

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA01: MANAGEMENT & ORGANIZATIONAL BEHAVIOR

Course Objective: To understand the Fundamentals of Management and Behavioral aspects of individual and groups in an organization.

Learning outcome: Students will be able to understand a) Evolution of Management and contribution of Management thinkers b) the relevance of environmental scanning, planning and to take decisions, c) Organizing and controlling d) Individual and group behaviour e) Leadership and Motivation.

Unit – I: Introduction to Management: The Management Process, Management Functions, kinds of managers, Managerial roles and skills.

Evolution of Management - Theories of Management - Classical, Scientific, Administrative, Behavioral, Management Sciences Theories; Systems and Contingency theory.

Unit – II: Planning and Decision Making: Planning and goal setting – Organizational planning - Vision, Mission and goals, Types of plans, steps in planning process, Approaches to planning, Planning in Dynamic Environment.

Decision making process, types of decisions, decision making styles, Vroom's Participative decision-making model.

Unit – III: Organizing and Controlling: Organizational Structure, Principles of Organizing, Authority, Power and Influence, designing organizational structure. Mechanistic and Organic structures, contemporary organizational design and its challenges.

Controlling: The Control process, controlling for organizational performance, types of control, financial controls, Balanced Scorecard, Bench Marking, Contemporary issues in controlling.

Unit – IV: Organizational Behavior: Individual and Group Behavior: Importance of Organizational Behavior, Culture and dynamics of diversity, personality theories, perception, formation of group behavior, classification of groups, group properties, group cohesiveness, build teams.

Unit – V: Leadership and Motivation: Leadership traits, Leadership styles, Leadership theories, Power and Politics.

Motivation: Approaches to Motivation, Maslow's needs hierarchy theory, two factor theory of motivation, McGregor's theory, ERG theory, McClelland's needs theory, Valance Theory.

Suggested Readings:

- Stephen P. Robbins, Timothy A. Judge, Neharika Vohra, Organizational Behaviour, Pearson, 16e, 2017.
- Richard L. Daft, New Era of Management, Cengage Learning, 11e, 2017.
- Afsaneh Nahavandi, Robert B. Denhardt, Janet V. Denhardt, Maris P. Aristigueta, Organizational Behaviour, Sage Publications, 2015.
- Ricky W Griffin, Management Principles and Practices, Cengage Learning, 11e, 2017.
- Laurie J. Mullins, Management and Organizational Behaviour, Pearson Publications, 9e, 2017
- Ramesh B. Rudani, Management and Organizational Behaviour Tata McGraw hill, 2011.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA02: BUSINESS ECONOMICS

Course Objective: To understand the Business, impact of Micro and Macro Economic Environment on business decisions.

Learning Outcome: Students will be able to understand (a) Economic Principles in Business (b) Forecast Demand and Supply (c) Production and Cost Estimates (d) Market Structure and Pricing Practices e)

Unit - I: Introduction to Business Economics: Definition, Nature and Scope, Relationship with other disciplines – business decision making process- The role of managerial economist- Basic economic principles – the concept of opportunity cost, Marginalism, Equi-marginalism, incremental concept, Time perspective, discounting principle, risk and uncertainty.

Unit - II: Theory of Demand and Supply: Demand Analysis - demand function, law of demand, determinants of demand, types of demand. Elasticity of demand, types, Measurement and significance of Elasticity of Demand. Demand Forecasting, Need for Demand Forecasting, Methods of Demand Forecasting.

Supply – Supply function, determinants of supply, law of supply, Elasticity of Supply.

Unit - III: Production and Cost Analysis: Production function, Production function with one, two variables, Cobb-Douglas Production Function, Marginal Rate of Technical Substitution, Isoquants and Isocosts, Returns to Scale, Economies of scale - Innovations and global competitiveness. Cost concepts, determinants of cost, cost-output relationship in the short run and long run, short run vs. long run costs, average cost curves, Break Even Analysis.

Unit - IV: Market Structures- Pricing and Output decisions:

Classification of Market Structures - Features - competitive situations - Price-Output determination under Perfect competition, Monopoly, Monopolistic competition and Oligopoly - both the long run and short run.

Unit - V: Pricing Strategies: Pricing Policy, Price Discrimination, Cost Plus Pricing, Pricing of multiple products, Transfer pricing, Pricing over Product Life Cycle. Theory of Firm - Managerial Theories and Behavioral Theories of firm. International Price Discrimination: Dumping, Effects of Dumping.

Suggested Readings:

- H L Ahuja, Business Economics, S. Chand & Co, 9e, 2017.
- D N Dwivedi, Managerial Economics, Vikas Publications 8e, 2015.
- Chaturvedi, Business Economics, International Book House, 2012.
- Craig H. Petersen, W. Cris Lewis and Sudhir K. Jain, Managerial Economics, Pearson, 14e, 2014.
- Dominick Salvatore, Managerial Economics, Oxford Publications, 7e, 2012.
- Mark Hirschey, Managerial Economics, Thomson, 10e, 2003.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA03: FINANCIAL ACCOUNTING AND ANALYSIS

Course Objective: To prepare, analyze, interpret the financial statements for business decision making.

Learning Outcome: Students will be able to understand a) Principles of Accounting, Accounting Process b) Inventory Valuation c) Preparation, Analysis and Interpretation of Financial Statements.

Unit - I: Introduction to Accounting: Importance, Objectives and Principles, Accounting Concepts and conventions, and The Generally Accepted Accounting Principles (GAAP), their implications on accounting system; Double entry system–recording business transactions–Classification of accounts–Accounting cycle.

Unit - II: The Accounting Process: Overview, Books of Original Record; Journal, ledger, Trial Balance, Classification of capital and revenue expenses, Final Accounts with adjustments. Rectification of Errors, Valuation of Fixed Assets -Tangible vs. Intangible assets. Depreciation, Methods of depreciation–their impact on measurement of business Accounting.

Unit - III: Inventory Valuation: Methods of inventory valuation and valuation of goodwill, methods of valuation of goodwill. Accounting from incomplete records, advantages and disadvantages of single entry and double entry system and the differences between the two, preparation of accounts, and ascertainment of profit from incomplete records, Accounting Treatment as per the statement of affairs method and calculation of missing figures.

Unit - IV: Financial Analysis-I: Statement of Changes in Working Capital, Funds from Operations, paid cost and unpaid costs. Distinction between cash profits and book profits. Preparation and analysis of cash flow statement and funds flow statement.

Unit - V: Financial Analysis-II: Analysis and interpretation of financial statements, Horizontal Analysis and Vertical Analysis of Company, Financial Statements, Liquidity, leverage, solvency and profitability ratios – Du Pont Chart –Accounting Standards Issued by ICAI- Focus on importance of Standards to give a general view on Financial Accounting practices, International Financial Reporting Standards (IFRS).

Suggested Readings:

- S. N. Maheswari, S. K. Maheshwari, Sharad K. Maheshwari Accounting for Management, 4e, Vikas Publishing House, 2018.
- Dhanesh K. Khatri, Financial Accounting & Analysis, Tata McGraw-Hill Publishing Limited, New Delhi, 2015.
- V. Rajasekharan, R. Lalitha, Financial Accounting & Analysis, Pearson Education, New Delhi, 2015
- Paresh Shah, Basic Financial Accounting for Management, Oxford University Press, New Delhi, 2014.
- Seema Srivastava, Financial Accounting, Jawaharlal, S. Chand, 2014.
- Ashish K. Bhattacharya, Financial Accounting & Analysis, PHI, 2012.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA04: RESEARCH METHODOLOGY AND STATISTICAL ANALYSIS

Course Objective: To understand the basic statistical tools for analysis & interpretation of qualitative & quantitative data.

Learning outcome: Students will be able to understand a) Conceptual overview of Research b) To apply, analyze various simple & advanced statistical tools c) to apply the principles of research methodology for various projects.

Unit - I: Introduction to Research - Types of Research, Research Process-Conceptualization of variables and Measurement – Types and measurement of variables – Reliability and validity in measurement of variables- sources of error in measurement- Ethics in business research.

Unit - II: Research design - Research Problem- purpose of Research design, Types of Research Design- Experimental research design, Research Design for cross sectional, longitudinal studies, Research design for action research – Characteristics of the good research design.
 Data Collection Methods & Tools: Types of Data, Sources and Instruments for data, Guidelines for questionnaire, Sampling and its application.

Unit – III: a) **Tabulation** of Univariate, Bivariate and multivariate data, Data classification and tabulation, Diagrammatic and graphical representation of data. One dimensional, two dimensional and three-dimensional diagrams and graphs
 b) **Small Sample Tests** - t-Distribution-properties and applications, testing for one and two means, paired t-test.

Unit – IV: a) **Analysis of Variance** - One Way and Two-Way ANOVA (with and without Interaction). Chi-Square distribution: Test for a specified Population variance, Test for Goodness of fit, Test for Independence of Attributes.

b) **Correlation Analysis**- correlation, limits for coefficient of Correlation, Karl Pearson's coefficient of correlation, Spearman's Rank correlation, Linear and Multiple regression analysis, Discriminant analysis, Exploratory Factor Analysis. Introduction to Structural Equation Modeling, Cluster Analysis and Conjoint Analysis.

Unit – V: Time Series Analysis and Report Writing:

a) Components, Models of Time Series–Additive, Multiplicative and Mixed models; Trend Analysis-Free hand curve, Semi averages, moving averages, Least Square methods and Index numbers – introduction, Characteristics and uses of index numbers, types of index numbers, unweighted price indexes, weighted price indexes, Tests of adequacy and consumer price indexes.

b) Importance of Report writing, Types of Research Reports, Report Preparation and presentation, Report structure, Report formulation, Guides for effective documentation, Research Briefings. Referencing styles and citation in Business Management Research.

Suggested Readings:

- Donald R Cooper, Pamela S. Schindler, Business Research Methods, Tata Mc Graw Hill, 12e, 2019.
- William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari, Mitch Griffin , Barry J. Babin, Business Research Methods Cengage Learning, 2012.
- Prahalad Mishra, Business Research Methods, Oxford University Press, 2015.
- Naval Bajpai, Business Research Methods, Pearson Publications, 2e 2017.
- S.P. Gupta, Statistical Methods, Sultan Chand & Sons, 2018.
- P.C. Tulsian, Bharat Jhunjunwala, Business Statistics, S. Chand, 2016.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA05: LEGAL AND BUSINESS ENVIRONMENT

Course Objective: To understand the Legal and Regulatory Framework for doing business in India.

Learning Outcome: Students will be able to understand a) Business Laws related to incorporating a company b) Law of contract and Negotiable Instruments c) Regulatory framework in India.

Unit – I: Introduction: Companies Act, 2013, Steps and procedure for incorporation of the company, Appointment of Directors, Powers, duties, & liabilities of Directors, Role of Audit and Auditors, Company Meetings, Resolutions, Winding-up of a Company.

Unit – II: Law of Contract: Nature and types of Contract and Essential elements of valid contract, Offer and Acceptance, Consideration, Capacity to contract and Free Consent, Legality of Object. Unlawful and illegal agreements, Contingent Contracts, Performance and discharge of Contracts, Remedies for breach of contract.

Contracts-II: Indemnity and guarantee, Contract of Agency, Sale of goods Act -1930: General Principles, Conditions & Warranties, Performance of Contract of Sale, Auction sale and E-auctions.

Unit – III: Negotiable Instruments Act - 1881: Negotiable Instruments- Promissory Note, Bills of Exchange, & Cheque, Parties to negotiable instruments, Types of endorsements, Holder- Holder in due course, Dishonour and discharge of negotiable Instruments, Offences by the companies.

Unit – IV: Business Environment: Industrial Policy, Five Year Planning, Foreign Direct Investment (FDI), Fiscal Policy- Latest Union Budget- Reforms Undertaken by the government, Monetary Policy, Banking Sector Reforms.

Unit – V: Business Regulations and Environment Laws:

(a) Consumer Protection Act 1986, IT Act 2000, Competition Act 2002, Intellectual Property Rights.

(b) Environmental Law- Water, Air pollution, Green Tribunal in protecting Environment.

Suggested Readings:

- MC Kuchhal, Vivek Kuchhal, Business Legislation for Management, Vikas, Publishing House, 5e, 2018.
- Ravinder Kumar, Legal Aspects of Business, Cengage Learning, 4e, 2016.
- Akhileshwar Patha, Legal Aspects of Business, Tata Mc Graw Hill, 7e, 2019.
- P.P.S.Gogna, Company Law, S.Chand, 2016.
- Francis Cherunilam, Business Environment Text & Cases, Himalaya Publications, 2012.
- Justin Paul, Business Environment Text and Cases, 3e, Mc Graw Hill Publication, 2010.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA06A: BUSINESS ETHICS AND CORPORATE GOVERNANCE
(OPEN ELECTIVE - I)

Course Aim: To understand the growing importance of Corporate Governance in Indian and Global Context.

Learning Outcome: Students will be able to understand a) Need for Business Ethics and Corporate Governance in India b) Codes and Committees in Corporate Governance c) Role of Board in Corporate Governance d) Stakeholder perspective of Corporate Governance.

Unit - I: Business Ethics The Changing Environment: Business Ethics-why does it matter?; Levels of Business Ethics-Five Myths about Business Ethics-can Business Ethics be taught and Trained?; stages of Moral development Kohlberg's study-carol Gilligan's Theory-Principles of Ethics.

Unit - II: Professional Ethics: Introduction to Professional Ethics- Ethics in Production and Product Management-Ethics of Marketing Professionals-Ethics in HRM-Ethics of Finance and Accounting Professionals-Ethics of Advertisement-Ethics of Media Reporting-Ethics of Healthcare Services. Ethical Dilemma. Introduction, Dilemma and Ethical Dilemma-Mounting Scandals-Ethical Issues-Preparatory Ethics: Proactive steps-The software challenge.

Unit - III: Corporate Governance: Introduction to Corporate Governance - Major Corporate Governance Failures- Need for Corporate Governance - Corporate Governance in India, Theories of Corporate Governance - Agency Theory, Stewardship Theory, and Stakeholder Theory – Convergence- Problems of Governance in Companies.

Corporate Governance codes and committees – Global reporting initiative – OECD Principles - Cadbury Committee Report - Kumara Mangalam Birla Committee Report - Naresh Chandra Committee Report - Narayana Murthy Committee Report - SEBI Clause 49 Guidelines- Corporate Governance Committees - Role of capital Markets, Regulator, Government in Corporate Governance.

Unit - IV: Role of Board: Functions of the Board, Structure of the Board, role of the board, Role, duties and responsibilities of Directors, Types of Directors, Board as a learning organization, Leveraging Good Governance for Competitive Advantage. Conflicts of Interest, Remedial Actions. Governance Ratings- Merits and Demerits.

Unit - V: Corporate Social Responsibility: Definition, Models for Implementation of CSR, Scope of CSR, Steps to attain CSR, Core - BCSD India, Ethics and Social Responsibility of Business, Social Responsibility and Indian Corporations, CSR as a business strategy for sustainable development.

Suggested Readings:

- A. C. Fernando: Business Ethics and Corporate Governance, 2e, Pearson, 2018.
- SK Mandal: Ethics in Business and Corporate Governance, TMH, 2012.
- C.S.V. Murthy: Business Ethics, Himalaya Publishing House, 2012.
- Sateesh Kumar, Corporate Governance, Oxford University Press, 2015.
- Christine A. Mallin, Corporate Governance, Oxford University Press, 4e, South Asia Edition, 2016.
- Bob Tricker, Corporate Governance Principles, Policies and Practices, Oxford University Press, 2015.
- N. Balasubramanian, Corporate Governance and Stewardship, TMH, 2012.
- A. C. Fernando, Corporate Governance, Principles, Policies and Practices, Pearson, 2012.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA06B: PROJECT MANAGEMENT
(OPEN ELECTIVE – I)

Course Objective: The objective of this course is to lay an important foundation to students in managing projects with a special focus on every phase such as project planning, execution, monitoring and evaluation.

Learning Outcome: Students will be able to understand a) Importance of Project Management b) Project Planning, Execution and implementation c) Significance of teams in projects d) Project evaluation techniques.

UNIT - I: Introduction: Introduction to Project management –Project Characteristics- Project Life cycle – Project Identification, Formulation and Implementation- Project management in different sectors: Construction, Services Sector, Public sector and Government Projects. Systems approach to project management.

UNIT - II: Project Appraisal: Project Planning – Steps in Project Planning - Scheduling - Project Appraisal- Feasibility study- Technical, Commercial, Economic, Financial, Management, Social Cost Benefit Analysis-Project Risk Analysis.

UNIT - III: Project Finance: Project Cost Estimation, Project Financing- Investment Criteria, Project Evaluation Techniques- Pay Back Period, Accounting rate of return, Net present value, Internal Rate of return, Profitability Index, Cash Flows Estimation for new and replacement projects- Cost of Capital, Risk Analysis.

UNIT - IV: Project Control: Network Diagrams, Network Analysis, Critical Path, Quality Management, Project Execution, Monitoring and control, Agile project Management, Scrum, Lean Production and project management.

UNIT - V: Organizational Behavior in Project Management: Organizational Structure and Integration, Role of project manager, Roles in the project team, Project stakeholder engagement, Leadership in project management, participative management, team building approach, Conflict Management in Projects, Stress Management.

Suggested Readings:

- John M, Nicholas and Herman Steyn, Project Management for Engineering, Business and Technology, 5e, Routledge, 2017.
- Prasanna Chandra, Projects, Planning, Analysis, Selection, Financing, Implementation and review, 6e, Tata Mc Graw Hill 2008.
- K. Nagrajan, Project Management, New Age International Publishers, 7e 2015.
- Jack Gido, Jim Clements Rose Baker, Successful Project Management, Cengage Learning, 7e 2015.
- R. Paneerselvam, P. Senthil Kumar, Project Management, PHI, 2009.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA06C: TECHNOLOGY MANAGEMENT
(OPEN ELECTIVE – I)

Course Objective: To understand the importance of technology in conduct of business.

Learning Outcome: Student will be able to understand: a) Importance of Technological Innovation
 b) Importance of Research and development in technology management
 c) Forecasting of Technology

Unit – I: The Process of Technological Innovation: The need for a Conceptual Approach, Technological Innovation as a Conversion Process, Factors Contributing to Successful Technological Innovation, Characteristics of Innovative firms, Dynamics of diffusion, A model of Innovation Adoption, Factors that drive the process of diffusion.

Unit – II: Technology Strategy: Collaborative Arrangements in domains of Technology Strategy, Risks of Collaborative Activity, Evolution of Technology Appropriation principles, External Sourcing of Technological Capability, Productivity of in-house R& D, influence of Environmental Trends

Unit – III: Research and Development: Programme Planning and Control, Portfolio Planning, Project Planning and Control, Project Termination, Resource Allocation and Management- New Product Development: New Product Development as a Competitive Strategy, Market Research For Developing New Products, Commercialization of Research Outcomes, Industrial Design, Product Architecture and Design For Manufacture, Developing Indigenous Substitute For Raw Materials.

Unit – IV: Technological Forecasting for Decision Making: Technological Forecasting, Forecasting System Inputs and Outputs, Classification of Forecasting Techniques, Organization for Technological Forecasting.

Transfer of Technology: Modes of technology transfer, Price of technology transfer, Negotiation for price of MOT.

Unit – V: Technological Intelligence: Levels of Technological Intelligence, External Vs Internal Technological Intelligence, Mapping Technological Environment, Mechanism for Data Collection, Analytic Tools, Managing Environmental Analysis in organizations, Contemporary challenges in mapping the technology environment.

Suggested Readings:

- Tarek Khalil, Management of Technology -The Key to Competitiveness and Wealth, Tata McGraw Hill, Boston, 2015.
- V. K. Narayanan, Managing Technology and Innovation for Competitive Advantage, Pearson Education, 2015.
- Norma Harison and Samson, Technology management – Text and cases, TMH, 2015
- Shane, Technology Strategy for Managers and Entrepreneurs, Pearson, 2015.
- Khandwala, Corporate Creativity, TMH, 2015.
- Lucy C. Morse, Daniel L. Babcock: Managing Engineering and Technology, 6e, Pearson.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA6D: CROSS CULTURAL MANAGEMENT
(OPEN ELECTIVE- I)

Course Objective: To understand the importance of cross culture in conduct of business.

Learning Outcome: Student will be able to understand: a) Importance of culture b) Values c) culture and styles of Management d) communication in different cultures e) cross cultural team management.

Unit - I: Introduction – Determinants of Culture – Facets of culture – Levels of Culture – National Cultural dimensions in the business context – The influence of National Culture on business culture. Business Cultures: East and West.

Unit - II: Cultural Dimensions and Dilemmas: Value orientations and Dimensions – Reconciling cultural dilemmas – Culture and Styles of Management: Management tasks and cultural values.

Unit - III: Culture and Organizations: Culture and corporate structures – Culture and Leadership – Culture and Strategy – Cultural change in Organizations- Culture and marketing – Cultural Diversity.

Unit - IV: Culture and Communications: Business communication across cultures – Barriers to intercultural communication – Negotiating Internationally.

Unit - V: Cross Cultural Team Management: Working with International teams – Groups processes during international encounters – Conflicts and cultural difference – Understanding and dealing with conflicts – Developing Intercultural relationships.

Suggested Readings:

- Marie-Joelle Browaeys and Roger Price: Understanding Cross-Cultural Management, Pearson, 2015.
- David C.Thomas: Cross Cultural Management, 2/e, Sage Publications, 2014.
- Nigel Holdon, Cross Cultural Management: Knowledge Management Perspective, Pentice Hall, 2012.
- Parissa Haghirian: Multinational and Cross-Cultural Management, Routledge, 2012.
- Richard Mead: International Management-Cross cultural Dimension, 3/e, Blackwell, 2015.
- Jerome Dumetz -Cross-cultural management textbook: Lessons from the world leading experts in cross-cultural management, Create Space Independent Publishing Platform; Student edition (September 5, 2012), Oakland, USA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA SEMESTER - I
19MBA07 BUSINESS COMMUNICATIONS (LAB)

Course Objective: To understand the importance of oral and written communication and its applications in Business.

Learning Outcome: Students will be able to understand a) the importance of Communication in Business b) to develop writing skills and presentation c) writing business proposals and letters d) application of business communication in the self-development process.

Unit-I: Introduction: Introduction to Business Communication, Communication Barriers, Communication Media Choices, Inter cultural and Team Communication, Interpersonal Communication: Respecting social protocol, Networking and Socializing professionally, Non-Verbal Communication, Listening, Communication through Social Media, Business Meetings.

Unit-II: Developing Business Writing Skills: Process of Writing, Drafting, revising Visuals, Editing, proofreading and formatting, Writing positive and Neutral Messages, Persuasive Messages, Bad News Messages, Business Letter Writing, Kinds of Business Letters, Communicating with e-mail and memos.

Unit-III: Business Reports and Proposals: Writing the report, planning the Report, Steps in writing Business Reports, Parts of a Report, Corporate Report and Business Proposal, citing sources.

Unit-IV: Oral and Employment Communication: The role of Business Presentations, Planning and organizing presentations, Team Presentations, online Presentations. Understanding yourself, Career, Goal Setting, Preparing Resume, Resume Formats, Writing Covering Letters, and Enquiry mails, Preparing for the job interview.

Unit-V: Contemporary Aspects in Communication: Business etiquette, developing professional telephone skills, Mass Media, Public Relations Management, Cross Cultural and Global Communication, Communication in Information Technology, e-Business related operations.

Suggested Readings:

- Ober Newman, Communicating in Business, Cengage Learning, 2015.
- P. Subba Rao, B.Anita Kumar, C.Hima Bindu, Business Communication, Cengage Learning India. Pvt. Ltd. 2012.
- Rebecca Moore Howaward, Writing Matters, 3e, Mc Graw Hill Education, 2018.
- Jeff Butterfield, Soft Skills for Everyone, Cengage Learning, 2017.
- Rajendra Pal, J S Korlahahi, Essentials of Business Communication, Sultan Chand & Sons, New Delhi, 2013.
- Sailesh Sen Gupta, Business and Managerial Communication, PHI, 2011.
- Elevate english , Mc Graw Hill, www.ellevateenglish.com

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
HYDERABADMBA SEMESTER - I
19MBA08: STATISTICAL DATA ANALYSIS LAB**

Course Objective: To understand the application of Statistical tools to Research Problem / Projects. **Learning Outcome:** Students will be able to understand a) Analyse and apply the statistical tools for decision making b) Hypotheses Testing c) Discussion of Results for better decision making.

Unit - I: Introduction to Statistical Packages - MS - EXCEL/SPSS: Introduction, uses, functions and features of Statistical Packages, Getting started with excel/SPSS, Highlights and main functions: Home, Insert, page layout, formulas, Data, review, view, add-ins, Using help function, Customizing the Quick Access Toolbar.

Unit - II: Creating and Using Templates: Working with Data: Entering, Editing, Copy, Cut, Paste, Paste Special, Formatting Data and Using the Right Mouse Click, Saving, Page Setup, and Printing, Using Headers and Footers, Manipulating Data, using Data Names and Ranges, Filters and Sort and Validation Lists.

Unit - III: Data from External Sources: Using and Formatting Tables, Basic Formulas and Use of Functions, Data Analysis Using Charts and Graphs, Managing, Inserting, and Copying Worksheets, Securing the Document, Advanced Formulas and Functions, Worksheet Features, Data Analysis using Pivot Tables and Pivot Charts.

Unit - IV: Data Analysis - I: Tabulation, bar diagram, Multiple Bar diagram, Pie diagram, Measure of central tendency: mean, median, mode, Measure of dispersion: variance, standard deviation, Coefficient of variation. Correlation, regression lines.

Unit - V: Data Analysis - II: t-test, F-test, ANOVA one-way classification, chi square test, independence of attributes.

Time series: forecasting Method of least squares, moving average method. Inference and discussion of results.

Suggested Readings:

- Glyn Davis & Branko Pecar "Business Statistics Using Excel" Oxford University Press, 2012.
- D P Apte : Statistical Tools for Managers USING MS EXCEL, Excel, 2012.
- David M Levine, David. F. Stephan & Kathryn A. Szabat, Statistics for Managers – Using MSEXcel, PHI, 2015.
- Bruce Bowerman, Business Statistics in Practice, TMH, 5/e 2012.
- Shelly, MS Office, 2007, Cengage, 2009.
- Ajai.S. Gaur, Sanjaya S.Gaur, Statistical Methods For Practice and Research, Response,2009