

RA

Code No: 137SR

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, October/November - 2020

CAD/CAM

(Automobile Engineering)

Time: 2 Hours

Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks

- 1.a) Explain the basic structure and basic configuration of CAD/CAM software.
- b) What are requirements of geometric modeling? [8+7]
2. Derive the parametric form equation for Bezier curve? List out its Characteristics. [15]
- 3.a) Write the parametric equation of Cylindrical surface, Surface of revolution, Regenerative surface.
- b) Explain the Blending functions, parameterization of surface patch, Subdividing. [8+7]
4. Explain the following:
 - a) Spatial occupancy enumeration
 - b) Sweep representation
 - c) Constructive modeling
 - d) Boundary representation. [15]
- 5.a) What are the basic elements of NC system? Explain them briefly.
- b) Briefly discuss about the coordinate system in NC system. [8+7]
- 6.a) Discuss the four types of statements used in APT part programming.
- b) State the advantages and disadvantages of Numerical Control. [8+7]
7. Briefly explain classify the methods of grouping parts into families. [15]
- 8.a) What are the components of an FMS?
- b) Discuss the various types of material handling system. [8+7]

---ooOoo---