

C09-CM-404/C09-IT-404

3461

BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2015 DCM-FOURTH SEMESTER EXAMINATION

OOP THROUGH C++

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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 the characteristics of friend function.
- 2. Define constructor. Write its syntax.
- **3.** List the operators that cannot be overloaded in C++.
- **4.** Define pass by reference method.
- **5.** Define memory management operators.
- **6.** State any three benefits of inheritance.
- 7. What is inheritance?

- **8.** State the need for virtual functions in C++.
- **9.** What are the differences between sequential and random access files?
- 10. What is a class template and how is it declared?

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. What is an in-line function? Explain with an example program.
- **12.** List and explain the properties of OOP.
- **13.** List and explain about friend function used in C++ with examples.
- **14.** Explain how to access member functions using array of objects with an example program.
- **15.** Write a C++ program to illustrate multiple inheritance.
- **16.** Explain the concept of multilevel inheritance with a small program.
- **17.** Describe the hierarchy of stream classes in C++.
- **18.** Explain templates with single argument types with an example program.

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