

Roll No. ....

Total Pages : 03

BT-2/M-18

32009

ENGINEERING GRAPHICS AND DRAWING  
ME-105E

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Assume any missing data.

Unit I

1. (a) What do you mean by scale ? Construct a Diagonal scale of RF = 3 : 200 showing metres, decimetres and centimetres. The scale should measure up to 6 metres. Show a distance of 4.56 metres. 10
- (b) Differentiate first and third angle systems of orthographic projections. 10
2. (a) Point A is 20 mm above HP and in the 1st quadrant. Its shortest distances from the XY line is 40 mm. Draw the projections determine its distance from VP. 8

(3-84/4) L-32009

P.T.O.

- (b) Draw the projections of the following points on the same XY line, keeping convenient distance between each projectors. Name the quadrants in which they lie. 12
  - (i) E -30 mm below HP and 25 mm behind VP
  - (ii) F -35 mm below HP 30 mm in front of VP
  - (iii) G -on HP and 30 mm in front of VP.
  - (iv) H - on HP and 35 mm behind VP.

Unit II

3. The front view of a line AB of length 70 mm is inclined 30° to the reference line and measures 45 mm. The end A is 20 mm above HP and 25 mm in front of VP. Draw the projection of line and find the inclinations with HP and VP. 20
4. The top view of a plate, the surface of which is perpendicular to the V.P. and inclined at 60° to the H.P. is a circle of 60 mm diameter. Draw its view. 20

Unit III

5. A hexagonal Prism (Base edge 30 mm and lateral edge 70 mm) is resting on one of its lateral edge such that the axis is inclined at 50° with VP. Draw the projection of solid. 20

L-32009

2

