Please check that this question paper contains 9 questions and 2 printed pages within first ten minutes.

[Total No. of Questions: 09]   [Total No. of Pages: 2]

Uni. Roll No. ....

Program: B.Tech. (Batch 2018 onward)
Semester : 3rd
Name of Subject: Object Oriented Programming Using C++
Subject Code: PCIT-102
Paper ID: 16041
Scientific calculator is NotAllowed

Time Allowed: 03 Hours   **Max. Marks: 60**

NOTE:

1) Parts A and B are compulsory
2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
3) Any missing data may be assumed appropriately

<center>Part – A   [Marks: 02 each]</center>

Q1.

   a) Write a short note on scope resolution operator.

   b) How will you declare and define a constructor?

   c) Why friend function is used in C++?

   d) How would you differentiate between parametrized and copy constructors?

   e) Design a program to illustrate the concept of Implicit Type Conversion.

   f) Differentiate between abstraction and encapsulation.

<center>Part – B   [Marks: 04 each]</center>

Q2. Compare and contrast virtual function and pure virtual function with help of an example.

Q3. Discuss the different types of operators used in C++.

Q4. Explain the concept of run time polymorphism with the help of an example.

Q5. Write a program to demonstrate the concept of Function Overloading.

Q6. Write a C++ program to show the implementation of ifstream and ofstream classes.

Q7. Develop a program to improve the functionality of program by using error handling during file operations.

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Part – C   **[Marks: 12 each]**

Q8.   Explain various control statements available in C++ using programming examples.

OR

What is Inheritance? Explain Multiple and Hierarchical Inheritance with suitable programming examples.

Q9.   Create a program to copy the contents of a file to another using Command Line arguments.

OR

Develop a program to convert a String to a List of Characters in C++ programming. Also implement the try, catch and throw method to handle the exception in the program.

Input: String = "C++Programming"

Output: [C,+,+,P,r,o,g,r,a,m,m,i,n,g]

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