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BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : MAY- 2024
SEMESTER – II

Sub: Object Oriented Programming Using C++
(BCA242-18/BCA242-20/ BCA23-201/BCAC23-201/BCA-CS242-20)

Date : 24/05/2024   Total Marks : 60   Time: 10.00 am To 12.30 pm

Instructions:
1. *All questions are compulsory unless and otherwise stated.*
2. *Bold figures to the right of every question are the maximum marks for that question.*
3. *Candidates are advised to attempt questions in order.*
4. *Answers written illegibly are likely to be marked zero.*
5. *Use of scientific calculators, Log tables, Mollier Charts is allowed.*
6. *Draw neat and labelled diagrams wherever necessary.*

Q.1   **Fill in the blanks.**   **(5)**
1. a::a() is called as _____
   - a) copy constructor
   - b) overload
   - c) default constructor
   - d) override
2. Object are instances of _____ .
   - a) pointer
   - b) class
   - c) program
   - d) function
3. ios::ate is used seek to _____
   - a) end of file
   - b) write into file
   - c) read a file
   - d) append a file
4. A class which inherit the attributes of two or more classes is called as _____
   - a) multilevel inheritance
   - b) single
   - c) multiple inheritance
   - d) none of these
5. The _____ moves put pointers to a specified location .
   - a) tellp()
   - b) seekp()
   - c) seekg()
   - d) tellg()

Q.2.   **State True/False.**   **(5)**
1. Cin and cout are not objects.
2. Constructor can be overloaded.
3. By default visibility mode in inheritance is public.
4. Inline expansion makes a program slowly.
5. Classes are basic runtime entity.

Q.3.   **Answer the following. (Solve any 5)**   **(10)**
1. Give difference between C and C++
2. What is protected access specifier?
3. What is early binding and late binding?
4. What is pure virtual function?
5. What is meant by stream?
6. What are manipulators in c++

Q. 4.   **Answer the following in detail. (Solve any 6)**   **(30)**
1.   What is inline function? Explain with example.
2.   Explain with example how friend function is important in c++
3.   What do you mean by exception handling? Write a program to show how it is achieved in c++
4.   Explain 'this' pointer.
5.   What is default argument? Give proper example.
6.   Give proper example how member function accessed outside class.
7.   Explain types of polymorphism briefly. Write down roles of polymorphism. How can we achieve dynamic polymorphism briefly? Explain with example.

Q. 5.   **Answer the following in detail. (Solve any 1)**   **(10)**
1.   What is constructor? Explain any two type of constructor with example
2.   Explain object oriented concept in C++.

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