**R19**

**Reg. No:**

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**
(AUTONOMOUS)
**B.Tech III Year I Semester Supplementary Examinations July-2022**
**CAD/CAM**
(Mechanical Engineering)

Time: 3 hours
Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

### UNIT-I

| | | | | |
|---|---|---|---|---|
| **1** | **a** | Explain the CAD Tools. | L2 | 6M |
| | **b** | Discuss clearly the functions of a graphics package. | L6 | 6M |

**OR**

| | | | | |
|---|---|---|---|---|
| **2** | **a** | Briefly explain the term scaling, translation and rotation used in Graphics. | L2 | 6M |
| | **b** | Illustrate detail about 2D and 3D transformations. | L2 | 6M |

### UNIT-II

| | | | | |
|---|---|---|---|---|
| **3** | **a** | Discuss clearly the Constructive Solid Geometry (CSG) method to create models. | L2 | 6M |
| | **b** | Describe briefly Parametric and non-Parametric representations. | L2 | 6M |

**OR**

| | | | | |
|---|---|---|---|---|
| **4** | **a** | Explain B-spline surface in detail. | L1 | 6M |
| | **b** | Write a short note on analytic representations. | L4 | 6M |

### UNIT-III

| | | | | |
|---|---|---|---|---|
| **5** | **a** | Write a short note on motion statement. | L5 | 6M |
| | **b** | Briefly explain about NC Coordinate systems. | L2 | 6M |

**OR**

| | | | | |
|---|---|---|---|---|
| **6** | **a** | Describe the Computer Assisted Part Programming with example. | L5 | 6M |
| | **b** | Write a short note on Manual part programming. | L2 | 6M |

### UNIT-IV

| | | | | |
|---|---|---|---|---|
| **7** | **a** | Determine briefly about production flow analysis (PFA). | L2 | 6M |
| | **b** | Discuss optical non-contact inspection methods. | L2 | 6M |

**OR**

| | | | | |
|---|---|---|---|---|
| **8** | **a** | Write Short notes on manufacturing system. | L2 | 6M |
| | **b** | Determine the components of FMS. | L2 | 6M |

### UNIT-V

| | | | | |
|---|---|---|---|---|
| **9** | **a** | Illustrate the Generative CAPP type system with neat sketch. | L2 | 6M |
| | **b** | Discuss briefly about MRP-I. | L5 | 6M |

**OR**

| | | | | |
|---|---|---|---|---|
| **10** | **a** | Explain about Machinability data systems. | L2 | 6M |
| | **b** | State and explain briefly about computer integrated production planning. | L2 | 6M |

*** END ***