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BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
(044)/BACHELOR OF SCIENCE (COMPUTER APPLICATIONS)(750)/
SPECIALIZATION IN CYBER SECURITY (CS)(464)/
BACHELOR OF SCIENCE (CYBER SECURITY)(760)/
EXAMINATION : MAY - 2026
SEMESTER – II
Sub: Object Oriented Programming Using C++
(BCA242-20/BCA23-201/BSC24-201/BCA-CS-242-20/BCAC23-
201/46425-201/76025-201/BSCC24-201)

Date : 26/05/2026

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.
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Q.1 Fill in the blanks.

(5)

1. _____ operator is used to free memory allocated using new operator
 - a) Free
 - b) Delete
 - c) old
 - d) inline
2. Every C++ program begins execution at the function _____.
 - a) main
 - b) header
 - c) class
 - d) start
3. _____ header file is used to define cin, cout.
 - a) <iomanip.h>
 - b) <iostream.h>
 - c) <fstream.h>
 - d) <conio.h>
4. _____ operator cannot be overloaded in C++
 - a) +
 - b) -
 - c) *
 - d) #
5. Runtime Polymorphism is achieved by _____.
 - a) Friend function
 - b) Virtual function
 - c) Operator Overloading
 - d) Function Overloading

Q.2. State True/False.

(5)

1. The unary operator operates on one operand.
2. Virtual function cannot be friend of another class.
3. The 'this' pointer is a reserved keyword that denotes the pointers to the object that is invoking a member function.
4. The input stream which allow reading or fetching characters.
5. The exception is typically caused by a faulty statement in a try block.

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

(10)

1. Give the difference between C and C++
2. What is data hiding?
3. Give the significance of 'Protected' access specifiers.
4. What is destructor?
5. What is a manipulator?
6. What is file?

Q. 4. Answer the following in detail. (Solve any 6)

(30)

1. What are inline functions? How are they useful?
2. Explain scope resolution operator with help of an example.
3. What are virtual functions and pure virtual functions?
4. What do you mean by "this" function?
5. Explain the friend function with example
6. Write a C++ program to create a class NUMBER with a constructor to initialize object of NUMBER class with three integer data values. Define a function largest to find the largest number among the three member data
7. Explain function overloading and operator overloading with examples.

Q. 5. Answer the following in detail. (Solve any 1)

(10)

1. What do you mean by exception handling? How exceptions are handling is done in C++. Illustrate with example
2. What is constructor? Explain various types of constructor with example.
