

B. Tech. (Sem. – 1<sup>st</sup>)

## FUNDAMENTALS OF COMPUTER PROGRAMMING &amp; IT

SUBJECT CODE: BTCS - 101 (2011 Batch)Paper ID: [A1108]

Time: 03 Hours

Maximum Marks: 60

## Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Five** questions from Section - B & C.
- 3) Select at least **two** questions from section B & C.

**Section - A***(2 Marks each)*

- Q1) a) What are various functions of operating system?  
b) What is difference between ROM, PROM and EPROM?  
c) What are identifiers?  
d) What do you mean by associativity of operators? When is it needed?  
e) What is the use of break statement?  
f) How are string variables initialized?  
g) What is polymorphism?  
h) What are destructors?  
i) Differentiate between pointers and references?  
j) What is the utility of mail merge in MS-WORD?

**Section - B***(8 Marks each)*

- Q2) With the help of block diagram, describe in detail various components of a computer system?  
Q3) Describe in detail evolution of Internet and its applications and services.  
Q4) Define an algorithm. Write an algorithm to check whether a given number is even or odd. Draw its flowchart as well.  
Q5) Describe in detail four significant features of MS-Word word processing software.

**Section - C***(8 Marks each)*

- Q6) a) Why do we need default arguments in a function?  
b) What is the main advantage of passing arguments by reference?  
Q7) a) What are objects? How are they created?  
b) What is a constructor? Is it mandatory to use constructors in a class?  
Q8) What are the different forms of inheritance? Give an example for each?  
Q9) Write a program in C++ to find the sum of the series  $1+2+3+4+\dots+n$  terms?

\*\*\*