Code No: 151AD

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year I Semester Examinations, October/November - 2020
ENGINEERING GRAPHICS
(Electronics and Communication Engineering)

Time: 2 hours **Max. Marks: 75**

Answer any three questions
All questions carry equal marks
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1.a) Construct a diagonal scale of 1cm = 2.5 km. And mark the length of 26.4 km on it.
b) Draw one branch each of a hyperbola and conjugate hyperbola whose transverse and conjugate axes are 60 mm and 80 mm respectively. Also locate the foci. [10+15]

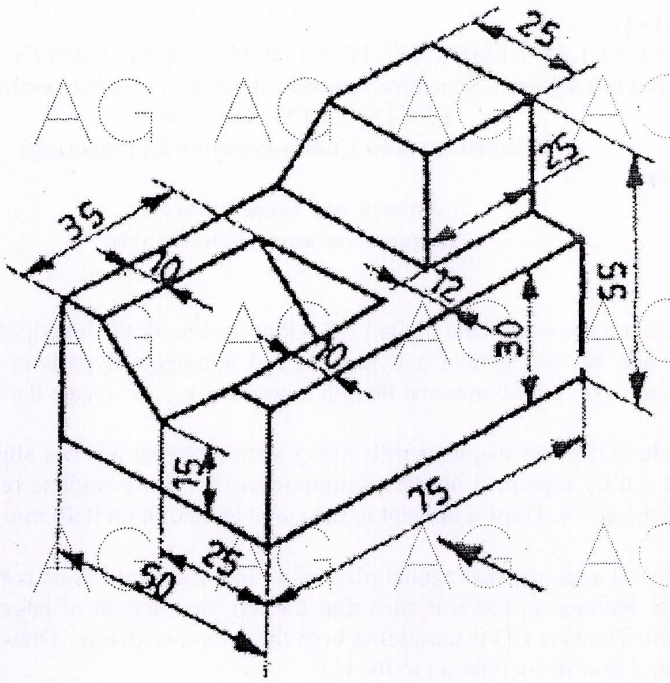
2. A circle of 50 mm diameter rolls along a straight line without slipping. Draw the curve traced out by a point P on the circumference, for one complete revolution of the circle. Name the curve. Draw a tangent to the curve at a point on it 40 mm from the line. [25]

3. ABCDE is a regular pentagonal plate of 40 mm side and has its corner A on the H.P. The plate is inclined to the H.P such that the top view length of edges AB and AE is each 35 mm. The side CD is parallel to both the reference planes. Draw the projections of the plate and find its inclination to the H.P. [25]

4. Draw the projections of a cone, base 50 mm diameter and axis 55 mm long, when it is resting on the V.P on a point on its base circle with the axis making an angle 30^0 with the V.P and 45^0 with the H.P. [25]

5. A cylinder of diameter 50 mm and height 75 mm is resting on the ground on its flat end. It is cut by a sectional plane inclined at 30^0 to the axis of the cylinder and passing through a point on the axis at height of 50 mm from the base. Draw the lateral surface of the bottom part. [25]

6. Draw the front view, both the side views and top view of the following block. (All dimensions are in mm) [25]



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