

B.Sc DEGREE END SEMESTER EXAMINATION : OCTOBER 2022**SEMESTER 3 : COMPUTER APPLICATION****COURSE : 19U3CRCAP6 : OBJECT ORIENTED PROGRAMMING IN C++***(For Regular - 2021 Admission and Improvement / Supplementary - 2020 / 2019 Admissions)*

Time : Three Hours

Max. Marks: 75

PART A**Answer All (1 mark each)**

1. What do you mean by temporary instance of a class?
2. What you mean by nesting of member functions?
3. Define about compile time polymorphism.
4. When constructor and destructor are executed?
5. Define this pointer.
6. Define Virtual functions.
7. What do you mean by base class?
8. What is the general syntax of operator overloading?
9. What is the significance of destructor?
10. What is the use of do-nothing constructor?

(1 x 10 = 10)**PART B****Answer any 8 (2 marks each)**

11. Which members of the base class can be accessed from derived classes but not by objects of derived classes?
12. List some of the characteristics of the constructor.
13. Differentiate call by value and call by reference.
14. Differentiate between unary and binary operator with examples.
15. What are the different C++ operators which cannot be overloaded?
16. What are iteration statements? Name the iteration statements provided by C++
17. What is the use of width() and precision()?
18. Define the following terms: i) Inheritance ii) Encapsulation.
19. What are objects? How are they created?
20. What are the components of exception handling?

(2 x 8 = 16)**PART C****Answer any 5 (5 marks each)**

21. Explain about throwing and catching exception in C++ with suitable example.
22. Explain function prototype with an example.
23. What do you mean by static data member of a class? Explain the characteristics of a static data member?
24. What is Inheritance? Bring out the various types of inheritance?
25. Write a program to find the product of two numbers using nesting of member function.

26. What is the difference between fundamental data types and derived data types? Explain with examples.
27. Explain about static member function with characteristics.

(5 x 5 = 25)

PART D

Answer any 2 (12 marks each)

28. What is the use of Virtual functions? Write a program to illustrate the use of virtual functions.
29. Differentiate procedure oriented programming and Object Oriented Programming.
30. Write a C++ program using binary operator overloading and explain the difference of binary operator overloading using friend function.
31. What is Constructor? What are the special characteristics of a constructor? And also write a program using dynamic initialization of constructor.

(12 x 2 = 24)