Total number of printed pages: 2 **Diploma/V/DCSE503**

2023
Object Oriented Programming with C++

Full Marks : 100
Time : Three hours

Answer question no 1 and any *four* from the rest

1. Answer all the questions

   i) Which one is for code reusability?
   (Abstraction, Polymorphism, Encapsulation, Inheritance)

   ii) How many types of access specifiers are in C++?
   (One, Two, Three, Four)

   iii) Combining data and functions in a class is known as?
   (Encapsulation, Inheritance, Enhancement, Abstraction)

   iv) Hide the implementation and show only the features is known as?
   (Abstraction, Polymorphism, Encapsulation, Inheritance)

   v) Access specifier of constructor is?
   (Private, Public, Protected, Any access specifier)

   vi) The suitable access specifier is for data members of a class?
   (Private, Public, Protected, Any access specifier)

   vii) Multiple functions with same name with different parameters is?
   (Abstraction, Overloaded, Encapsulation, Inheritance)

   viii) The default access specifier is used in a class definition?
   (Private, Public, Protected, Any access specifier)

   ix) IS A relationship in C++ is associate with?
   (Inheritance, Encapsulation, Composition, None of the above)

   x) Correct way of inheritance for Cat and Animal is?
   (class Cat: public Animal, class Animal: public Cat, Both are correct way, None is correct way)

2 x 10

2. Discuss characteristics and problems of structured programming. How these problem can be solve by Object Oriented Programming?

10 + 10

3. Briefly explain the inheritance with suitable example. Explain the order of execution of the constructors in the base and derived class with example.

10 + 10

4. What is exception? Why exception handling is better to use? Explain exception handling with ***try..... catch*** by using suitable example.

5 + 5 + 10

5. How ambiguity arises in multipath inheritance? How can you remove this type of ambiguity? Explain with suitable example.

5 + 5 + 10

6. Write the short note on: (any four)
i) Constructor
ii) Destructor
iii) Operator overloading
iv) Friend function
v) Function overloading

5 x 4

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