

B.Sc.(Hons.) in CSE, Part-II,3rd Semester Examination, 2022

CSE- 520204(Object Oriented Programming Lab)

Full Marks: 40

Time: 3Hours

(Answer any two of the following questions)

1. Write a program to enter any number and find its factorial using constructor.
2. Create a class called COMPLEX that has two private data called real and imaginary. Include constructor function to input real and imaginary values, show() to display complex numbers. Write a program to add two complex numbers.
3. Write a program with class to find whether a given number is prime or not.
4. Write a program to append the contents of a file into another.
5. Write a program that finds the volume of different shapes (like rectangle, cylinder, cube) using function overloading.
6. Write a class to represent time that includes the member function to perform the following:
 - Take input for time in hours and minutes.
 - Add two times.
 - Display the time in form hours : minutes.
7. Write a program to find the largest and smallest number between two numbers of different classes.
8. Create a class float that contains one float data number. Overload all the four arithmetic operators for two objects.
9. Given the following base class:

```
class area_cl
{public:
    double height;
    double width;

};
```

Create two derived classes called rectangle and isosceles that inherit area_cl . Have each class include a function area () that returns the area of a rectangle isosceles triangle as appropriate. Use parameterized constructor to initialize height and width.

Write the complete program.

Marks Distribution:

Code:	(10x2) = 20
Result:	(5x2) = 10
Viva-Voce:	(5x2) = 10

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40

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