(FOR THE CANDIDATES ADMITTED

DURING THE ACADEMIC YEAR 2023 ONLY)

23UBC204

REG.NO:

N.G.M.COLLEGE (AUTONOMOUS): POLLACHI
END-OF-SEMESTER EXAMINATIONS: MAY-2024
COURSE NAME: B.C.A   MAXIMUM MARKS: 75
SEMESTER: II   TIME: 3 HOURS

PART - III
OBJECT ORIENTED PROGRAMMING WITH C++

SECTION – A   (10 X 1 = 10 MARKS)
ANSWER THE FOLLOWING QUESTIONS.
MULTIPLE CHOICE QUESTIONS.   **K1**

1. Which of the following is true about C++?
    a) C++ is very close to hardware
    b) C++ programming gives you a clear understanding about Object Oriented Programming
    c) C++ is one of the every green programming languages and loved by millions of software developers.
    d) All of the above
2. Choose the one which must be unique in its namespace?
    a) Keywords   b) Identifier   c) Constants   d) Strings

3. When a function name is overloaded with different jobs it is called _____.
    a) Arguments   b) Member function   c) Function overloading   d) Virtual function

4. Which symbol is used to represent the unary operator overloading in C++?
    a) =   b) *   c) ++   d) %

5. Which of the following is true about FILE *fp?
    a) FILE is a structure and fp is a pointer to the structure of FILE type
    b) FILE is a buffered stream
    c) FILE is a keyword in C for representing files and fp is a variable of FILE type
    d) FILE is a stream

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.   **K2**
6**.** Define encapsulation.
7. Identify Member Dereferencing Operator in C++.
8. Interpret an inline function.
9. Indicate the purpose of pure virtual function.
10. Recall the usage of ios::trunk.

SECTION – B   (5 X 5 = 25 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. K3
11. a)   Explain the features of Object oriented programming.
(OR)
    b)   What are some examples of applications of OOP.

12.a)   Examine the ternary operator with an example.
(OR)
    b) Create a program using if-else statement to enter age and display a message whether.
        the user is eligible for voting or not.   **(CONTD……..2)**

13.a)   Explain the concept of an inline function with an example.

(OR)

b)   Investigate constructors and their role in objects oriented programming.

14. a)   Sketch a diagram to represent the forms of inheritance.

(OR)

b)   What are virtual functions? List the rules for declaring virtual functions.

15.a)   Explain the significance of seekg(),seekp(),tellg() and tellp() functions in the process of random Access file operators.

(OR)

b)   Explain the concept of C++ Stream Classes with an example.

SECTION – C   (5 X 8 = 40 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

16. a)   Describe the steps in Object Oriented Analysis and provide on explanation for each step.

(OR)

b)   Examine the concept of polymorphism in C++ and provide an example.

17.a)   Interpret Memory Management Operators.

(OR)

b)   Demonstrate the looping control structures with syntax, flowchart and examples.

18. a)   Explain the concept call by reference with an example.

(OR)

b)   Construct a program to destroy the constructor and Illustrate IL.

19.a)   Discuss the role of acess specifiers in inheritance and show their visibility when they are inherited as public, private and protected.

(OR)

b)   What is an Operator overloading? Write a C++ program to interpret overloading NEW and DELETE operators.

20. a)   Examine the Formatted I/O operations in C++.

(OR)

b)   Develop a C++ program to maintain the file of student's mark list.

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