

**KABARAK**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**2009/2010 ACADEMIC YEAR**

**FOR THE DEGREE OF BACHELOR OF COMPUTER SCIENCE**

**COURSE CODE: COMP 111**

**COURSE TITLE: INTRODUCTION TO PROGRAMMING**

**STREAM: Y1S1**

**DAY: WEDNESDAY**

**TIME: 2.00 – 4.00 P.M.**

**DATE: 09/12/2009**

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**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. Write a C program to compute the student grade based on the marks he scored

<b>MARKS</b>	<b>GRADE</b>
80 To 100	Honours
60 To 79	First Division
50 To 59	Second Class
40 To 49	Third Divisions
0 To 39	Fail

The program should print student Roll Number, Name and grade obtained.

[8 Marks]

c . Identify the error and correct the program.

[4 marks]

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

[4 marks]

d. Write the syntax of switch case statement and explain it

[4 marks]

e. Explain about call by reference and call by value

[4 marks]

f. Differentiate between structure and union in terms of their storage

[2marks]

**QUESTION TWO (20 marks)**

a. Explain any four derived data types used in C language

[4 marks]

b. Write a program to print largest value in the given list using if else statement [6marks]

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 functions:

- (i) malloc()
- (ii) free()

[2marks]

e. Explain the use of continue and break statements

[3 marks]

**QUESTION THREE (20 marks)**

- a. What is array? State the rules used to declare the array [4 marks]
- b. Write a program to find the sum of numbers between 500 to 1500 using Do while loop [4 marks]
- c. What is function calling [2 marks]
- d. Using a suitable example define a constant. Classify the constants [4 marks]
- e. What is identifier [2 marks]
- f. Using a suitable example explain the main use of enumerated data types [ 4 marks]

**QUESTION FOUR (20 marks)**

- a. (i) What is a function? [2 marks]  
(ii) Classify types of functions [2 marks]
- b. (i) What is a keyword? [1 mark]  
(ii) State four examples [2 marks]
- c. Write a C program to print student name, roll no, marks [3 marks]
- d. Write a program using switch case to display the day depending on the case entered where by the case should be between 1 to 7. [6 marks]
- e. Explain the following terms  
(i) Compiler  
(ii)Translator [4 marks]

**QUESTION FIVE (20 marks)**

- a. Write a program to check whether the character entered is a vowel or not [5 marks]
- b. What is the difference between Do and Do While [4 marks]
- c. Explain the following terms:  
(i) Low level language  
(ii) High level language [4 marks]
- d. Explain for loop syntax using a suitable example [ 4 marks]
- e. Discuss any three advantages for using functions in a program [3 marks]