DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE – RAIGAD -402 103

Summer Supplementary Examination 2023

Branch: B. Tech (All)   **Sem.: I/II**

Subject with Subject Code: Engineering Graphics   **Marks: 60**
                                                BTES103G

Date: 11/08/2023   **Time: 4 Hrs**

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**Instructions to the Students**

      1. Each question carries 12 marks.

      2. Attempt **any five** questions of the following.

      3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.

      4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

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                                                                       (Marks)

Q.1.   a) Draw a regular hexagon of side 30 mm.   (4)

      b) Redraw the following figure by correcting errors (x) of dimensioning.   (5)
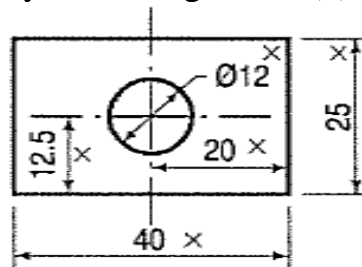
      c) Draw the projections of a point P which is 20 mm above H.P. and 15 mm in front of the V.P. Draw its LHSV also.   (3)

Q.2.   Draw the following views of the object shown in the figure 1, in the X direction.

          i) Front view   (6)

          ii) Top view   (6)

Q.3.   a) The front view of a 75 mm long line measures 55 mm. The line is parallel to the H.P. and one of its ends is in the V.P. and 25 mm above the H.P. Draw the projections of the line and determine its inclination with the V.P.   (6)

      b) A rectangular plane surface of size L x W is positioned in the first quadrant and is inclined at an angle of 60° with the H.P. and 30° with the V.P. Draw its projections. (Consider L = 50 mm and W = 30 mm)   (6)

Q.4.   A hexagonal pyramid, base 25 mm side and axis 50 mm long, has an edge of its base on the ground (H.P.). Its axis is inclined at 30° to the ground and parallel to the V.P. Draw its projections.   (12)

Q.5. A hexagonal pyramid, base 30 mm side and axis 65 mm long, is resting on its base on the H.P. with two edges parallel to the V.P. It is cut by a section plane, perpendicular to the V.P. inclined at 45° to the H.P. and intersecting the axis at a point 25 mm above the base. Draw the front view, sectional top view, sectional side view and true shape of the section. (12)

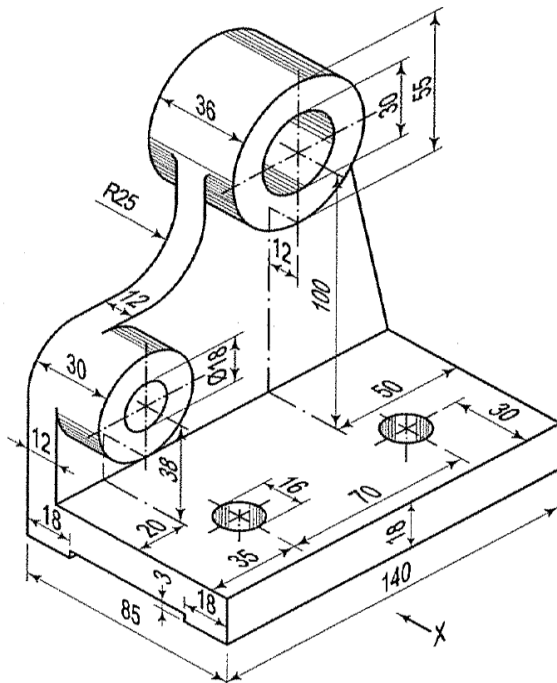Q.6. Figure 2 shows Front View (FV) and Top View (TV) of an object by **third angle projection method**. Draw its isometric view. (12)
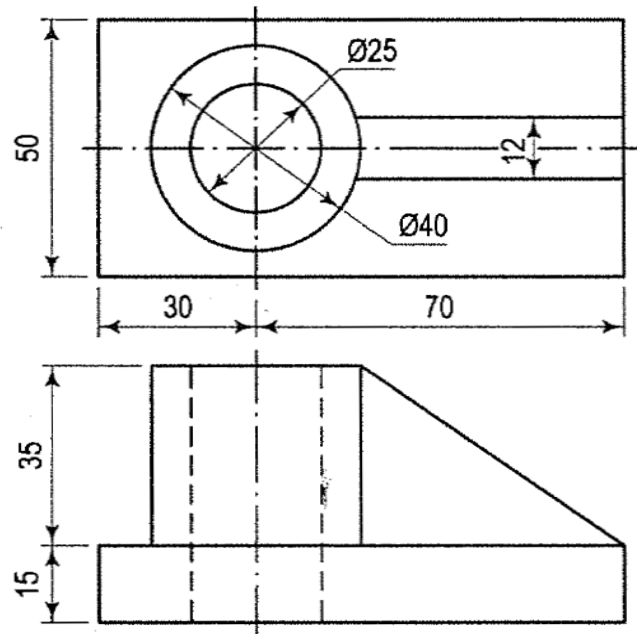

Figure 1 (Q.2)

Figure 2 (Q.6)