Q.P. Code: 16ME302 **R16**

**Reg. No:** | | | | | | | | | | |

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**

(AUTONOMOUS)

**B.Tech II Year I Semester Supplementary Examinations Feb-2021**

ENGINEERING GRAPHICS

**(Electronics and Communication Engineering)**

Time: 3 hours Max. Marks: 60

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

**UNIT-I**

| | | |
|---|---|---|
| 1 | The vertex of a hyperbola is 60 mm from its focus. Draw the curve, if the eccentricity is 3/2. Draw a normal and a tangent at a point on the curve, 75 mm from the directri | **12M** |

**OR**

| | | |
|---|---|---|
| 2 | Draw a hypo cycloid of a circle of 50 mm diameter, which rolls inside another circle of 180 mm diameter for one revolution counter clockwise. | **12M** |

**UNIT-II**

| | | |
|---|---|---|
| 3 | A line AB of 100mm lengthis inclined at an angle of 300 to HP and 450 to VP. The point A is 15mm above HP and 20mm in front of VP. Draw the projections of the line. | **12M** |

**OR**

| | | |
|---|---|---|
| 4 | A line CD 75mm long is inclined at an angle of 45° to HP and 30° to VP. The point P is 15mm above HP and 20mm in front of VP. Draw the projections of the line. | **12M** |

**UNIT-III**

| | | |
|---|---|---|
| 5 | A regular hexagonal plane of 45 mm side has a corner on HP, and its surface is inclined at 450 to HP. Draw thc projections, when the diagonal through the corner, which is on HP makes 300 with VP | **12M** |

**OR**

| | | |
|---|---|---|
| 6 | A pentagonal prism of base side 30mm and axis 60mm has one of its rectangular faces on the HP and the axis inclined at 60 degree to the VP. Draw its projections. | **12M** |

**UNIT-IV**

| | | |
|---|---|---|
| 7 | A cylinder of diameter of base 40 mm and axis 55 mm long, is resting on its base on cut by a section plane, perpendicular to VP and inclined at 45 degreeto HP. The secti is passing through the top end of an extreme generator of the cylinder. Draw the deve of the lateral surface of the cut cylinder. | **12M** |

**OR**

| | | |
|---|---|---|
| 8 | A square pyramid, with side of base 30 mm and axis 50 mm long, is resting on its base on HP with an edge of the base parallel to VP. It is cut by a section plane, perpendicular to VP and inclined at 45 degreeto HP. The section plane is passing through the mid-point of the axis. Draw the development of the surface of the cut pyramid. | **12M** |

**UNIT-V**

| | | |
|---|---|---|
| 9 | Draw the isometric view of a cone of base diameter 50mm and axis 60 mm. The cone has its base on (a)HP (b)VP | **12M** |

**OR**

| | | |
|---|---|---|
| 10 | Draw the isometric projection of a pentagonal prism of base side 35 mm and axis 60mm. The prism rests on its base on the HP with an edge of the base parallel to the VP | **12M** |

*** END ***