

Roll No.

Total No. of Pages : 2

Total No. of Questions : 09

B.Tech. (Sem.-1/2)

**FUNDAMENTALS OF COMPUTER
PROGRAMMING & IT**

Subject Code : BTCS-101 (2011 & 2012 Batch)

Paper ID : [A1108]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C. have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying EIGHT marks each.
4. Select atleast TWO questions from SECTION - B & C.

SECTION-A

1. Write briefly :
 - a. Differentiate between RAM and ROM.
 - b. List various functions of word processing software.
 - c. Define algorithm. How is it different from a program?
 - d. What is the use of break statement?
 - e. Differentiate between while loop and do-while loop.
 - f. What are storage classes?
 - g. What are the different ways to initialize string variables?
 - h. What are destructors?
 - i. What do you mean by polymorphism?
 - j. What is the role of strcat function?

SECTION-B

2. What do you mean by GUI? What are the significant features of GUI based operating system?
3. Define algorithm and flowchart. Write an algorithm to check whether a given number is even or not. Draw its flowchart as well.
4. Describe in detail four significant features of MS-Word word processing software.
5. What are spreadsheets? How are they created? Describe how data in a spreadsheet can be analyzed by using simple graphs like bar charts and line graphs.

SECTION-C

6. Describe the following terms :
 - a. Identifiers
 - b. Type modifiers
 - c. Symbolic constants
 - d. Keywords
7. Differentiate between iteration and recursion. Write iterative and recursive functions for finding factorial of a number. Illustrate the use of these functions in a program.
8. What are the different forms of inheritance supported by C++? Explain them with an example.
9. What is file? Write a C++ program to count the number of characters in a given file.