

## SEM 2-3 (RC 07-08)

## F.E. Sem. – II Examination, May/June 2012 INFORMATION TECHNOLOGY (Revised in 2007-2008)

Duration: 3 Hours Total Marks: 100 Instructions: i) Attempt any five questions, with atleast one question from each Module. ii) Make suitable assumptions, if required. b) A C program contains the followallons and initial assignments a) Explain any 1 input device. 6 b) Describe any two characteristics of monitor. so to suitay and animated 4 c) What is the difference between RAM and ROM? d) What is an operating system ? Briefly describe its functions. 6 a) Explain the following: 6 i) Web browser ii) IP address iii) Domain name. b) Describe star network topology with diagram. 6 c) Write a note on dot-matrix printer. 4 d) What is the purpose of following LINUX commands: 4 i) touch ii) cat iii) who iv) chmod MODULE-II 3. a) What are the benefits of using Database Management System ? b) With the help of neat diagram, explain compilation process. 8 c) Write an algorithm and draw flowchart for computing factorial of a number. 8



| 4.     |      | Differentiate between low-level and high-level languages.  | 6  |
|--------|------|--|----|
|        |      | Describe the characteristics of data in database.  | 5  |
|        | c)   | What is flowchart? What are the different elements used for constructing                               |    |
| nn e - |      | flowchart?   | 6  |
| 901.   |      | What is the function of assembler?   | 3  |
|        | nori | Instructions: I) Attempt any five questions, with aleast one question assert ModIII – BUDDOM           |    |
| 5.     | a)   | List and explain basic data types used in C.   | 7  |
|        |      | A C program contains the following declarations and initial assignments : int i=8, j=5;                |    |
|        |      | float x=0.005; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;   |    |
| b.     |      | Determine the value of each of the following expressions:  |    |
|        |      | i) 2*((i/5)+(4*(j-3))%(i+j-2)) and MAR neewed expensions:  | 3  |
|        |      | d) What is an operating system ? Briefly describe its fur (5>j) && (0 <i) (ii<="" td=""><td></td></i)> |    |
|        |      | Explain the following: (0 <x)! (iii<="" td=""><td></td></x)!>  |    |
|        |      | iv) ++x  | -1 |
|        | c)   | Write a C program using 'for' loop to find the average of n numbers.                                   | 7  |
| 6.     |      |  | -  |
| 0.     | a)   | i) printf() ii) scanf() iii) getchar()   | 6  |
|        | b)   |  |    |
|        |      | Describe the syntax of following control loops:  i) for loop  ii) while loop                           | 6  |
|        | c)   | Explain 'continue' statement with an example.  | )  |
|        |      | Identify errors in the following C program :   | 4  |
|        | -,   | i) #include <stdio.h></stdio.h>  | 4  |
|        |      | main()   |    |
|        |      | MODULE-#   |    |
|        |      | float area; InemeganaMeasdated prieu to affioned ent are tertW (e                                      | .8 |
| 8      |      | int radius !=4;q notaliqmoo niskyra mangalo taan to qiad adridti.V (c                                  |    |
| 8      |      | dmp area=3.14**radius*2; on of herlawork werb bits midflegts its emW (c                                |    |
|        |      | printf("%f", area);  |    |
| .O.T.  |      | }  |    |



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ii) #include<stdio.h> // Example and // All 
                                           main()
                                                char u,r;
                                                int w;
                                                u=a;
                                                v=b:
                                               w=a+b;
                                                printf("%d", w);
                                                                                                                                      MODULE-IV
 7. a) Illustrate the concept of C functions with an example.
              b) Differentiate between actual arguments and formal arguments.
              c) What is an array? Write a C program to find transpose of a matrix.
              d) What is the purpose of following string functions:
                                                                                                                                                                                                                                                                                                                               3
                               i) strcpy()
                            ii) strien() strien()
                           iii) strcat()
8. a) Explain the following basic file operations supported in C:
                              i) opening a file in read mode.
                            ii) closing a file.
             b) What is recursion? Illustrate with an example.
             c) Write a C program to read data from keyboard and write it to a file?
```