











In Celebration of the GOLDEN JUBLIEE of Siddhartha Academy of General & Technical Education(1975-2025)

Report on the Faculty Development Programme (FDP)

"R-Programming: Applications in Data Science and Research"

with Hands-on Training, Organized by IQAC, SDMSMK

Day & Date: 20-11-2025 Thursday

Venue: Webinar Hall

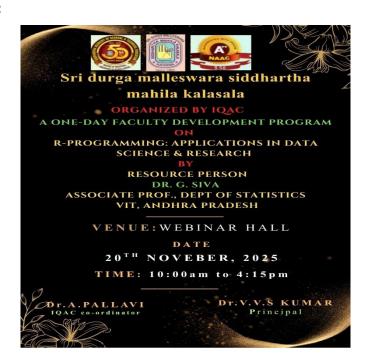
Time: 10:00AM-04.15PM

Resource Person: Dr. Siva G

Assistant Professor Grade-I, Department of Statistics

VIT-AP University, Amaravati, Andhra Pradesh.

INVITATION:



PROGRAMME SHEET:

10.00AM - 10.05AM: Welcoming the guests on to the Dias

10.05AM - 10.10AM : Prayer Song

10.10AM - 10.15AM: Address by Principal

10.15AM - 10.20AM: Address by IQAC Coordinator

10.20AM - 10.30AM: Introducing the Resource Person.

10.30AM - 12.30PM: Practical Session-I by Resource Person

12.30PM - 1.30PM : Lunch Break

1.30PM - 4.00PM : Practical Session-II by Resource Person

4.00PM - 4.10PM : Feedback by the Faculty Members

4.10PM - 4.15PM : Vote of thanks

OBJECTIVE: The objective of the FDP was to equip faculty members with essential skills in R-Programming, enhance their understanding of statistical computing, and strengthen their ability to apply data science tools in research and academic work.

PROGRAMME HIGHLIGHTS

The Internal Quality Assurance Cell (IQAC) of SDMSMK organized a Faculty Development Programme (FDP) on "R-Programming: Applications in Data Science and Research" with Hands-On training on 20 November 2025.





PRAYER SONG:



ADDRESSING BY THE PRINCIPAL: The programme began with a formal welcome. In his welcoming address, the Principal Sir highlighted the vital connection between FDPs and research development. He emphasized how statistical tools form the backbone of modern research and explained how the subject of Statistics is integrated across various research methodologies, irrespective of discipline. He encouraged faculty members to make use of such platforms to strengthen their analytical capabilities.



ADDRESSING BY THE IQAC CO-ORDINATOR: This was followed by an address from the IQAC Coordinator Madam, who spoke about the practical applications of R-Programming in academic project development. She explained how R can be used for data handling, visualization, and statistical modeling, and stressed the importance of adopting modern analytical tools to improve the quality of student projects and research output.



BIO-DATA OF THE RESOURCE PERSON:

➤ His research expertise lies in Biostatistics and Classification

Techniques, particularly ROC Analysis, which plays a significant role
in medical data evaluation and diagnostic accuracy studies.

- Recently in 2023, sir has completed a Ph.D. in Statistics from the Department of Statistics, Pondicherry Central University, Puducherry.
- Prior to this, Sir had qualified the State Eligibility Test (SET) conducted by the Government of Andhra Pradesh in 2022.

In addition to this strong academic and research foundation, sir has an impressive record of achievements.

- 1.He is the recipient of the MN Das Memorial Young Scientist 2025 Meritorious Award for Best Research Paper Presentation, awarded by the Society of Statistics and Computer Applications (SSCA).
- 2.He was also honored with the ISPS Young Statistician Award 2020 along with the Prof. Jayaram Sethuraman Gold Medal for Best Research Paper Presentation by the Indian Society for Probability and Statistics (ISPS).
- 3. During postgraduate studies, he secured the Prof. Senadhi Govindharajulu Gold Medal and the Prof. P. Balasddamuni Gold Medal for achieving first rank in M.Sc. Statistics, and also received the prestigious Prof. C.R. Rao Cash Prize for obtaining the highest score in the program.
- 4.He has consistently demonstrated academic excellence from the undergraduate level as well, being the First Rank Holder in the Bachelor's Degree in MSCs Mathematics, Statistics, and Computer Science.

Furthermore, He has made significant academic contributions through research and publications.

- ➤ He has published 8 research articles, all of which are Scopus indexed, with 6 appearing in SCI journals and also authored 3 books.
- ➤ He is currently guiding one Ph.D. scholar.
- ➤ He has presented 20 research papers at various national and international conferences, and have delivered 10 invited talks in Faculty Development Programmes.



SESSION BY THE RESOURCE PERSON: The technical session was delivered by the resource person, Dr. G.Siva, Assistant Professor, Department of Statistics, VIT-AP University. Dr. G.Siva began by explaining that AI, Machine Learning, and Deep Learning techniques are all fundamentally derived from Statistics. He highlighted the importance of data in decision-making and described how Statistics is deeply embedded in all aspects of real life. He introduced R as a highly advanced smart calculator, capable of performing complex statistical computations efficiently.











During the afternoon hands-on session, Dr. G.Siva demonstrated the use of the R-console, including basic commands and data processing techniques. Faculty members learned how to draw histograms, bar graphs, and pie charts in R. The session also covered the application of t-tests and their relevance in research, enabling participants to understand how statistical tests can be implemented and interpreted using R.

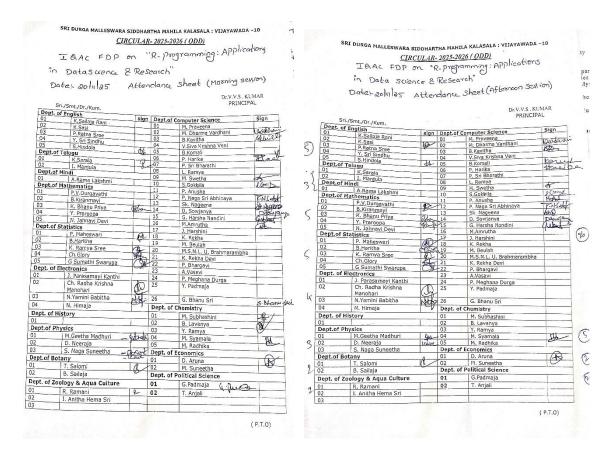




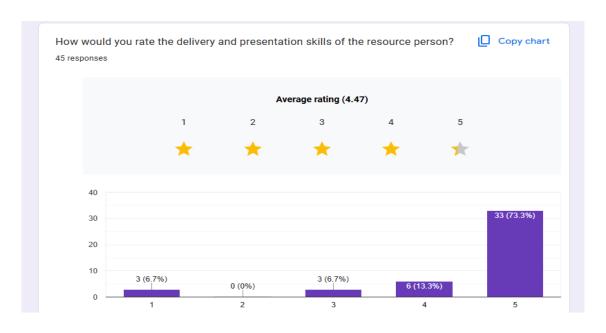


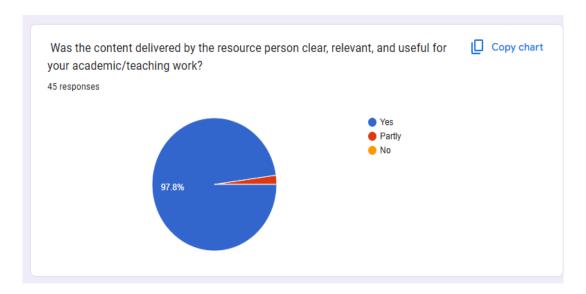
OUTCOME OF THE FDP: The FDP provided participants with practical exposure to R-Programming and its applications in data science and research. Faculty members gained confidence in executing basic statistical operations, visualizing data, and performing hypothesis testing using R. The programme enhanced their analytical skills, encouraged research-oriented thinking, and strengthened their ability to guide student projects more effectively.

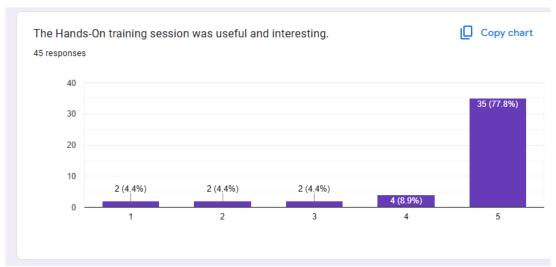
ATTENDANCE SHEET:

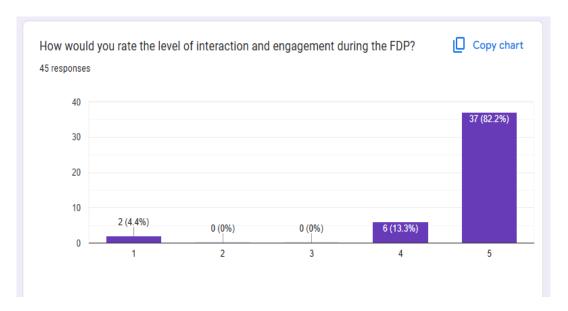


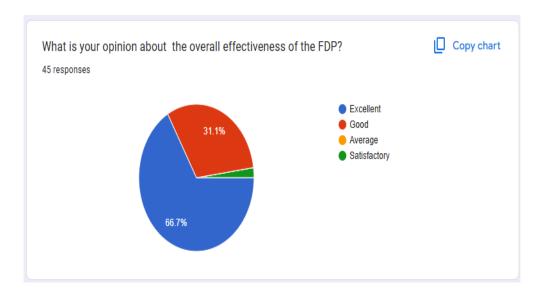
FEEDBACK FROM THE FACULTY:











What was the most useful takeaway from the FDP?

Data collection and storage Learning about R studio

R programming tools

Hands on training with real life examples delivered by the resource person

Research methodologies

The way of explaining with good set of examples

So many applications with this in real world life

Applications of statistics in research

To get more knowledge on Research

Hypothesis

What topics would you like to see covered in Future FDPs?

Spss, Machine learning, AI tools, LATEX,H indexing, Moodle, Phyton, Research methodology, Python, More applications of statistics in research, Quantum T echnologies, Research Tools, Open AI resources for paper writing Free tools for plagiarism check Research survey releted awareness programmes conducting in future.
