

## MANIPAL UNIVERSITY

## FIRST SEMESTER B. DES. (ID) DEGREE EXAMINATION – NOVEMBER 2017

## SUBJECT: BID 103 – GRAPHICS FOR INTERIORS – 2 DIMENSION

Monday, November 06, 2017

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

✍ Answer any FIVE complete questions.

- 1A. Draw a line segment of 100 mm and divide it into 7 equal parts.  
1B. Construct an ellipse if the conjugate diameters are 120 mm and 70 mm with an included angle of 60 degree.

(5+5 = 10 marks)

- 2A. Construct a parabola in a parallelogram of 120 mm x 70 mm when the included angle is 60 degree.  
2B. Construct a pair of hyperbolae when the length of transverse axis is 90 mm and the distance between focal points is 110 mm.

(5+5 = 10 marks)

- 3A. A line AB 70 mm in length is parallel to VP and is 30 mm in front of it. The end A is 20 mm above HP. The line is inclined to HP at 30 degrees. Draw its projections.  
3B. A line PQ 50 mm in length is parallel to both HP and VP. It is 30 mm above HP and 50 mm in front of VP. The right end of the line is 20 mm from the right profile plane. Draw its projections.

(5+5 = 10 marks)

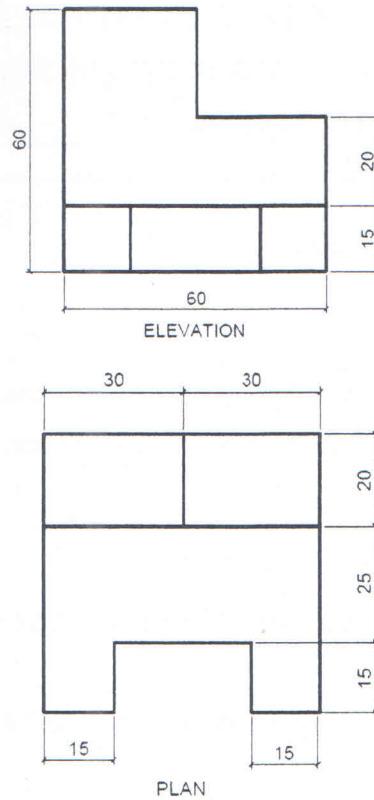
- 4A. A rectangular lamina of 50 mm x 60 mm is resting on HP with a short edge touching HP. The lamina is inclined to HP at 30 degrees. The edge on which it rests is parallel to VP. Draw its projections.  
4B. An equilateral triangular lamina of 30 mm sides is resting on VP with its one corner touching VP. The edges containing that corner are equally inclined to VP. The lamina is inclined to VP at 45 degrees and the edge opposite to the corner on which it lies is inclined to HP at 30 degrees. Draw its projections.

(5+5 = 10 marks)

5. A pentagonal prism of base sides 30 mm and the height 50 is resting on HP with a corner of the base touching HP. The edges of the base containing that corner are equally inclined to HP. The base of the prism is inclined to HP at 30 degrees. The axis of the prism appears to be inclined to VP at 45 degrees. Draw its projections.

(10 marks)

6. Draw isometric projections of the object whose orthographic projections are shown in Fig Q 6.



**Fig Q.6**

Note: All dimensions are in mm.

(10 marks)

