Reg. No.										

MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER B. DES. (ID) DEGREE EXAMINATION – NOVEMBER 2019

SUBJECT: BID 103 – GRAPHICS FOR INTERIORS – 2 DIMENSION

(2015 SCHEME)

Monday, November 18, 2019

Time: 14:00 – 17:00 Hrs. Max. Marks: 50

✍ **Answer any FIVE complete questions.**

1A. Construct an ellipse using concentric circles method when the major axis is 120 mm and the minor axis is 60 mm.

1B. A stone thrown from the ground at an angle of 60 degree with ground strikes the ground at 120 m from the point of throwing. Trace the path of the stone if the ground is horizontal.

(5+5 = 10 marks)

2A. Draw a hyperbola if a point on it is at distances of 30 mm and 40 mm from its asymptotes when the angle between asymptotes is 60 degree.

2B. A line PQ 70 mm in length is parallel to VP and 30 mm in front of it. The end P is touching the HP and the line is inclined to HP at 30 degrees. Draw its projections.

(5+5 = 10 marks)

3A. A pentagonal lamina of 30 mm sides is resting on HP with an edge touching HP. The lamina is inclined to HP at 30 degrees and the edge on which it rests is inclined to VP at 45 degrees. Draw its projections.

3B. A rectangular lamina of 50 mm × 70 mm is resting on HP with shorter edge touching HP. The lamina is inclined to HP at 30 degrees and the edge on which it rests is parallel to VP. Draw its projections.

(5+5 = 10 marks)

4. A pentagonal prism of base sides 25 mm and height 50 mm 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)

5. A cylinder of 60 mm diameter of base and 70 mm is resting on HP with a point on its circumference touching HP such that the circular base is inclined at 45 degrees to the HP. Draw the projections of the cylinder if the axis

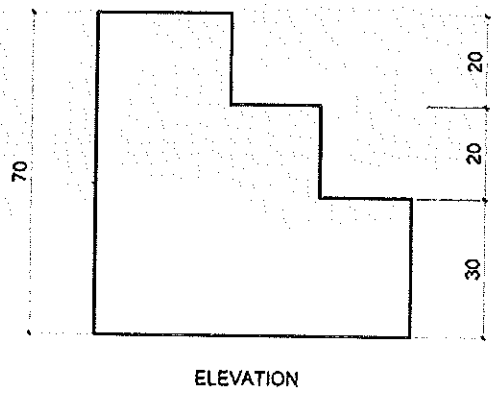
   i) Is inclined to VP at 30 degrees.

   ii) The axis appears to be inclined to VP at 30 degrees.

(10 marks)

6A. Draw the isometric projection of an object whose orthographic projections are shown in the Fig. 6A.

6B. Orthographic projections of an object are shown in Fig.6B. Draw its axonometric projection.



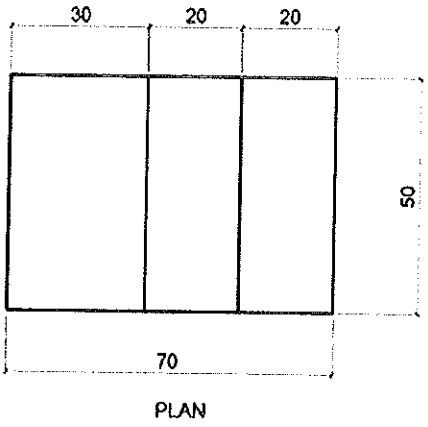
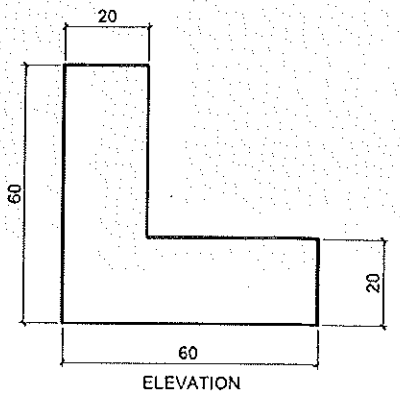


Fig 6.A



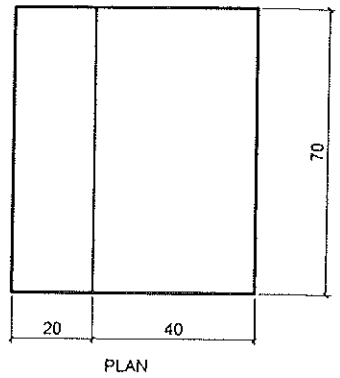


Fig 6.B

Note: All Dimensions are in mm.

(5+5 = 10 marks)