves and how they affect curve shape?

OR

Q3

[15]

- 1) Explain building block approach in solid modeling. And explain and draw CSG tree with neat example
- 2) Write note on analytical surface. Describe their types with detail diagram

Q4

[15]

- 1) Write a manual part program for drilling and milling bracket. Assume 6 mm milling cutter diameter. Assume necessary data required (Fig 1)

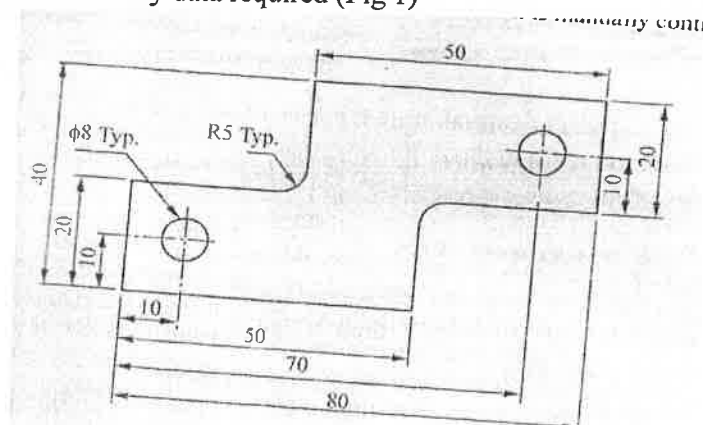


Fig 1

- 2) Write short note on SLS process in RP

