

BACHELOR OF COMPUTER APPLICATION
THIRD SEMESTER
OBJECT ORIENTED PROGRAMMING
BCA-931[IDMJ]
[USE OMR FOR OBJECTIVE PART]

SET
A

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

1X20=20

Choose the correct answer from the following:

- Where does the execution of the program start?
 - user-defined function
 - main function
 - void function
 - else function
- Which of the following extension is used for user-defined header file in C++?
 - hg
 - cpp
 - h
 - hf
- How many types of constructors are there in C++?
 - 1
 - 2
 - 3
 - 4
- Which access specifier allows member of a class to be accessed from outside the class in C++?
 - private
 - protected
 - friend
 - public
- Consider the following code snippet:
class Animal {public: void eat () {cout << "Eating...";}};
What is demonstrated in this code
 - Inheritance
 - Encapsulation
 - Class Definition
 - Polymorphism
- What is the correct syntax of declaring a virtual function?
 - virtual int func ();
 - virtual int func () {}
 - inline virtual func ()
 - inline virtual func () {}
- Which of the following correctly declares an array in C++?
 - array {10};
 - array array [10]
 - int array;
 - int array [10]
- A virtual function is a member function of which of the following class?
 - Derived class
 - Parent class
 - Base class
 - Both A and B

9. Which is the correct example of a binary operator?
 - a. ++
 - b. -
 - c. Dereferencing operator(*)
 - d. +
10. Which keyword is used to define the macros in c++?
 - a. #macro
 - b. #define
 - c. Macro
 - d. define
11. Identify the error in this C++ code


```
intmain(){
int123number;
return0;
}
```

 - a. Variable name starting with a digit
 - b. Incorrect data type
 - c. Syntax error in return statement
 - d. No error
12. What is the role of a constructor in classes?
 - a. To modify the data whenever required
 - b. To destroy an object
 - c. To initialize the data members of an object when it is created
 - d. To call private functions from the outer world
13. Which type of polymorphism is achieved by function overloading in C++?
 - a. Compile time polymorphism
 - b. Run time polymorphism
 - c. Staticpolymorphism
 - d. Dynamicpolymorphism
14. Under which pillar of OOP's does base class & derived class relationship comes?
 - a. Polymorphism
 - b. Inheritance
 - c. Encapsulation
 - d. Abstraction
15. Which of the following approach is used by C++?
 - a. Left-right
 - b. Right-left
 - c. Bottom-up
 - d. Top-down
16. Which is more effective while calling the C++ functions?
 - a. call by object
 - b. call by pointer
 - c. call by value
 - d. call by reference
17. A class can inherit properties from more than one class which is known as inheritance
 - a. single
 - b. multiple
 - c. multilevel
 - d. hierarchical

18. Which keyword is used to throw an exception in C++?
- a. raise
 - b. throw
 - c. catch
 - d. try
19. How many basic types of inheritance are provided as OOP feature?
- a. 4
 - b. 3
 - c. 2
 - d. 1
20. The C++ code which causes abnormal termination/behaviour of a program should be written under _____ block.
- a. catch
 - b. throw
 - c. try
 - d. finally

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(Descriptive)

Time : 2 hrs. 30 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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|---|----|
| 1. What do you mean by object-oriented programming? Explain the advantages and disadvantages of OOPs. | 10 |
| 2. What do you mean by operator in C++? Explain the various types of operators in C++ along with suitable examples. | 10 |
| 3. Explain the various types of classes in C++ along with suitable examples. | 10 |
| 4. What is variable? How do you classify variables in C++? Explain with example. | 10 |
| 5. What do you mean by constructor in C++? Explain the various types of constructors in C++ along with suitable examples. | 10 |
| 6. What do you mean by polymorphism? How many types of polymorphism are there? Explain all of them with suitable examples. | 10 |
| 7. Write a program in C++ to convert a Fahrenheit scale of temperature to Celsius scale. | 10 |
| 8. What do you mean by inheritance ? Explain the various types of inheritance in details along with an example and diagram. | 10 |

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