



TECHNICAL UNIVERSITY OF MOMBASA
**Faculty of Engineering &
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
HIGHER DIPLOMA IN BUILDING & CIVIL ENGINEERING (HDBC 12J)

EBC 3206: COMPUTER AIDED DESIGN II

SPECIAL/SPECIAL EXAMINATION

SERIES: JUNE 2013

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Computer Installed with AutoCAD*

This paper consists of **FIVE** questions.

Answer any **THREE** questions

Maximum marks for each part of a question are as shown

This paper consists of **FOUR** printed pages

Question One

- a) Differentiate between 2-D and 3-D concepts of creating engineering drawings. (5 marks)

- b) Briefly explain the following 3-D CAD terminologies:
 - (i) Boolean operations
 - (ii) Wire frame model
 - (iii) Rendering
 - (iv) Extrude (12 marks)

- c) Briefly explain the 'isoplane' command (3 marks)

Question Two

Figure 1 below shows a single line sketch floor plan of a proposed residential building. Draw a 3-D view of the building, excluding the roof.

the outline line of a roof to a proposed house.

Draw a pitched-hip ended roof to the house.

(20 marks)

Question Three

Figure 2 shows orthographic views of a bracket.

Draw a 3-D view of the bracket.

(20 marks)

Question Four

Figure 3 shows an outline of an object being designed.

Draw the outline and revolve the same through one complete revolution. Name the resulting object.
(20 marks)

Question Five

Figure 4 below shows orthographic views of an object.

Draw a 3-D view of the object.

(20 marks)