



ELIZADE UNIVERSITY, ILARA-MOKIN
FACULTY OF ENGINEERING
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

COURSE CODE: GNE 201 **SESSION/SEMESTER:** FIRST SEMESTER/ 2019/2020
COURSE TITLE: ENGINEERING DRAWING **LEVEL:** 200L
TIME ALLOWED: 3 HOURS
INSTRUCTION: ATTEMPT QUESTION 1, 2 AND ANY OTHER 2 QUESTIONS

Question 1 (20 marks)

- (a) The Isometric block (Figure Q1) is to be drawn and projected (15 Marks)

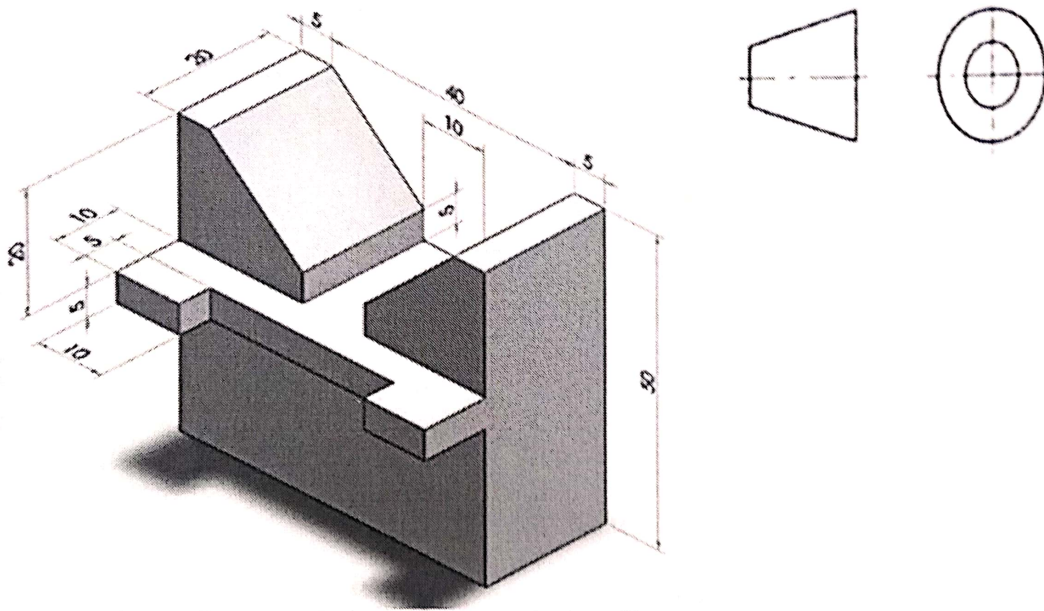


Figure Q1: Isometric block

- (b) Explain the following terms in relation to AutoCAD (i) World Coordinate System (WCS) (ii) Mirror (iii) Scale (iv) Chamfer (v) Explode (5 marks)

Question 2 (20 marks)

- (a) A cone, 50 mm base diameter and 70 mm axis is standing on its base on HP. It cut by a section plane 45° inclined to HP through base end of end generator. Draw projections, sectional views, true shape of section and development of surfaces of remaining solid. (15 Marks)
- (b) Explain the following four different types of 3D models (i) Wireframe models (ii) Surface models (iii) Solids models (iv) Mesh Models (v) Extrude (5 marks)

Question 3 (10 marks)

- (a) Define the following methods of projection (i) Axonometric projection, (ii) Oblique projection, (iii) Perspective projection, (iv) Orthographic projection **(8 marks)**
- (b) List four differences between 1st and 3rd angle projections **(2 marks)**

Question 4 (10 marks)

- (Q4a) Define Freehand sketching listing the four different forms of freehand sketching **(2 marks)**
- (b) List and explain factors on which type of projection depends **(8 marks)**

Question 5 (10 marks)

- (Q5a) List 10 software's used in engineering drawing **(5 marks)**
- (5b) List the advantages of freehand sketching in engineering drawing **(5 marks)**