



23104220

**QP CODE: 23104220**

**Reg No** : .....

**Name** : .....

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE  
EXAMINATIONS, JANUARY 2023**

**Third Semester**

B.Sc Physics Model II Computer Applications

**VOCATIONAL COURSE - CA3VOT05 - CONCEPTS OF OBJECT ORIENTED  
PROGRAMMING**

2017 Admission Onwards

ED75D908

Time: 3 Hours

Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is the use of "default" in "switch-case" statement?
2. Explain virtual functions.
3. Differentiate between class and object?
4. What is Array of objects ?
5. What is constructor?
6. What are parameterized constructors?
7. How the Copy Constructors are useful ?
8. What is destructor?
9. What are derived classes?
10. Explain virtual base class.
11. How to declare and initialize a pointer?
12. Write the meaning of Pure Virtual function.



(10×1=10)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Write a program to implement standard deviation.
14. Explain basic data types in c++.
15. What is scope resolution operator? Explain with an example.
16. Explain static member function.
17. Define memory allocation for objects.
18. Can we have more than one constructor in a class? Explain.
19. Write a note on dynamic constructor.
20. Explain the concepts of operator overloading.
21. Write a C++ program for adding two complex numbers using operator overloading.

(6×5=30)

**Part C**

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. What are the disadvantages of using procedural oriented languages? How does OOP overcome the shortcomings of traditional programming approaches?
23. Write a C++ program to sum the series:  $1 + (1 + 2) + (1 + 2 + 3) + \dots + (1 + 2 + 3 + \dots + N)$  for a given integer N.
24. What is the importance of inheritance in C++? Explain various inheritances with suitable example.
25. Narrate Pointers and strings and Pointers to functions with suitable examples.

(2×10=20)