



F.E. (Semester – II) (Revised in 2007-08) Examination, Nov./Dec. 2015
INFORMATION TECHNOLOGY

Duration : 3 Hours

Total Marks : 100

Instructions : 1) Attempt **any five** questions, with at least **one** question from **each** Module.

2) Make suitable assumptions, if required.

Module – I

1. a) Explain the characteristics of a monitor. 6
- b) What is an operating system ? List the functions of operating system. 5
- c) What do you mean by topology ? Explain any 2 network topologies with the help of diagrams. 6
- d) What is an IP address ? 3
2. a) Explain the working of CPU and memory with the help of a diagram. 7
- b) Describe the working of email. 8
- c) What are input devices ? Explain any two input devices. 5

Module – II

3. a) Explain the generations of languages. 6
- b) Write an algorithm and draw a flowchart to find sum of digits of a number. 8
- c) List the characteristics of data in a database. 6
4. a) Write an algorithm and draw a flowchart to generate Fibonacci series. 8
- b) With the help of a neat diagram explain the compilation process. 6
- c) Differentiate between high level and low level languages. 6

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Module – III

5. a) Write the general syntax and explain the working of 'for' statement in C with an example. 5
- b) Distinguish between ++ i and i++. 2
- c) Write a C program using switch statement to implement the simple operations of a calculator. 6
- d) What is an operator ? Explain the arithmetic, relational and assignment operators in C language. 7
6. a) What is type conversion ? Explain different types of type conversions. 6
- b) Explain with example entry controlled and exit controlled loop. 6
- c) Write a C program to generate the following pattern. 5

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  *****
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- d) Give the use of break statement in loops with an example. 3

Module – IV

7. a) What is function ? Write and explain the general format of function definition. 5
- b) Write a C program to find the squares of numbers stored in an array. 6
- c) What is recursion ? What are the advantages and limitations of recursion ? 4
- d) Write a C program to open a file and enter some text in it. 5
8. a) Explain the following file input/output functions. 6
 - i) rewind()
 - ii) getc()
 - iii) fseek()
- b) Write a program to read array of n random numbers and sort and print the numbers in ascending order. 7
- c) Define and explain two dimensional arrays with example. 4
- d) Explain the different modes of a file. 3