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Question Paper Code: 4021494

M.E. / M.Tech. DEGREE EXAMINATIONS, NOV/ DEC 2024

First Semester

CAD / CAM

P20CC101– COMPUTER APPLICATIONS IN DESIGN

(Regulation 2020)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions

PART – A

(10 x 2 = 20 Marks)

1. Define Computer Graphics.
2. Write the benefits of CAD.
3. What are the advantages of B-spline curve?
4. Discuss the various types of surfaces.
5. Identify the algorithms used for hidden surface removal.
6. Define Silhouette edges.
7. Why there is a need for tolerances?
8. Define assembly tree.
9. Give the types of graphics standard.
10. Write short notes on Open Graphics library.

PART – B

(5 x 16 = 80 Marks)

11. (a) Discuss various methods of clipping. (16)

(OR)

(b) Explain 2D and 3D transformation with matrix. (16)

12. (a) Explain different types of Bezier Curves in detail. (16)

(OR)

(b) Describe the CSG model with suitable example. (16)

13. (a) Write short notes on visibility of the object views. (16)

(OR)

(b) Illustrate the characteristics of the various color models. (16)

14. (a) Elaborate the various mating conditions for an assembly. (16)

(OR)

(b) Discuss the applications of simulation. (16)

15. (a) Construct the IGES file structure with examples. (16)

(OR)

(b) Explain STEP architecture with neat sketch. (16)

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