



ELIZADE UNIVERSITY, ILARA-MOKIN

FACULTY OF ENGINEERING

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

COURSE CODE: CVE 314 SESSION/SEMESTER: SECOND SEMESTER/ 2018/2019

COURSE TITLE: ELEMENT OF ARCHITECTURE

LEVEL: 300L

TIME ALLOWED: 3 HOURS

INSTRUCTION: ATTEMPT QUESTION 1 AND ANY OTHER TWO QUESTIONS

QUESTION 1 (30 marks)

- (1) With the aid of the ground floor plan shown in Figure Q1, produce the following using AutoCAD:
- i. Front and Left Side Elevations (10 marks)
 - ii. Roof Plan (10 marks)
 - iii. Section A – A (10 marks)

QUESTION 2 (15 marks)

- (2a) Sketch a 2 bedroom and a 3-bedroom apartment using freehand drawing ensuring every element of the building is properly dimensioned (10 marks)
- (2b) List the steps and activities in drawing a floor plan using AutoCAD (5 marks)

QUESTION 3 (15 marks)

- (3a) With the aid of a table, list the recommended dimensions for Windows showing their designations, size of opening, size of window frame and size of window shutter using units in millimeters. (10 marks)
- (3b) List the general door dimensions for a residential and public building stating the dimensions for the internal and external doors and show the width-height formula used for calculating door width and height. (5 marks)

QUESTION 4 (15 marks)

- (4a) With the aid of a table, list the recommended dimensions for Windows showing their designations, size of opening, size of window frame and size of window shutter using units in millimeters. (8 marks)
- (4b) Explain the following terms in relation to AutoCAD
- i. Offset
 - ii. Trim
 - iii. Fillet
 - iv. Layer Properties
 - v. Dimension Style
- (4c) List 4 visual styles in AutoCAD 3D (5 marks)
(2 marks)

QUESTION 5 (15 Marks)

- (5a) Explain the following four different types of 3D models
- i. Wireframe models
 - ii. Surface models
 - iii. Solids models
 - iv. Mesh Models
- (5b) List the general door dimensions for a residential and public building stating the dimensions for the internal and external doors and show the width-height formula used for calculating door width and height. (8 marks)
(5 marks)

(5c) List the different drawing paper size and their sizes

(2 marks)

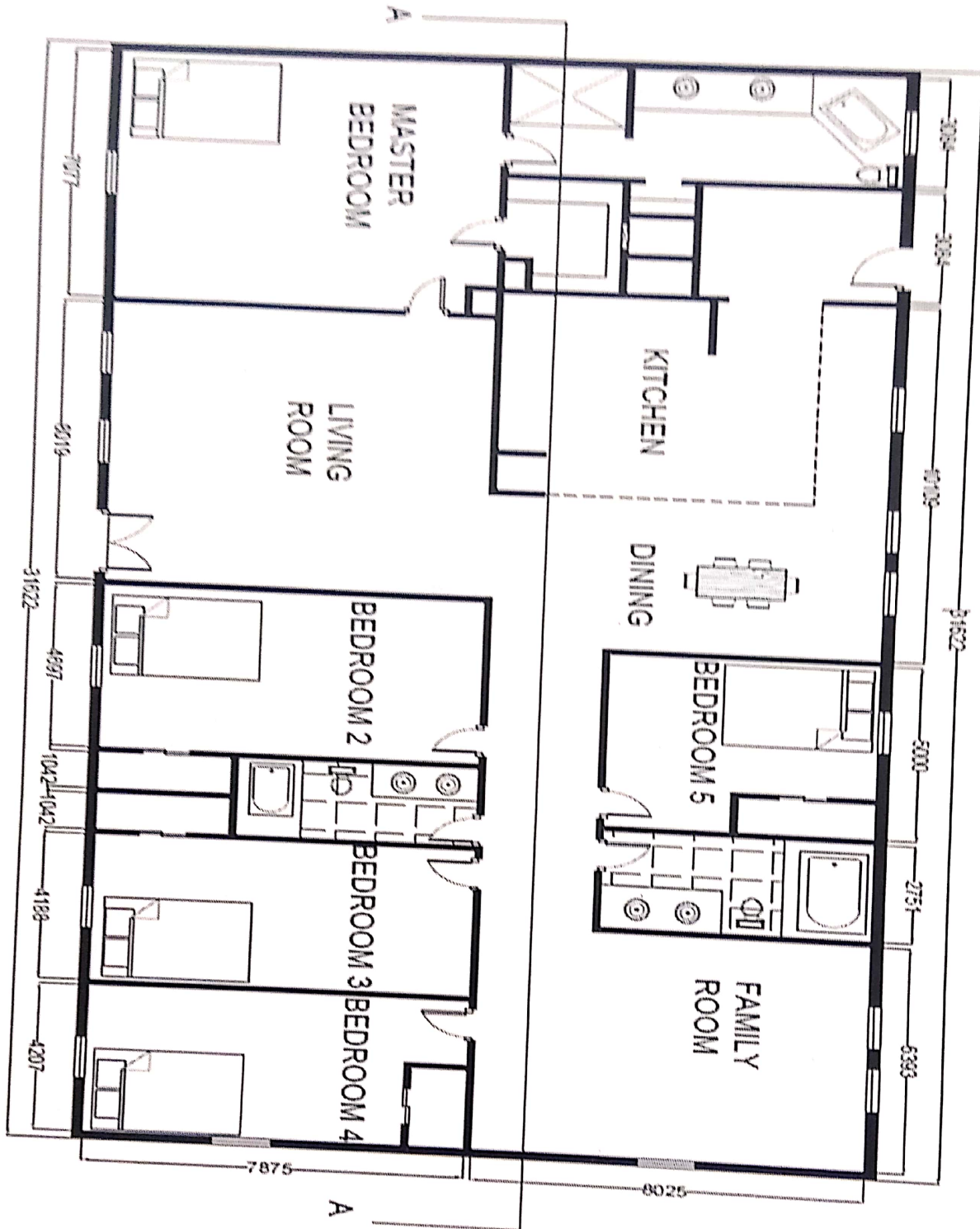


Figure 1: Ground Floor Plan