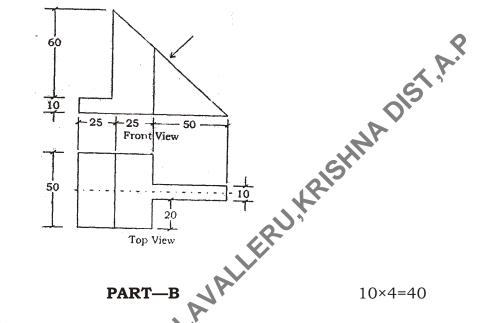


**3.** Draw a tangent to a circle of 30 mm diameter from a point 40 mm outside the circle.

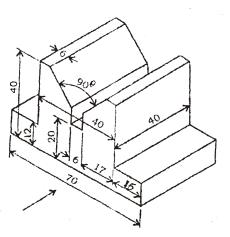


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4. The following figure shows front view and top view of an object. Draw an auxiliary in the direction of arrow :

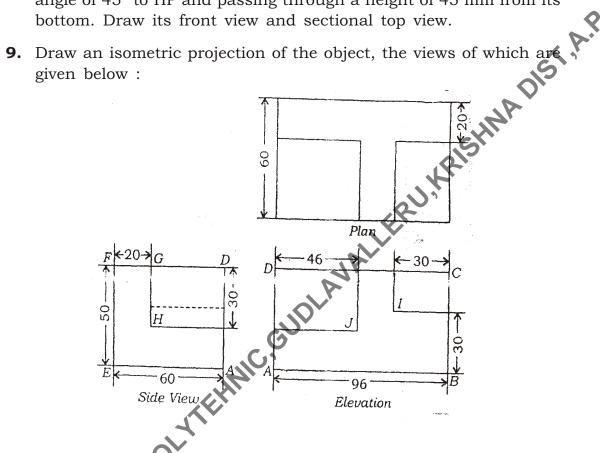


- Instructions : (1) Answer any four questions.
  - (2) Each question carries ten marks.
  - 5. Draw an ellipse whose major axis and minor axis are 80 mm and 60 mm by concentric circle method.
  - 6. Draw the front view and top view in first angle projection of a pentagonal plane whose side is 30 mm which is perpendicular to vertical plane and making an angle of 45° to horizontal plane.
- 7. Draw the front view, side view and top view in first-angle projection A.A.N.M&V.Y. of the following V-block :



[ Contd...

- 8. A regular hexagonal pyramid of side 30 mm and height 65 mm is resting on its base in HP and one of its base sides is parallel to VP. It is cut by a cutting plane which is perpendicular to VP, makes an angle of 45° to HP and passing through a height of 45 mm from its



10. Develop the lateral surface of a pentagonal pyramid of base side 25 mm and height 60 mm. .n R.A.N.M&V.V.R A.A.N.M