Institute of Actuaries of India
Statutory body established under an Act of Parliament
Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central,
Plot no R-1, Sector 40, Nerul Road, Navi Mumbai - 400706
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30th June, 2021

ANNOUNCEMENT OF CS1B (ACTUARAL STATISTICS- R MODELLING) ONLINE COACHING PROGRAM

I. BACKGROUND

The new curriculum includes a 2 hour examination, named CS1B (Actuarial Statistics 1B) in R-modelling based on the core concepts covered in CS1A course material. Many students find it difficult to engage in the self-study mode and to practice modelling of R by clearly identifying core concepts/ scenarios which largely leading to a failure in spite of good performance in the CS1A paper. We have requests from many students to conduct exclusive R-modelling classes for meeting requirements for CS1B examination, hence the program.

II. OBJECTIVE

The objective of the program is to cover each of the Chapters in CS1A in context of R-Modelling. The 40 hours teaching program running in 20 sessions will cover all possibilities of R-modelling which are directly assigned to core concepts in each of the chapters in CS1A.

What makes it different than the series of R-webinars already conducted earlier?

Webinars conducted in recent times is meant to introduce R to a fresher and also to strengthen modelling skills of students who are already into R. Any candidate who registers for this program should have at least a ground level understanding of R which was covered in R-Basic webinar program conducted earlier. In this program, no basics will be practiced.

III. THE PLAN & SCHEDULE

Session	Coverage	Time (Hours)
1	Probability calculations, Discrete distributions(d, p, q and r functions)	2
2	Continuous probability distributions	2
3	Central Limit theorem and applications	2
4	Simulation techniques	2
5(a)	Estimation: Method of moments; Maximum likelihood, Bootstrapping techniques	2
5(b)	Estimation: Method of moments; Maximum likelihood, Bootstrapping techniques	2
6	Confidence intervals; binom.test, poisson.test, t.test, var.test, prop.test etc.,	2

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7	Testing of Hypothesis: One sample and two sample tests; paired t test. Tests for proportions	2
8	One way and two way ANOVA. (with and without interaction0	2
9	Non parametric tests; chi-square tests	2
10	Correlation analysis (Pearson, Spearman and Kendall) and their tests	2
11	Principal component analysis	2
12 (a)	Regression analysis: Simple and Multiple	2
12 (b)	Regression analysis: Simple and Multiple	2
13	Models transformed to linear form; Polynomial regression.	2
14 (a)	Generalized linear models	2
14 (b)	Generalized linear models	2
15	Bayesian statistics	2
16 (a)	Credibility theory	2
16 (b)	Credibility theory	2
20	**Total number of sessions/ duration**	**40**

Days and timings of each session will be communicated to all registered candidates in time to time. Weekends/holidays and late evenings/early mornings will be accommodated to the maximum possible extent. All sessions will be LIVE & Interactive in nature. The program will start on Saturday, 10th July.2021, 6.30 PM-8.30 PM

IV. FACULTY

Dr. Raju Narayanan, PhD, Professor (Retd.) & Former Head of Department of Statistics, University of Calicut who carries more than 35 years of teaching experience of Statistics and R

V. REGISTRATION

Registration opening date	:	30th June, 2021
Registration closing date	:	9th July, 2021
Registration fee	:	₹5000 (Rupees Five thousand only)

Registration menu at: Online coaching>>>>Registration in the login page of IAI

VI. CONTACT

All queries related to the program to be addressed to Vinod Kumar Kuttierath, Head-Education & Training, IAI at hoet@actuariesindia.org or call to: 02262433359