

**Three Day Training Program**  
**On**  
*Statistical Techniques for Business*  
*Forecasting (BF-04)*

**During May 16-18, 2018**



***Conducted by:***  
**SQC & OR Unit, Mumbai**  
**Indian Statistical Institute,**  
Room No 320, 3rd Floor Old C G O Building  
101 Maharshi Karve Road, Mumbai 400 020:  
Tel 22014588 / 22004574  
email: sqcbombay@gmail.com  
[www.isimumbai.co.in](http://www.isimumbai.co.in)

## **Introduction:**

Forecasting is the process of making predictions of the future based on past and present data and analysis of trends. Today it is getting more attention due to the availability of data and computing facility. Quantitative methods are getting importance than that of Qualitative methods. However, the predictability of an event or a quantity depends on several factors such as - understanding factors that affect it, availability of historical data, pattern, and knowledge of any future events that might impact it. Hence, it requires analysis of data using statistical techniques. The program is planned to impart basic skill of forecasting using appropriate statistical techniques.

## **About the Institute:**

The Indian Statistical Institute is a quasi central organization under the Ministry of Statistics & Programme Implementation. It is declared by an Act of Parliament as an Institute of National Importance. Over the years the Institute has grown as a multi-disciplinary organization. It functions as a University empowered to award degrees upto Ph.D.; as a Corporation in undertaking large scale projects; as a Firm of Consultants to industries to improve Quality, Reliability and Efficiency and as a Meeting place

## **Programme Objectives:**

This program is designed to equip professionals with the knowledge on various time series and regression methods for developing forecasting models

## **Program Benefits:**

On completion of the course, the participants will be able to

- Develop forecasting models using time series and regression techniques
- Interpret and evaluate various models for forecasting
- Hands on experience on the usage of open source packages like R and R Studio

## **Course Contents:**

- Descriptive statistics
- Probability and normal distribution
- Inferential Statistics
- Introduction to time series
- Understanding of trends and patterns in time series data
- Time series decomposition
- Stationary series and unit root tests
- Importance of differencing
- Exponential smoothing and Holt Winter methods
- Linear regression
- Auto correlation (ACF) and partial auto correlation functions (PACF)
- Box Jenkins methods (ARIMA models)
- Model diagnostics and residual analysis
- Intervention Models
- Dynamic Regression

[First three topics are essential for creating foundation]

### **Target Participants:**

- Professionals working in analytics field or interested in usage of various methods of forecasting
- Elementary knowledge on statistical techniques are preferable

### **Faculty:**

Experienced faculties of SQC & OR Division having in-depth experience in data analysis and its application in various industries.

### **Course Fee:**

- INR 15,000 per participant + 18% GST (INR 17700/-)
- US\$ 300 for overseas participants

The participation fee includes course material, kit, lunch & snacks.

### **Registration:**

- Please send your nomination along with appropriate course fee in the attached registration format. Before making online payment, please check availability of seats. Fees once paid will not be refunded under any circumstances
- All participants are required to bring laptop, for carrying out analysis using R-studio.
- Registrations are done on 'first come first served' basis.

### **Important Dates:**

Last date of submission of nominations: **May 7, 2018**

Program dates: **May 16-18 2018**

Timing: **9:30 hrs - 17:30 hrs**

Venue:

**Conference Room, SQC & OR Unit,  
Indian Statistical Institute,  
Room No 320, 3rd Floor Old C G O Building  
101 Maharshi Karve Road, Mumbai 400 020**

**Training Programme on  
Statistical Techniques for Business Forecasting  
May 16-18, 2018**

*Organization:*

*Mailing Address:*

*Contact Person:*

*E-mail:*

*Phone: Fax :*

*Details of the participants attending the program:*

*1. Name :*

*Position :*

*2. Name :*

*Position :*

*Details of DD/Cheque attached (Rs17700/-) per participant inclusive of GST @18%) in favour of "Indian Statistical Institute" payable at Mumbai*

*Amount : \_\_\_\_\_*

*DD/Cheque No. : \_\_\_\_\_ Date : \_\_\_\_\_*

*Bank : \_\_\_\_\_ Branch : \_\_\_\_\_*

*Signature : \_\_\_\_\_ Name : \_\_\_\_\_ Date : \_\_\_\_\_*

**Bank Details for online payments** [please inform details of online payment to office]

*Bank Name:* STATE BANK OF INDIA

*Bank Account No:* 10996682279

*Account Name:* INDIAN STATISTICAL INSTITUTE, Type : Current

*Branch:* MUMBAI MAIN BRANCH

*Bank Address:* MUMBAI SAMACHAR MARG, HORNIMAN CIRCLE, FORT  
MUMBAI 400023

*IFSC code:* SBIN0000300

*Signature :*

*Name : \_\_\_\_\_ Date \_\_\_\_\_*

*Xerox copy of this form may be used in case of more participants. Please e-mail the form to: [sqcbombay@gmail.com](mailto:sqcbombay@gmail.com) or send to :*

*Program Director, SQC & OR Unit, Indian Statistical Institute, Room No,320, 3rd Floor, Old CGO Bldg,101, Maharshi Karve Road, Mumbai 400 020*

*Tel. 022 - 22014588 / 22004574 [www.isimumbai.co.in](http://www.isimumbai.co.in)*