



C09-CM-404/C09-IT-404

3461

**BOARD DIPLOMA EXAMINATION, (C-09)
OCT/NOV—2017
DCM—FOURTH SEMESTER EXAMINATION**

OOP THROUGH C++

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Write about the evolution of object-oriented programming language.
2. Define a class with syntax.
3. Define CONST keyword with syntax.
4. Define friend function.
5. Define reference. How is a reference variable declared?
6. State the need for virtual classes.
7. What is a virtual function? Give its syntax.

- * 8. What is the need for inheritance?
- 9. Define a file pointer.
- 10. Differentiate function overloading with function template.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11. Write a program for unary operator overloading.
- 12. Explain constructor and destructor using an example program.
- 13. Explain passing objects by value to a function with an example program.
- 14. Explain how to access member functions using array of objects with an example program.
- 15. Explain three types of access control with an examples.
- 16. Explain the different forms of inheritance supported by C++ with an example.
- 17. Describe the hierarchy of stream classes in C++.
- * 18. Explain a class template for stack data structures.
