

C09-IT-404

3498

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2014 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.** Write about the evolution of object-oriented programming language.
- 2. Define inline functions.
- 3. Define polymorphism and list their types.
- **4.** What is comment in C++? How can we represent comments in C++?
- **5.** Define memory management operators.
- **6.** What are virtual functions? Write its applications.
- **7.** What is the necessity for inheritance?

- **8.** What are the differences between inheriting a class with public and private visibility mode?
- **9.** What are the differences between sequential and random access files?
- **10.** What is generic programming?

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 constructor and destructor using an example program.
- **12.** Write a C++ program to illustrate friend function.
- 13. Explain the concept of returning objects from function with an example.
- 14. Explain the creating and accessing of array of objects with an example program.
- **15.** Explain the use of inheritance with an example program.
- **16.** Write a C++ program on hierarchical inheritance.
- 17. Explain any five I/O manipulators with examples.
- 18. Explain a class template for stack data structures.

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