



MARRI LAXMAN REDDY

INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

I B.Tech II Sem Regular Examination, October/November 2020

ENGINEERING GRAPHICS

(CSE)

Time: 2 Hours.

Max. Marks: 70

Note: 1. Answer any FIVE questions.

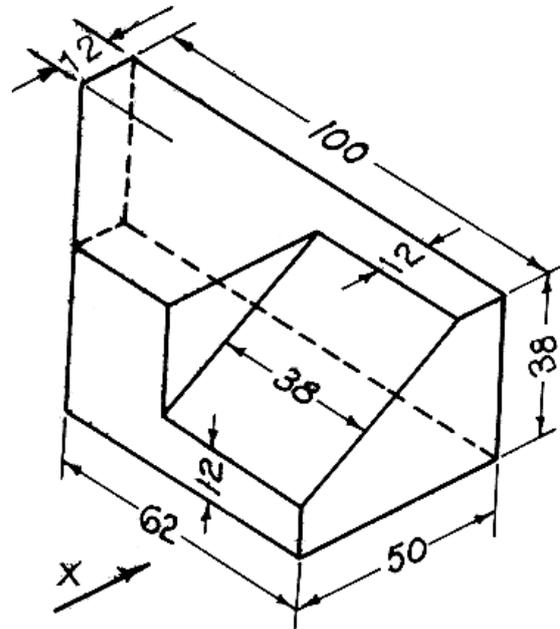
2. Each question carries 14 marks and may have a, b as sub questions.

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|---|--|-----|
| 1 | <p>a) Two points A and B are 100 mm apart. A point C is 75 mm from A and 60 mm from B. Draw an ellipse passing through A, B and C.</p> | 7M |
| | <p>b) Construct a scale of 1/60 to read meters and decimeters and long enough to measure up to 6 m. Mark on it a distance of 4.8 m</p> | 7M |
| 2 | <p>A circle of 40 mm diameter rolls along a straight line without slipping. Draw the curve traced by the point P on the circumference, for one complete revolution of the circle. Name the curve draw the tangent to the curve at a point on it 40 mm from the line.</p> | 14M |
| 3 | <p>a) A line AB, 65 mm long, has its end A 20 mm above the H.P. and 25 mm in front of V.P. The end B is 40 mm above the H.P. and 65 mm in front of the V.P. Draw the projections of AB and show its inclinations with H.P and the V.P</p> | 7M |
| | <p>b) A regular pentagonal plate of side 30 mm is placed with one side on H.P such that the surface is inclined at 45° to H.P and perpendicular to V.P draw its projections</p> | 7M |
| 4 | <p>A hexagonal pyramid of base 30 mm and axis height 60 mm is resting on the base on H.P with two of the base edges parallel to V.P. It is cut by a plane perpendicular to V.P, inclined 30° to H.P and bisects axis of the pyramid. Draw the development of the lateral surface of the pyramid.</p> | 14M |
| 5 | <p>a) A regular pentagon of 25 mm sides has a side on the ground. Its plane is inclined at 45° to HP & perpendicular to VP. Draw its projections.</p> | 7M |
| | <p>b) A pentagonal prism, base of 25 mm and axis of 50 mm long has an edge of its base on the ground. Its axis is inclined at 30° to the ground and parallel to V.P. Draw its projections</p> | 7M |

6 A vertical square prism, base of 50mm side and height of 70 mm is completely penetrated by a horizontal square prism base 35 mm side and 70 mm height, so that their axis intersect. The axis of the horizontal prism is parallel to the V.P, while the faces of the two prisms are equally inclined to the V.P. Draw the projections of the solids showing lines of intersection 14M

7 a) Draw the development of the lateral surface of the square pyramid of base 40 mm and axis 65 mm long, has its base on the H.P. And all the edges of base are equally inclined to the V.P. It is cut by a section plane, perpendicular to V.P, inclined at 45° with H.P and bisecting the axis 7M

b) Draw the Front view and top view of the given fig 1. All dimensions are in mm 7M



8 Draw isometric view of the figure 2. all dimensions are in mm 14M

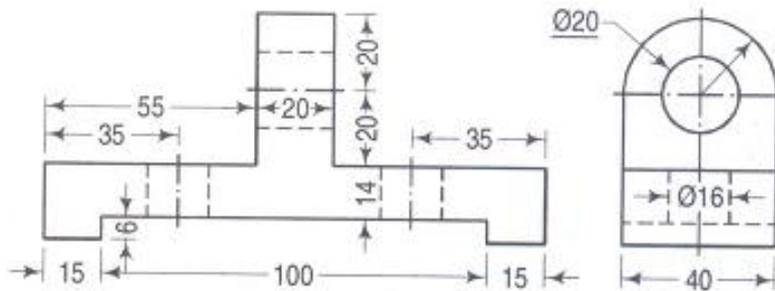


Figure 2

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