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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech I Year II Semester Regular Examinations November-2021

ENGINEERING GRAPHICS

(Common to CSE & CSIT)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

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| 1 | a Construct a parabola with base 120mm and length of the axis 60mm by using Rectangle method. | L3 | 6M |
| | b Draw the involute of a regular pentagon of side 20 mm. | L3 | 6M |

OR

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| 2 | Construct a hypo cycloid of a circle of 50 mm diameter, which rolls inside another circle of 180 mm diameter for one revolution counter clockwise. | L3 | 12M |
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UNIT-II

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| 3 | A point E is 20 mm below HP and 30mm behind VP. Another point F is in front of VP and above the HP. The distance between the projectors of the points is 60mm. Determine the point F and Point E if the length of line joining their top views and front views are 80mm & 90mm. | L2 | 12M |
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OR

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| 4 | A Line EF 85mm long has its end E is 25mm above HP and 20mm in front of VP. The top and front views of the line have lengths of 55mm and 70mm respectively. Draw the projections of the line and Find its true inclinations with VP & HP. | L3 | 12M |
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UNIT-III

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| 5 | An equilateral triangular plane ABC of side 40mm has its plane parallel to VP and 20mm away from it. Draw the projections of the plane when one of its sides is (i) perpendicular to HP (ii) parallel to HP and (iii) inclined to HP at an angle of 45°. | L3 | 12M |
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OR

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| 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° to the VP. Draw its projections. | L3 | 12M |
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UNIT-IV

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| 7 | A square pyramid of base 40 mm and axis 60 mm long, Its base lies on VP with its axis parallel to HP. A cut sectional plane, 60° to VP and it pass 10mm away from the axis. Draw the projections sectional front view. | L3 | 12M |
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OR

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| 8 | A pentagonal pyramid, side of base 30 mm and height 52 mm, stands with its base on HP and an edge of the base is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 40° to HP and passing through a point on the axis, 32 mm above the base. Draw the development of the lateral surface of the truncated pyramid | L3 | 12M |
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