

**W1-2-60-1-6**

## JOMO KENYATTA UNIVERSITY

**OF AGRICULTURE AND TECHNOLOGY**

# University Examinations 2016/2017

**YEAR ONE SEMESTER TWO EXAMINATIONS FOR THE DIPLOMA IN INFORMATION TECHNOLOGY/DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY**

**DIT 0301/HCT 0106: OBJECT ORIENTED PROGRAMMING/OBJECT ORIENTED PROGRAMMING TECHNIQUE**

**DATE: APRIL 2017 TIME: 1.5 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE(COMPULSORY) AND ANY OTHER TWO QUESTIONS**

QUESTION ONE

a) Define the term ‘object’ in programming context (2 marks)

b) An object exhibits some characteristics discuss characteristics of an object (6 marks)

c) What is a class? Using an example describe how a class is achieved in C++ (4 marks)

d) Discuss data types used in C++ (4 marks)

e) Explain difference between object based and object oriented programming language (4 marks)

QUESTION TWO

a) Come up with a simple program that can be used by a human resource department to be used to generate payroll; it should include necessary allowances and deduction (10 marks)

b) Explain any three types of operations employed with C++ programming (6 marks)

c) Differentiate between the while and do while statement (4 marks)

QUESTION THREE

a) Define the word member function (3 marks)

b) State two ways in which a member function can be defined (3 marks)

c) Demonstrate using examples, two ways in which a member function can be defined (6 marks)

d) Explain features that make O.OP superior over procedural language

(8 marks)

QUESTION FOUR

a) State four rules that should be observed when naming identifiers

(4 marks)

b) Define the term function used in programming (4 marks)

c) Explain several operations used in C++ programming (6 marks)

d) Explain three characteristics of a member function (6 marks)