Total No. of Questions : 9]   [Total No. of Printed Pages : 4

(2102)

BCA (CBCS) RUSA IIIrd Semester Examination

3994

OBJECT ORIENTED PROGRAMMING WITH C++

BCA-304

Time : 3 Hours]   [Maximum Marks : 70

Note :– Attempt *five* questions in all. Question No. 1 (Part A) is compulsory containing 10 fill in the blanks of 1 mark each and *five* short answer questions of 4 marks each. Select *one* question each from Parts–B, C, D and E.

Part–A

(Compulsory Questions)

1. Fill in the blanks :

    (i)   Objects is a/an .... of a class.

    (ii)   The process of building new class from existing ones is called ....

(iii) In function overloading, two functions can have the same .... in a program.

(iv) A class is a collection of .... and ....

(v) A bool value returns ...., or ....

(vi) The .... statement allows a program to make a decision.

(vii) The .... operator compares two values for equality.

(viii) The qualifier used to declare constants in C++ is ....

(ix) .... operator in C++, requires three operands.

(x) Variable of a class are called .... 1×10=10

Short answer type questions (25 to 50 words) :

(i) What is the basic structure of a C++ program ?

(ii) What are the various Arithmetic Operators in C++ ?

(iii) Explain the keywords in C++.

(iv) What is Operator Overloading ? Explain with example.

(v) Explain various relational operators in C++. 4×5=20

Part–B

Unit–I

2. Explain the concept of object oriented programming language. Distinguish the OOP language from procedural language. 10

3. (i) What are Operators ? Explain various operators of C++ in detail.

(ii) What are comments in C++ ? Explain. 6+4=10

Part–C

Unit–II

4. (i) Write a program in C++ to add first 10 natural numbers.

(ii) Explain goto control statement with example. 6+4=10

5. (i) Explain enumerated data type with example.

(ii) Explain Functions. How the arguments passed to a function and how it relations the values ? 6+4=10

Part–D

Unit–III

6. (i) Define Objects. Explain how C++ objects works as data types.

   (ii) Explain the concept of constructor. How the constructors are used ?

   $5+5=10$

7. (i) Explain the concept of array. Describe array elements.

   (ii) Write a program in C++ to add two 1-dimenssional arrays.

   $5+5=10$

Part–E

Unit–IV

8. (i) Explain Operators. Define the concept of operator overloading with the help of example.

   (ii) Explain how binary operators are overloaded.

   $6+4=10$

9. (i) Explain multiple inheritance. Explain the concept of ambiguity in multiple inheritance.

   (ii) Define the concept of aggregation. Explain different levels of inheritance.

   $5+5=10$