(NO. OF PAGES: 2)

(FOR THE CANDIDATES ADMITTED DURING THE ACADEMIC YEAR 2021 ONLY)

21UMS6E3

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : MAY-2024
COURSE NAME: B.Sc.- MATHEMATICS **MAXIMUM MARKS: 70**
SEMESTER: VI **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. How many types of access specifiers are provided in C++?
   a) 4 b) 3 c) 2 d) 1
2. Which of the following is the default return value of functions in C++?
   a) int b) char c) float d) void
3. Which of the following is the correct syntax for printing the address of the first element?
   a) array[1] b) array[2] c) array[0] d) array[3]
4. Which feature of OOPs derives the class from another class?
   a) Inheritance b) Data hiding c) Encapsulation d) Polymorphism
5. _____is used for implementing the late binding?
   a) Operator b) Virtual c) Constant d) Both A and B

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. (K2)

6. Define keywords.
7. Give any two math library functions.
8. Construct a note on class in C++.
9. What is abstract class in C++?
10. Infer about 'this' pointer.

SECTION – B (5 X 4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Describe the structure of C++ program.

(OR)

b) List the different types of variables with example.

12.a) Interpret inline function.

(OR)

b) Explain the virtual functions.

13.a) Examine the friend function with example

(OR)

b) Describe Constructors.

(CONTD…….2)

14.a) Show a note on operator overloading.

(OR)

b) List the different types of string functions with example.

15.a) Interpret polymorphism.

(OR)

b) Explain virtual base classes.

SECTION - C **(4 X 10 = 40 MARKS)**

ANSWER ANY FOUR OUT OF SIX QUESTIONS
(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS
(FROM Qn. No : 17 to 21) **(K4 (Or) K5)**

16. Classify the different types of operators in C++ with example.
17. Categorize the different types of control structures.
18. Discuss the function overloading with example.
19. Summarize two dimensional arrays with example.
20. Give a survey on types of inheritance.
21. Analyze the pointers with example.

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ETHICAL PAPER