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BCA (Sem-I) – Program

Fundamental Using C++ (101) Core-I

**2022**

*Time : 3 hours*

*Full Marks : 70*

*Candidates are required to give their answers  
in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer all sections as directed.*

### **Section-A**

#### **(Compulsory)**

1. Pick up the correct alternative for each of  
the following questions :  $2 \times 10 = 20$

(a) Which of the following is the correct  
syntax of including a user defined loader  
file in C++ ?

(i) #include[userdefined]

(ii) #include "userdefind"

(iii) #include <userdefined.h>

(iv) #include<userdefined>

(b) Which of the following is not a type of construction in C# ?

(i) Default constructor

(ii) Parameterized constructor

(iii) Copy constructor

(iv) Friend constructor

(c) Which of the following type is provided by C# but not C ?

(i) Double

(ii) Float

(iii) int

(iv) bool

(d) Which is more effective while calling the C++ function ?

(i) Call by object

(ii) Call by pointer

(iii) Call by value

(iv) Call by reference

(e) The C++ code which causes abnormal termination behaviour of a program should be written under \_\_\_\_ block.

(i) Catch

(ii) Throw

✓(iii) Try

(iv) Finally

(f) What is inheritance in C++ ?

✓(i) Deriving new class from existing class

Contd.

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(3)

(Turn over)

- (ii) Overloading of classes
  - (iii) Classes with same names
  - (iv) Wrapping of data into a single class
- (g) Pick incorrect statement about inline function in C# ?
- (i) Saves overhead of a return call from a function
  - (ii) They are generally very large and complicated function
  - (iii) These functions are inserted/ substituted at the point of call
  - (iv) They reduce function call overhead
- (h) Which concept allows you to reuse the written code in C++ ?

✓(i) Inheritance

(ii) Polymorphism

(iii) Abstraction

(iv) Encapsulation

(i) How structure and classes in C++ differ ?

(i) Structure by default hide every member where as class do not

✓(ii) In structure, member are public by default where as classes, they are private by default

(iii) Structure cannot have private member where as class can have

(iv) In structure, members are private by default whereas in class they are public by default

(j) Which of the following is a correct identifier in C++ ?

- ✓(i) VAR\_1234
- (ii) \$var name
- (iii) 7VAR NAME
- (iv) 7 var\_name

### Section-B

(Short answer type questions)

Answer any **four** questions of the following :

5×4=20

2. What is a token ? What are the different types of token in C++ ?
3. Differentiate between POP and OOP with the support of example.
4. Differentiate entry controlled loop and exit controlled loop.

5. Define classes and objects with the support of example.
6. Write a program in C++ to find the reverse of a five digit number using class.
7. What is a pointer? Support your answer with a example.
8. Write a program in C++ to find the area of triangle using a constructor.

### Section-C

(Long answer type questions)

Answer any two questions of the following :

15×2=30

9. What are the constructor in C++? Enlist its various types. Write a program in C++ of parameterized constructor.

10. Define operator overloading. How operator overloading can be done in C++ ? Support your answer with a example.

11. What is Inheritance ? Enlist its types. Write a program in C++ for multiple inheritance.

12. What is a loop in C++ ? Enlist its type. Write a program in C++ to show the use of exit controlled loop.

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