

## +C09-IT-404

## 3498

# BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2013 DIT-FOURTH SEMESTER EXAMINATION

OOP THROUGH C++

Time: 3 hours [ Total Marks: 80

### PART—A

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

- (2) Each question carries three marks.
- (3) Answer should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. Define friend function.
- **2.** Compare classes in C++ with structures in C.
- 3. Write any four features of OOPs.
- **4.** List the characteristics of constructors.
- **5.** Define a pointer with syntax.
- **6.** What are the differences between the accesses specifiers private and protected?
- 7. State the relationship between base class and derived class.
- **8.** State any three benefits of inheritance.

- **9.** List any four I/O manipulators with examples.
- 10. Define class template.

#### PART—B

**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 concept of returning objects from function with an example.
- **12.** (a) Explain the structure of C++ program with an example program.
  - (b) Explain the steps in developing a C++ program.
- **13.** Explain how you will overload unary and binary operators with the help of a program.
- **14.** Explain the concept of reference with an example program.
- **15.** Explain the concept of multilevel inheritance with a small program.
- **16.** Explain virtual function concept with a small program.
- **17.** Write a C++ program to read text from one file and copy it to another file.
- **18.** Explain multiple arguments function templates with an example program.

\* \* \*