

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BC-198

B.C.A. (Part-I) Examination, 2022

PROGRAMMING IN C++

Paper - BCA-103

Time : 3 Hours]

[Maximum Marks : 70

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 4 × 5 = 20)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **50** words). Each question carries **4** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) What is Token ? Explain.
- (ii) What is data abstraction ? Explain.
- (iii) Explain goto statement in C++.
- (iv) What is recursive function ? Explain.

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- (v) Explain class and object.
- (vi) What is Array of pointer ? Explain.
- (vii) What is Abstract Class in C++ ? Explain.
- (viii) What is Constructor ? Explain.
- (ix) What is Operator Overloading ? Explain.
- (x) Explain features of C++ 11.

Section-B

2. Explain concept of object oriented programming.

Or

What is type conversion ? Explain types of type conversions in C++.

3. What is function overloading ? Explain it with suitable example.

Or

Differentiate Pass by Value and Pass by Reference with suitable example.

4. Write a program to check a given string is palindrome or not palindrome.

Or

Explain instance variables and member function of a class using suitable example.

5. What is method overriding ? Explain with suitable example.

Or

What is Copy Constructor ? Explain with suitable example.

6. Differentiate Compile time and Run time polymorphism.

Or

Write a program to overload Unary++ operator using friend function.

Section-C

7. Explain the following with suitable example :
 - (a) Dynamic Binding
 - (b) Constants
 - (c) Scope of Variable
 - (d) Conditional Operator
 - (e) Cascading of input and output operator
8. Write a program using recursive function to find out factorial of a given number.
9.
 - (a) Write a program for matrix multiplication.
 - (b) Write a program using class and object to calculate total marks and percentage of a student.
10.
 - (a) What is multipath inheritance ? Explain with suitable example.
 - (b) Explain constructor invocation in inheritance.
11. What is Template ? Explain Function template and Class template with suitable example.