



QP CODE: 21101960		Reg No		***************************************
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## B.Sc DEGREE (CBCS)EXAMINATION, AUGUST 2021

## **Third Semester**

B.Sc Physics Model II Computer Applications

# VOCATIONAL COURSE - CA3VOT05 - CONCEPTS OF OBJECT ORIENTED PROGRAMMING

2017 Admission Onwards 99AE45EE

Time: 3 Hours

Max. Marks: 60

#### Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. Explain the structure of c++ program.
- 2. What is operator precedence?
- 3. Explain the visibility labels in C++?
- 4. Explain the diagrammatic representation of memory allocation of objects in a class.
- 5. What is constructor?
- 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. Explain multilevel.
- 12. Explain pointers.

 $(10 \times 1 = 10)$ 

Part B

Answer any **six** questions.

Each question carries **5** marks.



- 13. Differentiate between Structures and class? Give an example of each.
- 14. Explain control structures in c++ with syntax.
- 15. Explain inline function.
- 16. With suitable programming example describe arrays within a class.
- 17. Explain static member function.
- 18. Can we have more than one constructor in a class? Explain.
- 19. Write a note on dynamic constructor.
- 20. Describe virtual base class with an example.
- 21. Describe the implementation of Dynamic memory allocation.

 $(6 \times 5 = 30)$ 

### Part C

Answer any **two** questions.

Each question carries **10** marks.

- 22. Explain the operators in C++.
- 23. What is a friend function? What are characteristics of a friend function? Illustrate with an example.
- 24. Write a program to overload + binary operator for complex numbers.
- 25. Narrate Pointers and strings and Pointers to functions with suitable examples.

 $(2 \times 10 = 20)$