Code No. : B-415(A)

Annual Examination - 2017

BCA - II

BCA-203

PROGRAMMING IN C++ & VISUAL C++

Max.Marks : 100

Time : 3 Hrs.   Min.Marks : 40

Note : Section 'A', containing 10 very short-answer-type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

Section - 'A'

Answer the following very short-answer-type questions in one or two sentences :   **(2x10=20)**

Q.1   Define class and object.

Q.2   What is polymorphism?

Q.3   Can a constructor be overloaded? Justify.

Q.4   What is meant by early & late binding?

Q.5   Which of the following operators in C++ cannot be overloaded (a) ++   (b) : :   (c) +   (d) -

Q.6   What is pure virtual function?

Q.7   Write full form of MFC.

Q.8   Write any three VC++ components.

Q.9   What are the features of object-oriented programming?

Q.10   Write any three access specifiers of C++.

P.T.O.

Section - 'B'

Answer the following short-answer-type questions with word limit 150-200 :   **(6x5=30)**

Q.1   Explain the need for object-oriented programming.

OR

What is a function overloading? Explain with an example.

Q.2   How a class is different from an object?

OR

What are base & derived constructors called? Explain.

Q.3   Write different types of control structures used in C++.

OR

What is an inline function? Give an example.

Q.4   What do you mean by Bosch methodology?

OR

Explain object type & attribute type.

Q.5   Write down the steps for creating a VC++ program.

OR

Define ODBC. How is it supported in VC++?

Section - 'C'

Answer the following long-answer-type questions with word limit 300-350 :   **(10x5=50)**

Q.1   Write a program in C++ to calculate the area of circle, rectangle & triangle using function overloading.

OR

What is a data type? Explain different data types in detail with examples.

Q.2   Write a C++ program to display names, roll numbers, and grades of 3 students who have appeared in the exam. Create an array of class objects. Read and display the contents of the array.

OR

Discuss different types of inheritance with suitable example.

Q.3   Write a program to swap two numbers using in line-function.

OR

What is the difference between a virtual function and a pure virtual function? Give example of each.

Q.4   Describe in deail varous methodology of object-oriented design.

OR

Explain the steps involved in establishing ODBC in a VC++ application with an example.

Q.5   Describe the visual C++ components in detail.

OR

Write a program in VC++ to perform addition & multiplication of two numbers.

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