**Seat
No.**

F.E. (Semester – I) Examination, 2014
ENGINEERING GRAPHICS – I
(2012 Course)

Time : 2 Hours   Max. Marks : 50

Instructions : *1) Solve Q. **1** or Q. **2**, Q. **3** or Q. **4**, Q. **5** or Q. **6**, Q. **7** or Q. **8**.*

                        *2) **Use** only half imperial size drawing sheet as answer book.*

                        *3) Retain **all** construction lines.*

                        *4) Assume **suitable** data if **necessary**.*

1. The point A of line AB is in HP and 20 mm in front of VP. The front view and top view of line makes 40° and 45° with HP and VP respectively. Draw the projections if the projector distance between end points of the line is 70 mm. Find true length and true inclinations. Also, locate the traces of line.   **12**

2. A pentagonal plate of side 40 mm, is resting in HP on its side. Then its surface makes 40° with HP. Draw the projections if its resting side is inclined to VP at an angle of 45°. Find inclination made by the plane with VP.   **12**

3. A hexagonal pyramid of base side 40 mm and axis height 80 mm is resting in HP on one of its base side. Draw the projections, if its axis is inclined to HP and VP at 30° and 40°. Apex away from observer.   **13**

4. A) Draw an involute of a circle diameter 42 mm.   **7**

    B) Draw the development of lateral surface of triangular prism of base side 50 mm and axis height 80 mm.   **6**

P.T.O.

5. Figure 1 shows a pictorial view of an object. By using first angle method of projections, draw; **(13)**
   i) Sectional front view, along symmetry of object **4**
   ii) Right hand side view **4**
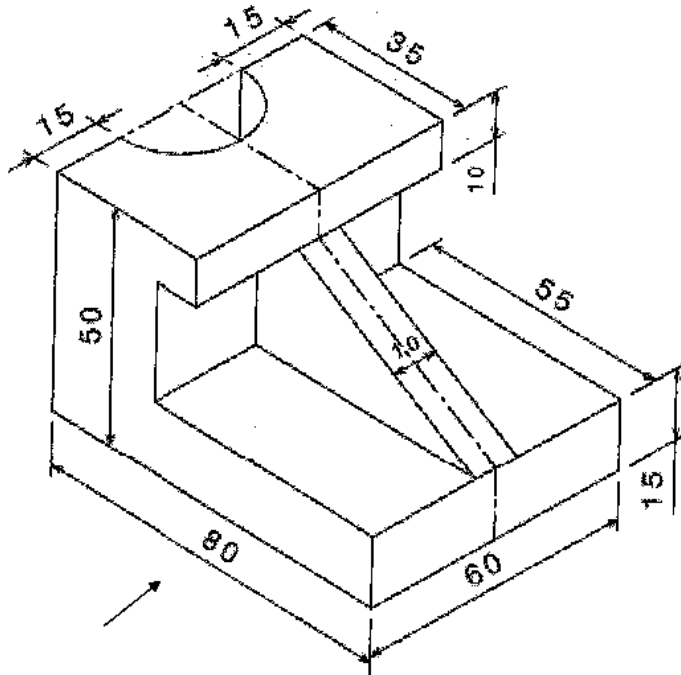   iii) Top view **4**
   iv) Dimensions **1**

Figure 1

6. Figure 2 shows a pictorial view of an object. By using first angle method of projections, draw; **(13)**
   i) Sectional front view, along symmetry of object **4**
   ii) Left hand side view **4**
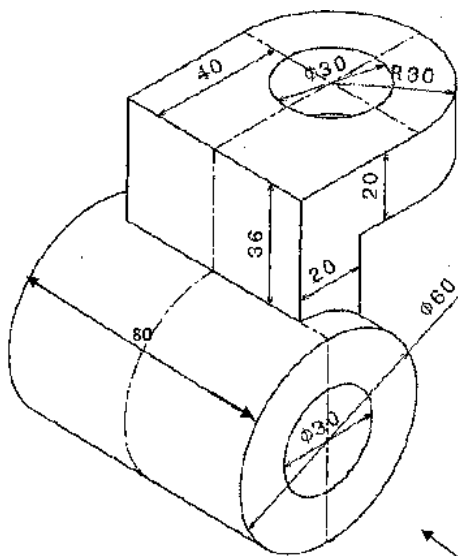   iii) Top view **4**
   iv) Dimensions **1**

Figure 2

7. Figure 3 shows front view, top view and end view of a bracket. Draw isometric view and show overall dimensions. **12**

Figure 3
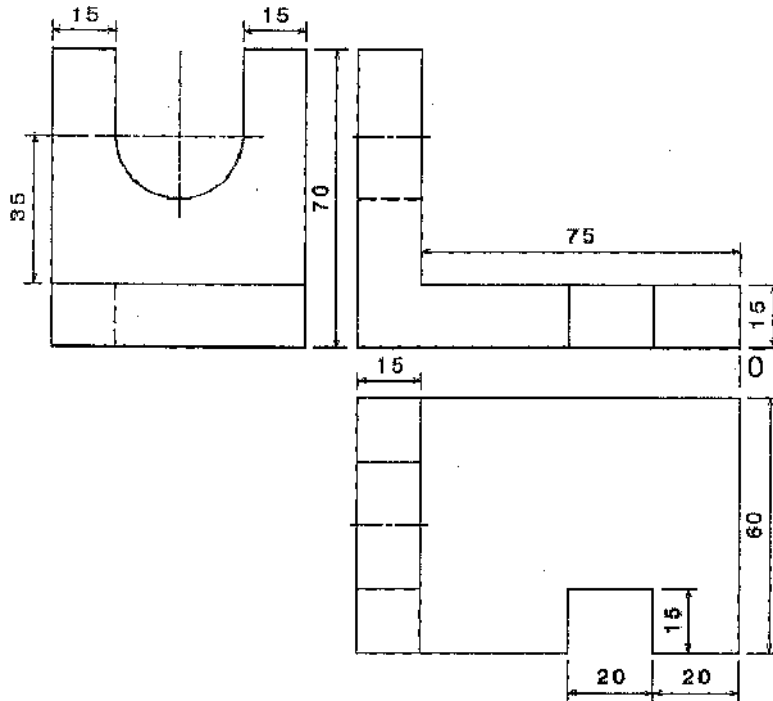
8. Figure 4 shows front view and end view of an object. Draw isometric view and show overall dimensions. **12**
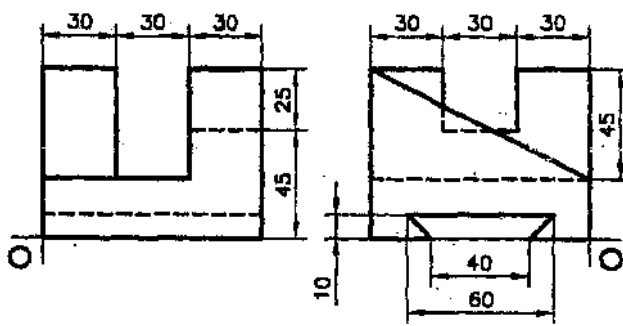

Figure 4