

KABARAK



UNIVERSITY

UNIVERSITY EXAMINATIONS

2009/2010 ACADEMIC YEAR

**FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT
& INFORMATION TECHNOLOGY AND BACHELOR OF
TELECOMMUNICATION**

COURSE CODE: BMIT 226

COURSE TITLE: COMPUTER PROGRAMMING

STREAM: Y2S2

DAY: FRIDAY

TIME: 9.00 – 12.00 P.M.

DATE: 26/03/2010

INSTRUCTIONS:

Answer question **ONE** and any other **THREE**

PLEASE TURN OVER

SECTION A: Answer Question Is Compulsory

QUESTION ONE (40 marks)

- a. Write notes on message passing and polymorphism [4marks]
- b. Using a suitable example write while statement syntax and explain it [4 marks]
- c. Explain any four derived data types used in C language [4 marks]
- d. Write a C program to compute the student grade based on the marks he scored
- | MARKS | GRADE |
|--------------|-----------------|
| 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]
- e. Explain steps used to execute a C program [4 marks]
- f. Write a c++ program to find the largest value of any three numbers entered by the user through the keyboard. [6 marks]
- g. Describe enumerated data type as used in C++ [4 marks]
- k. Using a suitable example explain for loop statement . [4 marks]
- m. Discuss elements of user defined functions [2 marks]

SECTION B: ANSWER ANY THREE QUESTIONS

QUESTION TWO (20 Marks)

- a) Identify the error and rewrite the program [4 marks]

```
# include <stdio.h>
main
{
    int A,b, sum;
    printf ("ENTER VALUE FOR A ; ")
    scanf ("%d",&a);
    printf(ENTER VALUE FOR B ;");
    scanf("%d",&b);
```

```

        sum=a+b
        printf("Sum Of Given Two Numbers are %d" Sum);
    } }

```

- b) Write a c language program to read a number and find whether the given number is even or odd. [5 marks]
- c) Write a c++ program to find factorial of given number [6 marks]
- d) . Explain five principles of object oriented programming [5 marks]

QUESTION THREE (20 Marks)

- a) Using else if statement write a c++ program to display the day depending on the choice entered by the user from the key board [6 marks]
- b) Identify the error and correct the program. [4 marks]

```

#include<stdio.h>
main()
{
int i;
printf("enter a number")
scanf " ",&i);
if(i<=50)
printf("\n entered number is <50)

```

- c) Describe the class structure [4 marks]
- d) (i) What is a Pointer [2 marks]
(ii) Describe four the advantages of using pointers [4 marks]

QUESTION FOUR (20 Marks)

- a) (i) What is variable. [1 marks]
(ii) What are the rules followed when declaring it. [3 marks]
- b) Differentiate the following:
(i) Compiler
(ii)Translator [2 marks]
- c) Discuss any three advantages for using functions in a program [3 marks]

- d) Describe the following functions. [6 marks]
 (i) Call by value
 (ii) Call by reference
 (iii) Inline function
- e) Write a program to calculate the area of triangle [5 marks]

QUESTION FIVE (20 Marks)

- a. (i) What is inheritance? [2 marks]
 (ii) Discuss any four types of inheritance available in c++. [4 marks]
- b. Write a C++ program to find the sum of first 100 natural Numbers using for loop Statement [4 marks]
- c. Write a C program to accept student roll no, marks in 3 subjects and calculate total, average and print it [5 marks]
- d. (i) What is a constructor [1 marks]
 (ii) When are they used in a program [3 marks]
- e. Explain any two logical operators used in c++ [2 marks]