# Mid Sem Exam: Sem – I (2021-2022)

## TA101AA Engineering Graphics

**Total Time : 2 hrs 10:00 to 12:00 Upload time 20 mins till 12:20 pm. Date 11 January 2022**

**After you have answered, scan all the sheets, and make one pdf file for upload to MOOKIT.**

**Name the file as: MS - roll no – name.pdf**

**Question paper contains a TOTAL of 6 questions. Each question carries the same marks, i.e., 15 marks even though all of them are not equally difficult. Total marks is 90.**

**NOTE: Carefully plan the drawing before starting so that it fits in the sheet.**

---

Q1.(a) Draw an ellipse having conjugate diameters of 120 mm and 60 mm with angle of 45 degrees between them using the parallelogram method. (**10**)

(b) Find the major and minor diameters of the ellipse and mark them with dark continuous lines using HB pencil**.** Measure and write down the major and minor diameters on your sheet. **Scale 1:1. Do not dimension**. (**5 Marks**)

Q2. The front view of a machine part having a uniform depth of 40 mm is as shown below. Draw its front and top views. Use **Third Angle projection and do not dimension the drawing. Use scale 1:1.** Note the tangent arcs to circles in the front view carefully and locate their centers properly. Place your front view judiciously so that centers of tangent arcs are on the sheet. (**15**)

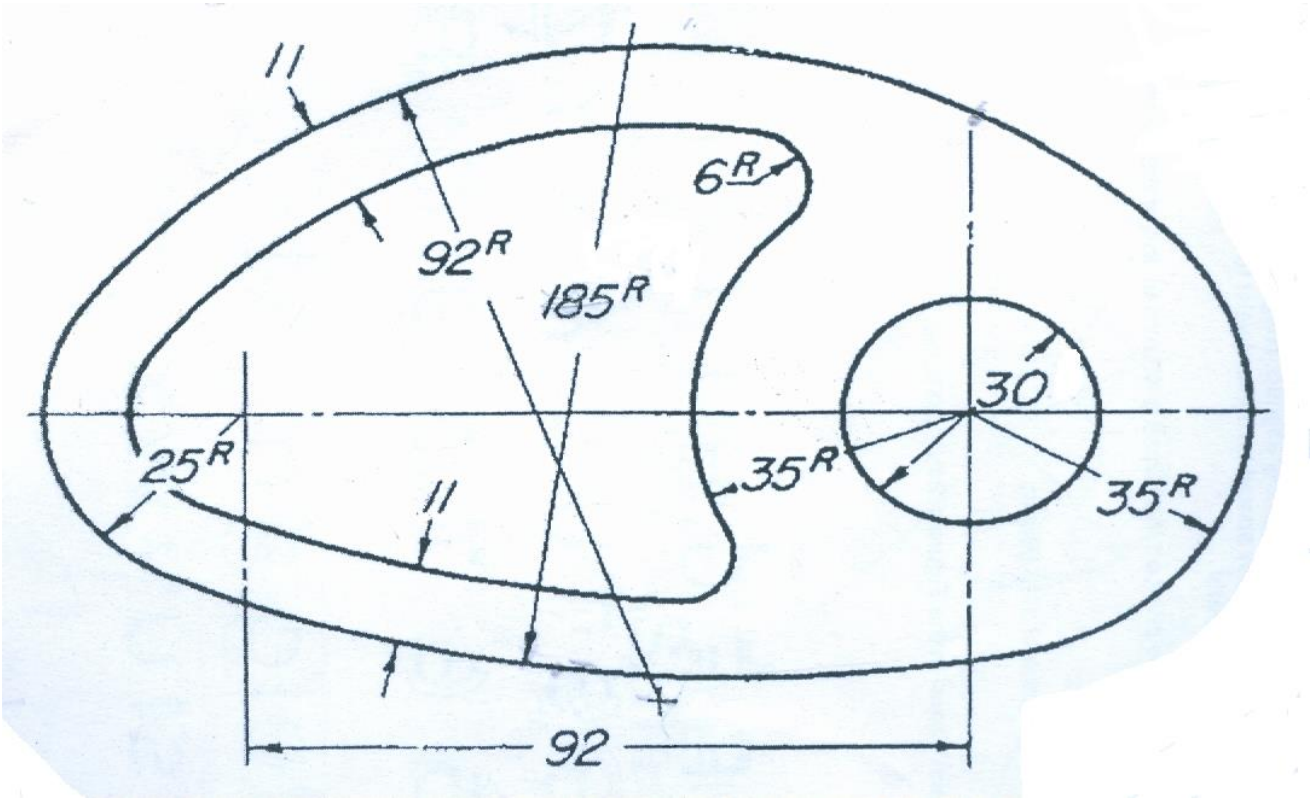


Figure for question 2

Q.3. Draw the front, top and left side views of the object given below. Use **First Angle projection scheme** and **dimension the drawing using aligned dimensioning system.** Write the dimension value within the dimension line wherever feasible. **Use scale 1:1.** (**15 Marks**)

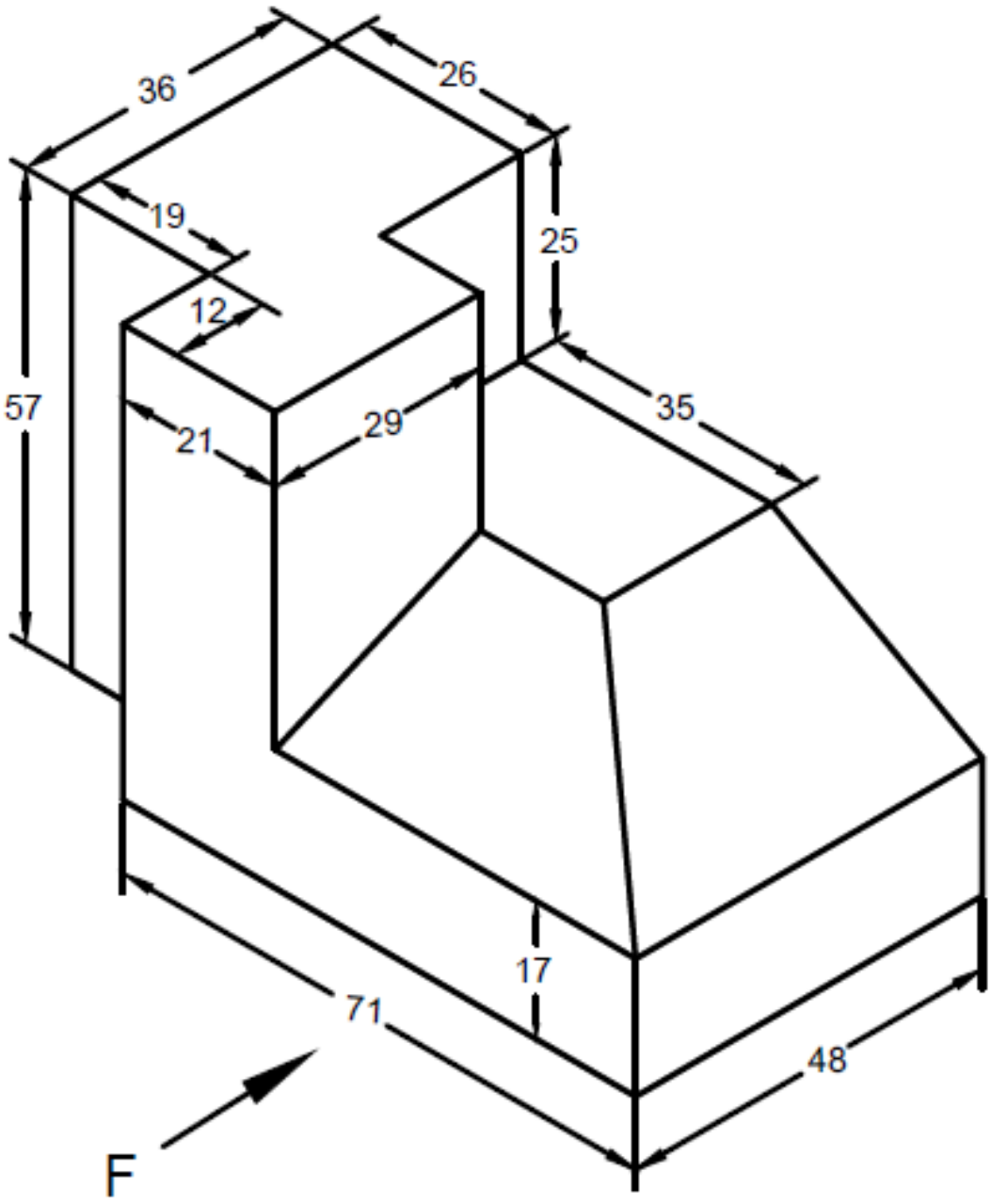


Figure for Question no 3

Q4. Draw the **isometric drawing** of the object whose orthographic views are as given below (**First angle projection** showing Front and Top views). **Do not dimension the drawing.** *Note: Start the drawing by placing the front view on the right side of the isometric drawing box.* (**15 Marks**)

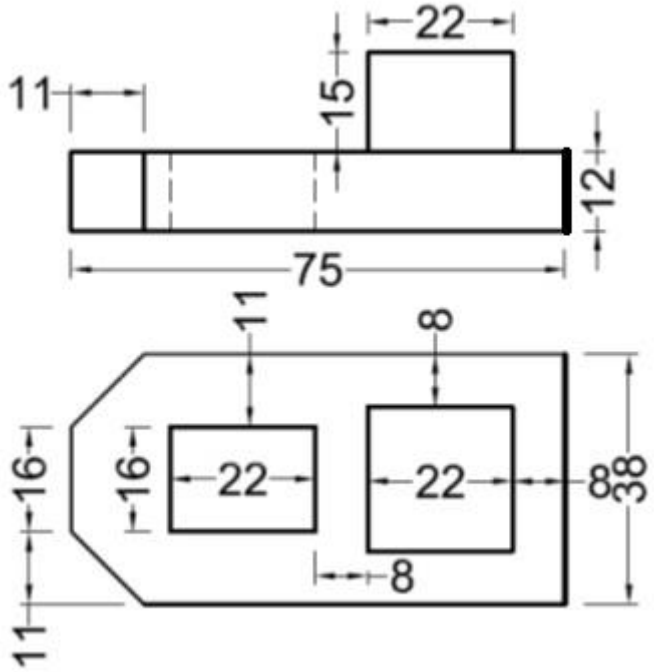


Figure for question no. 4

Q5. Draw the **Cavalier Oblique** view of the object shown in Figure below **(Front and Top views in third angle projection**). Take the depth direction receding axis to be $30^0$ to the right and up. **Do not dimension.**

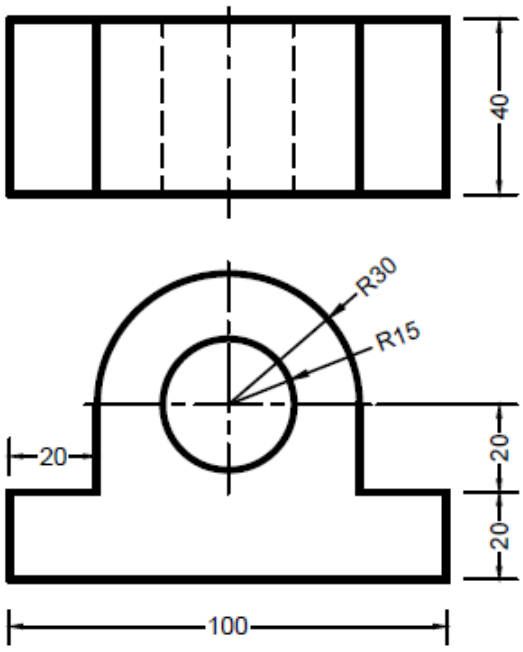


Figure for question no. 5

Q6. The top view of an object along with the picture plane and the station point is shown in Figure below. Also shown is the isometric view of the object. Draw a **one point (parallel) perspective view of the object** when the horizon line is 30 mm above the ground line. Assume 1:1 scale. **Do not dimension the drawing.**

(**15 Marks**)

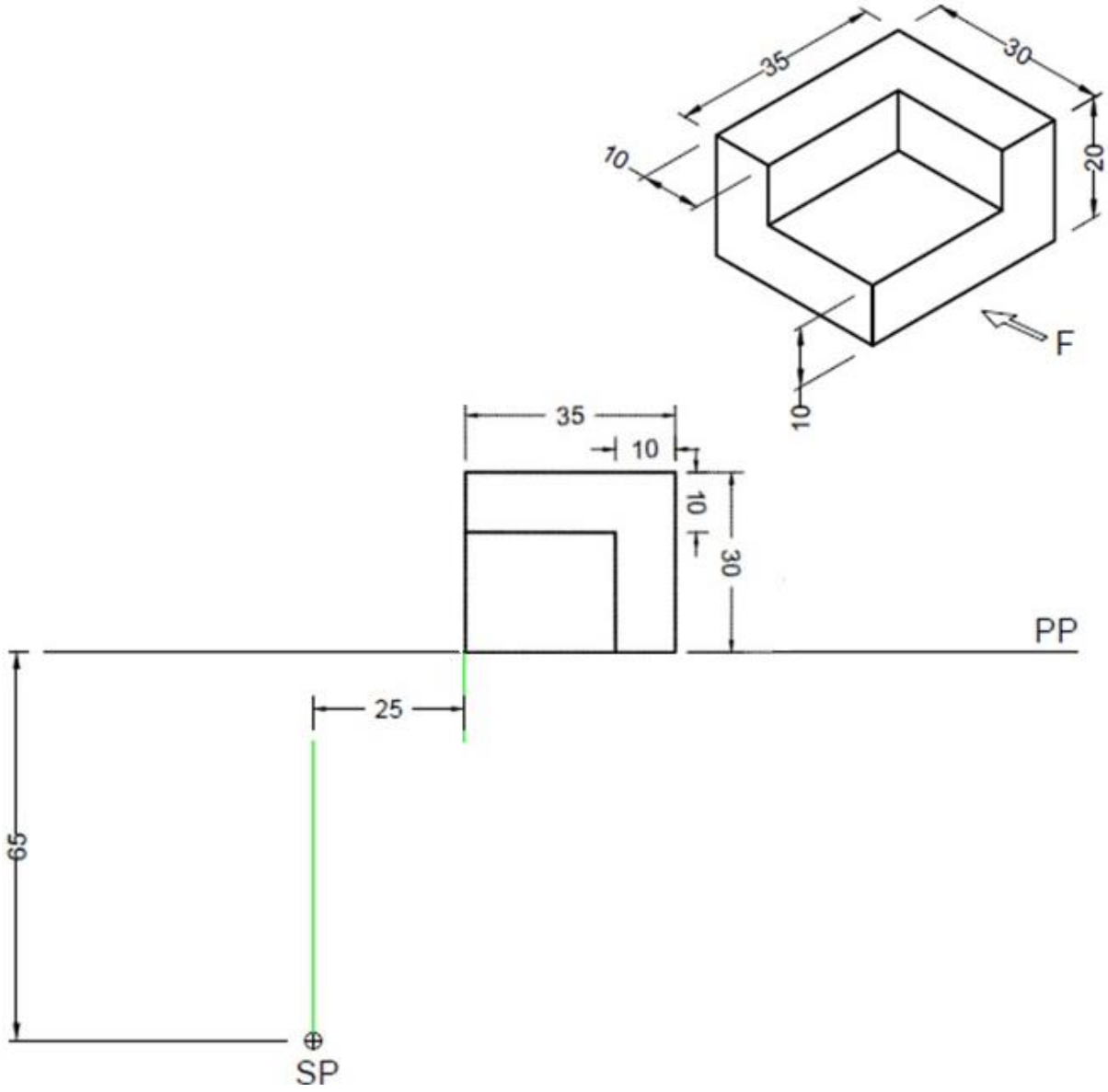


Figure for question no. 6