

Lecture Plan		
Name of the college: Government College Arts science and commerce Sanquelim Goa		
Name of Faculty:GAURI VERNEKAR	Subject: DECISION MAKING WITH SPREADSHEET 2	
Paper code:ECO321	Program: BA(MINOR)	Division:
Academic year: 2025-26	Semester: V	Total Lectures: 75
Course Objectives: Familiarize students with forecasting methods in spreadsheets		
• Introduce students to decision-making models in spreadsheet		
Expected Course Outcome: Students are expected to learn various time series forecasting tools		
Student Learning Outcome: At the end of the course, students will be able to: Students will be able to:1. Apply statistical tools		
2. Execute time series forecasting		
3. Execute forecasting methods		
4. Undertake advanced models of decision making in spreadsheetsresources for business.		

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
JUNE	24-06-2025	30-06-2025	5	Unit I: Statistics and Decision Making – Importing & Validating Data, Histograms, Descriptive Statistics	Data validation exercise	MS Excel / LibreOffice Calc	Anderson, Sweeney & Williams – Statistics for Business & Economics
				Unit I: PivotTables, Slicers, Summarizing Data, Filtering & Removing Duplicates	PivotTable practice	MS Excel / LibreOffice Calc	Anderson, Sweeney & Williams
JULY	08-07-2025	14-07-2025	5	Unit I: Straight Line Relationships, Exponential Growth, Power Curve	Graph plotting exercises		
JULY	15-07-2025	21-07-2025	5	Unit I: Correlations, Multiple Regression, Qualitative Factors, ANOVA (One-way & Two-way)	Regression analysis assignment	MS Excel / LibreOffice Calc	Anderson, Sweeney & Williams
JULY	22-07-2025	28-07-2025	5	Unit II: Time Series – Moving Averages, Winters Method, Forecasting Special Events	Time series forecasting exercise	MS Excel / LibreOffice Calc	Anderson, Sweeney & Williams

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JULY	22-07-2025	28-07-2025	5	Unit II: Time Series – Moving Averages, Winters Method, Forecasting Special Events	Time series forecasting exercise	MS Excel / LibreOffice Calc	Anderson, Sweeney & Williams
AUGUST	29-07-2025	04-08-2025	5	Unit II: Random Variables – Binomial, Hypergeometric, Negative Binomial	Probability exercises	MS Excel / LibreOffice Calc	Ross – Introduction to Probability Models
AUGUST	05-08-2025	11-08-2025	5	Unit II: Poisson & Exponential Random Variables, Normal, Weibull & Beta Distributions	Simulation exercises	MS Excel / LibreOffice Calc	Ross – Introduction to Probability Models
AUGUST	12-08-2025	18-08-2025	5	Unit II: Machine Life Models, Project Forecasts	Project forecasting exercises	MS Excel / LibreOffice Calc	Ross – Introduction to Probability Models
AUGUST	19-08-2025	25-08-2025	5	Unit III: Decision Analysis – Lognormal Distribution, Monte Carlo Simulation	Monte Carlo simulation practice	MS Excel / LibreOffice Calc	Hillier & Lieberman – Introduction to Operations Research
SEPTEMBE	26-08-2025	01-09-2025	GANESH	Unit III: Simulating	Stock price	MS Excel /	Hillier & Lieberman

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SEPTEMBER	02-09-2025	08-09-2025	5	Unit III: Stock Options, Determining Customer Value	Case study: customer value	MS Excel / LibreOffice Calc	Hillier & Lieberman
SEPTEMBER	09-09-2025	15-09-2025	5	Unit IV: Advanced Decision Models – EOQ, Inventory Modeling, Queuing Theory	Inventory modeling exercises	MS Excel / LibreOffice Calc	Nahmias – Production and Operations Analysis
SEPTEMBER	16-09-2025	22-09-2025		Unit IV: Mathematics of Waiting Line, Estimating Demand Curve	Queuing problem exercise	MS Excel / LibreOffice Calc	Nahmias