22100545

QP CODE: 22100545

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)REGULAR / REAPPEARANCE EXAMINATIONS, APRIL 2022

Third Semester

B.Sc Physics Model II Computer Applications

VOCATIONAL COURSE - CA3VOT05 - CONCEPTS OF OBJECT ORIENTED PROGRAMMING

2017 Admission Onwards

6EF4C45A

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What are user defined data types?
2. Which operator is used to send output data to the screen?
3. What is an Object ?
4. Explain the diagrammatic representation of memory allocation of objects in a class.
5. Why we want to use constructors ?
6. What are parameterized constructors?
7. How the Copy Constructors are useful ?
8. What is destructor ?
9. Define operator overloading.
10. What is the meaning of Inheritance ?
11. What is the use of this pointer in C++?
12. What are the operators used for dynamic memory allocation of pointers?

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Describe the structure of C++ program.
14. Explain control structures in c++ with syntax.
15. Explain virtual functions with example.
16. Explain different ways of defining member function.
17. Explain with suitable example how static member functions are created and implemented.
18. Explain how multiple constructors can be used in a class.
19. Write a note on dynamic constructor.
20. Differentiate between unary and binary arithmetic operators. Give examples for each.
21. Describe virtual base class with an example.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the basic concepts of Object Oriented Programming languages.
23. Write a C++ program to sum the series:1 + (1 + 2) + (1 + 2 + 3) + ...+ (1 + 2 + 3 + ... + N) for a given integer N.
24. Explain hybrid inheritance. How can the repeated inheritance of member function to the derived class in hybrid inheritance be avoided? Explain with example.
25. Narrate Pointers and strings and Pointers to functions with suitable examples.

(2×10=20)