

Dr. Reeba Maryy

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M 250



National Institute of Technology, Hamirpur(H.P.)

End-Semester Theory Examination – November-2022

Title of the Course: <Object Oriented Programming >

Class: B.Tech. (Mathematics and Computing)

Course Code: CS-211

Duration: 03:00 Hours

Semester: 3

Max. Marks: 50

Instructions:

- All Questions are compulsory.
 - Each question carries 05 Marks.
1. Explain briefly the characteristics of OOPs language and also mention advantages of OOPs approach over functional/procedural programming.
 2. Differentiate between the following terms with the suitable examples:
 - I. Abstraction and Encapsulation
 - II. Function Overloading and Function Overriding
 3. What is mean by destructor? State the rules for writing destructor function.
 4. Write a program to declare a class 'student' having data members as 'stud_name' and 'roll_no'. Accept and display this data for 5 students.
 5. Use the concept of function overloading; write a program in c++ to find the maximum of three integer's numbers.
 6. Write a program to add two complex numbers using object as arguments.
 7. What is multilevel inheritance? Draw the diagram to show multilevel inheritance. Explain it with suitable example.
 8. Write a program to declare a class 'book' containing data members as 'title', 'author-name', 'publication', 'price'. Accept and display the information for one object using pointer to that object.
 9. Write a C++ program involving reading and writing of class objects in a file.
 10. Write down a detailed C++ program to demonstrate the use of try, catch, throw and nested try.

*****ALL THE BEST*****