



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN MARINE ENGINEERING

EMR 2205: ICT 3

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Select Month Pick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

- A) Explain the various preventive maintenance activities (8 Marks)
- B) Explain the various number systems in use (8 Marks)
- C) Illustrate the data hierarchical concepts (4 Marks)

Question TWO

- A) Define CAD (2 Marks)
- B) Discuss the various CAD activities in detail citing examples relating to marine engineering in each (10 Marks)
- C) Outline some of the software used in Marine industry (8 Marks)

Question THREE

- A) Describe the C programming decision making statements with a clear example in each (12 Marks)
- B) Discuss the various operators used in C programming (8 Marks)

Question FOUR

- A) State and explain programming related terms and concepts (8 Marks)
- B) Write a C program to calculate the addition of a two by two matrix (12 Marks)

Question FIVE

Explain how the importance of following marine specific packages:

- A. MATLAB (5 Marks)
- B. FINITE (5 Marks)
- C. AMOS (5 Marks)
- D. CFD (5 Marks)