

C09-IT-404

3498

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2013 DIT—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. What is operator overloading?
- **2.** Explain the evolution of C++ in brief.
- **3.** List the advantages of inline functions.
- **4.** Define friend function.
- **5.** Define dynamic memory management operators.
- **6.** Give any three rules for virtual functions.
- **7.** What is the need of inheritance?

- **8.** What are the different inheritance visibility modes supported by C++?
- **9.** What are the binary I/O functions?
- **10.** State the need of templates.

PART—B

 $10 \times 5 = 50$

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. Explain the constructor and destructor using example program.
- **12.** (a) Explain the structure of C++ program with an example program.
 - (b) Explain the steps in developing a C++ program.
- **13.** Explain the concept of returning objects from function with an example.
- **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 creating of classes based on templates.

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