

C09-CM-404

3461

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2014 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) Answer should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. What is a constructor? List the types of constructors.
- **2.** Define object. How is an object created in C++?
- **3.** Define data hiding.
- 4. Define friend function.
- **5.** State the usage of pointer.
- **6.** What is visibility mode?
- **7.** What is the need for inheritence?

- 8. Define virtual class.
- **9.** What is predefined console stream?
- **10.** What is function template?

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 passing objects by value to a function with an example program.
- **12.** How will you overload unary and binary operators using friend functions? Explain with a program.
- **13.** (a) Explain the structure of C++ program with an example.
 - (b) Explain the steps in developing a C++ program.
- **14.** Write a C++ program using dynamic memory allocation operators New and Delete.
- **15.** Write a C++ program to illustrate multiple inheritance.
- **16.** Explain virtual function concept with a small program.
- **17.** (a) What are file modes? Describe various file mode options available.
 - (b) Explain about file I/O functions.
- **18.** Explain the creating of classes based on templates.

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