

**4453**

**BOARD DIPLOMA EXAMINATION, (C-14)**  
**MARCH/APRIL-2019**  
**DCME - FOURTH SEMESTER EXAMINATION**  
**OOPS THROUGH C++**

Time: 3 Hours

Max. Marks: 80

**PART-A****10x3=30M**

**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 points.

- 1) Write any three differences between structure and class. 3M
- 2) Write the need of using a constructor in c++? 3M
- 3) Define a friend function. 3M
- 4) What is polymorphism? 3M
- 5) What is a reference variable? Write syntax of a reference variable. 2+1
- 6) List the different types of access modes. 3M
- 7) What is hierarchial inheritance? 3M
- 8) What is meant by reusability in inheritance? 3M
- 9) Write about manipulators. 3M
- 10) Define a template. Write the syntax of a template. 2+1

**PART-B**

**5x10=50M**

- Instructions:*** 1) Answer any **five** questions.  
2) Each questions carries **ten** marks.  
3) Answer should be comprehensive and the crietron for valuation is the content but not the length of the answer.

- 11) a) Write a c++ program using scope resolution operator. 5M  
b) Write a c++program using inline function. 5M
- 12) Explain the function of overloading with an example program. 10M
- 13) Write a c++ program that illustrates the concept of returing objects from functions. 10M
- 14) Explain the concept of dynamic memory allocation and deallocatin mechanism in c++. 10M
- 15) Explain the different types of inheritances. 10M
- 16) Write a c++ program that illustrates the concept of virtual function. 10M
- 17) Explain about file I/O functions. 10M
- 18) Write a c++ program that illustrates the concept of class template. 10M

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