C14–CM–405/C14–IT–405

4453

BOARD DIPLOMA EXAMINATION, (C–14)

OCT/NOV—2016

DCME—FOURTH SEMESTER EXAMINATION

OOPS THROUGH C++

Time : 3 hours]　　　　　　　　　　　　　[*Total Marks* : 80

PART—A　　　　　　3×10=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 comment statements in C++.　　3

2. Define destructor. How to call the destructor?　　2+1=3

3. Write any three advantages of inline function.　　3

4. Write the syntax of a class in C++.　　3

5. Write the usage of 'this' pointer.　　3

6. Write the differences between private and protected access modes in inheritance.　　3

7. Define virtual function.　　3

8. Define multilevel inheritance.　　3

9. Write about 'file' pointer.　　3

10. What is a class template? Write the syntax of a class template.

2+1=3

PART—B 10×5=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 any five basic concepts of OOPs. 10

12. *(a)* Write any five differences between C and C++.

(b) Write a C++ program that implements friend function.

5+5=10

13. Write a C++ program to calculate addition of two complex numbers using binary operator overloading. 10

14. Write a C++ program that illustrates the concept of array of objects. 10

15. Write a C++ program that implements single inheritance. 10

16. Explain the concept of virtual base class with an example program. 10

17. Explain the different types of file stream classes. 10

18. Write a C++ program that implements the function template for swapping of two integers and two characters. 10

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