

2021

ENGINEERING DRAWING

(Theory)

Full Marks : 70

Pass Marks : 21

Time : Three hours

Instructions :

- (i) Attempt all the questions.
- (ii) All dimensions are in millimeters.
- (iii) Missing and mismatching dimensions, if any may be suitably assumed.
- (iv) Use both sides of the drawing sheet if necessary.
- (v) Follow the SP : 46-2003 codes, (With first angle method of projection) if not mentioned.

1. Answer the following Multiple Choice Questions and rewrite the correct choice on your drawing sheet. 1×5=5

a. A drafter cannot replace a :

- i. Protector
- ii. T-square
- iii. Set square
- iv. Compass

b. An ellipse has how many foci ?

- i. 1
- ii. 2
- iii. 3
- iv. 4

P.T.O.

6. A cylinder of 35 mm diameter and 50 mm long axis, is resting on H.P. with its axis inclined to it at 30° towards left and parallel to V.P. It is sectioned by a Vertical Plane, passing through its circular face on top and inclined to V.P. towards the right. Project its sectional Front view and Top view. 14
7. Draw to scale 1 : 1, the following views of the machine block shown in Fig. - 1. (Use First Angle Projection method). 10
- Front View looking in the direction of arrow.
 - Side View as seen from left.
 - Top View.

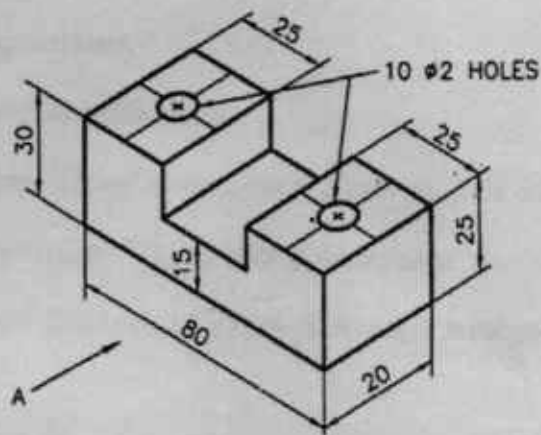


Fig. - 1

8. Draw an isometric projection of a hexagon of 30 mm sides, standing on one of its sides, with its surface parallel to V.P. 10
9. Draw the total development surface of a pentagonal prism having ends edges 25 mm and height of prism 50 mm. 5