



# TECHNICAL UNIVERSITY OF MOMBASA

*Faculty of Engineering and Technology*

## DEPARTMENT OF MECHANICAL AND AUTOMOTIVE ENGINEERING

DIPLOMA IN MARINE ENGINEERING (DMAE)

**EMR 2219**

ICT IV

END OF SEMESTER EXAMINATIONS

**SERIES:** DECEMBER, 2013

**TIME:** 2 HOURS

### INSTRUCTIONS TO CANDIDATES:

1. You should have the following for this examination:
  - Answer Booklet
2. This paper consists of **FIVE** Questions.
3. Answer **ANY THREE** Questions the marks are as shown.
4. All Questions carry equal marks.
5. **This paper consists of THREE printed pages.**

Question ONE

- (a) Using illustrations, identify key interface elements of Autocad 2010 model space. **(12 marks)**
- (b) Briefly explain the functions of each key interface. **(8 marks)**

### Question TWO

- (a) State and describe the **FOUR** fundamental stages in the creation of any C-Program. **(8 marks)**
- (b) Write a simple C program that would accept **TWO** integers and compute their sums and displays the output. **(4 marks)**
- (c) Giving examples illustrate the software family tree. **(3 marks)**

### Question THREE

- (a) Illustrate the output of each of the following commands when working with matlab program.
- (i) `>> A = [1 2 3; 3 4 5; 6 7 8]`
- (ii) `>> b = [1 2 1 4]`
- (iii) `>> c = AT` **(6 marks)**
- (b) Discuss computer preventive maintenance order each of the following headings:
- (i) Heat and dust buildup
- (ii) corrosion
- (iii) Electromagnetic/Radio-frequency interference
- (iv) Powerline noise **(14 marks)**

### Question FOUR

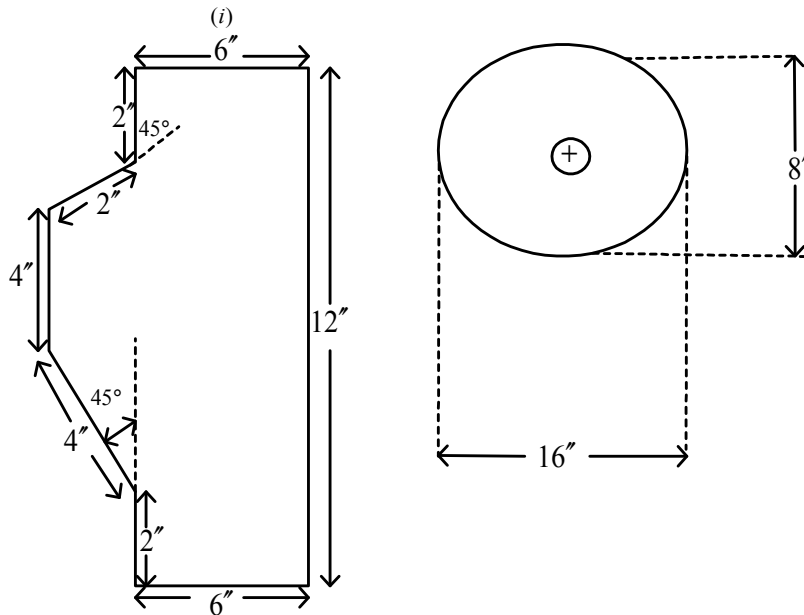
- (a) Briefly describe any **FIVE** features of Microsoft project 2010 application in marine engineering projects. **(10 marks)**
- (b) Define each of the following terms as used in project management:
- (i) Work breakdown structure (WBS)
- (ii) Milestone
- (iii) Configuration management

- (iv) Work Resource
- (v) Organization Chart

(10 marks)

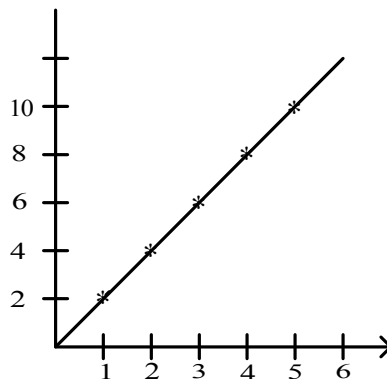
**Question FIVE**

- (a) Explain clearly how you would construct each of the following geometry using AUTOCAD 2010 application.



(10 marks)

- (b) Describe how you would create the diagram shown below in matlab at the command prompt.



(10 marks)