

This exam measures the following ILOs; a.1.1, a.1.2, a.1.4, a.8.1, b.2.1, b.2.2, c.11.1, d.3.1, d.3.2, d.3 and d.4.

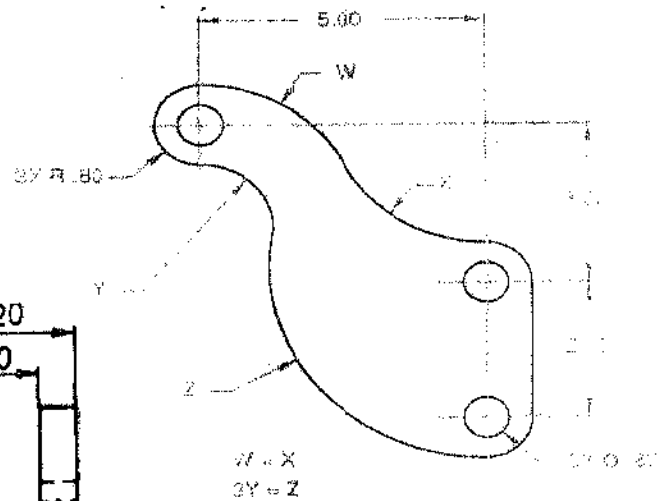
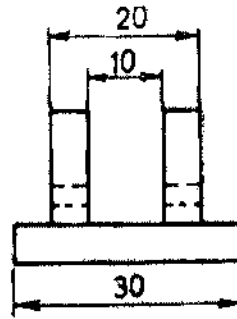
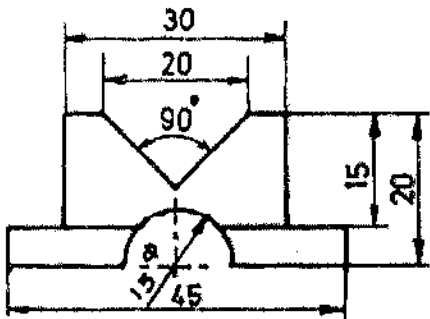
**Properly assume any missing dimensions**

**Questions No. 1(20 Marks)**

Using drawing tools and rules of applied geometry to draw the given figure.

**Questions No. 2 (25 Marks)**

Draw the isometric view for the body that represented by the given projection views



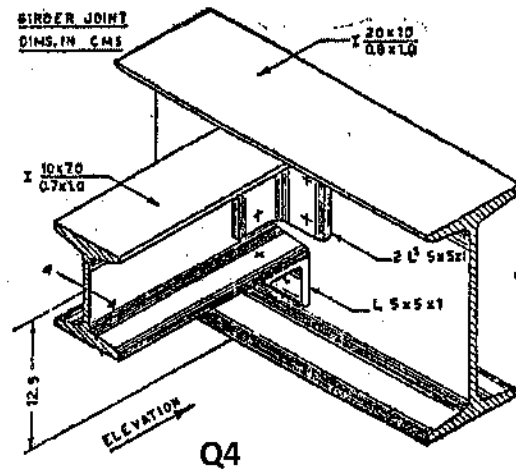
Q1

Q2

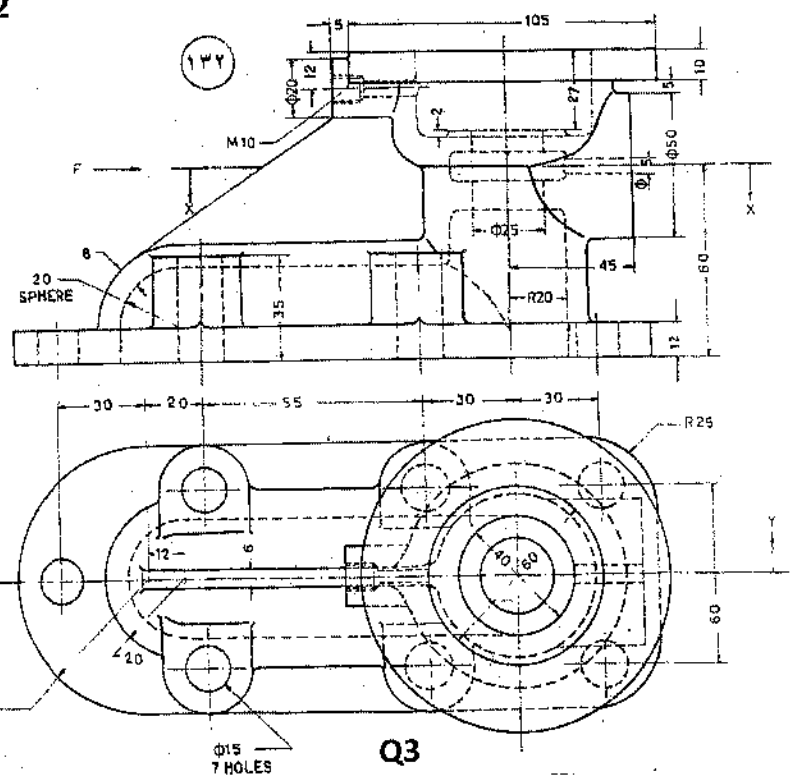
**Questions No. 3 (75 Marks)**

Given are elevation and plan for a mechanical elements.

Draw Sectional elevation-Y, sectional plan X-X and side view.



Q4



Q3

**Questions No. 4( 45 Marks)**

Given is isometric view for a steel joint.

Draw elevation, side view and sectional plan.