## BCA-306P

# COMPUTER BASED NUMERICAL AND STATISTICAL TECHNIQUES LAB L T P 0 0 2

Note: - At least ten experiments are to be conducted.

- 1. WAP to find the eigen values and eigenvectors of a given square matrix.
- 2. WAP to find the root of the Algebraic equations using Bisection Method.
- 3. WAP to find the root of the Algebraic equations using Regula falsi Method.
- 4. WAP to find the root of the Algebraic equations using Newton Raphson Method.
- 5. WAP to implement Newton"s Forward Interpolation formula.
- 6. WAP to implement Newton"s Divided Difference Interpolation formula.
- 7. WAP to implement Langranges Interpolation formula.
- 8. WAP to implement Numerical Integration using Trapezoidal rule.
- 9. WAP to implement Numerical Integration using Simpson 1/3 rule.
- **10.** WAP to implement Numerical Integration using Simpson 3/8 rule.
- **11.** WAP to implement Numerical Differentiations.

## **BCA-307P**

#### **OBJECT ORIENTED PROGRAMMING & JAVA LAB**

L T P 0 0 3

Note: - At least ten experiments are to be conducted. Perform practical using JAVA language.

- 1. Write a program in java which prints your name using command line arguments.
- 2. Write a program in java which enters three number using command line arguments and print sum and average of the number
- 3. Write a program to swap the value of 2 variables without using 3rd variable
- **4.** Write a program to calculate the sum of digits of a given integer no.
- 5. Write a program to compute the sum of the first and last digit of a given number.
- **6.** Write a program in java which enter the number using Data Input Stream and check whether the entered number is even or odd.
- 7. Write an application that reads a string and determines whether it is a palindrome.
- **8.** Write a program to enter a sentence form keyboard and also find all the words in that sentence with starting character as vowel.
- **9.** Write a Program in java which creates the array of size 5; find the sum and average of the five numbers.
- **10.** Create a java program that has three version of add method which can add two, three, and four integers.
- **11.** Program illustrating Classes and Objects.
- 12. Program illustrating Method Overloading and Method Overriding.
- 13. Program illustrating concept of Interface.
- 14. Program illustrating use of Final and Super keyword.
- **15.** Program that illustrates the Creation of simple package.
- **16.** Program that illustrates the Accessing of a package.
- **17.** Program that illustrates the Handling of predefined exceptions.
- **18.** Program that illustrates the Handling of user defined exceptions.

# **BCA-308P**

## **OPERATING SYSTEM LAB**

L T P 0 0 2

Note: - At least ten experiments are to be conducted. Perform practical using C language.

- **1.** FCFS(First Come First Served)
- 2. RR( Round Robin) Scheduling
- 3. SJF(Shortest Job First)
- 4. Priority Scheduling
- 5. FIFO(First In First Out) Page Replacement
- 6. LRU(Least Recent Used) Page Replacement
- 7. Optimal Page Replacement
- 8. Banker's Algorithm for Dead Lock Avoidance
- **9.** Sequential File Allocation
- 10. Indexed File Allocation
- 11. Linked File Allocation
- 12. Paging Memory Allocation Technique