LAB RECORD PROGRAMS

1. (a) Write a Java Program which will display your name, roll number, branch, semester, and college name.

(b) Write a Java program which will display the given format:

```
#
# #
# # #
# # # #
# # # #
# # #
# #
#
```

(c) Write a Java program to perform arithmetic operations using numbers 10 and 7.

(d) Write a Java program which will swap two numbers 15 and 25.

2. (a) Write a Java program which will read name of the student, roll, and marks in four subjects. Display name, roll, total and average marks in the given format:

Name:
Roll:
Total Marks:
Average Marks:

(b) Write a Java program which will read two numbers. Then display the numbers and display the swapped numbers.

(c) Write a Java program which will read principal, rate, and time. Then calculate simple interest and amount, and display it.

(d) Write a Java program which will read radius of the circle. Then calculate area and circumference, and display it.

(e) Write a Java program which will read temperature in degree. Then change into Fahrenheit and display it.

3. (a) Write a Java program which will read a character. Then check the character is vowel or not.

(b) Write a Java program which will read a character. Then check the character is vowel or not.

(c) Write a Java program which will read an arithmetic character. Then display the operator name.

(d) Write a Java program which will read a month number. Then display number of days.

(e) Write a Java program which will read the age of a driver. Then display the license fees accordingly:

Age	Fees
50 – 60	Rs. 1000/-
40 – 49	Rs. 1500/-
30 – 39	Rs. 2000/-
18 – 29	Rs. 3000/-

4. (a) Write a Java program which will print the Fibonacci series 0 1 1 2 3 5 8 …… n.

(b) Write a Java program which will read a number and check prime or not.

(c) Write a Java program which will read a number and check perfect or not.

(d) Write a Java program which will display all the prime numbers from 1 to 100.

(e) Write a Java program which will print the number and its factorial from 0 to 10 in the given format:

0! = 1
1! = 1
2! = 2
…….

5. (a) Write Java programs for the following formats:

```
A  B  C  D        1          * * * *
E  F  G  H        2 3        * * *
I  J  K  L        4 5 6      * *
M  N  O  P        7 8 9 10   *
```

(b) Write a Java program which will read two numbers. Then display the HCF.

(c) Write a Java program which will read two numbers. Then display the LCM.

(d) Write a Java program which will read a string. Then count total number of uppercase and lowercase alphabets.

(e) Write a Java program which will read a line of text. Then count total number of words.

6. **(a)** Write a Java program which will read ‘n’ numbers in an array. Then display all and print the biggest and smallest number.
   (b) Write a Java program which will read ‘n’ numbers in an array. Then arrange in ascending order.
   (c) Write a Java program which will read ‘n’ students name, roll, branch, and total marks in four numbers of arrays. Then display all the details of the students.

7. **(a)** Write a Java program which will read rXc numbers in a matrix. Then display the matrix. And display all the prime numbers without changing its original position in the matrix.
   (b) Write a Java program for sum of two matrices of order 2X3.
   (c) Write a Java program for multiplication of two matrices of order 3X3.

8. **(a)** Develop a Java program to define a class called **StudentRec** with two instance variable (**regNumber**, **testMarks**), a method **setRegTestMarks()** to assign regNumber and tsetMarks and another method **displayDetails()** to display the variables .
   (b) Develop a Java program to define a class called **RailwayReservation** with four instance variables (**trainNumber**, **bogieNumber**, **berthNumber**, **passengerId**), a method to set the variables and another method to display the variables.
   (c) Wrrite a Java program to define a class called **numbers** with two member variables of double kind, a method to assign member variables, and a method to display sum and difference of those two numbers.

9. **(a)** Write a java program using **super** keyword.
   (b) Develop a Java program using method overloading concept.
   (c) Develop a Java program using constructor overloading.
   (d) Write a Java program which will read ‘n’ employees name, gender, post, and salary in an array of object. Then display all the details.

10. **(a)** Develop a Java program using object as arguments in a member method.
    (b) Develop a Java program using object as arguments and return object from the member method.

11. **(a)** Develop a Java program using Single Inheritance.
    (b) Develop a Java program using Multilevel Inheritance.
    (c) Develop a Java program using Hierarchical Inheritance.

12. **(a)** Develop a Java program using Dynamic Method Dispatch.
    (b) Develop a Java program using Interface.
    (c) Develop a Java program using Package.
    (d) Develop a Java program using exception handling method.

13. **(a)** Develop a Java program for threading.
    (b) Develop a Java program for multiple tasks using single thread.
    (c) Develop a simple applet program.
    (d) Develop an applet program for displaying of different text colours.

Note:

- **Write neatly the Lab Record with output of the program.**
- **Index page must be properly filled in with Practical Number, name of program, date of held, and page number.**
- **Mention the following dates as practical held dates.**

27/7/2017
03/08/2017
10/08/2017
22/08/2017
29/08/2017
07/09/2017
14/09/2017
21/09/2017
12/10/2017
19/10/2017
26/10/2017
02/11/2017
09/11/2017
16/11/2017