## PRIMAX FOUNDATION

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Bengaluru, Karnataka, India
In Association with

## P.G. Department of Commerce

## K.S.R. COLLEGE OF ARTS AND SCIENCE FOR WOMEN

 Tiruchengode - 637215, Namakkal District, Tamil Nadu Organizes
## Days - Virtual FDP on Time Series Analysis in Financial Research

Time Series Analysis in

## For Registration

 Financial Research
## Registiation Fee Rs. 1 (

## mome 2022

Time : 6.00 PM to 8.00 PM

## About Time Series Analysis

Time series analysis is a specific way of analysing a sequence of data points collected over an interval of time. In time series analysis, analysts record data points at consistent intervals over a set period of time rather than just recording the data points intermittently or randomly. However, this type of analysis is not merely the act of collecting data over time. Time series analysis is a specific way of analyzing a sequence of data points collected over an interval of time. In time series analysis, analysts record data points at consistent intervals over a set period of time rather than just recording the data points intermittently or randomly.

## Resource Persons



## Dr. Dhaval Maheta

Faculty, Veer Narmad South Gujarat University Surat, Gujarat, India.
Dr. Dhaval Maheta is doctorate in Management and currently working as an Assistant Professor, Department of Business and Industrial Management, Veer Narmad South Gujarat University, Surat. He has 20 years of Post - Graduate teaching and research experience. He has presented and published 40 research papers in National and International Conferences. He has been the key resource persons for the Research Methodology workshops organized at various levels including NITs. He has also published book on "Data Analysis using Minitab" software and "Statistical Analysis using R Software", "Machine Learning using R" for Data Analysis. He has organized various Faculty Development Programme on Data Analysis using SPSS, AMOS, Minitab, E-views, R Software, R-Rattle, Gretl, Matlab, Design Expert, TORA, Atlas.ti, Orange, IBM Watson Predictive Analytics, RapidMiner, Python using Jupyter, Smart PLS, qualitative data analysis using NVIVO, tableau, Power BI, etc. More than 8000 faculties have been trained for various research softwares


Prof. Rajkumar Chavan
Research Scholar, Christ (Deemed to be University), Bengaluru
Mr. Rajkumar Chavan is an Academician and Research Scholar in Department of Commerce, CHRIST (Deemed to be University), Bangalore. His area of Interest is Finance and Accounting. He has published many research paper in the area of finance and econometrics. He has presented research paper in National and International Conference in reputed institute like Indian Institute of Management, Nagpur (IIM-Nagpur), Ramanujan College, Delhi and Some Top B Schools in India. He has attended many FDP, workshop on Time Series Analysis and Econometrics. He has broad teaching experience from PUC to PG. He has been appointed resource person in many workshops in Bangalore colleges.

## Topics to be covered

1 Introduction to Research and R Software:
Introduction to Research, Process/ steps in Research types of Data in financial Research. Types of statistics (Descriptive statistics, inferential statistics). Introduction of time series, deterministic trend and stochastic trend, differencing and detrending. Introduction to R and R Studio and installations. Data type and their uses in R. Data import /export and packages in R. Functions in R. Plotting of graphs using time series data. Concepts of N/A values in data series, omitting of $\mathrm{N} / \mathrm{A}$ values using R studio.

Statistical Modelling using ' $R$ 'software:
Stationary Concepts (Non-Stationary and Stationary), plotting of stationary and Nonstationary graphs using 'R'. Hypothesis Testing, Testing of stationary (ADF, KPSS, Phillips Perron Test), Log returns calculation, structural breaks- meaning, graphs plotting, trending, detrending, measuring structural breaks using ' $R$ ' Studio.

| 3 | Regression Analysis: <br> Simple and Multiple time series regression with its assumption, OLS estimation <br> using 'R" studio | 3 Hrs. |
| :---: | :--- | :---: |
| $\mathbf{4}$ | Modelling of Time Series Data: <br> Concepts of Autoregressive, Moving Average, ARMA, ARIMA modeling using 'R' <br> studio, diagnostic checking of ARIMAModel <br> Stylized Facts in Finance - Modeling, Volatility using ARCH and GARCH | $3 \mathrm{Hrs}$. |
| 5 | Cointegration Test <br> Vector Auto Regressive Model (VAR) <br> Vector Error Correction Model (VECM) <br> Impulse Response Function and Variance Decomposition | $3 \mathrm{Hrs}$. |

## Important Note:

- The maximum intake 40 Seats.
- The Fee Include Materials, E-Certificate.
- No Video recording.
- Participants needs to have their laptop with mouse along with internet during online session.
- Free Demo Students R-software will be downloaded clicking the following link.
- ( https://www.rstudio.com/products/rstudio/download/)


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## Director

PG Department of Commerce
K.S.R College of Arts and Science for Women Tiruchengode, Tamil Nadu.

## Prof. T. Rajeswari

President
Primax Foundation, Bengaluru, Karnataka.

## Organizing Commitee

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## CONTACT

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