

Week-06-L-06

Agricultural Statistics in Practice

Summarizing the Course

Dr. Amandeep Singh

Imagineering Laboratory
Indian Institute of Technology Kanpur



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Week – 1

Index Numbers and Forecasting

- ✓ Index Numbers –An Introduction
- ✓ Identifying Good Index Numbers
- ✓ Chain based index numbers
- ✓ Measurement or Isolation of Trend
- ✓ Time Series Analysis
- ✓ MS Excel Program Showcasing an Example





Week – 2

Forecasting Techniques in Agriculture

- ✓ Measurement of Seasonal Component
- ✓ Cyclical Fluctuations
- ✓ Forecasting in Agriculture
- ✓ Forecasting Methods
- ✓ Forecasting Accuracy & Its Need
- ✓ MS Excel Demonstration





Week – 3

Analysis of Variance

- ✓ Introduction and Assumptions
- ✓ One Way Classification
- ✓ Two-way ANOVA with one observation per cell
- ✓ More about ANOVA
- ✓ Effect of change of origin and scale in ANOVA
- ✓ MS Excel Program for 1- Way and 2-Way ANOVA





Week – 4

Regression Path Analysis

- ✓ Introduction
- ✓ Path Diagrams and Calculation of Path Coefficient
- ✓ Calculation of Residual
- ✓ Regression Path Coefficient Analysis
- ✓ Types and Interpretation of Path Coefficient
- ✓ Excel Program for determination of Regression path Coefficients





Week – 5

Stability and Sustainability Analysis

- ✓ Problem of Measuring Stability
- ✓ Models assessing stability classical model-Wricke Model
- ✓ Models assessing stability classical model-Perkins and Jinks Model
- ✓ Sustainability Introduction
- ✓ Measuring yield sustainability of different treatments
- ✓ MS Excel Demonstration for measurement of yield sustainability





Week – 6

Multivariate Analysis

- ✓ General Idea and Classification of Multivariate Analysis
- ✓ Multivariate Regression Analysis
- ✓ Factor Analysis and its types
- ✓ Principal Component Analysis-Scree Plot
- ✓ Solved examples (Lecture notes)
- ✓ Course Summary



Thank You



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