



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA INFORMATION COMMUNICATION TECHNOLOGY (DICT 14M)

ECS 2202: OBJECT-ORIENTED PROGRAMMING

END OF SEMESTER EXAMINATION

SERIES: APRIL 2015

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions.

Attempt question **ONE (Compulsory)** and any other **TWO** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (Compulsory)

- a) Explain the factors to consider while selecting a programming language during software development. **(10 marks)**
- b) Explain the following reserved words in C++ programming language:
(i) Class
(ii) Break
(iii) Double
(iv) Else **(8 marks)**
- c) Explain the meaning of the pre-processor command
#include < conio.h> **(2 marks)**

Question Two

- a) Explain the structured features of C++ programming **(10 marks)**
- b) Explain the following C++ program segment:
for (i = 0; i<3; i++)
{
 emp [i].id = 0
 em [i]. salary = 0.0;
}
(6 marks)
- c) Explain the following commands in C++ programming language: **(4 marks)**
(i) Cout ()
(ii) Cinc ()

Question Three

- a) Draw a program flowchart to read in 50 integer values then display all the odd numbers **(10 marks)**
- b) Implement 93 (a) above in C++ Programming Language **(10 marks)**

Question Four

- a) Explain the term ARRAY as used in programming **(2 marks)**
- b) Explain the characteristics of arrays **(8 marks)**
- c) Develop a C++ program to read TEN elements in a structure called Array then compare them and display the largest element **(10 marks)**

Question Five

- a) Explain the following terms as used in object oriented programming:
(i) Object
(ii) Attribute
(iii) Class
(iv) Encapsulation
(v) Local variable

(vi) Polymorphism

(12 marks)

- b) Develop a C++ class to input customer ID, Salary and then display the correspondence attribute
(8 marks)