

Lesson Plan (Quantitative Techniques – 18 Weeks) **(July 2025 to November 2025)**

Name of Teacher: Manoj Garg

Subject : Quantitative Techniques

Class : M.Com SEM-3

Week No.	Contents
Week 1	Introduction to Quantitative Techniques – Meaning, Scope, and Importance in Business and Economics.
Week 2	Inferential and Descriptive Statistics; Role of Statistics in Business Decision-Making.
Week 3	Measures of Central Tendency – Mean, Median, and Mode; Applications and Comparative Analysis.
Week 4	Measures of Dispersion – Range, Mean Deviation, Standard Deviation, and Coefficient of Variation; Interpretation and Use.
Week 5	Introduction to Probability – Meaning, Types, and Basic Rules; Classical, Empirical, and Axiomatic Approaches.
Week 6	Conditional Probability and Bayes' Theorem; Applications in Business and Risk Analysis.
Week 7	Probability Distributions – Binomial and Poisson Distributions; Characteristics and Applications.
Week 8	Normal Distribution – Properties, Importance, and Applications in Business Forecasting.

Week 9	Sampling Methods – Probability and Non-Probability Sampling; Concept of Sampling Distribution and Standard Error.
Week 10	Hypothesis Testing – Concepts of Null and Alternative Hypotheses; Type I and Type II Errors; Level of Significance.
Week 11	Tests of Significance – Z-Test, T-Test, Chi-Square Test, and F-Test; Applications with Examples.
Week 12	Confidence Interval and Estimation of Population Parameters; Practical Problem Solving.
Week 13	Correlation – Meaning, Types, and Methods; Karl Pearson's and Spearman's Rank Correlation.
Week 14	Regression Analysis – Simple and Multiple Regression; Least Squares Method and Interpretation of Coefficients.
Week 15	Time Series Analysis – Components and Forecasting Methods; Introduction to Linear Programming (LPP).
Week 16	Formulation of LPP, Graphical and Simplex Methods; Decision Theory – Decision Trees and Payoff Tables; Course Review.
Week 17	Revision
Week 18	Revision

Lesson Plan (Business Analytics – 18 Weeks)
(July 2025 to November 2025)

Name of Teacher: Manoj Garg

Subject : Business Analytics

Class : M.Com SEM-1

Week	Contents
Week 1	Introduction to Business Analytics – Meaning, nature, and scope. Understanding the role of analytics in modern organizations and decision-making.
Week 2	Types of Analytics – Descriptive, Predictive, and Prescriptive analytics. Comparison of their uses and significance in business contexts.
Week 3	Characteristics of Analytics – Data-driven approach, accuracy, timeliness, and relevance. Importance of data quality and analytical mindset.
Week 4	Business Analytics and Business Intelligence – Difference and interrelation between analytics and BI. Role in organizational strategy formulation.
Week 5	Business Analytics Process – Steps involved in data collection, cleaning, analysis, and interpretation. Relationship with decision-making process.
Week 6	Advantages of Business Analytics – Informed decision-making, developing unique capabilities, and creating competitive advantage.
Week 7	Analytical Methods: Descriptive Analytics – Overview of tools, techniques, and applications. Role in summarizing and visualizing business data.
Week 8	Predictive Analytics – Introduction, modeling techniques, and data mining concepts. Basics of machine learning applications in prediction.
Week 9	Prescriptive Analytics – Understanding optimization, simulation, and their role in suggesting best possible outcomes.
Week 10	Business Analytics in Action – Applications in finance, HR, marketing, and healthcare analytics.

Week 11	Supply Chain, Sports, and Government Analytics – How analytics improves logistics, performance analysis, and public services.
Week 12	Developing Analytics Professionals – Overview of key roles: statistician, data scientist, and data engineer.
Week 13	Skills Required for Analytics – Analytical thinking, data visualization, programming, and domain knowledge.
Week 14	Big Data and Analytics Software – Introduction to big data concepts, major analytical tools like Python, R, Power BI, and Tableau.
Week 15	Analytics Careers and Companies – Overview of organizations offering analytical solutions and job opportunities in business analytics.
Week 16	Revision and Case Studies – Review of all units through practical examples and case discussions. Final assessment and feedback.
Week17	Revision
Week 18	Revision

Lesson Plan (Cyber Security – 18 Weeks) **(July 2025 to November 2025)**

Name of Teacher: Manoj Garg

Subject : Cyber Security

Class : B.Com SEM-3

Week	Contents
Week 1	Introduction to Cyber Security – Concept, Significance, and Fundamentals. Importance of cyber security in the digital era.
Week 2	Cyber Security Techniques – Overview of cryptography, encryption, and firewalls. Role of passwords and privacy protection mechanisms.
Week 3	Digital Signatures – Meaning, uses, and authentication process. Practical applications and importance in e-commerce and digital governance.
Week 4	Issues and Challenges in Cyber Security – Emerging threats, vulnerabilities, and cyber risk management.
Week 5	Cyber Security Regulations – Overview of policies, major regulating bodies, and compliance requirements in India.
Week 6	Recent Government Initiatives – National Cyber Security Policy, CERT-In, and Digital India initiatives for securing cyberspace.
Week 7	Overview of Cyber Crime – Concept and definition under IT Act 2000. Classification and understanding of common cybercrimes.
Week 8	Hacking and Malicious Codes – Understanding viruses, trojans, malware, DOS/DDOS, phishing, and web defacement.

Week 9	Financial Frauds, Social Engineering, and Ransomware Attacks – Case studies and prevention techniques.
Week 10	Cyber Stalking, Bullying, and Pornography – Legal implications and measures to prevent such crimes.
Week 11	Digital Forensics – Introduction, objectives, and process of digital evidence collection and preservation.
Week 12	Cyber Laws and IT Act 2000 – Important provisions, reporting cybercrimes, and investigation techniques.
Week 13	Social Media Overview and Security – Introduction to social networks, media types, and emerging trends like deep fakes and sock puppets.
Week 14	Social Media Privacy and Monitoring – Managing privacy settings, identifying viral content, and legal aspects of inappropriate content.
Week 15	Artificial Intelligence (AI) – Meaning, emergence, and significance of AI in cyber security and commerce.
Week 16	AI Challenges and Ethics – Role of chat bots and virtual assistants, ethical issues, and AI vs. morality. Revision and final discussion.
Week 17	Revision
Week 18	Revision

Lesson Plan (Investment Analysis– 18 Weeks)
(July 2025 to November 2025)

Name of Teacher: Manoj Garg

Subject : Investment Analysis

Class : B.Com(Hons)SEM-5

Week	Contents
Week 1	Introduction to Investment – Meaning, nature, and process. Understanding the importance of investment decisions.
Week 2	Investment Avenues – Study of various investment options like shares, bonds, mutual funds, and real estate.
Week 3	Measurement of Investment Risk and Return – Concept, calculation methods, and relationship between risk and return.
Week 4	Identification of Investment Opportunities – Process and techniques for identifying profitable investment options.
Week 5	Speculation, Gambling, and Investment – Differentiating the three and understanding their implications in finance.
Week 6	Efficient Market Hypothesis (EMH) – Concept, forms (weak, semi-strong, and strong), and its significance for investors.
Week 7	Technical Analysis – Introduction and Dow Theory. Understanding market trends and investor psychology.
Week 8	Charting Techniques and Volume Indicators – Practical understanding of stock charts, trends, and trading volumes.

Week 9	Fundamental Analysis – Concept and process; evaluating intrinsic value of securities using fundamental factors.
Week 10	Company Analysis – Tools for analyzing company financial statements and performance indicators.
Week 11	Industry and Economy Analysis – Understanding macro and micro factors affecting investment decisions.
Week 12	Technical vs Fundamental Analysis – Comparison of both approaches and their relevance in investment decision-making.
Week 13	Trading Mechanism in Bombay Stock Exchange – Order types, trading procedures, and settlement process.
Week 14	Derivatives – Meaning, uses, and significance in financial markets.
Week 15	Types of Derivatives – Understanding forwards, futures, and swaps with Indian examples.
Week 16	Option Contracts – Meaning, uses, and basic types (call and put). Revision of key concepts and final discussion.
Week 17	Revision
Week 18	Revision