BCA (CBCS) RUSA IIIrd Semester Examination

4045

OBJECT ORIENTED PROGRAMMING WITH C++

BCA-0304

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 Question)

1. Fill in the blanks :

   (i)   In C++, ... are the variables of the type class.

(ii) The insulation of the data from direct access by the program is called ....

(iii) Polymorphism means the ability to take more than one form.

(iv) The process by which the objects of one class acquire the properties of objects of another class is known as single inheritance

(v) The smallest individual units in a program is known as ....

(vi) In C++, Constructor allows that we can have more than one function with the same name in our program.

(vii) By default, the members of a class are private .

(viii) A Encapsulation is a way to bind data and its associated functions together.

(ix) A member function can be called by using its name inside another member function of the same class, is known as Object of member functions.

(x) A static member function can have access to the .... members declared in the same class and can be called using the class name.

$1 \times 10 = 10$

Short answer type questions (25 to 50 words) :

(i) What do you mean by Identifiers ? Explain.

(ii) What are Objects ?

(iii) How is a member function of a class defined ?

(iv) Why in C++, a variable can be declared anywhere in the scope ? What is the significance of this feature ?

(v) Differentiate between an array and a string. $4 \times 5 = 20$

Part–B

Unit–I

2. Explain the terms :

(i) Reusability

(ii) Polymorphism $5+5$

3. (a) Explain different types of operators present in C++.

(b) With the help of an example, show how a setu manipulator works. $5+5$

Part–C

Unit–II

4. (a) Write a program in C++ to print maximum of the given three numbers using conditional operator.

 (b) What are storage classes ? Explain. 5+5

5. What are enumerated data types ? Explain with the help of an example program. 5+5

Part–D

Unit–III

6. Is it possible to declare and use a multidimensional array in C++ ? Explain with the help of an example program. 5+5

7. What are objects and classes ? How objects are created inside a class ? Explain how a class accomplishes data hiding. 4+3+3

Part–E

Unit–IV

8. Write a program to show how a Unary operator is overloaded. 10

9. What do you mean by multilevel inheritance ? Explain with the help of an example. 5+5

C–592 (4)