

# School of Computing Science and Engineering

B.Tech CSE  
ETE - Jun 2023

Time : 3 Hours

Marks : 100

## Sem II - E1UJ201C - OOPS Using Java

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

1. What is .class file? How it is created? Explain using example. K1 CO1 (5)
2. Explain the usage of 'extends' keyword in Java. K2 CO2 (5)  
,CO3
3. Write a program in java to check whether a number is armstrong or not. K3 CO3 (5)  
,CO2
- 4) Develop a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 and 500. K4 CO4 (10)  
,CO3

### OR

- Compare and contrast method overloading and method overriding. K4 CO4 (10)  
,CO3
5. Develop a java program to show the use of copy constructor. K4 CO3 (10)  
,CO4
  6. Define Class, Method and Object. Show syntax to define these in java. K2 CO3 (10)  
,CO4
  7. Explain the difference between break and continue statement in java using example. K1 CO2 (10)  
,CO3
  8. Explain any five methods of StringBuffer class to handle strings using examples. K3 CO4 (15)  
,CO2  
,CO3
  9. Create a class named 'Member' having following member variables: name, age, address, salary. It also has a method named 'printSalary()' which prints the salary of the members. Two classes 'Employee' and 'Manager' inherit the 'Member' class. Employee and Manager classes have data member 'specialization' and 'department' respectively. Assign name age address and salary to an employee and a manager by making an object of both the classes and print the same along with specialization and department respectively. K3 CO3 (15)  
,CO4
  - 10) WAP to create a class with following specifications: Class name: SimpleInterest Data K4 CO4 (15)  
members: principle, rate, time  
Method : calSimpleInterest(double p, double rate, double time) printDetails()  
Add parameterized constructor in the class. Create an object of class SimpleInterest and call calSimpleInterest with user inputs for calculating simple interest. Also print the output.

### OR

- Describe the following string class methods with examples K4 CO3 (15)  
a) length() b) charAt() c) compareTo()  
,CO4