

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
ENTREPRENUERSHIP AND ENTERPRISE MANAGEMENT

BCOM 364: COMPUTER PROGRAMMING 2

STREAMS: BEEM Y2S2, BCOM Y3S2

TIME: 2 HOURS

DAY/DATE: FRIDAY 09/7/2021

8.30 A.M. – 10.30 A.M.

**INSTRUCTIONS:**

- Answer Question ONE and Any Other TWO.
- Do not write on the question paper.

**SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION**

**QUESTION ONE (30 MARKS)**

- Outline **TWO** ways in which comments can be implemented in C++ programs. (2 marks)
- Outline **FOUR** advantages of Object Oriented Programming. (4 marks)
- Differentiate between *derived class* and *base class* as used in OOP. (4 marks)
- Differentiate between a *constant* and a *variable*. (4 marks)
- Write a C++ program that implements a function declaration, a function definition and a function call. (6 marks)
- What is visibility mode? What are the different inheritance visibility modes supported by C++? (6 marks)
- Write a C++ program to explain the use of the IF ..ELSE statement in any C++ program. (4 marks)

**SECTION B (40 MARKS)**

**ANSWER ANY TWO QUESTIONS OUT OF THE THREE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

**QUESTION 2 (20 MARKS)**

- a) With the use of appropriate examples, illustrate two ways by which you can pass initial values as arguments to a parameterized constructor when an object is declared. (Use not more than three arguments). (6 marks)
- b) List any four special characteristics that constructor functions have. (4 marks)
- c) Differentiate between a constructor and a destructor giving the use for each. (4 marks)
- d) Explain FIVE standard libraries usable in C++ programming (6 marks)

**QUESTION 3 (20 MARKS)**

- a) Explain each of the following terms as used in C++ programs: (4 marks)
  - (i) Global variable
  - (ii) Pointers
- b) Write a C++ program that will allow the user to enter a number and determines whether the number is a odd number. The program should then output the number and appropriate remark. (6 Marks)
- c) What is operator overloading? Explain the importance of operator overloading. (10 marks)

**QUESTION 4 (20 MARKS)**

- a) What are variables? List C++ rules for variables naming. (6 marks)
- b) Using case statement, write a C++ or C program to display the day depending on the Choice entered by the user from the key board (4 marks)
- c) Write a program that reads the contents of a file (say MyFile.cpp) word by word and puts them into a vector of strings. The program then prints to the screen all the words in the vector each on its line, the total number of words read and then clears all the words from the vector. (10 marks)

**QUESTION 5 (20 MARKS)**

- a) Outline **four** advantages of arrays as used in OOP. (4 marks)
- b) Differentiate between iteration and recursion in C++ programming. (6 marks)

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- c) Write a program that illustrates the use of object arrays. The program should accept the Name, Reg. No and Age of 10 students and store the details in an object array. The program then displays these details on the screen. (10 marks)
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