University of Jordan

Mechanical Engineering Department

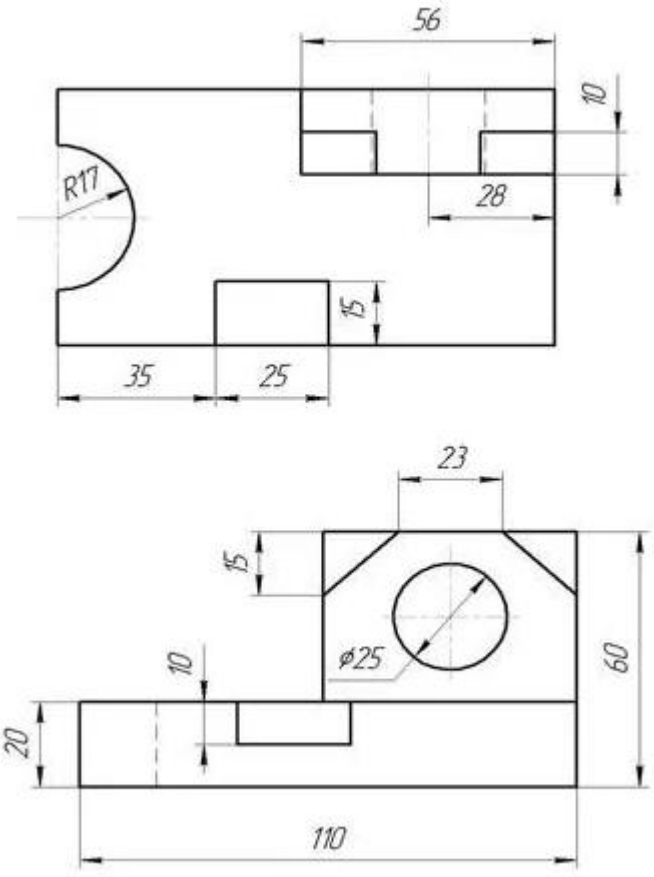
Engineering Drawing & Descriptive Geometry

Final Manual Exam ***Section (2)***

*Student Name:*_____ *File No.* _____

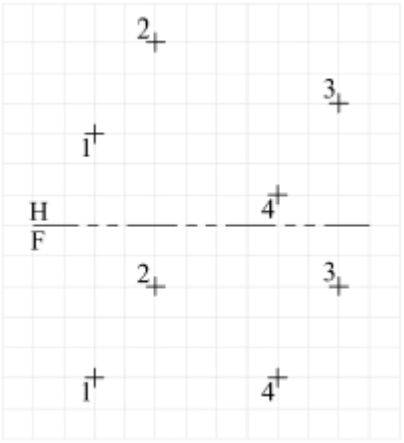
Problem (1) : Draw the following views as 3D Solid in Grid Paper using the isometric coordinates.

(10 Points)

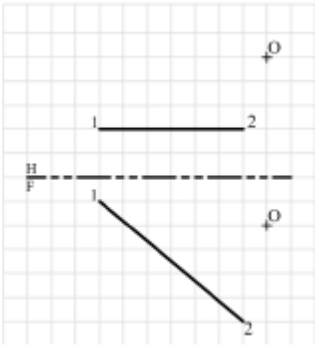


Problem (2): Redraw the following exercise on a "Grid Paper". For Triangle (134) and Point (2), find the following by starting projection from front: (9 Points)

a) *Compute the area for the triangle, Area = 0.5*base*height.*
b) *Find the true length for the shortest distance between the triangle and point.*
c) *Start Projection from horizontal and find the angle between the lines (1-3) and (3-2).*



Problem (3): Redraw the following exercise on a "Grid Paper". Then find the shortest distance between the line (1-2) and the point (O), and find the true length for the shortest distance.
(3 Points)



Problem (4): Redraw the following exercise on a "Grid Paper". Then draw a line from point (1) which lies on the Horizontal Plane (3456) and the line is 3 cm perpendicular on the plane.
(3 Points)