

Subject Code: R13209/R13

Set No - 1

I B. Tech II Semester Supplementary Examinations Dec. - 2016

ENGINEERING DRAWING

(Com. to CE, ME, TE)

Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**
Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**

PART-A

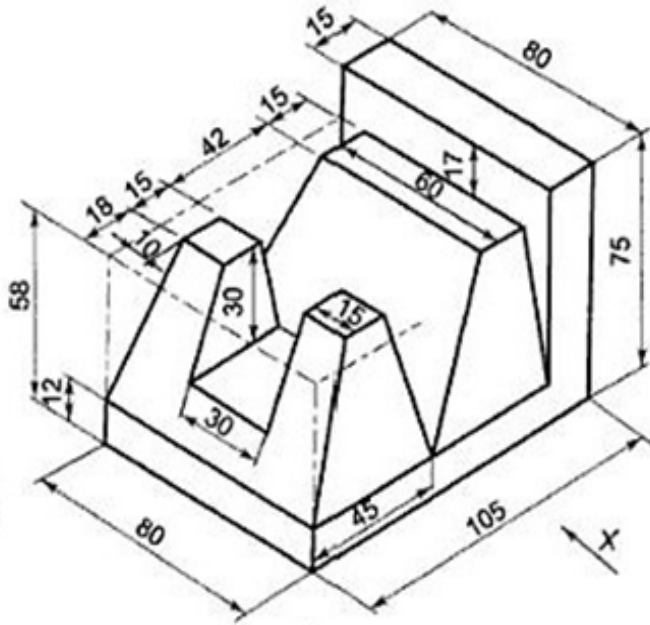
1. (a) A line AB measuring 12 cm long has its VT 8 cm above the XY line and the HT 10 cm in front of xy line. The projections of the HT and VT on xy line are 11 cm apart. If the point A is 1cm above HP, Draw the projections of AB and find its true inclinations.
- (b) A pentagonal lamina of 40 mm side has a circular hole of 30 mm diameter in its center. The plane stands on one of its sides on HP with its plane perpendicular to VP and 45° inclined to HP. Draw its projections. [12+10]

PART-B

2. (a) The major and minor axes of an ellipse are 100mm and 60 mm respectively. Draw the ellipse using oblong method.
- (b) Construct a diagonal scale of R.F = 1/4000 to show metres and long enough to measure up to 500meters. Mark on it a distance of 374meters. [8+8]
3. (a) Draw the projections of the following points, keeping the distance between the projectors as 25mm on the same reference line.
 - i) P- 25mm above HP and 45 in front of VP
 - ii) Q- 35mm above HP and 50mm behind VP
 - iii) R- 45mm below HP and on VP
 - iv) S- 30mm below HP and 40 mm in front of VP
- (b) A straight line AB of 40 mm length is perpendicular to the HP. Its end point A, which is nearer to the HP, is 10 mm above the HP and 15 mm in front of the VP. Draw the projections of the line AB. [8+8]



- A straight line AB has its end A 15 mm above the HP and 10 mm in front of the VP. The other end B is 25 mm in front of the VP. The VT is 10 mm above the HP. Draw the projections of the line if the distance between end projectors is 25 mm and find its true length and true angles of inclinations with HP and the VP. Locate the HT. [16]
- A square ABCD of 50 mm side has its corner A in HP, its diagonal AC inclined at 30° to HP and is the diagonal BD inclined at 45° to VP and is parallel to HP. Draw its projections. [16]
- A pentagonal prism, side of base 25 mm and axis 50 mm long, rests with one of its edges on HP such that the base containing that edge makes an angle of 30° to HP and its axis is parallel to VP. Draw its projections. [16]
- Draw the Orthographic Projections of the object given below in 1st angle method of projection.
(i) Front View (ii) Top View (iii) Left Side View



[16]

Note: All dimensions are in mm.

