Roll No _____

Examination May-2014

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BTCS-101
Fundamentals of Computer Programming & IT

Time Allowed: 3 Hrs.   Paper ID- A1108   **Maximum Marks: 60**

Note: Attempt five questions from Section-B and Section-C, selecting atleast two from each part and the entire Section-A.

Section-A

I.   Give short answers of the following:
   a.   What is an operating system?
   b.   Differentiate between primary memory and secondary memory.
   c.   What are keywords?
   d.   What are expressions? How are they evaluated?
   e.   What is the use of continue statement?
   f.   Differentiate between user-defined functions and library functions.
   g.   What is data encapsulation?
   h.   What are constructors?
   i.   What is a friend function?
   j.   What is a stream?

(2×10 =20)

Section-B

II.   Draw and explain the different components of block diagram of the computer.

III.   What do you mean by GUI? What are the significant features of GUI based operating system?

IV.   Define an algorithm. Write an algorithm to check whether a given number is prime or not. Draw its flowchart as well.

V.   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.

(8 marks each)

Section-C

VI.
   a.   What is a reference variable? What is its major use?
   b.   Differentiate between call by value and call by reference.

VII.
   a.   What is a class? How does it accomplish data hiding?
   b.   Can we have more than one constructor in a class? If yes, explain the need for such a situation?

VIII.   What does inheritance mean in C++? What are the different forms of inheritance?

IX.   What is file? Write a program that read some text from keyboard and write it into a file named "Abc.txt". The program then reads this file and displays its content on the computer screen.

(8 marks each)

———— End ————