

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
& SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : JUNE / JULY - 2022
SEMESTER - II

Sub: Object Oriented Programming using C++
(BCA –242-20 / BCA-CS-242-20)

Date : 01/07/2022

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.
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Q.1. Fill in the blanks.

(5)

1. Constructor cannot be declared as _____ .
 - a) Dynamic
 - b) default argument
 - c) Static
 - d) All of these
2. C++ follows _____ approach in program design
 - a) bottom-up
 - b) top-down
 - c) horizontal way
 - d) None of these
3. Throw are caught by the _____ statement.
 - a) try
 - b) syntax error
 - c) catch
 - d) runtime error
4. _____ operator is used to dynamically allocate memory in c++
 - a) free
 - b) new
 - c) delete
 - d) malloc
5. _____ provides data security by hiding it from external world.
 - a) data encapsulation
 - b) antivirus
 - c) data abstraction
 - d) dynamic binding

Q.2. State True/False.

(5)

1. We can have virtual destructors but not virtual constructor
2. Cin represents the input stream connected to the standard output device.
3. Operator functions never return a value
4. Class can have multiple object
5. Friend function can be declared either in public or private of class

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

1. What is a Default argument?
2. Explain following with respect to C++ with examples.
1) new operator 2) setw()
3. What is 'This' pointer?
4. What is use of inline function?
5. Define: ios::ate and ios::out
6. Differentiate between class and structure.

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. Define operator overloading? Explain how to overload unary operator and binary operator.
2. Explain function overloading with example.
3. Explain Access specifiers of c++.
4. What is Inheritance? Explain multilevel inheritance in detail.
5. Explain stream classes and give stream classes for console operation
6. Explain friend function with example and list some of the special properties of friend function.
7. What is constructor? Explain any two types of constructor.

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. What is a virtual function? Write rules for virtual function. Explain with example.
2. Define Object-oriented programming and Explain feature of Object oriented programming. How it is different than procedure oriented programming.