

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*

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**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]