

QP Code : 3143

Mark : 75

(OLD)

Time: 3Hrs

1. Question No 1 is compulsory. Solve any four from remaining
2. Use your own judgment for any unspecified dimension
3. Solve by first angle method only
4. Retain all construction lines

Q1. Fig 1 shows pictorial view of an object. Draw following

(15)

- i) Sectional Front view along AA
- ii) Top view
- iii) Left Hand Side view

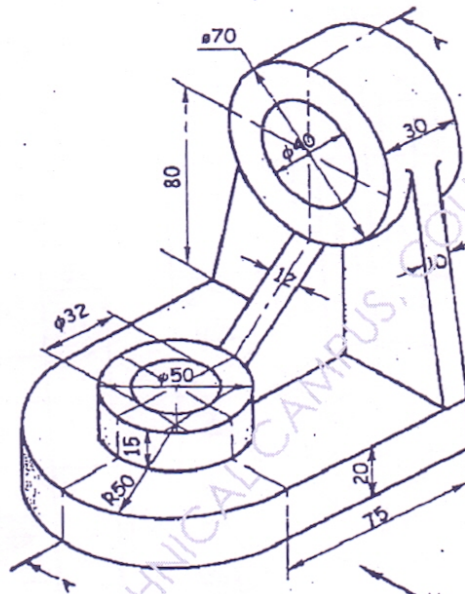


Fig.1

- Q 2. A regular pentagonal pyramid sides of 30mm and axis height 60mm lying in one of its triangular surface on HP so that the top view of the axis is inclined at  $45^\circ$  to VP. Draw its projections when its apex is nearer to VP. (15)
- Q 3. A cylinder of base 60mm diameter and 80mm long is resting on its circular base on the HP. A section plane perpendicular to VP and inclined at  $60^\circ$  to HP cuts the axis at a point 20mm from its top end. Draw the Front view, sectional top view and true shape of the section. Also draw the development. (15)
- Q 4. a) A line AB is 90mm long is inclined at  $45^\circ$  to the HP and its top view makes an angle of  $60^\circ$  with XY. The end A is in the HP and 15mm in front of the VP. Draw its projections and find its true inclination with the VP. (12)
- b) Draw Front view and Top view of the hexagonal nut (3)

RJ-Con. 9011-15.

[TURN OVER

- Q5. a) Draw an involute for a circle of 50mm diameter. Draw tangent and normal at any point on the curve. (10)
- b) Draw free hand sketches of the following
- i) Conventional representation of internal and external threads (3)
  - ii) Wing nut (Two views) (2)

Q6. Fig 2 shows front view and right hand side view of an object. Draw

- i) Draw sectional front view along AA
- ii) Sectional side view along BB
- iii) Top view

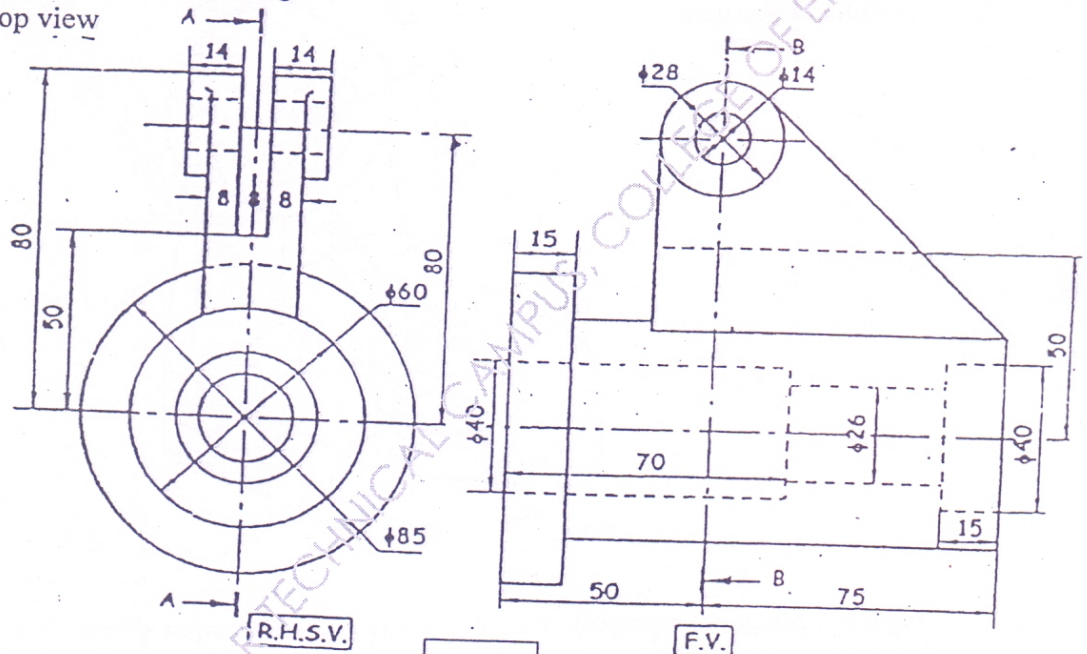


Fig. 2

Q7. Fig 3 shows two views of an object, draw isometric view of it using natural scale. (15)

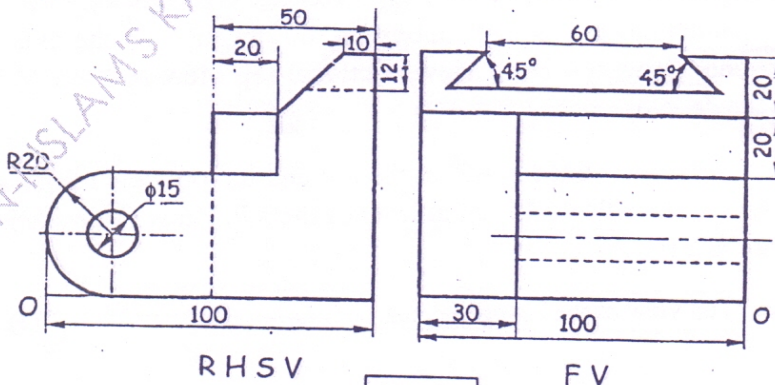


Fig. 3