

**KABARAK**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**2009/2010 ACADEMIC YEAR**

**FOR THE DEGREE OF BACHELOR OF EDUCATION**

**SCIENCE**

**COURSE CODE: COMP 111**

**COURSE TITLE: INTRODUCTION TO PROGRAMMING**

**STREAM: SESSION II**

**DAY: THURSDAY**

**TIME: 2.00 – 4.00 P.M.**

**DATE: 08/04/2010**

---

**INSTRUCTIONS:**

Attempt **Question ONE** and **Any other TWO**.

**PLEASE TURN OVER**

### **QUESTION ONE (30 MARKS)**

- a. Explain steps used to execute a C program (4 marks)
- b. Using a suitable examples explain any three looping statements (6 marks)
- c. Identify the errors in the program below, correct them and explain the output thereof. (4 marks)

```
main()
{
    int i;
    printf("enter a number")
    scanf "%i";
    if(i<=50)
    printf("\n entered number is <50)
```

- d. Write the syntax of switch case statement and explain it (4 marks)
- e. Write an assembly language program to add two numbers x and y and store the result in z. (4 marks)
- f. Differentiate between call by value and call by reference functions. (4 marks)
- g. Discuss the unary operator with a sample program. (4 Marks)

### **QUESTION TWO (20 MARKS)**

- a. Explain any four data types used in C language (4 marks)
- b. Write the syntax of if-else statement (4 marks)
- c. Write a program to find sum, average of any three numbers which are entered by the user through the key board. (5 marks)
- d. Explain the following terms functions with their syntax
- (i) strcpy() (2 marks)
  - (ii) strcat() (2 marks)
- e. Explain the use of continue and break statements with their format (3 marks)

### **QUESTION THREE (20 MARKS)**

- a. What is an array? State four rules used to declare the array (5 marks)
- b. Write a program using the nested-if statement and explain it (5 marks)
- c. Explain the importance of using control statements in programming (3 marks)

d. Using suitable examples classify the constants in C language. **(4 marks)**

e. What is an identifier? List the rules used when writing identifiers. **(3 marks)**

**QUESTION FOUR (20 MARKS)**

a. Describe the basic structure of a C program **(4 marks)**

b. What is a keyword? State four examples **(4 marks)**

c. Write a C program to print student name, roll no, marks **(2 marks)**

d. Write a program using switch case to display the day depending on the case entered where by the case should be 1 to 7. **(6 marks)**

e. Differentiate between a compiler and an interpreter. **(4 marks)**

**QUESTION FIVE (20 MARKS)**

a. Write a program in C language to check whether the character entered is a vowel or not **(5 marks)**

b. What is the difference between while and Do-While statements? **(4 marks)**

c. Explain the factors that led to the development of 3<sup>rd</sup> generation programming languages. **(4 marks)**

d. Describe the classification of binary operators in C. **(4 marks)**

e. Write and explain the output of the following c program. **(3 Marks)**

```
#include<stdio.h>
main()
{
    int a=6, b=10;
    printf("a=%d\n,a++);
    printf("b=%d\n,++b);
}
```