

## MBA-Total Quality Management

It is an integrated program designed to provide an advanced program in management for those seeking managerial positions in industry, commerce and services. The core subjects are aimed at developing knowledge and skills in fundamental management disciplines. The program also involves participation in group work with students from diverse backgrounds and is aimed at improving the decision making abilities of the participants in management related areas.

Subject Code	Subject	Credits	Subject Code	Subject	Credits
<b>SEMESTER I</b>			<b>SEMESTER III</b>		
<b>MBA-01</b>	Managerial Tasks and Behavioural Dynamics	5	<b>MBA-13</b>	Research Methodology	5
<b>MBA-02</b>	Corporate Communication and Managerial Economics	5	<b>MBA-14</b>	Total Quality Management	5
<b>MBA-03</b>	Legislative Framework of Business	5	<b>MBA-15</b>	International Business Management	5
<b>MBA-04</b>	Accounting and Taxation for Managers	5	<b>TQ-01</b>	Technology of Quality Management	5
<b>MBA-05</b>	Quantitative Techniques for Managerial Decisions	5	<b>TQ-02</b>	Production Planning and Control	5
<b>MBA-06</b>	Business Development and Entrepreneurship	5	<b>TQ-03</b>	Statistical Process Control	5
<b>SEMESTER II</b>			<b>SEMESTER IV</b>		
<b>MBA-07</b>	Human Asset Management	5	<b>TQ-04</b>	Quality Assurance and Audit	5
<b>MBA-08</b>	Corporate Finance and Services	5	<b>TQ-05</b>	Management of Software Quality	5
<b>MBA-09</b>	Marketing Planning and Management	5	<b>TQ-06</b>	Product Design and Process Optimization	5
<b>MBA-10</b>	Production Technology and Industrial Engineering	5	<b>TQ-07</b>	Quality Management Systems and Methods	5
<b>MBA-11</b>	Information Science for Managers	5	<b>TQ-08</b>	Environmental Management System	5
<b>MBA-12</b>	Strategic Management and Corporate Governance	5	<b>MBA-16</b>	Project Work Viva-voice	6 3
				<b>Grand Credits</b>	<b>124</b>

**SUBJECT CODE: MBA-01**

**SUBJECT: MANAGERIAL TASKS AND BEHAVIOURAL DYNAMICS**

This course helps to prepare the students to understand the basic application of managerial functions in day to day operations and activities of corporate and business enterprises.

**OBJECTIVES:**

1. To understand the role and responsibilities of manager
2. To learn the process of management in corporate enterprises.
3. To comprehend the behavior of others and adapt to managerial success.
4. To make the students to equip the necessary changes and developments in an organization.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK 1 MANAGERIAL FUNCTION AND RESPONSIBILITIES**

Unit 1: Manager Role, Responsibilities and Tasks

Unit 2: Managerial Functions and Their Characteristics

Unit 3: Evolution of Management and Schools of Thought

Unit 4: Social Responsibilities and Business Ethics & Corporate Governance

**BLOCK 2 PLANNING AND ORGANIZING FUNCTION**

Unit 1: Planning Nature, Types and Process

Unit 2: Decision Making and MBO

Unit 3: Organizing Principles and Structural Design

Unit 4: Delegation, Span of Control, Decentralization, Line and Staff Authority

**BLOCK 3 DIRECTING, CONTROLLING AND CO ORDINATION**

Unit 1: Directing, Motivating, And Leadership

Unit 2: Controlling Nature and Techniques

Unit 3: Co Ordination the Essence of Management

Unit 4: Contemporary Trends in Management

## **BLOCK 4 INTRODUCTION TO BEHAVIOURAL DYNAMICS**

Unit 1: Evolution, Challenges and Opportunities of Organization Behaviour

Unit 2: Personality and Behavioural Assessment

Unit 3: Emotions and Learning

Unit 4: Perceptions and Stress Management

## **BLOCK 5 ORGANIZATIONAL BEHAVIOURAL DYNAMICS**

Unit 1: Change Management

Unit 2: Organizational Climate

Unit 3: Management of Conflicts

Unit 4: Organizational Development Interventions

## **REFERENCE BOOKS:**

1. Peter F Druker, Management Tasks and Responsibilities, Truman Talley Books, New York.
2. Stephen P Robbins, Fundamental of Management, Pearson 2003
3. Koontz & Weirich, Essentials of Management, Tata McGraw Hill, New Delhi
4. Stephen P Robbins, Organization Behaviour, Prentice Hall Of India, 6<sup>th</sup> Edition
5. C B Gupta, Management Principles And Practice, Sultan Chand & Sons, New Delhi
6. L M Prasad, Organization Behaviour, Sultan Chand & Sons, New Delhi
7. Consumer Behaviour- Leon Schiffman, Lesslie Lazar Kanuk- Pearson/PHI,8/E
8. Consumer Behaviour- Hawkins, Best, Coney-TMH,9/e,2004
9. Consumer Behaviour in Indian Perspective – Suja Nair – Himalaya Publishers, 2004
10. Consumer Behaviour- Satish k Batra & S H H Kazmi, Excell Books
5. Customer Relationship Management- Peeru Ahamed & Sagadevan Vikas Publishing

**SUBJECT CODE: MBA-02**

**SUBJECT: CORPORATE COMMUNICATION AND MANAGERIAL ECONOMICS**

This course enables the students to develop their communication and analytical abilities in terms of effective presentation and economic uncertainties by applying modern and contemporary tools and techniques for competitive advantage.

**OBJECTIVES**

1. To adopt the modern application of communication and presentation of ideas
2. To understand the basic principles of effective correspondence and idea generation.
3. To make the decision and evaluation through application of economic tools and techniques.
4. To equip and adapt the changing and challenging environmental threats and opportunities.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK 1 CONCEPT OF CORPORATE COMMUNICATION**

Unit 1: Meaning Importance Principles and Objectives Of  
Communication

Unit 2: Verbal and Non Verbal Communication

Unit 3: Speech & Technical and Non Technical Presentation

Unit 4: Group Discussion, Conference and Interview  
Techniques

**BLOCK 2 APPLICATION OF COMMUNICATION IN BUSINESS**

Unit 1: Business Letters: Concept And Introduction

Unit 2: Inquiries, Circulars, Quotation, Order, and  
Acknowledgement

Unit 3: Complaints, Collection, Memos, Minutes and Resume  
Preparation

Unit 4: Banking, Insurance, and Sales Correspondences

**BLOCK 3 INTRODUCTIONS TO MANAGERIAL ECONOMICS**

Unit 1: Managerial Economics Role and Responsibilities

Unit 2: Law of Demand and Elasticity Of Demand

Unit 3: Utility Analysis and Indifference Curve

Unit 4: Demand Forecasting and Demand Distinctions

#### **BLOCK 4 PRODUCTIONS, COST AND MARKET STRUCTURE**

Unit 1: Production Functions and Laws of Returns

Unit 2: Cost Functions and Marginal Cost Theory

Unit 3: Market Structure and Price Determination

Unit 4: Pricing Strategies and Techniques

#### **BLOCK 5 ENVIRONMENTAL ASSESSMENTS AND DIAGNOSIS**

Unit 1: Corporate Environment and Assessment

Unit 2: Indian Economic Environment

Unit 3: International Trade and Trends

Unit 4: Money, Banking, Inflation and Business Cycles

#### **REFERENCE BOOKS**

1. Rajendrapal, Korlahalli, Essentials of Business Communication, Sultan Chand & Sons, New Delhi,
2. Peterson Lewis, Managerial Economics, Prentice Hall of India, New Delhi, 2002
3. Varshney & K L Maheshwari, Managerial Economics, Sultan Chand & Sons, New Delhi
4. N S Raghunathan & B Santhanam, Business Communication, Margham Publication, Chennai.
5. Business Communication - Asha Kaul (2000), New Delhi, Prentice Hall of India
6. Effective Business Communication - Murphy and Hildebrandt (1991), New York: McGraw Hill
7. Communication in India : Some Observations and Theoretical implications - J.S. Yadava, IIMC
8. Communication Theory: Eastern and Western perspective- Lawrence D.

**SUBJECT CODE: MBA-03****SUBJECT: LEGISLATIVE FRAMEWORK OF BUSINESS**

This course presents the rules and conduct of business in terms of legislative framework. This study helps the manager to lead the business in a smooth and orderly manner as per the legal prescription by the Indian Government.

**OBJECTIVES**

1. To understand the nature of laws governing the Indian business.
2. To understand the economic and labour laws pertaining to corporate perspectives.
3. To govern the business as per the legislative requirements.
4. To examine the recent requirements of the government from the business.

**STRUCTURE OF THE COURSE CONTENT****BLOCK 1 ELEMENTS OF BUSINESS LEGISLATION**

Unit 1: The Contract Act 1872, And Their Special Contracts

Unit 2: Indian Partnership Act 1932

Unit 3: Sale of Goods Act 1930

Unit 4: Negotiable Instruments Act 1881

**BLOCK 2 ELEMENTS OF ECONOMICS LEGISLATION**

Unit 1: Information Technology Act 2000

Unit 2: The Consumer Protection Act 1986

Unit 3: The Environment Protection Act 1986

Unit 4: Competition Law 2002

Unit 5: Intellectual Property Tax Laws

**BLOCK 3 BANKING AND INSURANCE LAWS**

Unit 1: The Banking Regulation Act 1949

Unit 2: The Reserve Bank of India Act 1934

Unit 3: The Insurance Act and IRDA Regulations

**BLOCK 4 LABOUR LEGISLATION**

Unit 1: Factories Act 1948 & Workmen Compensation Act 1923

Unit 2: Employee State Insurance Act 1948 & EPF and Miscellaneous Provision's Act 1952

Unit 3: Industrial Disputes Act 1947 & Trade Union Act 1926

Unit 4: The Minimum Wages Act 1948 & the Payment of Wages Act 1936

Unit 5: The Payment Of Bonus Act 1965 & The Payment Of Gratuity Act 1972.

## **BLOCK 5 CORPORATE LEGISLATION**

Unit 1: The Indian Companies Act 1956

Unit 2: The Securities Contracts and Regulation Act 1956

Unit 3: sebi rules

## **REFERENCE BOOKS**

1. N D Kapoor, elements of merchantile law, sultan chand & sons, New Delhi.
2. Essential bare acts
3. Majumdar, G k Kapoor, corporate laws and secretarial practice, taxmann publication, new delhi
4. M tannan, banking law and practice,
5. Business Law – S.S. Gulshan
6. Saravanavel & Sumathi- Business Law for Management – HPH
7. M C Kuchhal -Business Law -Vikas, 4/e, 2005
8. BARE ACTS -  
Indian Contract Act 1872  
Negotiable Instruments Act 1881  
Indian Partnership Act 1932  
Foreign Exchange Management Act 1999  
Sale Of Goods Act 1930  
Consumer Protection Act 1986  
Information Technology Act 2000  
Companies Act 1956  
Environmental Protection Act 1986  
Right To Information Act

**SUBJECT CODE: MBA-04**

**SUBJECT: ACCOUNTING AND TAXATION FOR MANAGERS**

This course enables the students to acquaint the knowledge of application of accounting and financial process of organization framework. It also enables to assess and evaluate the financial results for future organization.

**OBJECTIVES**

1. To understand the basic ideology of recording, classifying and summarizing financial records.
2. To assess and diagnose the financial condition and position of business results.
3. To apply the costing and managerial tools and techniques for decision making.
4. To ensure the tax laws governing the business conditioning and regulation.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK 1 BASIC ACCOUNTING CONCEPTS AND PRINCIPLES**

Unit 1: Accounting Principles and Theory

Unit 2: Indian Accounting Standards

Unit 3: Users of Accounting Information and Accounting Equation

Unit 4: Double Entry Principles – Journal, Subsidiary Books,  
Ledger and Trial Balance

**BLOCK 2 FINANCIAL STATEMENTS ANALYSIS**

Unit 1: Financial Statements – Corporate and Non Corporate Bodies

Unit 2: Financial Statement Analysis and Ratio Analysis

Unit 3: Funds Flow and Cash Flow Analysis

**BLOCK 3 COST ACCOUNTING**

Unit 1: Elements of Cost and Cost Statement

Unit 2: Marginal Costing and Break Even Analysis

Unit 3: Budgeting and Budgetary Techniques

Unit 4: Standard Costing and Variance Analysis

**BLOCK 4 MANAGEMENT ACCOUNTING**

Unit 1: Long Term Investment Appraisal



Unit 2: Costing For Decision Making

Unit 3: Process and Service Costing

Unit 4: Responsibility Accounting and Transfer Pricing

## **BLOCK 5 TAXATION FOR MANAGEMENT**

Unit 1: Taxation Principles and System

Unit 2: Direct Taxation: The Income Tax Act 1961 and Wealth Tax Act

Unit 3: Indirect Taxation: Central Excise, Central Customs and Sales Tax Act

Unit 4: service tax

## **RECOMMENDEND TEXT BOOKS**

1. M C Shukla, T S Grewal, S C Gupta, Advanced Accounts, Sultan Chand & Company, New Delhi
2. Saxena & Vashist, Cost and Management Accounting, Sultan Chand & Sons, New Delhi
3. S P Jain and K L Narang Advanced Accountancy, Kalyani Publishers, New Delhi.
4. Vinod K Singhania, Kapil Singhania, Direct Tax Laws, Tax Mann Publications,
5. V S Datey, Indirect Taxation, Taxmann Publications. New Delhi.
6. Cost Accounting - Khan & Jain
7. Management Accounting 3rd Ed. - Khan & Jain
8. Theory & Problems in Management & Cost Accounting - Khan & Jain
9. Cost Accounting - Jawaharlal

**SUBJECT CODE: MBA-05**

**SUBJECT: QUANTITATIVE TECHNIQUES FOR MANAGERIAL DECISIONS**

This course presents the various statistical and optimization models for managerial application

**OBJECTIVES**

1. To understand the fundamentals of the quantitative techniques and tools
2. To learn the optimal allocation of resources by mathematical modeling,
3. To estimate the likelihood of chances and probability application in business.
4. To evaluate the resources availability and utility by resource optimization and allocation techniques.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK 1 BASIC STATISTICAL ANALYSIS**

Unit 1: Meaning Of Statistics, Data Types and Collection

Unit 2: Tables, Graphs and Frequency Distribution

Unit 3: Measures of Central Tendency, Variation and Skewness

Unit 4: correlation and regression

**BLOCK 2 THEORIES OF PROBABILITY AND DECISION MAKING**

Unit 1: Theory of Probability and Probability Distribution

Unit 2: test of hypothesis – t test, f test and chi square test.

Unit 3: Statistical Decision Making

Unit 4: Time Series and Index Numbers

**BLOCK 3 RESOURCE OPTIMIZATION TECHNIQUES - I**

Unit 1: Operation Research and Linear Programming – Meaning and Uses

Unit 2: Graphical Method

Unit 3: Simplex Method

Unit 4: dual programming

**BLOCK 4 RESOURCE OPTIMIZATION TECHNIQUES - II**

Unit 1: Assignment

Unit 2: Transportation

Unit 3: Inventory Models

Unit 4: Replacement and Sequence Analysis

## **BLOCK 5 RESOURCE OPTIMIZATION TECHNIQUES - III**

Unit 1: game theory

Unit 2: queuing theory

Unit 3: pert and cpm

Unit 4: simulation

### **REFERENCE BOOKS**

1. Richard L Levin & David S Rubin, Statistics for Management,
2. S P Gupta, Statistical Methods, Sultan Chand & Sons, New Delhi
3. U K Srivatsava, G V Shenoy, S C Sharma, Quantitative Techniques for Managerial Decision, Prentice Hall Of India, 2<sup>nd</sup> Edition,
4. V K Kapoor, Operation Research, Sultan Chand & Sons, New Delhi.
5. Statistics and Quantitative Techniques - M.G.Dhaygude
6. Operations Research - V.K.Kapoor
7. Operations Research - J.K.Sharma
8. Quantitative Techniques - N.D.Vohra
9. Introduction to Operations Research – Hiller
10. Introduction to Operations Research - Gillett

**SEMESTER 1: SUBJECT CODE: MBA-06**

**SUBJECT: BUSINESS DEVELOPMENT AND ENTREPRENEURSHIP**

The purpose of this course is to provide a strong theoretical framework for business innovation, development and growth issues for initiation of new business ideas. It also helps to develop the skills to start a new venture and becomes entrepreneur in future career.

**OBJECTIVES:**

1. To prepare a groundwork for business creation, development and initiation.
2. To build the necessary caliber and competencies for running and conducting new business.
3. To help the students to prepare desirable and feasible project report for business project.
4. To create new ideas for successful entrepreneurship and launching technical know how in a pragmatic business application.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK I BUSINESS INNOVATION AND CREATIVITY**

Unit 1: Skills and Styles of Innovation and Creativity

Unit 2: Creative Organization

Unit 3: Functional Innovation

Unit 4: Personal Innovation and Self Awareness Plan

**BLOCK II ENTREPRENEURSHIP**

Unit 1: Role and Functions of Entrepreneurs

Unit 2: Entrepreneurial Competencies and Culture

Unit 3: Entrepreneurial Motivation and Performance

Unit 4: Women and Social Entrepreneurship

**BLOCK III BUSINESS IDEAS**

Unit 1: Sources of Business Ideas

Unit 2: Business Planning and Measurement of Success

Unit 3: Commencement of Internet Business

Unit 4: Presentation of Feasibility Report

## **BLOCK IV ENTREPRENEURIAL TRANSITIONS**

Unit 1: Entrepreneurial Growth and Management Structure

Unit 2: Legal and Intellectual Property Issues

Unit 3: Venture Capital and Entrepreneurial Finance

Unit 4: Crisis and Symptoms of Business Failures

## **BLOCK V INSTITUTIONAL FRAMEWORK OF ENTREPRENEUR**

Unit 1: Role of Government for Promotion of Entrepreneur

Unit 2: Agencies for Entrepreneurship Development

Unit 3: Turnaround Strategies and Rehabilitation Measures

Unit 4: Global Entrepreneurship

## **REFERENCE BOOKS:**

1. Bellon Whittington, "Competing Through Innovation", Prentice.
2. Peter F Drucker, "Innovation and Entrepreneurship"
3. Vasant Desai, Management of Small Scale Enterprise, Himalaya Publishing House, New Delhi.
4. J C Verma and Gurpal Singh, Small Business and Industry – A Handbook for Entrepreneurs, Sage Publications, New Delhi.
5. Brandt, Steven C., The 10 Commandments for Building a Growth Company, Third Edition, Macmillan Business Books, Delhi, 1977
6. Bhide, Amar V., The Origin and Evolution of New Businesses, Oxford University Press, New York, 2000.
7. Desai, Vasant, Small Scale Enterprises Vols. 1-12, Mumbai, Himalaya Publishing House. (Latest edition).
8. Dollinger, Mare J., Entrepreneurship: Strategies and Resources, Illinois, Irwin, 1955.
9. Holt, David H., Entrepreneurship: New Venture Creation, Prentice-Hall of India, New Delhi, latest Edition.

**SUBJECT CODE: MBA-07****SUBJECT: HUMAN ASSET MANAGEMENT**

This course will help the students to explore, recognize and analyse the multiple paradoxes related to the study and application of human resource as an asset in an organization. This course will help the students to understand the basic nature, functions, activities, operations and complexities of human resource management in the corporate realm.

**OBJECTIVES:**

1. To introduce conceptual and theoretical foundations of human resource management.
2. To aware the importance of human and recognize as an asset in an organization.
3. To acquire the skills of interaction and execution of managerial duties with the help of human resources.
4. To understand the values and utilities of human resources in an competitive environment.

**STRUCTURE OF THE COURSE CONTENT****BLOCK 1: HUMAN RESOURCE – INTRODUCTORY PERCEPTION**

Unit 1: Human resource management – concept, scope, objectives, philosophy and trends

Unit 2: Functions organization and environment of human resource management

Unit 3: HRM models, theories, approaches and fish bone diagram approach

**BLOCK 2: PROCUREMENT AND ACQUISITION OF HUMAN RESOURCES**

Unit 1: Human Resource Planning, Inventory and Forecasting Techniques

Unit 2: Job Analysis and Employment Security

Unit 3: Recruitment, Selection, Placement, Induction and Socialization

**BLOCK 3: DEVELOPMENTS OF HUMAN RESOURCES**

Unit 1: Employee Training

Unit 2: Executive Development and Managerial Growth

Unit 3: Career Planning and Management

Unit 4: Promotion, Transfer and Separation

Unit 5: Performance Appraisal and Merit Rating

## **BLOCK 4: WAGES AND SALARIES ADMINISTRATION**

Unit 1: Theory of wages and job evaluation

Unit 2: Pay plans and executive compensation

Unit 3: Performance and financial incentives

Unit 4: Benefits and services and employee commitment

## **BLOCK 5 : MAINTENANCE OF HUMAN RESOURCES**

Unit 1: Discipline Administration, Grievances and Industrial Relations

Unit 2: Collective Bargaining and Trade Unionism

Unit 3: Employee Health, Safety and Security Welfare Measures

Unit 4: Human Resource Audit, Accounting, Report and Information System

Unit 5: Human Resource Empowerment

## **REFERENCE BOOKS**

1. David A Decenzo & Stephen P Robbins, Personnel/Human Resource Management, Prentice Hall of India Ltd. Pearson.
2. N G Nair & Latha Nair, Personnel Management and Industrial Relations, Sultan Chand And Company New Delhi.
3. C B Mamaria and Mamaria, Personnel Management,
4. P C Tripathy, Human Resource Development, Sultan Chand & Sons, New Delhi
5. C B Gupta, Human Resource Management, Sultan Chand & Sons, New Delhi.
6. Chopra, S, and P. Meindl, 2004, *Supply Chain Management ? Strategy, Planning and Operation*, 2nd edition, Pearson Education (ISBN 81-297-0172-3).
7. Sople, V. V. (2004). *Logistics Management: Supply Chain Imperatives*, New Delhi: Pearson Education.
8. Verma M.M., *Materials Management*, New Delhi, S. Chand & Sons
9. Raghuram, G. and N. Rangaraj, 2000, *Logistics and Supply Chain Management: Cases and Concepts*, Macmillan, New Delhi

**SUBJECT CODE: MBA-08**

**SUBJECT: CORPORATE FINANCE AND SERVICES**

This course ensures to acquaint the students with the broad and contemporary framework of financial decision making in a corporate strategic business unit. This course also imbibes the modern tools and techniques of analytical information of finance.

**OBJECTIVES:**

1. To familiarize the changing environment of acquisition, allocation and distribution of financial resources.
2. To learn the importance of new tools and techniques of financial evaluation and decision variables.
3. To develop the skills of application of financial theories in the corporate market.
4. To aware the services and infrastructural facilities of financial system and markets.

**STRUCTURE OF THE COURSE CONTENTS**

**BLOCK 1 CORPORATE FINANCE AND VALUATION CONCEPTS**

Unit 1: Corporate finance functions, scope, goals, organization and activities

Unit 2: Concepts of valuation and return

Unit 3: Portfolio theory, CAPM and Risk Diversification

Unit 4: Corporate financial policy & strategy and shareholder value creation

**BLOCK 2 ACQUISITIONS OF CORPORATE FINANCIAL RESOURCES**

Unit 1: Avenues of Short Term Fund Procurement

Unit 2: Avenues of Long Term Fund Procurement

Unit 3: Avenues of International Fund Procurement

Unit 4: Indian and International Financial Environment

**BLOCK 3 ALLOCATIONS OF CORPORATE FINANCIAL RESOURCES**

Unit 1: Investment Analysis and Capital Budgeting Process

Unit 2: Cost of Capital and Leverage Analysis

Unit 3: Capital Structure Theories and Debit Analysis

Unit 4: Dividend Policy and Theories



## **BLOCK 4 CORPORATE FINANCIAL SYSTEMS**

Unit 1: Banking System in India

Unit 2: Development banks

Unit 3: Money market and capital market operations and their recent trends

## **BLOCK 5 CORPORATE FINANCIAL SERVICES**

Unit 1: Mutual funds and derivatives

Unit 2: Merchant banking and corporate counseling

Unit 3: Housing, leasing, consumer and export finance

Unit 4: Factoring, venture capital, credit rating and depositories

## **REFERENCE BOOKS:**

1. Van Horne, Financial Management and Policy, Prentice Hall of India Ltd.
2. I M Pandey, Financial Management, Vikas Publishing House, New Delhi
3. S N Maheshwari, Management Accounting and Financial Control, Sultant Chand & Sons, New Delhi
4. S Gurusamy, Financial Services, Vikas Publishing House, New Delhi
5. B Santhanam, Financial Services, Margham Publications, Chennai.
6. Saunders, Anthony, *Financial Markets and Institutions: A Modern Perspective*
7. Assigned Articles (provided in class and on blackboard)
8. The Wall Street Journal
9. Financial Calculator (TI BA II Plus Recommended)

**SUBJECT CODE: MBA-09**

**SUBJECT: MARKETING PLANNING AND MANAGEMENT**

This course presents the ideas of understanding market, marketing, marketing planning, organizing and controlling aspects in the current scenario. This study helps the modern marketers to arrange the resources strategically according to changing marketing needs and requirements.

**OBJECTIVES:**

1. To understand the fundamental concepts and approaches of marketing
2. To learn the buyer behavior and marketing segmentation
3. To familiarize the 4p's in marketing system
4. To learn about the market and marketing analysis.

**STRUCTURE OF THE COURSE CONTENTS**

**BLOCK 1 MARKETING CONCEPTS AND TASKS**

Unit 1: Customer value satisfaction and marketing tasks

Unit 2: Digitalization, customization and e marketing

Unit 3: Market and marketing research and information system

Unit 4: Concept, approaches and functions of marketing

**BLOCK 2 MARKETING STRATEGIC PLANNING**

Unit 1: Marketing Action Plans

Unit 2: Strategic Marketing Process

Unit 3: Marketing Audit and Evaluation System

Unit 4: Marketing Models and Competitor Analysis

**BLOCK 3 MARKETING PROGRAMMES**

Unit 1: Consumer Behavior

Unit 2: Marketing Segmentation

Unit 3: Services Marketing

Unit 4: Marketing Ethics and Legislation

## **BLOCK 4 PRODUCT MANAGEMENT**

Unit 1: Meaning policy and development of product

Unit 2: Product line strategy

Unit 3: Product identification branding and packaging

Unit 4: Pricing of products

## **BLOCK 5 MARKETING COMMUNICATION MANAGEMENT**

Unit 1: Sales Promotion Tools and Techniques

Unit 2: Advertising

Unit 3: Management of physical distribution

Unit 4: Sales force management

## **REFERENCE BOOKS**

1. Philip Kotler, Marketing Management Analysis, Planning and Control, Prentice Hall.
2. Guiltman J P & Gordon W P , Marketing Management Strategies & Programmes, Mc Graw Hill, New York.
3. Ramasamy & Namakumari, Marketing Management Planning, Control And Implementation, Macmillan India
4. SA Sherleker, Marketing Management, Vikas Publications.
5. S Jayachandran, Marketing Management, Tata Mc Graw Hill, 2003.
6. Border, N.H. and: Advertising Management-Text and Cases, Marshal, W.V Richard D. Irwin Inc. 1967.
7. Howard. J.M. : Consumer Behaviour in Marketing Strategies, Prentice Hall, 1989.
8. Montgomery, D.B.: Management Science in Marketing, & Urban. G.L. Prentice Hall, 197

**SUBJECT CODE: MBA-10****SUBJECT: PRODUCTION TECHNOLOGY AND INDUSTRIAL ENGINEERING**

This course focuses on basic managerial issues arising in the production and operations of both manufacturing and service industries. The objectives are to familiarize students with the problems and issues confronting production technology managers and to introduce language, conceptual models, and analytical techniques that are broadly applicable in confronting such problems.

**OBJECTIVES:**

1. To address rapid changes in technology application to production and industrial engineering management
2. To focus on some fundamental concepts and techniques of production system
3. To provide some significant background of pragmatic implementation of technology in managerial decision making.
4. To emphasize the theory of work design, product development, order delivery and customer service through by business process.

**STRUCTURE OF THE COURSE CONTENT****BLOCK 1: TECHNOLOGY OF PRODUCTION TECHNIQUES**

Unit 1: Meaning and implication of technology

Unit 2: Technology forecasting

Unit 3: Machine tools process technology

Unit 4: FMS, JIT, MRP –I, MRP-II and advanced techniques

**BLOCK 2: PRODUCTION PLANNING**

Unit 1: Integrated Production Planning System

Unit 2: Procurement Planning and Inventory Policy

Unit 3: Scheduling and Optimization

Unit 4: Production Monitoring System

**BLOCK 3: PRODUCTION DESIGN AND ECONOMICS**

Unit 1: Facilities Location and Layout

Unit 2: Capacity and Work System Design

Unit 3: Management Information System for Production Technology

Unit 4: Maintenance and Waste Management

## **BLOCK 4: PRODUCTIVITY**

Unit 1: Measurement of productivity

Unit 2: Work study and sampling

Unit 3: Cost reduction and value analysis

Unit 4: Cost and financial impact of operational activities

## **BLOCK 5: INDUSTRIAL ENGINEERING**

Unit 1: Quality assurance

Unit 2: Methods of engineering and ergonomics

Unit 3: Manufacturing Automation

Unit 4: Materials Handling

Unit 5: Stores and Purchase Management

## **REFERENCE BOOKS**

1. Adam & Ebert, Production and Operation Management, Prentice Hall
2. Op Khanna, Industrial Engineering And Management, Dhanbat Rai & Sons, New Delhi
3. T Hill, Production/Operation Management, Prentice Hall, London
4. Berk J and Berk S, Total Quality Management, Implementing Continuous Improvement, Excel Books, New Delhi.
5. Chary S N, Production and Operation Management, Tata Mcgraw Hill, New Delhi.
6. Willie Harruner, Occupational Safety Management and Engineering, latest edition. Prentice-Hall. ISBN 0-13-629437-5.
7. M.S. Sanders, Human Factors in Engineering and Design, 7th Edition. McGraw-Hill, 1993.
8. R.S. Bridger, Introduction to Ergonomic. McGraw-Hill, ISBN 0-07-007741-X.
9. Laudon & Laudon, Management Information Systems: A Contemporary Perspective, latest edition. MacMillan, 1991.

**SUBJECT CODE: MBA-11**

**SUBJECT: INFORMATION SCIENCE FOR MANAGERS**

The purpose of this course is to present the fundamentals of the computer, data processing techniques, and concepts of e mail, e commerce and tele working. It helps the modern manager to process business applications in payroll generation, bill generation, e commerce and e communication or complicated decision making in computerized environment.

**OBJECTIVES:**

1. To know the development of computer & communication technology and its application in managerial decision making.
2. To learn the concept and need of system development in managerial work
3. To understand the impact of information technology in corporate environment.
4. To assess the changes and requirements of business appraisal in terms of information technology.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK 1: COMPUTER SYSTEM**

- Unit 1: Computer and data processing
- Unit 2: Computer peripherals and hardware
- Unit 3: Operating system an introduction
- Unit 4: Selection and analysis of computer system

**BLOCK 2: MANAGEMENT INFORMATION SYSTEM**

- Unit 1: Structure and Development of MIS
- Unit 2: Prerequisites and Installation of MIS
- Unit 3: MIS Reports
- Unit 4: Computer Based MIS

**BLOCK 3: COMPUTER APPLICATIONS IN BUSINESS**

- Unit 1: electronic data processing system and flow charts
- Unit 2: computer application in accounting
- Unit 3: computer application in inventory control
- Unit 4: computer application in payroll

## **BLOCK 4: SYSTEM ANALYSES AND DESIGN**

Unit 1: System development phases

Unit 2: Master development plan

Unit 3: System documentation

Unit 4: System implementation

## **BLOCK 5 DATA PROCESSING**

Unit 1: Data Representation

Unit 2: Data processing resources

Unit 3: Data processing standards and documentation

Unit 4: Data processing and EDP environment

## **REFERENCE BOOKS**

1. Davis Gordon B & Olson Margrethe H, Management Information System Tata Mc Graw Hill International Edition
2. Mundick Robert G, Ross, Joel E and Claggett, James R, Information Systems for Modern Management, Prentice Hall of India. New Delhi.
3. V K Kapoor, Information Technology and Computer Application, Sultan Chand & Sons, New Delhi.
4. Analysis and Design of Information Systems, Rajaraman, Prentice Hall
5. Decision Support Systems and Intelligent Systems, Turban and Aronson, Pearson Education Asia
6. Management Information Systems, Schulthesis, Tata McGraw Hill
7. Management Information Systems - Sadagopan, Prentice Hall
8. Management Information Systems - Jayant Oke

**SUBJECT CODE: MBA-12**

**SUBJECT: STRATEGIC MANAGEMENT AND CORPORATE GOVERNANCE**

This course helps the students to craft a strategy and choose a superior competitive position by analyzing and exploring conceptual frameworks and models to gain practical knowledge and application in management and execution arena.

**OBJECTIVES:**

1. To identify and choose the best strategy for competitive advantage
2. To explore models and paradigms for strategic insights.
3. To assess the critical conditions and challenging puzzles in business.
4. To incorporate the best governance practice in the world of corporate business.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK I INTRODUCTION TO STRATEGY**

Unit 1: What Is Strategy And Strategic Management?

Unit 2: Strategic Management Process and Models

Unit 3: Role of Top Management and Board Of Directors

Unit 4: Strategic Intent

**BLOCK II RESOURCES DYANMICS**

Unit 1: Scanning and Diagnosis of Environment

Unit 2: Strategic Advantage Profile

Unit 3: Corporate and Industry Analysis

Unit 4: Business Level Strategies

**BLOCK III STRATEGIC IMPLEMENTATION AND CONTROL**

Unit 1: Strategic Choice and Analysis

Unit 2: Strategic Implementation

Unit 3: Strategic Control and Audit

Unit 4: International Strategic Issues

**BLOCK IV BUSINESS ETHICS**

Unit 1: Concept of Business Ethics

Unit 2: Value Based Organizations

Unit 3: Discriminatory and Prejudicial Employee Practice

Unit 4: Ecological Consciousness



## **BLOCK V CORPORATE GOVERNANCE**

Unit 1: Overview of Corporate Governance

Unit 2: Directorial Competence and Board Effectiveness

Unit 3: Disclosure and Investor Protection

Unit 4: Corporate Reputation, Legitimacy and Crime

### **REFERENCE BOOKS:**

1. Arthur A Thompson A J Strickland John E Gamble Arun K Jain Crafting And
2. Executing Strategy Concepts And Cases Tata Mcgraw- Hill Publishing 2006
3. Azhar Kazmi Business Policy And Strategic Management Tata Mcgraw- Hill Publishing 2002
4. Francis Cherunilam Strategic Management Himalaya Publishing House 1998
5. John A Pearce Richard B Robinson Strategic Management Tata Mcgraw- Hill Publishing 2005
6. M.Jeyarathnam Business Policy And Strategic Management Himalaya Publishing House 2007
7. Bhatia S K, Business Ethics And Managerial Values, Deep And Deep Publication, 2001.
8. Manual G Valasquez, Business Ethics – Concepts and Cases, Pearson Education, 2002.
9. N. Gopalasamy, Corporate Governance, Wheeler Publishing, 1998.

**SUBJECT CODE: MBA-13**

**SUBJECT: RESEARCH METHODOLOGY**

This course enables the students to apply the theoretical knowledge in the pragmatic corporate environment to identify the solution to various managerial difficulties and complexities. This course presents the basic concepts and theories of research to choose the optimal decision in managerial problems.

**Objectives:**

1. To understand the basics of research methods in managerial and corporate areas.
2. To learn the techniques of assessment and evaluation of research design for managerial paradigm.
3. To aware the various methods of data analysis and application in its decision making.
4. To learn the format and presentation of research report

**Structure of the course content**

**BLOCK I RESEARCH AN INTRODUCTION**

Unit 1: Meaning and Types Of Research

Unit 2: Research Process

Unit 3: Problem Identification

Unit 4: Research Design

**BLOCK II SAMPLING DESIGN**

Unit 1: Meaning and Steps in Sampling

Unit 2: Types of Sampling

Unit 3: Data Collection

Unit 4: Data Processing

**BLOCK III TESTING OF HYPOTHESIS**

Unit 1: Meaning, Sources and Types of Hypothesis

Unit 2: Parametric Test of Hypothesis

Unit 3: Non Parametric Test of Hypothesis

Unit 4: Techniques of Measurement and Scaling

## **BLOCK IV DATA INTERPRETATION AND REPORT PRESENTATION**

Unit 1: Meaning of Interpretation

Unit 2: Report Meaning and Types

Unit 3: Presentation of Report

Unit 4: Mechanics of Writing of Research Report

## **BLOCK V SOFTWARE APPLICATION OF RESEARCH**

Unit 1: SPSS Application for Research Methodology

Unit 2: MS- Excel Application for Research Methodology

## **REFERENCE BOOKS**

1. C R Kothari, Research Methodology,
2. Donald R Cooper, And Pamela S Schindler, Business Research Methods, Tata Mcgraw Hill, New Delhi.
3. Rao K V, Research Methods for Management and Commerce, Sterling Publications.
4. P C Tripathy, Research Methods for Social Sciences, Sultan Chand & Sons, New Delhi.
5. Uma Sekeran, Research Methods for Business, Wiley Publications.
6. Cooper and Schindler - Business Research Methods (Tata Mc Graw Hill, 9th Edition)
7. Saunders - Research Methods for Business students (Pearson Education, 2nd Edition, 2007)
8. Panneer Selvam - Research Methodology (Prentice Hall of India, Edition 2008)
9. Gravetter - Research Method for Behaviourial Sciences (Cengage Learning)

**SUBJECT CODE: MBA-14**

**SUBJECT: TOTAL QUALITY MANAGEMENT**

This course provides in depth understanding of problems and issues in total quality management. It also incorporates the managerial reasoning and analyzing in order to derive an appropriate course of action by focusing quality in products and services.

**OBJECTIVES:**

1. To understand the quality implication in business set up.
2. To ensure the principles and tools used in total quality management.
3. To create an awareness about the quality certification process.

**STRUCTURE OF THE COURSE CONTENT**

**BLOCK I CONCEPT OF QUALITY MANAGEMENT**

Unit 1: Concept, Principles and Role of TQM Implementation.

Unit 2: Quality Control Techniques

Unit 3: Cost of Quality

Unit 4: Kaizen and Continuous Improvement

**BLOCK II PRINCIPLES OF TQM**

Unit 1: Customer Specification and Perception

Unit 2: Employee Involvement and Retention

Unit 3: Supplier Relationship Movement

Unit 4: Service Quality

**BLOCK III QUALITY ANALYSES**

Unit 1: Introduction to Statistics

Unit 2: Statistical Control Charts

Unit 3: Probability Estimation

Unit 4: Measurement of Reliability and Sampling

Unit 5: Experimental Designs

**BLOCK IV QUALITY SYSTEMS**

Unit 1: ISO 9000

Unit 2: Six Sigma

Unit 3: Certification Requirements

Unit 4: Standards for Quality

## **BLOCK V BENCHMARKING AND QUALITY CIRCLE**

Unit 4: Introduction to Benchmarking

Unit 2: Quality function Deployment

Unit 3: Quality Circle

Unit 4: Quality Awards

### **REFERENCE BOOKS:**

1. James Evans and William M Lidsay, The Management and Control of Quality, Thomson Learning, 2002
2. Narayana V and N S Sreenivasan, Quality Management-Concepts and Tasks, New Age International, 1996.
3. Shailendra Nigam, Total Quality Management, Excel Books, New Delhi.
4. James R.Evans & William M.Lidsay, The Management and Control of Quality, (5th Edition), South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).
5. Feigenbaum.A.V. "Total Quality Management, McGraw-Hill, 1991.
6. Oakland.J.S. "Total Quality Management Butterworth – Hcinemann Ltd., Oxford. 1989.
7. Zeiri. "Total Quality Management for Engineers Wood Head Publishers, 1991.
8. Feigenbaum.A.V. "Total Quality Management, McGraw-Hill, 1991.

**SUBJECT CODE: MBA15****SUBJECT: INTERNATIONAL BUSINESS MANAGEMENT**

This course is to impart special knowledge of global aspects of business and operations so as to equip the students suitable for entry level managerial positions in the field of international business management.

**OBJECTIVES**

1. To gain in depth understanding and analytical skills to conduct the business globally.
2. To effectively carrying the international business operations in complex structure.
3. To acquaint with international business environment and its impact on business operation.

**STRUCTURE OF THE COURSE CONTENT****BLOCK I INTERNATIONAL BUSINESS ENVIRONMENT**

Unit 1: Nature and Scope of International Business Environment

Unit 2: Environmental Analysis

Unit 3: Theories of International Business

Unit 4: India's International Trade: Trends, Directions and Compositions

**BLOCK II INTERNATIONAL INSTITUTIONS**

Unit 1: WTO and GATT

Unit 2: World Bank and IMF

Unit 3: Regional Economic Integration

**BLOCK III MNC AND FOREIGN INVESTMENT**

Unit 1: FDI Theories

Unit 2: Nature and Management of MNC

Unit 3: Strategic Analysis of International Merger

Unit 4: Business Process Outsourcing

**BLOCK IV INTERNATIONAL TRADE OPERATIONS**

Unit 1: Export Documentation and Procedures

Unit 2: Export Financing Methods

Unit 3: Formalities of Claiming Export Incentives

Unit 4: Legal Framework of International Trade

## **BLOCK V INTERNATIONAL BUSINESS MANAGEMENT**

Unit 1: International Marketing

Unit 2: International Logistics

Unit 3: International Business Negotiations

Unit 4: International Business Culture

### **REFERENCE BOOKS:**

1. V K Bhalla, International Business, Anmol Publications, New Delhi.
2. Export Import Policy, Government of India,
3. S C Jain, International Marketing Prentice Hall, New Delhi.
4. Denies John D and Radebaugh Lee H, International Busines Environment and Operations.
5. Francis Cherunilam, International Business Environment, Prentice Hall of India.
6. Alan C Shapiro : Multinational Financial Management, Prentice Hall, New Delhi
7. Ian H Giddy: Global Financial Markets, AITBS Publishers and Distributors, New Delhi
8. C Jeevanandam, Foreign Exchange: Practice, Concepts, Sultan Chand & Sons, New Delhi
9. Vijayabhaskar P and Mahapatra B., Derivatives Simplified, Respose Books, Sage Publications, New Delhi

## **SUBJECT CODE TQ-01**

### **SUBJECT: TECHNOLOGY OF QUALITY MANAGEMENT**

#### **BLOCK I: INTRODUCTION OF TECHNOLOGY OF QUALITY MANAGEMENT**

- Unit 1: Introduction to Quality Control
- Unit 2: Quality Cost Consideration
- Unit 3: Statistics and its application in quality control
- Unit 4: Manufacture Sampling Inspection in Engineering

#### **BLOCK II: STATISTICS AND QUALITY CONTROL**

- Unit 1: Statistics and Quality Control by the use of Control Charts
- Unit 2: Methods of Inspection & Quality Control
- Unit 3: Reliability Engineering
- Unit 4: Value engineering & Value Analysis

#### **BLOCK III: SAMPLING INSPECTION**

- Unit 1: Theory of sampling Inspection
- Unit 2: Standard Tolerance ABC Analysis
- Unit 3: Defect diagnosis
- Unit 4: Preventions

#### **BLOCK IV: RECENT TECHNIQUE FOR QUALITY IMPROVEMENT**

- Unit 1: Recent Technique for Quality Improvement - introduction
- Unit 2: ZERO defect
- Unit 3: A quality Motivation Techniques
- Unit 4: Quality Management System & Total quality Control.

#### **BLOCK V: ISO 9000**

- Unit 1: Selection of ISO and Models
- Unit 2: Implementation of ISO Model 9000
- Unit 3: Human Resource Development and Quality Circles
- Unit 4: Environmental Management System & Total Quality Control

#### **REFERENCE BOOKS:**

1. Dahigaard Jens J., Kristensen K., Kanji Gopal K, "Fundamental Of Total Quality Management" Bross Chapman & Hall, London, 1998.
2. George, Stephen And Weimerskirch, Arnold, "Total Quality Management
3. Strategies And Techniques Proven", Mohit Publications, 2001
4. Juran, Joseph M., "Total Quality Management : Mc Graw-Hill Pub
5. Hakes, Chris (Editor) Total Quality Management : The Key To Business Success", Nychapman and Hall Pub, 1991.
6. Fox, Roy, "Making Quality Happen. Six Steps To Total Quality Management" Mcgraw-Hill, 1991
7. Jain, "Quality Control And Total Quality Management", Tata Mcgraw Hill, 2002
8. H.Lal "Total Quality Management: A Practical Approach", New Age International Private Ltd., 2002
9. Besterfield, "Total Quality Management", Pearson Education, 1999 , Rao, Ashok, "Total Quality Management : A Cross Functional Perspective", Wiley & Sons.



## **SUBJECT CODE TQ-02**

### **SUBJECT: PRODUCTION PLANNING AND CONTROL**

#### **BLOCK I : PPC AND PRODUCTION SYSTEMS**

- Unit 1 : Definition, Functions, and Objectives
- Unit 2 : Organization and advantages of PPC
- Unit 3 : Life cycle of Product and Manufacturing strategy
- Unit 4 : Manufacturing systems, Characteristics of Production Systems.

#### **BLOCK II : PROCESS PLANNING AND PRODUCT PLANNING**

- Unit 1 : Manual process planning methodology and techniques, computer Aided process planning methods.
- Unit 2 : Master Production Schedule (MPS) – Bill of materials (BOM),
- Unit 3 : Material Requirement Planning (MRP) - Advantages and Problems of MRP
- Unit 4 : Material selection techniques and value analysis.

#### **BLOCK III : MATERIAL MANAGEMENT**

- Unit 1 : Programmed material planning – Meaning and, types,
- Unit 2 : Cost and management of inventory Policy
- Unit 3 : ABC analysis, Inventory models, Economic order quantity (EOQ)& Reorder point,
- Unit 4 : Lead time, Problems in EOQ, Simulation Application in Inventory Management.

#### **BLOCK IV : PURCHASING & STORES MANAGEMENT**

- Unit 1 : Functions and organization of Purchase Department
- Unit 2 : Make or buy decisions, Purchasing Management & Stores Management
- Unit 3 : Inspection and Identifying Bad Storage
- Unit 4 : Classification and Coding of purchased items.

#### **BLOCK V : LOADING, SCHEDULING, DISPATCHING CONTROL**

- Unit 1 : Developing Loading and Scheduling System
- Unit 2 : Dispatching, Procedure & Progress Reporting
- Unit 3 : Corrective Action
- Unit 4 : Recording and Reporting.

#### **REFERENCES**

1. Barnes R.M., Work Design and Measurement, Wiley & sons, 1997.
2. Bage T.R. & Sharma S.C., Production Planning and Control, Khanna Publishers.
3. James L. Riggs, Engineering Economics, Mc Graw Hill Book Company, 1982.
4. James L. Pappas and Brigham F., Managerial Economics, Holt. Rinehart and Winston Limited, 1983.
5. Dalela -Mansoor Ali S., Industrial Engineering and Management System, Standard publishers, Nai sarak, Delhi.
6. Buffa E.S., Modern Production Management, Eastern private limited.

## **SUBJECT CODE TQ-03**

### **SUBJECT: STATISTICAL PROCESS CONTROL**

#### **BLOCK I: STATISTICS PROCESS CONTROL AN OVERVIEW**

- Unit 1: Meaning and significance of Statistical Process Control (SPC)
- Unit 2: Construction of Control Charts for variables and attributes
- Unit 3: Process Capability- Significance
- Unit 4: Measurement of Process Capability

#### **BLOCK II: RELIABILITY CONCEPTS**

- Unit 1: Introduction of Reliability concepts
- Unit 2: Significance, Types of Reliability Concepts
- Unit 3: Reliability in Series and Parallel
- Unit 4: Product Life Characteristics Curve

#### **BLOCK III: TOTAL PRODUCTIVE MAINTENANCE (TPM)**

- Unit 1: Introduction of TPM
- Unit 2: Significance of TPM
- Unit 3: Relevance to TPM
- Unit 4: Terotechnology

#### **BLOCK IV: BUSINESS PROCESS RE-ENGINEERING**

- Unit 1: Principles of BPR
- Unit 2: Applications of BPR
- Unit 3: Process of Reengineering
- Unit 4: Benefits and Limitations of BPR

#### **BLOCK V: STATISTICS TOOLS**

- Unit 1: Transportation and Assignment models
- Unit 2: Shipment and Routing Problems
- Unit 3: Queuing Theory; Inventory Management Techniques
- Unit 4: PERT/CPM; Decision Theory and Decision Trees;

#### **REFERENCE BOOKS:**

1. Process control Instrumentation C.D. Johnson
2. Process control B.G. Liptak
3. Computer based Industrial control Krishnakant
4. Process control, designing processes and control system for dynamic processes  
Thomes E. marlin
5. Gary Dunning, 'Introduction to Programmable logic Controllers', (Delmar Publisher)
6. Webb & Reis, 'Programmable logic Controllers', (Prentice Hall of India)
3. Jose A. Romagnoli, Ahmet Palazoglu, 'Introduction to process Control' (CRC  
Tylor and Francisgroup)
7. Statistical Process Control –ISA Handbook
8. B.G. Liptak 'Handbook of Instrumentation- Process Control'
9. Installation and user manuals of different DCS, PLC Vendors

## **SUBJECT CODE TQ-04**

### **SUBJECT: QUALITY ASSURANCE AND AUDIT**

#### **BLOCK I : QUALITY ASSURANCE – AN INTRODUCTION**

- Unit 1 : Concept and Meaning of Quality Assurance
- Unit 2 : Quality Assurance Properties for Raw Materials, Finished Products and Packaged Materials
- Unit 3 : Quality Analysis and Stability Methods
- Unit 4 : Quality Engineering

#### **BLOCK II : QUALITY INSPECTIONS**

- Unit 1 : Inspection Planning
- Unit 2 : Product Acceptance Inspection
- Unit 3 : Inspection Errors
- Unit 4 : Inspection Manual

#### **BLOCK III : QUALITY TESTING**

- Unit 1 : Concept, Issues and Techniques of Quality Testing
- Unit 2 : Quality Test Activities and Usage Testing
- Unit 3 : Adaptation, Specialization and Integration
- Unit 4 : Verification and Failure Analysis

#### **BLOCK IV : QUALITY SYSTEMS AND AUDIT**

- Unit 1 : Quality System Elements, Documentation and Standards
- Unit 2 : Quality Audit Concepts, Types and Procedures
- Unit 3 : Quality Auditor Roles and Responsibilities
- Unit 4 : Quality Ethics

#### **BLOCK V : COMPUTERISED QUALITY CONTROL AND TRAINING**

- Unit 1 : Computer Aided Quality Control
- Unit 2 : Calibration Control
- Unit 3 : Robust Design
- Unit 4 : Quality Training

#### **REFERENCES**

1. Arter, Dennis R., Quality Audits for Improved Performance, 3rd ed., Milwaukee, WI: ASQ Quality Press, 2003.
2. ASQ Quality Costs Committee, Jack Campanella, 3rd ed., Principles of Quality Costs: Principles, Implementation, and Use, 3rd ed.
3. Dovich, Robert A., Quality Engineering Statistics. Milwaukee, WI: ASQC Quality Press, 1992.
4. Gryna, Frank, Quality Planning and Analysis: From Product Development through Use, 4th ed., New York: McGraw-Hill Publishing Co., 2001.
5. Scholtes, Peter R., the Team Handbook, 3rd ed., Oreil Inc., 2003.
6. D C Montgomery, John Wiley, Introduction to Statistical Quality Engineering, 5th Edition. 2005.
7. Frank M Gryna, Richard C H, Chua and Joseph A Defec, Juran's Quality Planning and Analysis for Enterprise Quality, 5th Edition, Mc Graw Hill, 2007.

## **SUBJECT CODE TQ-05**

### **SUBJECT: MANAGEMENT OF SOFTWARE QUALITY**

#### **BLOCK I: INTRODUCTION OF SOFTWARE MANAGEMENT QUALITY**

Unit 1: Software and its process

Unit 2: Software Engineering and Characteristics of software project

Unit 3: Software project Management and its problems

Unit 4: Feasibility Analysis

#### **BLOCK II: PROJECT PLANNING**

Unit 1: Project planning & Analyzing Project Characteristics

Unit 2: Identifying Project goals and Activities

Unit 3: Estimating Time & Effort

Unit 4: Allocating resources & Review plan

#### **BLOCK III: SOFTWARE TECHNIQUES**

Unit 1: Software requirement and Analysis

Unit 2: Need for Software Estimation and Problems with Over & Under Estimation

Unit 3: Software Techniques

Unit 4: Estimating by Analogy & LOC Based COCOMO Model

#### **BLOCK IV: SOFTWARE DESIGN CONCEPTS**

Unit 1: Objectives of Activity Planning

Unit 2: Project Scheduling, Sequencing and Scheduling Activities

Unit 3: Network Planning Models

Unit 4: Software Design Concepts

#### **BLOCK V: RISK MANAGEMENT**

Unit 1: Risk and Its Implication

Unit 2: Types of Risk, Identifying Risk and Analyzing risk

Unit 3: Risk Avoidance, Containment & Identification

Unit 4: Resource Planning, Allocation & Monitoring.

#### **REFERENCE BOOKS:**

1. Software Project Management : Bob Hughes and Mike Cotterell- Tata McGraw Hill
2. Software Engineering a Practitioner's Approach Roger S Pressman Tata McGraw Hill
3. Introduction to Software Project Management & Quality Assurance : By Ince, Dorrel, Helen Sharp & Mark Woodman
4. Software Engineering Ian Sommerville, Addison Wesley, 2004
5. Managing Software Development Projects
  - A formula for Success
  - By Whitten Neal
6. Mythical Man Month Essays on Software Engineering
7. Software Project Management From Concepts to Deployment Kieron Conway Dreamtech Publications

## **SUBJECT CODE TQ-06**

### **SUBJECT: PRODUCT DESIGN AND PRODUCT OPTIMIZATION**

#### **BLOCK I: PRODUCT DESIGN AN OVERVIEW**

Unit 1: Product Development Verses Design, modern Product Development Theories

Unit 2: Establishing product Functions.

Unit 3: Understanding Customer needs, Functional Decomposition & modeling  
Process

Unit 4: Functional Modeling Methods.

#### **BLOCK II: PRODUCT PORTFOLIOS**

Unit 1: Portfolio Architecture

Unit 2: Types, Platform, Functional Architecting,

Unit 3: Optimization Selection

Unit 4: Product Modularity, Modular Design.

#### **BLOCK III: DESIGN FOR MANUFACTURING AND ASSEMBLY.**

Unit 1: Design for the Environment, Design for Assembly

Unit 2: Piece Part Production, Cost Analysis, Environmental Objectives

Unit 3: Life Cycle Assessments

Unit 4: Techniques to Reduce Environmental Impact

#### **BLOCK IV: ANALYTICAL AND NUMERICAL SOLUTIONS**

Unit 1: Solution Definition, Spread Sheet Search

Unit 2: Analytical Formulation, Practical Optimization,

Unit 3: Numerical Search, Stopping Criteria.

Unit 4: Product Applications. Sensitivity Analysis Global Optimality

#### **BLOCK V: CONCEPTS AND MODELING**

Unit 1 Generation of Concepts, Information Gathering and Brain Storming

Unit 2: Concept Selection Process, Selection Charts

Unit 3: Measurement Theory, Numerical Concept Scoring, Design Evaluation  
Scheme,

Unit 4: Physical Prototyping, Informal and Formal Models.

#### **REFERENCES:**

1. Product Design : fundamentals and methods NFM Roozenburg, J Eekels, John Wiley and sons Ltd. Price Rs. 2265.00
2. Product Design for Manufacturing and Assembly Geoftry Boothroyd, Peter dewhurst, Winstn Knight Marcel Dekker Inc., USA. Price Rs.8201.00
3. Product Design: A practical guide to systematic methods of new product development, Mike Baxter, Champman and Hall. Price Rs1436.00.
4. Product Design and manufacturing, AK Chitale; R.C. Gupta, Prentice Hall India. Price Rs.250.00
5. Product Design and Manufacturing John R.Lindbeck, Prentice Hall International Editime. Price Rs.1001.00
6. Product Design :Techniques in Revenue Engineering and New product development, Kevin Otto, Kristin wood Pearson Education Inc. Price Rs.495.00

## **SUBJECT CODE TQ-07**

### **SUBJECT: QUALITY MANAGEMENT SYSTEMS AND METHODS**

#### **BLOCK I: INTRODUCTION OF QUALITY MANAGEMENT**

- Unit 1: Quality Management: Benefits, awareness and Obstacles
- Unit 2: Quality Vision, Mission and Policy statements
- Unit 3: Customer Focus- Customer Perception of Quality
- Unit 4: Customer Retention

#### **BLOCK II: PRINCIPLES AND PHILOSOPHIES OF QMS**

- Unit 1: Overview of the Contributions of Deming
- Unit 2: Concepts of Quality circle
- Unit 3: Methodology of Quality management
- Unit 4: Various Philosophies of Quality Management

#### **BLOCK III: TOOLS FOR QUALITY MANAGEMENT.**

- Unit 1: Quality Functions Development (QFD)
- Unit 2: Benefits, Voice of Customer & House of Quality (HOQ)
- Unit 3: QFD Process
- Unit 4: FEMA: Design, Process and Documentation

#### **BLOCK IV: TECHNIQUES FOR QUALITY MANAGEMENT**

- Unit 1: Introduction of Taguchi Techniques
- Unit 2: Parameter and Tolerance Design
- Unit 3: Seven New Management Tools
- Unit 4: Bench Marking and POKA YOKE

#### **BLOCK V: QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION**

- Unit 1: Quality Management Systems: IS/ISO 9004:2000
- Unit 2: Guidelines for Performance Improvements
- Unit 3: Internet and Electronic Communication
- Unit 4: Information Quality Issues

#### **REFERENCES:**

1. William J.Kolarii, Creating quality, Mcgraw Hill, 1995
2. Poornima M.Charantimath., Total quality management, Pearson Education, First Indian Reprint 2003.
3. Rose J.E. Total Quality Management, Kogan Page India Pvt Ltd, 1993.
4. Indian standard quality management systems Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.
5. Dale H.Besterfield et al, Total Quality Management, Thrid edition, Perarson Education (First Indian Reprints 2004)
6. Shridhara Bhat K, Total Quality Management Text and Cases, First Edition 2002, Himalaya Publishing House.
7. James R.Evans & William M.Lidsay, The Management and Control of Quality, (5th Edition), South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).
8. Feigenbaum.A.V. "Total Quality Management, McGraw-Hill, 1991.
9. Narayana V. and Sreenivasan, N.S. Quality Management – Concepts and Tasks, New Age International 1996.

## **SUBJECT CODE TQ-08**

### **SUBJECT: ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **BLOCK I: MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES**

Unit 1: Introduction

Unit 2: Definition, Scope & Importance of Environmental Studies

Unit 3: Need for Public Awareness

Unit 4: Concept of Green Technology

#### **BLOCK II: ENVIRONMENTAL CONSERVATION AND MANAGEMENT**

Unit 1: Forest and Water Resources

Unit 2: Food and Land Resources

Unit 3: Mineral and Energy Resources

Unit 4: Resource Management & Sustainable Development

#### **BLOCK III: ENVIRONMENTAL POLLUTION & CONTROL.**

Unit 1: Air Pollution: Types, Sources, Effects and Problems

Unit 2: Water Pollution: Classification, Sources, and Treatment

Unit 3 Solid Waste Pollution Types, Waste treatment and Disposal methods;

Unit 4: Hazardous Wastes & Marine Pollution

#### **BLOCK IV: CHEMICAL TOXICOLOGY**

Unit 1 Toxic chemical in the environment

Unit 2: Impact Of Toxic Chemicals On Enzymes,,

Unit 3: Biochemical Effects of Arsenic, Cadmium, Lead, Chromium, Mercury.

Unit 4: Biochemical Effects of Pesticides

#### **BLOCK V: ENVIRONMENTAL MANAGEMENT SYSTEMS**

Unit 1: Objective, Components, Environmental Impact Assessment

Unit 2: Some Important Environmental Laws

Unit 3: Green Bench & Carbon Credits

Unit 4: Environmental Management system Standards- ISO 14000 series.

#### **REFERENCE BOOKS:**

1. Roger Perman et. al., Natural Resources & Environmental Economics, 2nd Ed., Longman, USA, 2000
2. Longman, USA, 2000
3. Stern, A.C. (1980), Air Pollution, Vol. 1-VIII, Academic Press.
4. James M., Lynch & Alan Wiseman, Environmental Bio-Monitoring : The Biotechnology Ecotoxicology Interface, Cambridge University Press, 1998.
5. John Glasson, Riki Therivel and Andrew Chadwick, Introduction to Environmental
6. Impact Assessment, 2nd Ed., UCL Press, Philadelphia, USA, 1994.
7. Richard K. Morgan, Environmental Impact Assessment: A Methodological Perspective, Kluwar Academic Publications, Boston, 1998.

8. Gabriel Bitton, Wastewater Microbiology, 2nd Ed., Wiley-Liss, New York, 1999.
9. Environmental Chemistry & Pollution Control, S. Chand & Co. (Latest ed.), By S.S. Dara
10. Environmental Chemistry, I.K. Publishers, 2007, Balaram Pani