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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year II Semester (Special) Examinations, January - 2021
ENGINEERING GRAPHICS
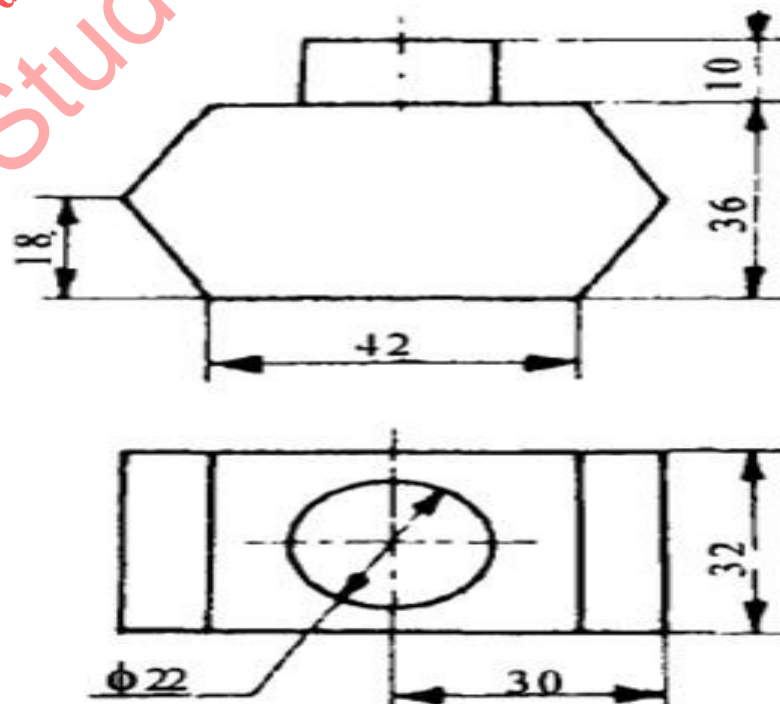**(Common to EEE, IT)**

Time: 2 hours   Max. Marks: 75

Answer any three questions
All questions carry equal marks
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1. Draw a diagonal scale to read kilometer, hectometer and decameter given that 1 km is represented by 5 cm on the drawing. Mark on the scale a distance of 1.54 km. What is the RF of the scale? [25]

2. Draw the projections of a straight line AB 80 mm long inclined at 45^0 to the HP and 30^0 to the VP with the end A in the HP and the end B in the VP. [25]

3. A hexagonal prism of side of base 25 mm and axis 60 mm long lies with one of its rectangular faces on the HP, such that the axis is inclined at 45^0 to the VP. Draw its projections. [25]

4. A hexagonal pyramid with side of base 30 mm and height 75 mm stands with its base on HP and an edge of the base parallel to VP. It is cut by a plane perpendicular to VP, inclined at 45^0 to HP and passing through the mid-point of the axis. Develop the lateral surface of the truncated pyramid. [25]

5. A cylinder of base diameter 70 mm is resting on its base on the HP. It is penetrated by another cylinder of base diameter 50 mm, the axis of which is parallel to both the principal planes. The two axes are 14 mm apart. Draw the projections of the combination and show the curve of intersection. [25]

6. The orthographic views of an object are shown in figure. Draw its isometric view. All dimensions are in mm. [25]

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