

RA

Code No: 137SR

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, July/August - 2022

CAD/CAM

(Automobile Engineering)

Time: 3 Hours

Max.Marks:75

**Answer any five questions
All questions carry equal marks**

- 1.a) Describe the general design process considered in CAD.
b) What are the various applications of computers for design related tasks? [7+8]
- 2.a) Discuss the concept of non-parametric representation of curves.
b) State the features of B-Spline curve. [7+8]
- 3.a) Explain the parametrization of surface patch.
b) Write short notes on the following:
i) Constructive solid geometry
ii) Sweep representation. [7+8]
- 4.a) What are the elements of NC systems?
b) Bring out the differences between the NC, CNC and DNC systems. [7+8]
- 5.a) What are the different types of group technology machine cells?
b) What difficulties are faced in tradition process planning? [8+7]
- 6.a) How does the retrieval type of computer aided planning is processed?
b) What are the benefits of Material Requirement Planning? [8+7]
- 7.a) What are the basic requirements placed on the material handling systems?
b) Discuss about any one non-contact optical inspection method in CAQC. [7+8]
- 8.a) What are the benefits of FMS systems?
b) What are the functions of a computer in any CIM system? [7+8]

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