SEM 2 – 3 (RC)

# F.E. (Semester – II) (Revised in 2007-08) Examination, November 2010
## INFORMATION TECHNOLOGY

Duration : 3 Hours | Total Marks : 100

***Instructions :*** *1) Answer **five** questions with **at least one** question from **each** Module.*
*2) Assume **wherever** necessary.*

### MODULE – I

1. a) Explain the different variations of ROM. **5**
   b) What is auxiliary storage ? Explain floppy disk and hard disk. **5**
   c) Explain any one input device and one output device. **6**
   d) Describe some salient features of DOS and Windows O.S. **4**

2. a) State and explain the two network architectures. **5**
   b) What is Domain Name ? How is it related to IP address ? **4**
   c) Write short note on : **6**
      i) URL
      ii) WWW
      iii) Web browsers.
   d) Explain how email works with a diagram. **5**

### MODULE – II

3. a) What is a database and DBMS ? Explain the consistency and non-redundancy of data in the database. **4**
   b) State and explain types of DBMS. **10**

**P.T.O.**

c) Explain the following : 6

i) Machine languages

ii) Assembly languages

iii) High level languages.

4. a) Define assembler. What is the difference between interpreter and compilers ? 3

b) Draw the diagram showing the compilation process. 5

c) Explain query languages and report generators. Decision Support System and Financial Planning languages. 4

d) Write an algorithm and draw the flowchart to display Fibonacci series of n terms. 8

## MODULE – III

5. a) Explain the basic types of constants. 4

b) Define and explain the three classes of data types. 6

c) What is meant by operator precedence and associativity. Give example. 4

d) Explain the following with examples : 6

i) getchar ( )

ii) printf ( )

iii) scanf ( ).

6. a) Identify errors in the following : 3

i)
```
# include < stdio. h>
main ( )
{
   char x, y;
   int z ;
   x = a;
   y = = b;
   z = x + y;
   printf ("%d", z);
}
```

ii) # include < stdio.h>

```
main ( )
{
   int total marks = 5;
   printf ("%d", total marks)
}
```

iii) # include <stdio.h>

```
main ( )
{
   float area;
   int radius ! = 4;
   area = 3.14* *radius* 2;
   print ("% f ", area);
}
```

b) Explain if statement with example. 3

c) Explain the structure of for loop used in C program. 4

d) Write a C program to find whether a given integer is a palindrome or not. 5

e) Write a C program using switch statement to implement the simple operations of a calculators. 5

## MODULE – IV

7. a) State and explain the elements of a function. 6

b) Explain the difference between call by value and call by reference using an example. 4

c) Write a C program to find largest of value in an array of float elements using function. **6**

d) State the rules for passing two dimensional arrays to a function. **4**

8. a) Explain the two ways of one dimensional array initialization. **4**

b) Why are files desirable for handling large volumes of data. **4**

c) Explain the following basic file operations supported in C : **6**

i) Naming a file

ii) Reading data from a file

iii) Closing a file.

d) Explain the general format of opening a file with example. **6**

---