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SAT-003-2033002   Seat No. _30905_

B. C. A. (Sem. III) (CBCS) (W.E.F. 2019) Examination

December - 2021

CS-14 : C++ and Object Oriented Programming

(New Course)

Faculty Code : 003

Subject Code : 2033002

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

Instructions : Attempt any Five questions.

1   (A)   Objective type questions :   **04**
   - (1)   Full form of OOP.
   - (2)   Wrapping up of data and function together is known as ____ .
   - (3)   In POP languages, the main focus is on _____ .
   - (4)   C++ was developed by _____ .

   (B)   Explain Scope resolution operator.   **02**

   (C)   Explain structure of C++ program.   **03**

   (D)   What is OOP ? List and explain basic concepts of OOP. **05**

2   (A)   Objective type questions :   **04**
   - (1)   What is identifier ?
   - (2)   What is a derived data type ?
   - (3)   What is Expression ?
   - (4)   What is C++ ?

   (B)   What is memory management operator ?   **02**

   (C)   Explain the concept of namespace.   **03**

   (D)   Write the benefits and applications of OOP.   **05**

3   (A)   Objective type questions :   **04**
   - (1)   A class defined inside a class is known as _____ .
   - (2)   A static member variable is initialized to _____ when an object is created of its class.
   - (3)   The members of a class are _____ by default.
   - (4)   Full form of MIL.

(B) What is class ?   02

(C) Explain static data member and member function in   03
     class.

(D) What is constructor ? Explain all types of constructor   05
     in detail.

4   (A) Objective type questions: 04
        (1) What is member function ?
        (2) What is Local class ?
        (3) What is copy constructor ?
        (4) What is explicit constructor ?

    (B) What is Destructor ?   02

    (C) Explain friend function in brief.   03

    (D) Explain array within class with example.   05

5   (A) Objective type questions :   04
        (1) The benefit of inheritance is ____..
        (2) If a class is deriving from a derived class, it is known
             as ____ inheritance.
        (3) Class A : public B, public C is example of _____.
        (4) How many types of inheritance in C++ ?

    (B) What is Operator Overloading ?   02

    (C) Write down rules for operator overloading.   03

    (D) What is Inheritance ? Explain the different types of   05
        inheritance in detail.

6   (A) Objective type questions :   04
        (1) What is Containership ?
        (2) What is Abstract class ?
        (3) What is Derived class ?
        (4) What is Hierarchical inheritance ?

    (B) How many visibility modifiers are available in C++ ?   02

    (C) List out types of conversion and explain any one with   03
        example.

    (D) How to overload binary operator using friend function ?   05
        Explain with example.

7   (A) Objective type questions :   04
        (1) Full form of RTTI.
        (2) If the name and prototype of functions in both the
             base class and derived class are same, then which
             version of the function will be called by the derived
             class object ?

(3) What would be the output of the following code ?
Float a =56.789;
cout<<setprecision(1)<<a;

(4) Which flag is used to specify hexadecimal number format ?

(B) Explain get() function.   **02**

(C) What is RTTI ? Explain in brief.   **03**

(D) Explain C++ stream classes.   **05**

8   (A) Objective type questions :   **04**
    (1) What is pointer to Object ?
    (2) What is pure virtual function ?
    (3) What is formatted I/O operation ?
    (4) What is the Use of manipulators ?

(B) Explain getline() function.   **02**

(C) Explain this pointer with an example.   **03**

(D) Explain virtual function in detail with example.   **05**

9   (A) Objective type questions :   **04**
    (1) Which function is used to find the current position of the output pointer ?
    (2) Full form of STL.
    (3) Which block handles the exception ?
    (4) An exception can be generated by _____.

(B) Explain seekg().   **02**

(C) Explain class template with example.   **03**

(D) Explain File mode in details.   **05**

10   (A) Objective type questions :   **04**
    (1) What is Error handling ?
    (2) What is a Sequential I/O operation.
    (3) What is Generic programming ?
    (4) What is a File pointer ?

(B) Explain tellg().   **02**

(C) Explain file stream classes.   **03**

(D) Explain Exception handling in detail with example.   **05**