

Total No. of Questions : 4]

SEAT No. :

PA-438

[Total No. of Pages : 1

[5931]-74

S.E. (Automobile & Mechanical Engg./Mechanical S/W/

Automation & Robotics)

SOLID MODELING & DRAFTING

(2019 Pattern) (Semester - I) (202042)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Attempt Question 1 or 2 and Question 3 or 4.
- 2) Figures to the right indicate full marks.
- 3) Draw the neat sketch wherever necessary.

- Q1)** a) What is computer-aided design? Explain the phases involved in it. [6]
b) Explain the difference between Wireframe, Surface & Solid Modeling with suitable examples and sketches. [9]

OR

- Q2)** a) Explain the feature-based geometric modeling approach with suitable examples. [8]
b) Explain the concept of VRML, web-based viewing with a suitable example. [7]

- Q3)** a) Explain C^0 , C^1 , and C^2 continuities with a neat sketch. [6]
b) Write the parametric equation of line with endpoints A(1, 1, 1) and B(6, 8, 10). Find the coordinate of points at $u = 0.25, 0.50, 0.75$. [9]

OR

- Q4)** a) Distinguish between analytical and synthetic curves? [6]
b) Write Parametric Equation of Circle with center C(4, 4) and Radius 5 units. Find coordinates of points on circle at $30^\circ, 45^\circ$ and 60° . [9]

