



DEPARTMENT OF STATISTICS St. JOSEPH'S COLLEGE (Autonomous)

*Special Heritage Status awarded by UGC Accredited at A++ Grade (4th cycle) by NAAC
College with Potential for Excellence by UGC DBT-STAR & DST-FIST sponsored College*

TIRUCHIRAPPALLI - 620 002.

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Website : www.sjctni.edu

A Report on Value-Added Course (2022-2023)

Department of Statistics, St. Joseph's College, Trichy conducted a Value-Added Course on "Research through Statistical Packages" from 1 February 2023 to 28 February 2023, through hybrid mode. This course provides an application-oriented hands on experience through IBM SPSS. At the end of this course, participants can review several statistical techniques and discuss situations in which they would use each technique, how to set up the hypothesis, and how to interpret the results. The course coordinator is Dr. A. Philip Arokiadoss (Assistant Professor, Dept. of Statistics). The classes were conducted by the Resource persons - Dr. Lilly George (Head & Assistant Professor, Dept. of Statistics), Dr. R. Vijayakumar, Dr. J. Glory Persial, Dr. T. Venkatesan and Dr. A. Philip Arokiadoss (Assistant Professors, Dept. of Statistics). A total of 23 students who belong to the Statistics and Data Science departments from various institutions had registered for this course.

The course was inaugurated on 1 February 2023 at 3:00 pm through Google Meet platform with a silent prayer. Dr. Lilly George welcomed all the participants and highlighted the importance of conducting research in today's modern era through the statistical package SPSS and she introduced the resource persons who handled the course sessions. Subsequently, Dr. A. Philip Arokiadoss explained the course syllabus, schedule and assessment details.

The course consists of five units which were handled by five staff members of the department. The syllabus and a detailed plan of action were enclosed in this report.

As per the schedule, all the topics were explained by the respective resource persons from 3:00 pm to 4:00 pm following that they have given the hands on training to all the participants from 4:00 pm to 5:00 pm. It is noteworthy that about 15 participants, who did not have laptop/desktop facilities with SPSS software, had the opportunity to come directly to the department of Statistics, Mahalanobis Smart class room which has desktops with IBM Licensed SPSS software, for their hands on training.

At the end of all the assessments, 19 participants progressed, of which 13 achieved outstanding grades (above 80%) and 6 achieved 'A' grades (above 60%). All the participants said that the course stimulated their interest for future research and their further studies. At the end of the value-added course, certificates were distributed to all the participants who have successfully completed the course.

L. M. Sg

Dr. Lilly George, M.Sc., M.Phil., Ph.D.
Assistant Professor & Head
Department of Statistics
St. Joseph's College (Autonomous)
Tiruchirappalli - 620 002.

Invitation – Value-Added Course



DEPARTMENT OF STATISTICS

SCHOOL OF COMPUTING SCIENCES

St. JOSEPH'S COLLEGE (AUTONOMOUS)

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College With Potential For Excellence By UGC, DBT - STAR & DST - FIST Sponsored College

Tiruchirappalli- 620 002, Tamilnadu, India

VALUE ADDED COURSE

RESEARCH THROUGH STATISTICAL PACKAGE

Date : 01.02.2023 to 28.02.2023 (30 Hrs) Time : 3.00 pm to 5.00 pm

Through Virtual mode (Google Meet)

There are plenty of Statistical software available in the market to perform data analysis. SPSS which stands for Statistical Package for Social Sciences is an application that can be used as a data collection tool and software to run various statistical tests.

A student / scholar who has as in-depth knowledge in SPSS software, not only would be able to analyse their project / dissertation work successfully but also would get endless job opportunities around the world.

Statistical software are used by various organisations like,

- Market Researchers
- Survey Companies
- Education Researchers
- Health Researchers
- Government Entities
- Marketing Organisations

Resource Persons : Dr. Lilly George

Dr. R. Vijayakumar

Dr. J. Glorypersial

Dr. T. Venketesan

Dr. A. Philip Arokiadoss

Asst. Professors, Dept. of Statistics, St. Joseph's College, Trichy.

Seats Available : 50

Eligibility : Students/ Scholar with any degree / Pursuing degree

Course Fees : Rs. 500/-

Pre - requisites : Laptop / desktop with internet connection

Registration link : <https://admission.sjctni.edu/Statistics/RTSP/>



Scan QR

Classes will be conducted during weekdays.

For Further Details Contact : Dr. A. Philip Arokiadoss , Course Co- ordinator, Asst. Professor of Statistics - 9944298134

Value Added Course II

Research Through Statistical Packages

Course code: 20STVA2

Practical - 30 Hours

Course Outcomes:

After learning the course, students will be able to:

- ❖ Familiarize with Statistical software interface.
- ❖ Define variables and feed data.
- ❖ Inherit skills of extracting various statement.
- ❖ Apply skills in interpreting various statistical results.
- ❖ Apply various statistical techniques to draw inferences
- ❖ Generate statistical report.

Unit – I:

Construction of frequency tables – Univariate Frequency tables – Cross tabulation.
Graphical representation of Data: Bar diagram – Simple Bar diagram, Multiple Bar diagram, Sub divided Bar diagram, Histogram Pie diagram.

Unit – II

Calculations of Measures of Central Tendency: Mean, Median and Mode and Geometric mean. **Calculations of Measures of Dispersion** - Standard Deviation, Quartiles, Skewness and Kurtosis.

Unit- III

Calculations of Correlation Coefficient: Karl Pearson's Correlation Coefficient and Spearman's Rank Correlation Coefficient. **Calculation of Regression Coefficient:** Trend Line.

Unit-IV:

Testing of Hypothesis: Large sample test (Z-Test): Test for Mean, Test for Difference of means, Test for proportions and Test for standard Deviation. Small sample test (t-Test, F test) Test of Mean- Test of variances: Test of Homogeneity of means for more than 2 samples One way ANOVA –Two-way ANOVA.

Unit – V:

Non-Parametric Test- Test for Homogeneity - Test for Attributes – Kolmogorov Smirnov test- Kruskal Wallis test- Wilcoxin signed rank test- Kendall's - Friedman tests.

References:

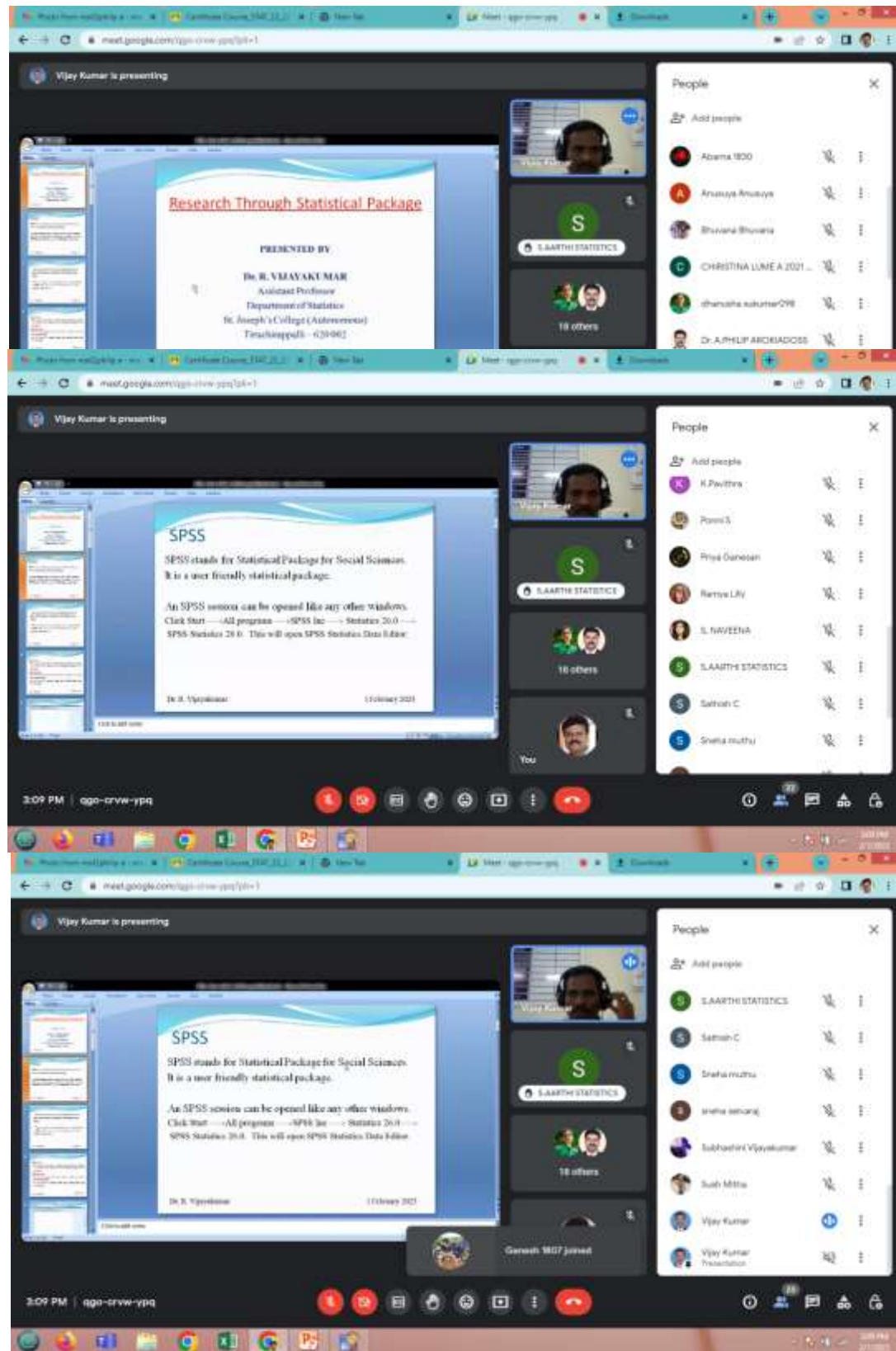
1. Melanie C. Page, Sanford L. Braver and David P. MacKinnon, "Levine's Guide to SPSS for Analysis of Variance". 2nd Edition, 2003, Lawrence Erlbaum Associates, Publishers Mawwah, New Jersey, London.
2. Vijay Gupta, "SPSS for Beginners", 1999, Published by VJBooks Inc.

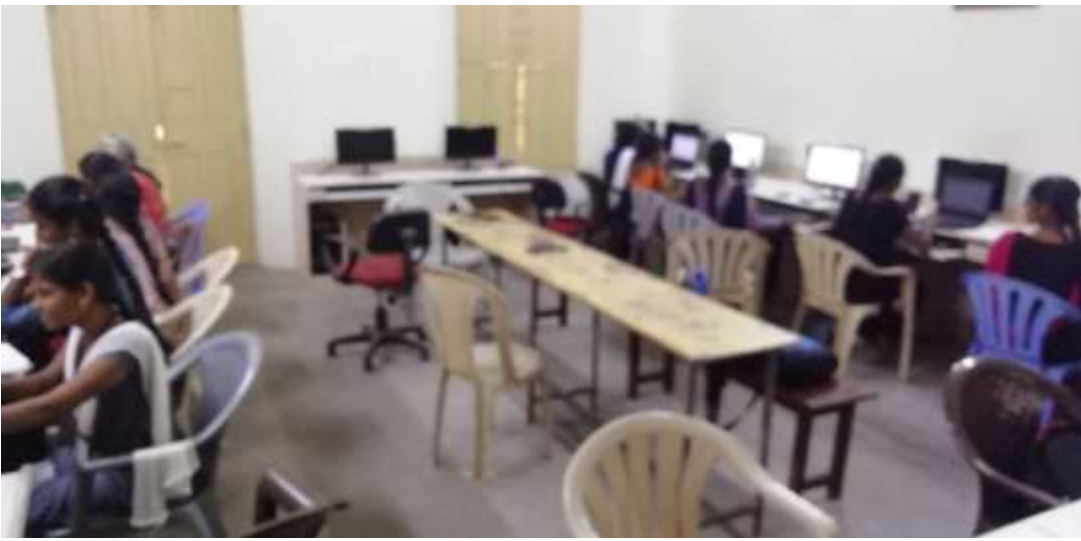
Evaluation Process : By conducting practical examination students will be evaluated.

Plan of Action

<i>Unit handled</i>	<i>Resource person</i>	<i>Date</i>	<i>Topics covered & Assessments</i>
Unit-I	Dr. R. Vijayakumar	01.02.2023	Construction of frequency tables
		02.02.2023	Graphical representation of data
		03.02.2023	Assessment-1. Test (20 Marks)
Unit-II	Dr. Lilly George	06.02.2023	Measures of Central Tendency
		07.02.2023	Measures of Dispersion
		08.02.2023	Assessment-2. Assignment (20Marks)
Unit-III	Dr. T. Venkantesan	09.02.2023	Correlation Coefficient
		10.02.2023	Regression Coefficient & Trend line
		20.02.2023	Assessment-3. Test (20 Marks)
Unit-IV	Dr. J. Glorypersial	21.02.2023	Large sample & Small sample tests
		22.02.2023	One-way ANOVA & Two-way ANOVA
		23.02.2023	Assessment-4. Test (20 Marks)
Unit-V	Dr. A. Philip Arokiadoss	24.02.2023	Test for Homogeneity & Attributes
		27.02.2023	Non-parametric tests
		28.02.2023	Assessment-5. Test (20 Marks)

Photos for Value-Added Course





meet.google.com/tyi-gfbo-way

You're presenting to everyone

Value Added Course
Data Analysis Through Statistical Packages
Module - 5
NON-PARAMETRIC TESTS

Dr. A. Philip Anandkumar
Assistant Professor
Department of Statistics
St. Joseph's College, Tirunelveli

3:53 PM | tyi-gfbo-way

meet.google.com/tyi-gfbo-way

Vijay Kumar is presenting

SPSS
SPSS stands for Statistical Package for Social Sciences. It is a user friendly statistical package.
As SPSS windows can be opened like any other windows, Click Start -> All programs -> SPSS Inc -> Statistics 20.0 -> SPSS Statistics 20.0. This will open SPSS Statistics Data Editor

Dr. A. Vijaykumar
1 February 2021

3:09 PM | qqi-erw-yqq

meet.google.com/tyi-gfbo-way

Philip Anandkumar

3:52 PM | tyi-gfbo-way

Attendance

Department of Statistics, St. Joseph's College (Autonomous), Tiruchirappalli -2.
Value Added Course - 2022-2023 - RESEARCH THROUGH STATISTICAL PACKAGES

Attendance Sheet

					X	-Present			A	- Absent						
S.no	Name	Dr. R. Vijayakumar			Dr. Lilly George			Dr. T. Venkatesan			Dr.J. Glorypersial			Dr.A.Philip Arokiadoss		
		1 Feb	2 Feb	3 Feb	6 Feb	7 Feb	8 Feb	9 Feb	10 Feb	20 Feb	21 Feb	22 Feb	23 Feb	24 Feb	27 Feb	28 Feb
1	KATTUPALLI SUDHAKAR	A	A	A		A	A	A	A	A	A	A	A	A	A	A
2	PAVITHRA K	X	X	X		X	X	X	X	A	A	X	X	X	X	X
3	DHANUSHA S	X	X	X		X	X	X	X	X	X	X	X	X	X	X
4	GAYATHRI R	X	X	X		X	X	X	X	A	A	X	X	X	X	X
5	SUSHMITHA G	X	X	X		X	X	X	X	X	X	X	X	X	X	X
6	SNEKA M	X	X	X		X	X	X	X	X	X	X	X	X	X	X
7	SUBHASHINI V	X	X	X		X	X	X	X	X	X	X	X	X	X	X
8	ABARNA	X	X	X		X	X	X	X	A	A	X	X	X	X	X
9	PONNI S	X	X	X		X	X	X	X	A	A	A	X	X	X	X
10	S. KEERTHANA	A	X	X		X	X	X	X	X	X	X	X	X	X	X
11	CHRISTINA LUME. A	X	X	X		X	X	X	X	X	A	X	X	X	X	X
12	BHUVANESHWARI S	X	X	X		X	X	X	X	X	A	X	X	X	X	X
13	PRIYADHARSHINI. G	X	X	X		X	X	X	X	X	X	X	X	X	X	X
14	NANDHINI N	A	X	X		X	X	X	X	A	A	X	X	X	X	X
15	NAVEENA S	X	X	X		X	X	X	X	X	X	X	X	X	X	X
16	SNEHA S	X	X	X		X	X	X	X	X	X	X	X	X	X	X
17	ANUSUYA. G	X	X	X		X	X	X	X	X	A	X	X	X	X	X
18	RAMYA	X	X	X		X	X	X	X	X	A	A	X	X	X	X
19	SATHISH C	X	X	X		A	X	X	X	X	X	X	X	X	X	X
20	HAMSAVARDHINI	A	A	A		A	A	A	A	A	A	A	A	A	A	A
21	GANESH R	A	X	X		A	X	X	X	A	A	X	X	X	X	X
22	VEERA MUTHU B	A	A	A		X	A	A	A	A	A	A	A	A	A	A
23	N NAVEEN KUMAR	A	A	A		A	A	A	A	A	A	A	A	A	A	A
No. of Attendees		16	19	19	0	18	19	19	19	13	9	17	19	19	19	19
No. of Absentees		7	4	4	0	5	4	4	4	10	14	6	4	4	4	4

Marks Details

Department of Statistics, St. Joseph's College (Autonomous), Tiruchirappalli -2.
Value Added Course - 2022-2023 - RESEARCH THROUGH STATISTICAL PACKAGES
Marksheet

S.No.	Name	Components					Total Marks (100)	Result	Grade
		Test-1 (20)	Assign (20)	Test-2 (20)	Test-3 (20)	Test-4 (20)			
1	KATTUPALLI SUDHAKAR	A	A	A	A	A	0	FAIL	-
2	PAVITHRA K	16	16	17	18	19	86	PASS	OS
3	DHANUSHA S	14	16	17	14	19	80	PASS	OS
4	GAYATHRI R	15	16	18	14	19	82	PASS	OS
5	G. SUSHMITHA	15	15	17	13	19	79	PASS	A
6	SNEKA M	15	15	18	13	19	80	PASS	OS
7	V.SUBHASHINI	14	15	18	13	18	78	PASS	A
8	ABARNA	18	15	17	18	20	88	PASS	OS
9	PONNI S	14	16	18	14	20	82	PASS	OS
10	S. KEERTHANA	16	16	19	19	20	90	PASS	OS
11	CHRISTINA LUME. A	14	15	16	14	20	79	PASS	A
12	BHUVANESHWARI S	16	15	16	14	18	79	PASS	A
13	PRIYADHARSHINI. G	15	16	17	14	20	82	PASS	OS
14	NANDHINI N	14	15	18	13	20	80	PASS	OS
15	NAVEENA S	A	15	17	15	20	67	PASS	A
16	SNEHA S	14	15	18	13	20	80	PASS	OS
17	ANUSUYA. G	16	15	18	13	19	81	PASS	OS
18	RAMYA	16	15	17	18	20	86	PASS	OS
19	SATHISH C	A	15	18	19	20	72	PASS	A
20	HAMSAVARDHINI	A	A	A	A	A	0	FAIL	-
21	GANESH R	15	18	18	18	19	88	PASS	OS
22	VEERA MUTHU B	A	A	A	A	A	0	FAIL	-
23	N NAVEEN KUMAR	A	A	A	A	A	0	FAIL	-

St. Joseph's College (Autonomous), Tiruchirappalli.
DEPARTMENT OF STATISTICS

VALUE ADDED COURSE (Virtual mode - Google meet)
RESEARCH THROUGH STATISTICAL PACKAGES

Course duration: 30 Hours | Date: 1st Feb 2023 to 28th Feb. 2023 | Class days: Monday to Friday

Registration Details

SNO	UID	NAME	CATEGORY	DEPT	COLLEGE	PLACE	STATE	MOBILE	EMAIL	Amount
1	ST2302_7977	Kattupalli Sudhakar	Research Scholar	Artificial Intelligence and Data Science	Lakireddy Bali Reddy College of Engineering	Mylavaram	None	9010503595	ksudhakar@lbrce.ac.in	500
2	ST2302_8039	PAVITHRA K	PG Student	Statistics	Rajah serfoji government college (Autonomous)	Thanjavur	Tamilnadu	8760818294	rkpavi2001@gmail.com	500
3	ST2302_8041	DHANUSHA S	PG Student	Statistics	Kunthavai Naacchiyaar govt.Arts College (W)	Thanjavur	Tamilnadu	9943804926	dhanushasukamuar59@gmail.com	500
4	ST2302_8045	GAYATHRI R	PG Student	Statistics	Rajah Serfoji Government College (Autonomous)	Thanjavur	TAMILNADU	9025889310	gauma642002@gmail.com	500
5	ST2302_8046	G. SUSHMITHA	PG Student	STATISTICS	KNGAC THANJAVUR	THANJAVUR	TAMILNADU	8270268780	sushmithamuthu1234@gmail.com	500
6	ST2302_8049	SNEKA M	PG Student	STATISTICS	KNGAC	THANJAVUR	TAMILNADU	6369826689	msneka05072002@gmail.com	500
7	ST2302_8051	V.SUBHASHINI	PG Student	Statistics	Kngac	Thanjavur	Tamilnadu	8667241653	subhashinisubha551@gmail.com	500
8	ST2302_8056	ABARNA	PG Student	Statistics	Rajah serafoji government college	Thanjavur	TamilNadu	9943473317	abarna.abu09@gmail.com	500

9	ST2302_8059	Ponni s	PG Student	Statistics	Rajah serfoji government college	Thanjavur	Tamilnadu	7339384679	ponniraj20@gmail.com	500
10	ST2302_8061	S. KEERTHANA	PG Student	STATISTICS	KNGAC THANJAVUR	THANJAVUR	TAMILNADU	7397309580	keerthu9580@gmail.com	500
11	ST2302_8079	CHIRISTINA LUME. A	PG Student	STATISTICS	KNGAC	Thanjavur	TAMILNADU	6385883318	chiristinalume2001@gmail.com	500
12	ST2302_8080	BHUVANESHWARI S	PG Student	STATISTICS	KNGAC	THANJAVUR	TAMILNADU	6384964677	bhuvanapuvi1401@gmail.com	500
13	ST2302_8081	PRIYADHARSHINI. G	PG Student	Statistics	KNGAC	Thanjavur	Tamilnadu	8270408988	priyadharshinistat@gmail.com	500
14	ST2302_8084	NANDHINI N	PG Student	STATISTICS	KNGAC	THANJAVUR	TAMILNADU	8838823525	nandhini101ayr@gmail.com	500
15	ST2302_8094	NAVEENA S	PG Student	Statistics	KNGAC	Thanjavur	TamilNadu	7708719121	starsaloonsk@gmail.com	500
16	ST2302_8104	Sneha S	PG Student	Statistics	Kngac	Thanjavur	Tamilnadu	9791796173	snehaselvaraj5@gmail.com	500
17	ST2302_8105	ANUSUYA. G	PG Student	STATISTICS	KUNDHAVAI NAACHIYAR GOVT. ARTS COLLEGE	THANJAVUR	Tamilnadu	9025179847	anujith232557@gmail.com	500
18	ST2302_8106	RAMYA	PG Student	STATISTICS	KNGAC	THANJAVUR	TAMIL NADU	6369715020	ramya190701@gmail.com	500
19	ST2302_8130	SATHISH C	UG Student	Statistics	St Joseph's College (Autonomous)	Tiruchirapalli	TamilNadu	9894687076	sathishc8580@gmail.com	500
20	ST2302_8145	HAMSAVARDHINI	PG Student	Data science	SASTRA UNIVERSITY	Thanjavur	TamilNadu	7871673220	vardhinimuruganantham@gmail.com	500
21	ST2302_8146	GANESH R	PG Student	Statistics	Rajah serfoji Govt college	Thanjavur	TamilNadu	6385619050	ganeshra402@gmail.com	500
22	ST2302_8147	VEERA MUTHU B	UG Student	Statistics	Rajah serfoji Govt college	Thanjavur	Tamilnadu	6383839774	bveeramuthu2001@gmail.com	500
23	ST2302_8148	N NAVEEN KUMAR	UG Student	Statistics	Raja Serfoji Government College	Thanjavur	TamilNadu	7806852836	hartiknaveen@gmail.com	500