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SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : DECEMBER/JANUARY- 2023-24
SEMESTER – II

CS/CB

Sub: Object Oriented Programming Using C++

(BCA –242-18/BCA-242-20/BCA-CS-242-20)

Date : 02/01/2024	Total Marks : 60	Time: 2.00 pm To 4.30 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 destructor should be declared in the _____ section of the class.
   - a) private
   - b) protected
   - c) public
   - d) constructor

2. _____ gives the current position of the put pointer
   - a) seekg
   - b) seekp
   - c) tellp
   - d) tellg

3. Function and class name share same name is called as _____
   - a) virtual function
   - b) constructor function
   - c) friend function
   - d) overloading function

4. Exceptions are the errors that occur at _____
   - a) compile time
   - b) run time
   - c) Error time
   - d) none of these

5. The object _____ is associated with the standard output stream
   - a) cin
   - b) scanf
   - c) cout
   - d) none of these

Q.2.   **State True/False.**   **(5)**

1. The modulus operator (%) can be used only with integer operands
2. Declarations can appear almost anywhere in the body of a C++ function
3. Virtual function can be friend of another class.
4. The setw manipulators used to insert a line.
5. The ifstream::ate() this function returns zero if end of file is reached

Q.3.   **Answer the following. (Solve any 5)**   **(10)**

1. Explain following with respect to C++ with examples. 1)new operator 2) delete operator
2. Write the significance of pure virtual functions in C++?
3. Write a snippet to destroy the constructor
4. What do you mean by dynamic binding? How it is useful in OOP?
5. What are the advantages of OOP?
6. How does a main () function in c++ differ from main () in c?

Q. 4.   **Answer the following in detail. (Solve any 6)**   **(30)**
1.   What is constructor? Explain any two type of constructor
2.   Explain friend function.
3.   Explain public, private and protected access specifiers and show their visibility when they are inherited as public, private and protected.
4.   What is a virtual function? Write rules for virtual function. Explain with example
5.   Explain function overloading with example
6.   What is file? Explain file pointers.
7.   What is Try ,Catch and Throw ? Explain with example

Q. 5.   **Answer the following in detail. (Solve any 1)**   **(10)**
1.   Explain Object oriented concept
2.   What is inheritance? Explain any two type of inheritance

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