FE, sem. - I CBGS, FH2018

Engg. Drawing 12/06/18

(OLD)

Q. P. Code : 50062

(3 Hours)

[Total Marks: 60]

N. B. – 1. *Question* ***No. 1*** *is* ***compulsory.***

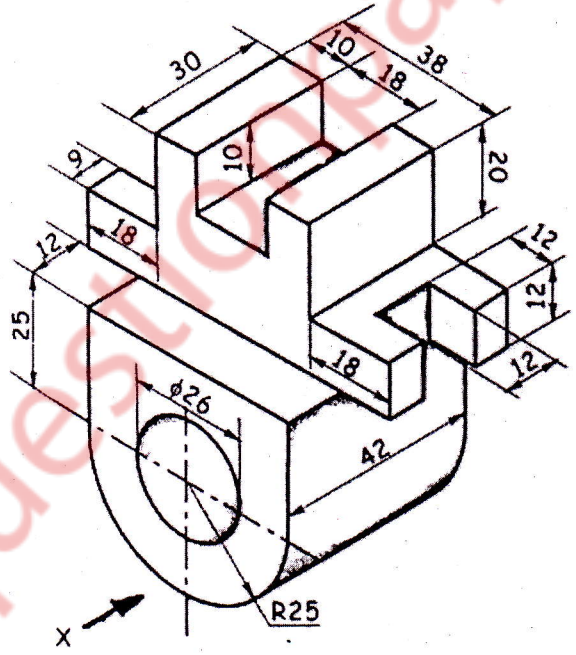
2. *Attempt any three questions out of remaining five questions.*
3. ***Use first angle method of projection****, unless mentioned otherwise.*
4. *Write all answers on drawing sheets only & use both the sides of the sheets.*
5. ***Use your own judgment for any unspecified dimension.***
6. *Retain construction lines.*
7. *All dimensions are in mm.*

Q.1 (a) One end of an inelastic string, 130 mm long is attached to the circumference of a circular disc of 50 mm diameter. The free end of the string is wound around the disc, keeping always tight. Draw the locus of the free end and name the curve. ***(06)***

(b) For the object shown in figure draw the following views -

(i) Front view in the direction of arrow. ***(05)***

(ii) Top view. ***(04)***



TURN OVER

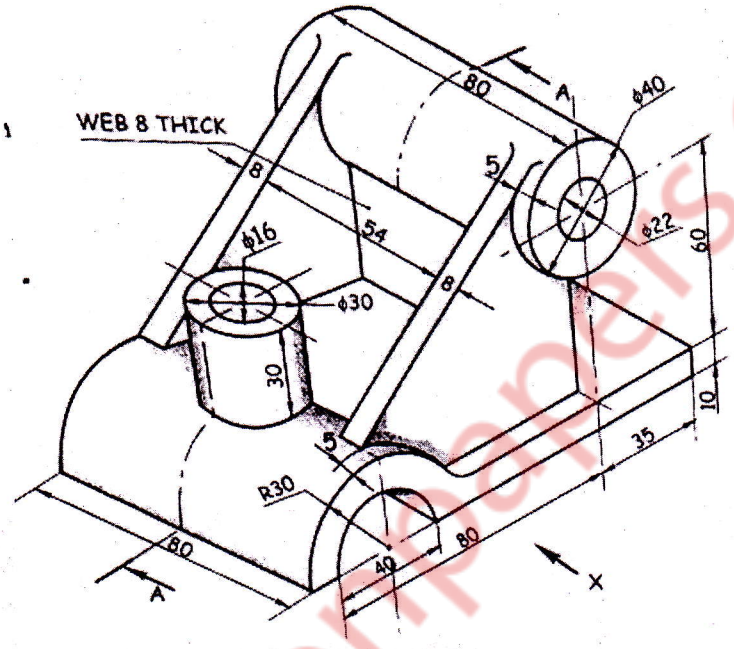
Q. 2 For the object shown in figure draw the following views –

(i) Sectional front view from X direction section along A-A. *(04)*

(ii) Side view from left *(04)*

(iii) Top view *(05)*

(iv) Insert the major dimensions *(02)*



Q. 3 A hexagonal pyramid of 30 mm side of base and slant edges 65 mm long is lying on one of its triangular surface in the VP, so that its axis is inclined at an angle of 45^0 to the HP, Draw its projection if apex is nearer to the observer. *(15)*

Q. 4 (a) A cylinder of 50 mm diameter of base and 70 mm length of an axis has resting on one point of the circumference in VP. Draw its projections if axis is inclined at 30^0 to VP and parallel to HP. *(06)*

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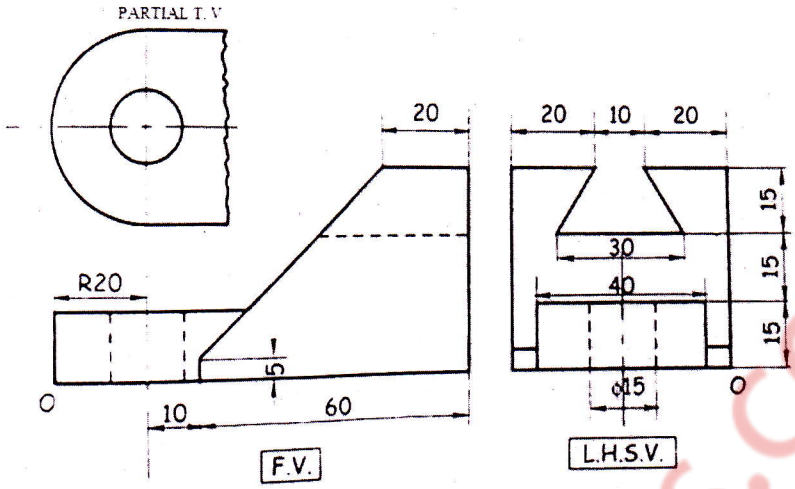
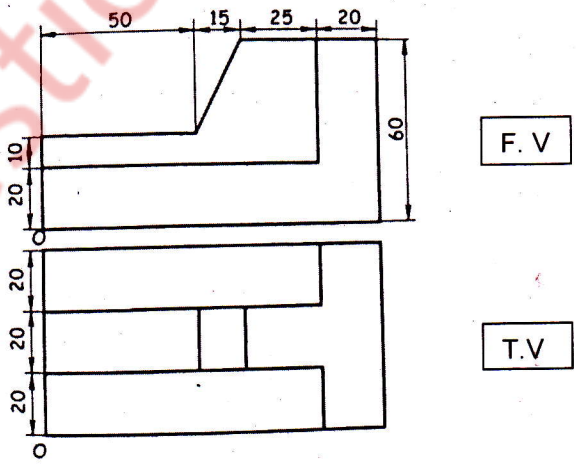
Q. 4 (b) Figure shows three views of an object. Draw its isometric view with 'O' as origin. *(09)*



Q. 5 A cone of base diameter 60 mm and axis height 75 mm is resting on HP on one of its generators with axis parallel to the VP. It is cut by A.I.P. such that the true shape of the section will be a parabola with the axis length equal to 60 mm. Draw the projection of cut solid & D.L.S. of cone removing the apex. *(15)*

Q. 6 (a) The End P of straight line PQ 30mm above HP 40mm in front of VP. The line is inclined at 30° to the HP and 40° with the VP. The Distance between the ends projection measures parallel to XY line is 60mm. Draw the projection if point "Q" is in second quadrant. Find out the true length of the line. *(09)*

(b) Figure shows two views of an object. Draw its isometric view with 'O' as origin. *(06)*



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