

C14-CM-405/

C14-IT-405

4453

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2018 DCME—FOURTH SEMESTER EXAMINATION

OOPs THROUGH C++

[Total Marks: 80 *Time* : 3 hours

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. Define class and object.
 - 2. List any three advantages of OOPs.
 - **3.** What is Friend Function?
 - **4.** Differentiate between normal function and member function.
 - **5.** What is use of 'this' pointer?
 - What is Inheritance? What are different types of inheritance? 6.
 - 7. Define a virtual base class.
 - **8.** List the three keywords for access control in C++
 - **9.** What is user defined manipulator?
- **10.** What is function template? How is it declared?

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 criteria for valuation are the content but not the length of the answer.
- 11. Explain constructor and Destructor using an example program.
- **12.** Explain the concept of Returning Objects from function with an example.
- **13.** Write a C++ program on Binary operator overloading.
- **14.** Explain how to access member functions using Array of objects with an example program.
- **15.** Explain the Format/Syntax for defining a Derived class with an example program.
- **16.** Explain the Accessibility of base class members in inheritance with an example program.
- **17.** Explain the following I/O Functions :
 - (a) OPEN () (b) READO () (c) WRITE ()
 - (d) CLOSE ()
- **18.** Explain a Class template for Stack Data Structures.

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