



SRR & CVR GOVERNMENT DEGREE COLLEGE VIJAYAWADA



*An Autonomous, ISO certified, Ranked by NIRF in band 101-150 in 2020 &
NAAAC accredited Institution with "A" Grade (IV Cycle)
Affiliated to Krishna University, Machilipatnam*

Internal Quality Assurance Cell

Department of Statistics

Date(s)	06-03-2025 to 19-04-2025
Conducted through (DRC/JKC/ELF/NCC/NS S/Departments etc.	Department
Nature of activity (seminar/Workshop/Extn. Lecture/CIA activity, etc)	Certificate Course / Skill Development
Title of the Activity	Basic Statistics with 'R'
Name of the Department/Committee	Statistics
Details of Resource Persons(Name, Designation etc.) if any	K. Ashok, HOD P. Ramesh, Lecturer
No of students Attended	25
Year and Class	I year BSc
Name of the Lecturers planned & conducted the activity	Department
Remarks	Duration: 40 Hrs

Report:

Certificate course in 'Basic Statistics with R' was conducted by the department of Statistics for the A.Y 2024-25 as per BOS-2024-25 for UG students from 06-03-2025 to 19-04-2025 under the guidance of IQAC. Training sessions on 'R' are conducted in Lab for a total of 40 hrs (20 hrs for training + 20 hrs for practice & assignments) by the faculty of the department K. Ashok and P. Ramesh.

At the end Examination was conducted in lab as per BOS on 02-05-2025. Course completion certificates were distributed to the students by the Principal madam, Dr. K. Bhagya Lakshmi, IQAC Co-ordinator Dr. J. Nageswara Rao and Smt. K.V Naga Lakshmi, HOD of Mathematics on the occasion of National Statistics Day 2025.

No. of students enrolled for the course: 25

No of students registered for exam and completed: 22

Out Comes:

- 1.All the Students enthusiastically attended and well-trained in analyzing the data using 'R'.
- 2.Trained and learned various tools and packages in 'R' to draw insights of a data.
3. Got the skill to use 'R' software for analyzing and visualizing the data







Vijayawada, Andhra Pradesh, India
24-28/1-7/2, Durgapuram, Bavajipet, Vijayawada,
Andhra Pradesh 520003, India
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28/06/2025 01:08 PM GMT +05:30



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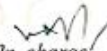
**SRR & CVR GOVERNMENT DEGEREE COLLEGE
VIJAYAWADA**

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Internal Quality Assurance Cell*



Certificate

This is to certify that **TURAKA GEETHIKA** studying I B.Sc (H) Artificial Intelligence has successfully completed the certificate course on " *Basic Statistics with 'R'* " during the period 06-03-2025 to 19-04-2025 with Grade **B** conducted by **DEPARTMENT OF STATISTICS.**


In-charge
Dept of Statistics


IQAC- Coordinator


Principal

All Certificates:



R-Scanned
Certificates_2024-25

Date: 03-03-2025

From

Lecturer In-Charge

Department of Statistics

SRR & CVR Government Degree College(A)

Vijayawada

To

The Principal

SRR & CVR Government Degree College(A)

Vijayawada

Respected Madam,

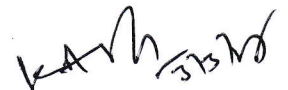
Sub: Certificate Course-Basic Statistics with 'R' – Permission to run the course
for 2024-25 – Requesting – Regd.

Ref: Approval of proposal in BOS, and AC meetings 2024-25.

As per the reference cited above, the Department of Statistics is going to run the certificate course titled "Basics of Statistics with 'R' from 06-03-2025 for the academic year 2024-25. Details of the course, schedule with teaching plan and list of willing students are attached. So, I request you to give permission to run the course during scheduled/zero hours in Statistics/Computers lab.

Thanking you madam.

Yours faithfully



(K.Ashok)

N
3.3.25

SRR & CVR Government Degree College (A):Vijayawada

Department of Statistics

Certificate Course : Basic Statistics with R

Duration : 20T+20P=40 Hours

Proposed Schedule & Teaching Plan for 2024-25

S. No	Month & Week	Date(s)	Time	Topic	T	P/A	Methodology
1	Mar/1	06-03-25 07-03-25	3:30 to 5:30	Introduction to R – Basics- Math & Vector operations with R	2	2	Lecture, Demonstration, Self-practice
2	Mar/2	13-03-25 15-03-25	3:30 to 5:30	Handing with Missing data in R Matrices with R	2	2+2	Lecture, Demonstration, Self-practice, Assignment1
3	Mar/3	20-03-25 21-03-25 22-03-25	3:30 to 5:30	Introduction to descriptive statistics-Mean, Median, Mode, GM, HM	4	2+2	Lecture, Demonstration, Self-practice
4	Mar/4	27-03-25 29-03-25	3:30 to 5:30	Absolute, relative frequencies with R Range, QD and Absolute Deviation with R	4	2	Lecture, Demonstration, Self-practice, Assignment2
5	Apr/1	03-04-25 04-04-25	3:30 to 5:30	SD and Variance with R Correlation and Application with R	4	2	Lecture, Demonstration, Self-practice
6	Apr/2	11-04-25	3:30 to 5:30	Graphs & Plots- Bar and Pie	2	2	Lecture, Demonstration, Self-practice and Assignment3
7	Apr/3	16-04-25 19-04-25	3:30 to 5:30	Box plots and Scatter plots Kernal density, stem leaf	2	2+2	Lecture, Demonstration, Self-practice Assignment-4
8	May/1	02-05-25	2 to 4	Final Exam		2	Exam
				Total Hrs	20	22	42

Course Instructors:

1. K. Ashok
2. P. Ramesh


Lecturer In-Charge

List of Students:

S. No	Name of the Student	Year	Class
1	ATUKURI JAHNAVI	1 st	BSc (Statistics)
2	BANAVATHU CHANDU NAIK	1 st	BSc (Statistics)
3	BETHALA SAILAJA	1 st	BSc (Statistics)
4	DEVARAKONDA DURGA MALLESWARI	1 st	BSc (Statistics)
5	ITIKALA AMOSH	1 st	BSc (Statistics)
6	PILLI LAKSHMI DEVI	1 st	BSc (Statistics)
7	SHAIK REHMATUNNISHA	1 st	BSc (Statistics)
8	SHAIK SUMMAYA ASRAF	1 st	BSc (Statistics)
9	TALABATTULA LALITH VEDAGNA	1 st	BSc (Statistics)
10	THADISETTI MAHA LAKSHMI	1 st	BSc (Statistics)
11	DANGETI DINESH KARTHIK	1 st	B. Sc (Artificial Intelligence)
12	BEVARA KUSHAL LAKSHMI PRASAD	1 st	B. Sc (Artificial Intelligence)
13	BONI RAKESH	1 st	B. Sc (Artificial Intelligence)
14	TURAKA GEETHIKA	1 st	B. Sc (Artificial Intelligence)
15	ATCHI SONALI	1 st	B. Sc (Artificial Intelligence)
16	JAKKA BHAVAZNA	1 st	B. Sc (Artificial Intelligence)
17	MALABALA SUDHEER	1 st	B. Sc (Artificial Intelligence)
18	AYINAVILLI TARUN	1 st	B. Sc (Data Science)
19	BADUGU RAKESH	1 st	B. Sc (Data Science)
20	GOLUKONDA REVATHI	1 st	B. Sc (Data Science)
21	MOTHRAPU MAHITHA	1 st	B. Sc (Data Science)
22	MOTHUKURI MAHESWARI	1 st	B. Sc (Data Science)
23	PODILI NAVEEN BABU	1 st	B. Sc (Data Science)
24	PURI SRIRAM	1 st	B. Sc (Data Science)
25	RALI NAGA CHARAN	1 st	B. Sc (Data Science)



SRR & CVR Government Degree College (A):Vijayawada

Department of Statistics

Certificate Course : Basic Statistics with R

Duration : 40 Hours

Period of the course: Even Sem

Intake: 30

ABOUT THE COURSE:

Any data analysis is incomplete without statistics. After getting the data, any statistical analysis starts with descriptive statistics which aims to extract the information hidden inside the data. The tools of descriptive statistics are based on mathematical and statistical functions which are to be evaluated using the software. The statistical software are paid as well as free. Most of the statistical software are paid software. Popular free statistical software is R.

Objective of the Course: What are the basic tools of descriptive statistics and how to use the R software for descriptive statistical analysis is the objective of the course to be taught.

Learning Outcomes: After completion of the course, the learners are able apply various tools of 'R' software to analyze descriptive statistics and to derive insights of the data.

INTENDED AUDIENCE:

UG students of Science and Humanities with basic mathematical and statistical background.

COURSE LAYOUT:

- Unit 1:** Calculations with R Software: (8 Hrs)
Introduction, Basics, Data Vectors, Matrices, Handling missing data
- Unit 2:** Introduction to Descriptive Statistics, frequency distribution,
Central Tendency of Data: (10 Hrs)
Absolute frequencies, Relative frequencies, Cumulative frequency distribution, Mean,
Median, Mode, GM and HM
- Unit 3:** Variation in Data and Bi-variate data and correlation analysis : (12 Hrs)
Range, Quartile deviation, Absolute Deviation, Standard deviation and variance
Correlation analysis of bi-variate data
- Unit 4:** Graphics and Plots: (10 Hrs)
Bar diagrams, Pie diagrams, kernel density, stem-leaf plots, Box plots, scatter plots.

References:

1. Software for Data Analysis: Programming with R (Statistics and Computing) by John M. Chambers (Spinger)
2. R reference card (PDF) by Tom Short (more can be found under Short Documents and Reference Cards here)
3. Quick-R: quick online reference for data input, basic statistics and plots

