

ORGANIZING COMMITTEE

- Patron** : Sr. Alice K.T.,
Secretary,
Auxilium College.
- Convener** : Dr. (Sr.) Regina Mary R.,
Principal,
Auxilium College.
- Co Conveners** : Dr.(Sr.) Amala Valarmathy A.,
Vice Principal (Shift II),
Auxilium College.
- Sr. Sumathi M.,**
Vice Principal (Shift I),
Auxilium College.
- Organizing Secretaries** : Dr. Sujatha L.,
Head, PG & Research
Dept. of Mathematics,
Auxilium College.
- Swapnali Kadam,**
Tamil Nadu Training
Coordinator,
Spoken-Tutorial,
IIT Bombay.

Executive Members

- Ms. Thangam S., Assistant Professor
Ms. Gayathri K., Assistant Professor
Ms. Priya A., Assistant Professor
Ms. Naga soundarya lakshmi V.S.V., Assistant
Professor
Ms. Priya P., Assistant Professor
Dr. Priyanka Victor, Assistant Professor
Dr. Yuvarani S., Assistant Professor

Forum is open to staff members of:

- University
- Arts and Science College
- Engineering and Technology
- College of Education
- School Teachers

NO REGISTRATION FEE

**E – CERTIFICATE WILL BE
ISSUED TO ALL THE
PARTICIPANTS**

It is mandatory for
all the participants
to join the
WhatsApp group
through the link
given in the
Google form

**Last date
for Registration:
10.05.2020 till 10 a.m.**

For further details contact:

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Mobile: 9486384320



**Online
Faculty Development Programme
on**

R Language



13.05.2020 - 20.05.2020

Organized by

**PG and Research
Department of Mathematics
Auxilium College**

(Autonomous)

**(Accredited by NAAC with A+ Grade with
CGPA of 3.55 out of 4 in the 3rd Cycle)
Gandhi Nagar, Vellore - 632 006
Tamil Nadu, India.**

In Collaboration with

**Spoken-Tutorial
IIT Bombay**

ABOUT AUXILIUM COLLEGE

Auxilium College founded in 1954 is the first women's College in Vellore District and was affiliated to Madras University then and now affiliated to Thiruvalluvar University. Auxilium College has been granted the status of autonomy by the UGC and the Thiruvalluvar University from the academic year 2007-2008. The College has been accredited by the National Assessment and Accreditation Council (NAAC) with A⁺ Grade in 2003 and Re-accredited with A Grade with a CGPA of 3.41 out of 4 in 2010 and with A⁺ Grade with CGPA of 3.55 out of 4 in the 3rd cycle in 2016. In the Education World India Autonomous College Rankings 2020-2021, Auxilium College has secured the 24th rank among the India's top-ranked private Autonomous Colleges. It is a minority institution established and administered by the Daughters of Mary Help of Christians, commonly known as Salesian Sisters of Don Bosco, belonging to the Catholic Church.

ABOUT THE DEPARTMENT

The Department of Mathematics was started in 1966, with the single minded purpose to improve the level of mathematical maturity, logical and analytical thinking among the students from rural areas of Vellore District. The M.Sc. and the M.Phil. courses were started in 1999 and 2007 respectively. Due to increase in demand, additional sections in B.Sc. Mathematics in 2009 and third section in 2018 were started. From 2010, the department is also offering Ph.D. programme in Mathematics. In a period of five and half decades of its existence, the department has become a full-fledged research department.

ABOUT R LANGUAGE

R is a programming Language and free software environment for statistical computing. The R language is widely used among statisticians and data miners for developing statistical software and data analysis. R provides variety of statistical (linear and non linear modelling, classical statistical tests, time series analysis, classification and clustering) and graphical techniques and is highly extensible. One of R's strengths is the ease with which well designed publication quality plots can be produced including mathematica symbols and formulae where needed.

The advantages of R language are:

- An effective data handling and storage facility.
- A suite of operators for calculation on arrays.
- Integrated collection of immediate tools for data analysis.
- Graphical facilities for data analysis.
- A well developed, simple and effective programming language.

ABOUT THE SPOKEN - TUTORIAL, IIT BOMBAY

Spoken Tutorial is an initiative of National Mission on Education through ICT, MHRD, Government of India, to promote IT literacy through open source software.

IMPORTANT NOTE:

If you have registered for any FDP programme in collaboration with Spoken-Tutorial, IIT Bombay or enrolled for any other training program in the Spoken-Tutorial, provide the alternative E-mail ID in the Google Registration Form.

TOPICS FOCUSED

1. Installing R and RStudio on Linux
2. Installing R and RStudio on Windows
3. Introduction to basics of R
4. Introduction to Data Frames in R
5. Introduction to RStudio
6. Introduction to R script
7. Working directories in RStudio
8. Indexing and Slicing Data Frames
9. Creating Matrices using Data Frames
10. Operations on Matrices and Data frames
11. Merging and Importing Data
12. Data types and Factors
13. Lists and its Operations
14. Plotting Histograms and Pie Chart
15. Plotting Bar Charts and Scatter Plot
16. Introduction to ggplot2
17. Aesthetic Mapping in ggplot2
18. Data Manipulation using dplyr Package
19. More Functions in dplyr Package
20. Pipe Operators
21. Conditional Statements
22. Functions in R

Link for Registration:

<https://forms.gle/55iaG6HkTnRqZbRL9>

Link for WhatsApp Group:

<https://chat.whatsapp.com/HKAPK1btnaFBdfqASXyCtT>