



ZIMBABWE

MINISTRY OF HIGHER AND TERTIARY EDUCATION

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL DIPLOMA

IN

CIVIL ENGINEERING / IRRIGATION ENGINEERING

**SUBJECT: Computer Aided Design
Theory**

PAPER NO: 579/S09

NOVEMBER/DECEMBER 2010 EXAMINATION

REQUIREMENTS







INSTRUCTIONS TO CANDIDATE

Answer ALL questions

This paper consists of 3 printed pages.

MS/2010

QUESTION 1

- (a) Give any four reasons of using a drawing plan sheet. (4 marks)
- (b) Describe a prototype drawing. (4 marks)
- (c) Identify the following lines:
- (i)  (2 marks)
- (ii)  (2 marks)
- (iii)  (2 marks)
- (iv)  (2 marks)
- (v)  (2 marks)
- (vi)  (2 marks)

QUESTION 2

Below are command line editing keys. State their respective functions:

- (i) End (2 marks)
- (ii) Backspace (2 marks)
- (iii) Delete (2 marks)
- (iv) right arrow (2 marks)
- (v) left arrow (2 marks)

QUESTION 3

- (a) Having started a command and realising that you no longer need it, how do you cancel it? (2 marks)
- (b) What are orthogonal lines and state in which mode does the computer has to be for it to draw orthogonal lines. (2 marks)
- (c) Which is the quickest way of specifying co-ordinates on the screen. (2 marks)

QUESTION 4

- (a) What is meant by today window. (3 marks)
- (b) State three input /pointing devices used in Autocad. (3 marks)
- (c) Describe how you would hatch a selected object on a drawing. (4 marks)

QUESTION 5

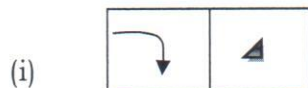
- (a) Give five ways of erasing an object. (5 marks)
- (b) List any five Autocad pull down menu. (5 marks)
- (c) Give the four (4) main areas that comprise the Autocad screen layout. (5 marks)
- (d) Describe how you would draw a 25mm line using direct distance entry. (5 marks)

QUESTION 6

- (a) Explain the following terms:
 - (i) Wire frame (3 marks)
 - (ii) Command history (3 marks)
 - (iii) Drawing limits (3 marks)
 - (iv) Pan (3 marks)
- (b) What is the use of a tool bar. (2 marks)

QUESTION 7

- (a) Explain the three (3) types of co-ordinate systems which are used in Autocad. (3 marks)
- (b) In relation to cross hairs, why is the small box referred to as a pick box. (3 marks)
- (c) What do the following commands icon represent.



- (d) Briefly explain how you can dock a command window and unlock the window. (6 marks)

QUESTION 8

- (a) Give the difference between the following:
 - (i) Key and button (3 marks)
 - (ii) Installing and launching Autocad. (3 marks)

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