

Code No: **RT41032****R13****Set No. 1****IV B.Tech I Semester Supplementary Examinations, February/March - 2018****CAD/CAM****(Common to Automobile Engineering and Mechanical Engineering)****Time: 3 hours****Max. Marks: 70***Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B************PART-A (22 Marks)**

1. a) What is mathematics of projection? [4]
b) What are layers in CAD? [4]
c) What is NC mode? [3]
d) What are the two types of parts similarities? [4]
e) What additional benefits obtained by integrating CAQC with CAD/CAM? [4]
f) What are the four basic components of a CIM system? [3]

PART-B (3x16 = 48 Marks)

2. a) How the product cycle is revised with introduction of CAD/CAM. [8]
b) What are the various memories used in a computer? [8]
3. a) What are the various curve representation methods? [8]
b) How the line and circle are parametrically represented as Analytic curves? [8]
4. a) Differentiate CNC and DNC machines? [8]
b) What are the various NC elements? [8]
5. a) What are the three general methods to form group parts into families? [8]
b) What are the various hierarchical structure used in GT applications? [8]
6. a) What are the important effects which results from computer aided quality control? [8]
b) Discuss about scanning laser system used for non contact inspection. [8]
7. a) What are the important machine tools in a CIM system? [8]
b) What are the computer components used in CIM? [8]