

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE**(UGC – AUTONOMOUS)****B TECH I Semester Examinations, July 2021****(Common to CE, ECE)****ENGINEERING GRAPHICS****Answer any five questions****All questions carry equal marks****Time : 3 Hours****Max. Marks : 75**

1. a) Construct a diagonal scale of $1\text{cm}=3\text{KM}$ and mark the length of 31.4KM on it. [10]
b). Draw hyperbola whose distance of focus is 55 mm and $e = 1.5$. Draw the tangent and normal 50 mm from the directrix. [15]
2. Draw epicycloid of a circle of 40 mm diameter, which rolls outside on another circle of 150 mm diameter for one revolution clockwise. Draw a tangent and normal to it at a point 95 mm from the center of the directing circle. [25]
3. PQRSTU is a regular hexagonal lamina of side 25mm rests on one of its edge on HP. The lamina makes 45° to HP and the side opposite to the resting edge is inclined at 30° VP. Draw the projections. [25]
4. A square pyramid 35 mm side of base and 60 mm axis length rests on HP on one its corners of the base such that the two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP at 45° . [25]
5. A right cone of 50mm diameter of base and 65mm height stands on its base on HP. It is cut to the shape of truncated cone with its truncated surface is inclined at 45° to the axis lying at a distance of 35mm from the apex of the cone. Obtain the development of the lateral surface of the truncated cone. [25]
6. Draw the orthographic views(Front/Top and side view) of an object show in the Fig.1 (All dimensions are in mm) [25]

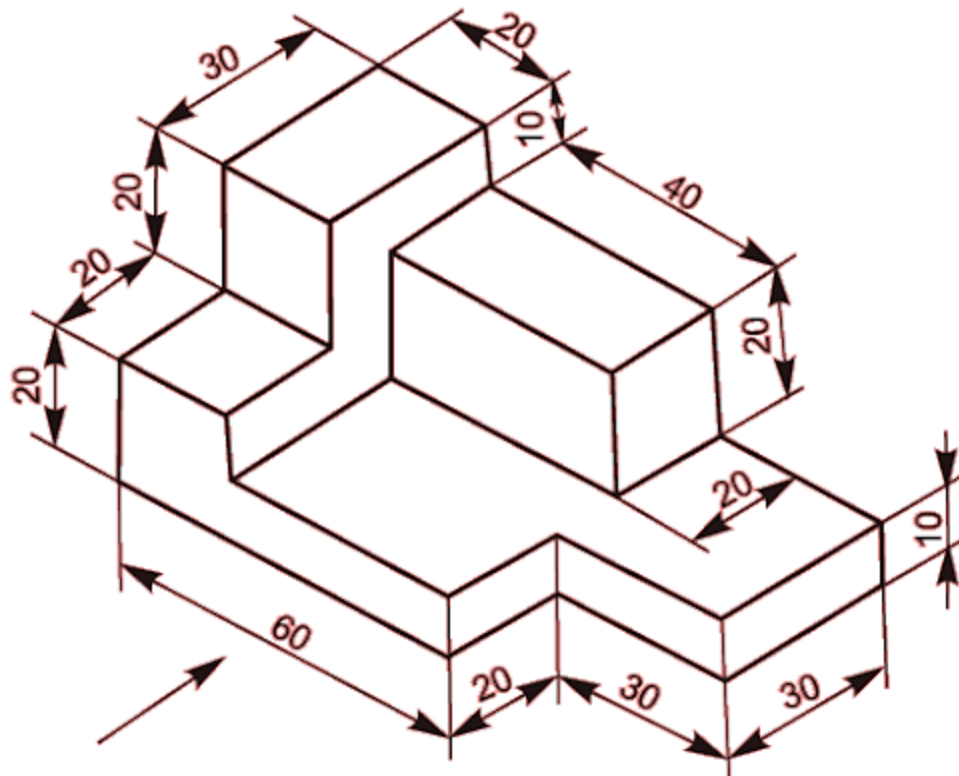


Fig 1: Isometric view of the block

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