

[Total No. of Questions : 8]

F.E. (Semester - II) (Revised in 2007 - 08) Examination, May/June 2011

INFORMATION TECHNOLOGY - II

Duration : 3 Hours

Total Marks : 100

*Instructions : 1) Answer any five questions with at least one question from each Module.**2) Assume necessary data.**3) Diagrams in pencil only.***MODULE - I**

- Q1)** a) Explain the mechanism of a magnetic tape and provide a suitable diagram to support the answer. [5]
 b) What do you mean by ROM. Explain the different types of ROM. [7]
 c) Write a short note on the following input devices: [8]
 i) Keyboard ii) Mouse
- Q2)** a) List and explain the different functions of operating system. [5]
 b) Give the use of the following linux commands [2]
 i) chmod ii) ls
 c) What do you mean by topology? Explain different network topologies with the help of a neat diagram. [6]
 d) Explain how email works? [3]
 e) Explain the following addressing in internet [4]
 i) Domain name ii) IP address

MODULE - II

- Q3)** a) What do you mean by database? What are the functions of database. [8]
 b) Write an algorithm and draw a flowchart to generate fibonacci series. [8]
 c) Distinguish between Assembly language and high level language. [4]
- Q4)** a) Write an algorithm and draw a flowchart to check if the number entered is a palindrome. [10]
 b) Explain any two types of database management system. [6]
 c) What are the functions of an assembler and a compiler. [4]

MODULE - III

- a) Evaluate the following expressions [4]
- Given $i = 8, j = 5$, evaluate $k = 2 * ((i/3) + 4 * (j - 2))$. What is the value of K.
 - Given $x = 2, y = 3$, $SI = ++x + y++$. What is the value of SI.
 - Given $a = 4, b = 3$, evaluate $c = a \& b$. What is the value of c.
 - Given $a = 10$, evaluate $b = a << 2$. What is the value of b.
- b) Write a C program to find the sum of the following series $2 - 4 + 6 - 8 + \dots n$ terms. [6]
- c) Distinguish between [4]
- While and do-while
 - Break and continue.
- d) Explain the syntax of the following [6]
- For loop
 - Switch statement
 - Scanf statement

- a) Write a C program to generate the following pattern. [8]

```

1 2 3 4 4 3 2 1
1 2 3       3 2 1
1 2         2 1
1           1

```

- b) What do you mean by ternary operator, explain with an example. [6]
- c) Give the output for the following programs [4]

- Void main ()

```

{
    printf ( "%d", printf ("Helloworld"));
}

```
- Void main ()

```

{
    int a, b, c;
    b = 10;
    While (b < 100)
    {
        a = b ++;
        c = ++b;
    }
}

```

- d) Point out the errors in the following program and correct it.

[2]

```
Void main ( )
{
    int i = 4, j = '2';
    switch (i)
    {
        case 1 : printf (" aaa");
                break;;
        case j : printf (" bbb");
                break;
        case i * j : printf (" ccc");
                break;
    }
}
```



MODULE - IV

- Q7) a) With the help of an example, distinguish between actual & formal arguments. [4]
b) Write a C program to find the largest and the smallest element in an array of an integers. [8]
c) Write a C program to find the sum of the digits of an integer. Make use of the concept of user defined functions. [6]
d) How does function definition differ from function declaration. [2]
- Q8) a) Write a program to accept a string reverse it and check whether it is a palindrome. [6]
b) Write a program to copy the content of "file 1 . txt" to "file 2 . txt". [8]
c) Explain the following functions with respect to files. [4]
i) rewind () ii) fflush ()
d) Explain the following string handling functions. [2]
i) strcpy () ii) strncpy ()

