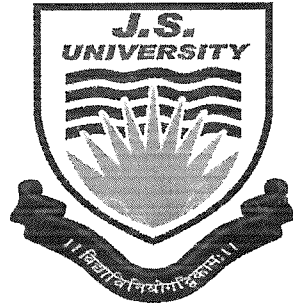


# **J.S. University, Shikohabad**

Established by UP Govt. Act No. 07 of 2015


Recognized by U.G.C. under section 2 (f) of Act-1956



## **Value Added Course**

### **(R-Programming)**

### **Faculty of Science**

	J.S. University, Shikohabad Faculty of Science	Value Added Course
		AY: 2022-23

## R-Programming

### Learning Outcome:

This Course will provide knowledge of R-Programming.

**Duration:** 30 Hours. (Theory and Practical)

### Course Outcomes: -

After completion of the course the student shall be able to:-

1. Learn a new programming language, beginner in the field of data science.
2. kindle the problem solving ability in statistics.

### Syllabus Outline

#### 1. Module-1

- Simple Programs using Mathematical constant
- Programs using complex functions

#### 2. Module-2

- Numerical solutions of nonlinear equations and systems
- Solving system of linear equations using Jacobi method

#### 3. Module-3

- Program using Trigonometric and Hyperbolic Expressions
- Finding Eigen values and Eigen vectors

#### 4. Module-4

- Plotting Points in the Plane and Space
- Analyse data using Central Tendency and Measures of dispersion and distributions

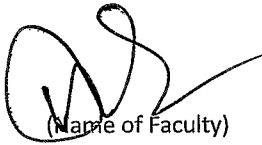
#### 5. Module-5

- Find the Laplace integral transforms for different functions.
- Obtain the solution of the initial value problem

## R

### References:-

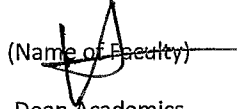
1. Programming with R by S.R. Mani Sekhar, T.V. Suresh Kumar, Madhavi Kasa, Sunil Kumar S. Manvi, Cengage Learning India Pvt. Ltd, 2017
2. R for Statistics by Pierre-Andre Cornillon, Arnaud Guyader, Francois Husson, Nicolas Jegou, Julie Josse, Maëla Kloareg, Eric Matzner-Lober, Laurent Rouvière, Chapman and Hall, 2012
3. Statistics with R Programming by Dr. Sandip Rakshit, McGraw Hill Education (India) Pvt. Ltd, 2018



(Name of Faculty)

Course Coordinator

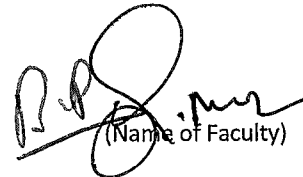
Dr. Vimal  
Yadav



(Name of Faculty)

Dean Academics

Dr. Akhilesh



(Name of Faculty)

Director/Principle/Dean of  
Faculty/Department

Dr. R.P. Chaudhary