Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

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

l. **Answer briefly :**

a. What do you mean by psuedocode?

b. Differentiate between RAM and ROM.

c. List various types of operating systems.

d. What are symbolic constants? How are they created?

e. Define expression.

f. List various advantages of using functions.

g. Differentiate between call by value and call by reference.

h. What do you mean by data encapsulation?

i. What are constructors?

j. Define file.

SECTION-B

2. With the help of a block diagram, describe in detail various components of a computer system.

3. Describe in detail evolution of internet and its applications.

4. List various symbols used in flowcharts. Draw a flowchart to check whether a number is prime or not.

5. Describe mail merge feature of a word processing software.

SECTION-C

6. What do you mean by iteration? List and explain various constructs for iteration available in C++.

7. With the help of an example, describe passing of strings to a function.

8. What do you mean by member functions? Describe how member functions can be defined inside a class and outside of a class. What is the difference between these two types of definitions?

9. Write a program in C++ to count number of characters in a file.