

## **Department of Computer Science and Engineering**

P.E.S College of Engineering, Mandya, (An Autonomous Institution under VTU)

Course Title: Object Oriented Programming with Java Laboratory			
Course Code : P18CSL48	Semester: 4	L :T:P:H : 0:0:3:3	Credits: 1.5
Contact Period: Laboratory: 3 Hrs/week, Exam: 3 Hr		Weightage: CIE:50%, SEE:50%	

## **Course Content**

- 1. a) Write a Java program to illustrate the concept of class with Parameterized Constructor and default constructors.
  - b) Write a Java program to illustrate the concept of class with Method overloading and Method overriding
- 2. Write a Java Program to implement multilevel inheritance by applying various access controls to its data members and methods.
- 3. Write a Java program to implement multiple inheritance by using Interface.
- 4. Write a JAVA program which has
  - i. A Interface class for Stack Operations
  - ii. A Class that implements the Stack Interface and creates a fixed length Stack.
  - iii. A Class that implements the Stack Interface and creates a Dynamic length Stack.
  - iv. A Class that uses both the above Stacks through Interface reference and does the Stack operations that demonstrates the runtime binding.
- 5. a) Write a Java program to implement the concept of exception handling (multiple try and catch blocks).
  - b) Write a program to implement the concept of Exception Handling by creating user defined exceptions (one exception).
- 6. Write a Java program to implement queues using generic methods.
- 7. Write a Java Program that reads on file name from the user, displays information about whether the file exists, whether the file is readable, whether the file is writable, the type of file and the length of the file in bytes, and displays the file on the screen, with a line number before each line.
- 8. Write a Java Program that reads the elements from a file, sort the elements and to the sorted elements into another file.
- 9. Write a java program that loads data from a text file. The data (two fields) is organized as one line per record and each field in a record are separated by tab (\t). Program must accept the first or second data as input and should print the corresponding other value from the hash table (hint: use hash tables)(collection frame work)
- 10. Write a Java program to illustrate the concept of generics wildcard arguments
- 11. Write a program to get the input from the user and store it into file. Using Reader and Writer file.
- 12. Write a JAVA Program which writes a object to a file (use transient variable also)
- 13. Write a java program to split a given text file into n parts. Name each part as the name of the original file followed by .part<n> where n is the sequence number of the part file.