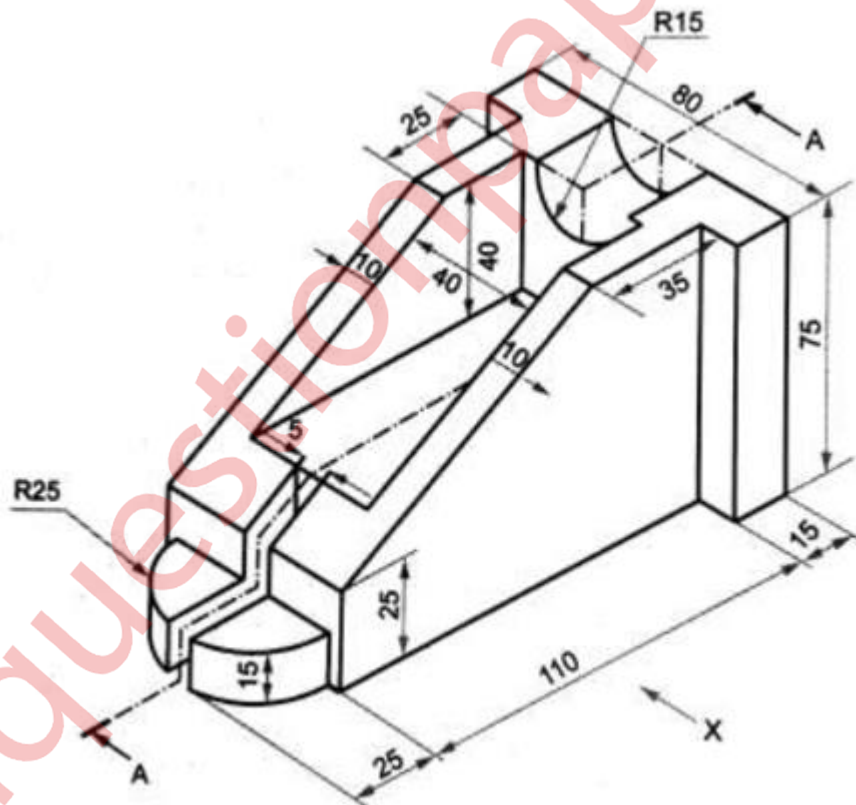**Time: 3 Hrs**   **Max Marks: 60**

Note :

- Solve any **FOUR** questions.
- All dimensions are in **mm**.
- Use First Angle Method Of Projection.
- Assume Suitable Dimension If Necessary.

Q.1   Following figure shows the pictorial view of an object. Draw
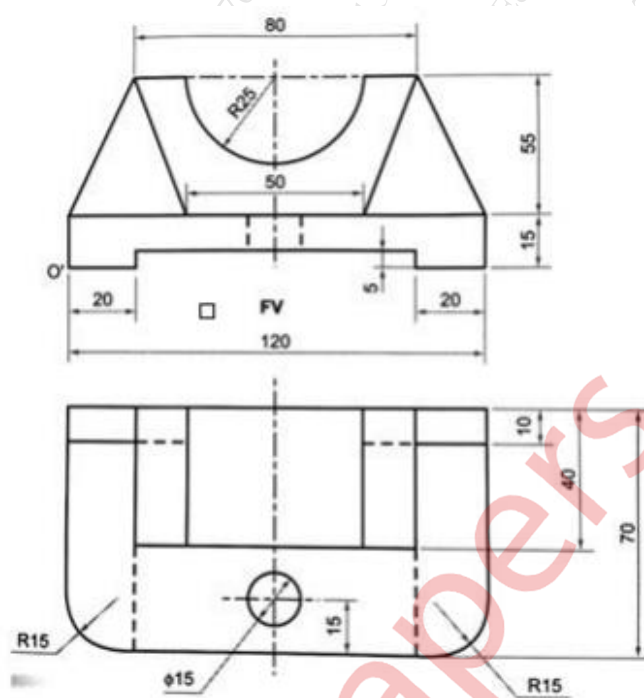   i)   Sectional FV along section A-A   **[5]**
         ii)   Top view.   **[4]**
         iii)   Leftt Hand Side view   **[4]**
         iv)   Insert at least 10 dimensions   **[2]**

Q.2   (a)   A cylinder of diameter 50mm and axis 65 mm long is resting on V.P on a   **[6]**
               point on the base circle with axis inclined at 45° to V.P and parallel to HP.
               Draw the projections of cylinder.
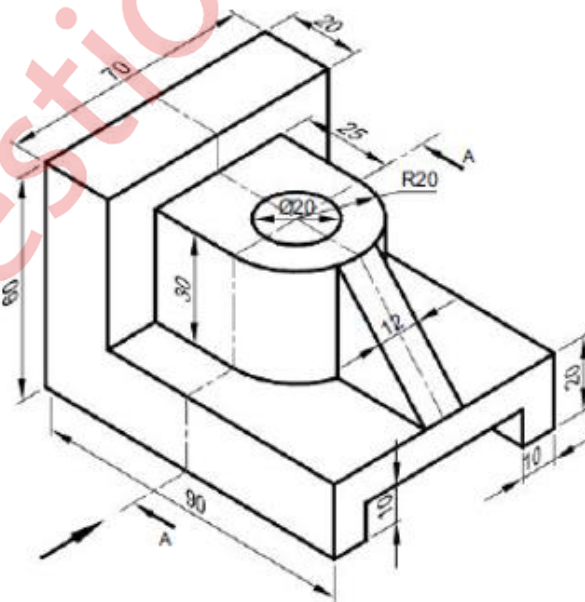
41524   **Page 1 of 3**

(b) Draw the isometric view of the object whose FV and TV are as given below. **[9]**

Q.3 (a) The pictorial view of a machine part is shown in following figure.
Draw
   i) Front view from the direction "X" **[4]**
   ii) Top view **[4]**
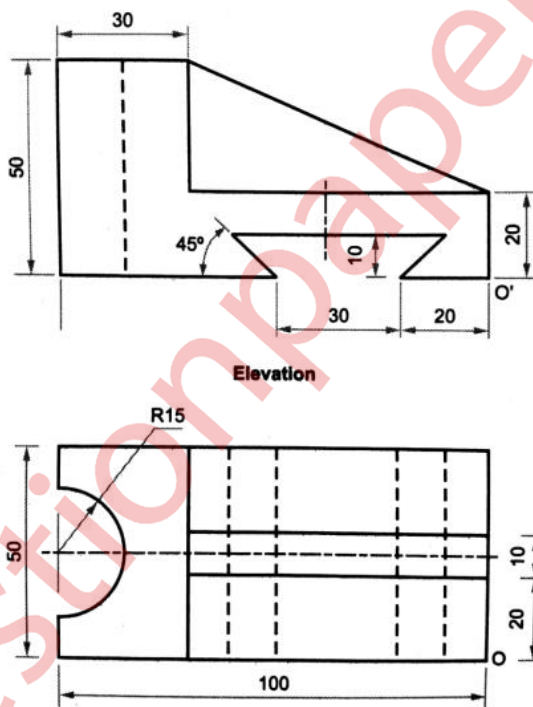   iii) Insert at least 6 Dimensions. **[1]**

(b) Draw a hexagon ABCDEF of 25 mm sides with two of its sides AB & DE being vertical. One end of an inelastic string is attached at corner C of the hexagon and wound around its perimeter completely by holding the free end of the string such that the string is always tightly stretched. Trace the path of the free end. Name the curve. **[6]**

Q.4   A hexagonal pyramid of base side 30 mm and axis 60 mm, has an edge of its **[15]**
       base on the HP inclined at 45° to the V.P. Draw the projections of the pyramid
       when the axis is inclined at 30° to the H.P.

Q.5   Draw the projections of a line AB when its end A is 20 mm above H.P. and 10 **[15]**
       mm in front of the V.P., its end B is 55 mm above the H.P. and 60 mm in front
       of the V.P. The distance between end projectors of line AB is 45 mm.
       Determine its true length, and inclination of line with the H.P. and V.P.

Q.6   (a)   The FV and TV of an object is shown below. Draw the Isometric view of the **[8]**
              object.

Elevation

       (b)   A pentagonal prism of side of base 35 mm and axis 65mm long is resting on **[7]**
              one of its base edges on VP such that the base of the prism is inclined 45
              degrees to VP and axis parallel to HP.Draw the projections of prism.

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