Regd. No.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Regulation: R22   **Code: 22DCS203/2**

II Diploma I Semester Supplementary Examinations – April, 2024

OBJECT ORIENTED PROGRAMMING THROUGH C++

Time: 3 Hrs   (CSE)   **Max. Marks:60M**

SECTION – A

Answer all Ten questions   **10×1M=10M**

1. What is the name of | operator?   [   ]
   a) sizeof   b) or   c) and   d) modulus

2. Pick out the compound assignment statement.   [   ]
   a) a = a – 5   b) a = a / b   c) a -= 5   d) a = a + 5

3. Where does the execution of the program starts?   [   ]
   a) user-defined function b) main function   c) void function d) else function

4. What is the index number of the last element of an array with 9 elements?   [   ]
   a) 9   b) 8   c) 0   d) Programmer-defined

5. The explicit keyword is an optional decoration for the constructors that take
   exactly_____argument.   [   ]
   a) No argument   b) Two   c) Three   d) One

6. Which is the correct example of a binary operator?   [   ]
   a) ++   b) —
   c) Dereferencing operator(*)   d) +

7. Which concept allows you to reuse the written code?   [   ]
   a) Encapsulation   b) Abstraction c) Inheritance d) Polymorphism

8. Which of the following is used for implementing the late binding? [   ]
   a) Operator Functions   b)Virtual Functions
   c) Constant Functions   d)All of above

9. Which of the following best defines the syntax for template function?   [   ]
   a) template return type Function Name(Parameters)
   b) template return type Function Name(Parameters)
   c) Both A and B
   d) None of the above

10. How many types of templates are there in c++?   [   ]
    a) 1   b) 2   c) 3   d) 4

SECTION – B

Answer All Four questions   **4×5M=20M**

11. What are the different types of operators in C++? Explain with examples.
(OR)
12. Explain the structure of C++ Program with example.

13. Distinguish between call by value and call by address with an example.
(OR)
14. What is function overloading? What are the principles of function overloading?

15. Explain constructor overloading with example.
(OR)
16. Give the rules for operator overloading. Discuss an example.

17. What is virtual function? What are the rules for virtual functions?
(OR)
18. Differentiate class template and function template

SECTION – C

Answer All Three questions   **3×10M=30M**

19. What is OOP? Discuss about the OOPs concepts.
(OR)
20. Define inline function? Write a program for finding the area of a triangle using inline functions.

21. Write a C++ program to overload binary '+' operator which will add two complex numbers of the form (a+ib).
(OR)
22. Write a C++ program to show the functioning of virtual functions

23. Define inheritance? Explain the different types of inheritances used in C++
(OR)
24. Define template? What is the need of template? How to declare a template class?