Q. P. Code : 50063

(REVISED COURSE)

[3 Hours]   **[Total Marks: 60]**

N.B.
1. Question No. 1 is compulsory.
2. Answer any Three questions out of remaining Five questions.
3. Use only Drawing Sheets for answering.
4. Use your judgement for any unspecified diminution.
5. Use First Angle Method of projection only.
6. Retain all construction Lines.

Q.1   a.   A circle of 60mm diameter rolls along a straight line without   (6)
           slipping, draw the curve traced by a point 'P' on the circumference
           of the circle for one complete revolution.

      b.   The pictorial view of a machine part is given in Fig.1b Draw
           (i) Front View in the direction of 'X'   (4)
           (ii) Top View.   (4)
           (iii) Insert at least 10 major dimensions.   (1)

Fig.1b   Fig.2

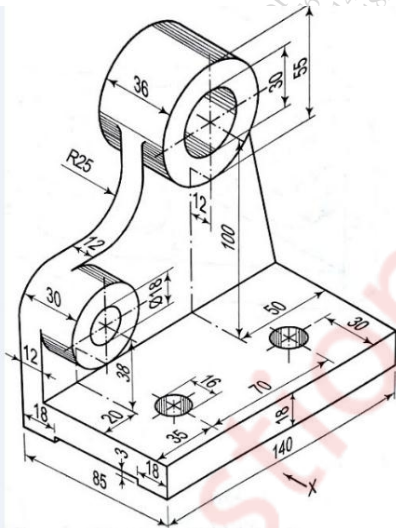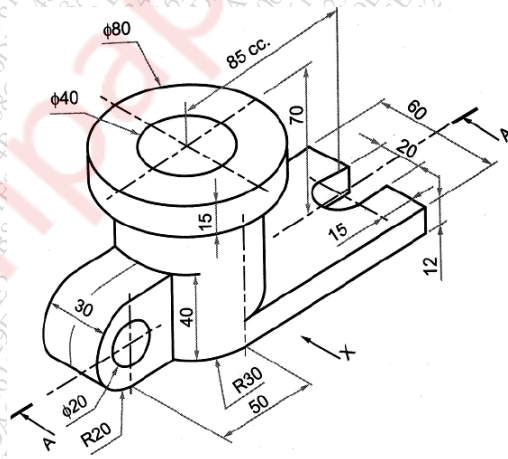Q.2   Fig.2 shows a pictorial view of a machine part, Draw:
         (a) Sectional Front View looking along 'X' (Section A-A)   (5)
         (b) Top View   (4)
         (c) LHSV   (4)
         (d) Insert at least 10 major dimensions.   (2)

Q.3   A hexagonal pyramid of 30mm edge of base and 70mm length of   (15)
         axis has base edge on the HP. The axis is inclined at 30⁰ to HP.
         and 45⁰ to VP. Draw the projections.

Q.4   a.   A cylinder of base diameter 50mm and height 60mm is resting on a   (6)
           point on base circle on H.P. with axis inclined at 30⁰ to H.P. Draw
           its projections.

TURN OVER

b.   Draw an isometric view of the Fig.4b object using natural scale.   (9)
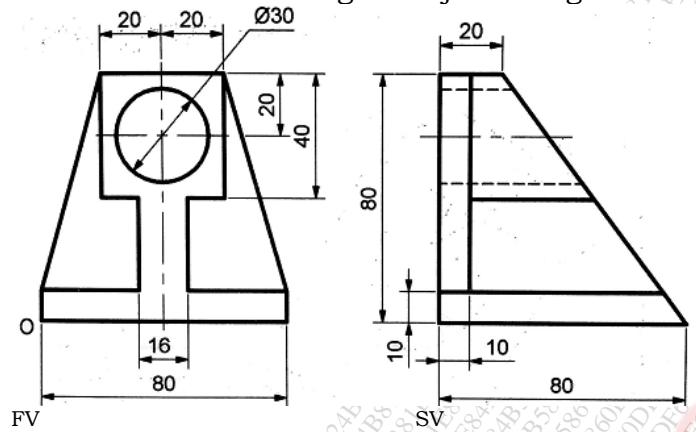

Fig.4b

Q.5   A cone base 50mm diameter and axis 65mm long is resting on its   (15)
base on the H.P A section plane perpendicular to V.P and inclined
at 45⁰ to H.P cuts the cone, bisecting its axis. Draw front view,
sectional top view, sectional side view and the true shape of the
section and also draw its development of lateral surface.

Q.6 a.   A line AB 70mm long is inclined at an angle of 30⁰ to HP and 45⁰ to   (9)
VP. Its end point 'A' is 20mm above HP and 25mm in front of VP.
Draw the projections when point 'B' is in the first quadrant.

b.   Draw an isometric view of the following object using natural scale.   (6)
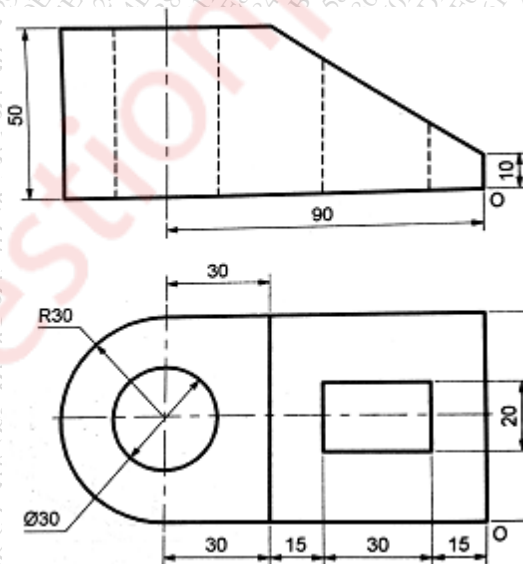

Fig.6b