LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – **COMPUTER SCIENCE**

THIRD SEMESTER – **NOVEMBER 2022**

17/18UCS3MC02 – OBJECT ORIENTED PROGRAMMING USING C++

Date: 26-11-2022   Dept. No.   Max. : 100 Marks
Time: 09:00 AM - 12:00 NOON

PART – A

Answer ALL the Questions   **(10 x 2 = 20 Marks)**

1. What are the applications of OOP's?

2. Define token. List any 4.

3. What is overloading?

4. State the features of friend function.

5. What are the rules for overloading operators?

6. What is inheritance? Give example.

7. Define pointer. State the use of & and * operators.

8. What is polymorphism? Mention its types.

9. Define Template.

10. What are the different modes of file operation?

PART – B

Answer ALL the Questions   **(5 x 8 = 40 Marks)**

11. a) Write short note on the basic concepts of OOP's
        (Or)
    b) Illustrate Call by value and Call by reference with example.

12. a) Write a C++ program to implement the class and object.
        (Or)
    b) Explain friend function with an example.

13. a) Illustrate with an example Unary operator overloading.
        (Or)
    b) Explain with an example binary operator overloading.

14. a) Explain pointers to objects with an example.
        (Or)
    b) Illustrate virtual function with an example.

15. a) Explain the stream classes for console I/O.
        (Or)
    b) Illustrate Template with an example.

Answer ANY TWO the Questions   **(2 x 20 = 40 Marks)**

16. a) Explain in detail the looping statements with example for each.

    b) Explain function overloading with an example.

17. a) Explain the following with example
        i. parameterized constructor
        ii. copy constructor.

    b) Write a C++ program to implement
        i. multiple inheritance
        ii. multilevel inheritance.

18. a) Explain the exception handling mechanism with an example.

    b) Explain in detail functions for manipulation of file pointers.

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