Semester III

FT-301C: STRATEGIC MANAGEMENT

Level of Knowledge: Working knowledge.

Course Objectives:

- The aim of this subject is to impart an understanding to the student of MBA-3rd semester of the concept of Strategic Management. The course also seeks to prepare the student in analytical and decision-making skills whereby he/she can analyze real business problems in the form of case studies and take decisions accordingly.

Evaluation:

The course will have a weightage of 100 marks with 40 marks from internal assessment and 60 marks from External assessment. The Internal assessment will include marking on presentations, case studies, assignments, attendance and internal tests. The external main exam will consist of two sections—Section A will test the conceptual knowledge of the student and will be of 30 marks; Section B shall test the student's analytical and decision making skills by presenting one or two case studies of 30 marks.

Course Contents:

Unit 1: An Overview of Strategic Management:

- Understanding Strategy
- Defining and Explaining Strategy
- Levels at which Strategy operates
- Strategic Decision-making
- Schools of Thought on Strategy Formulation
- The Process of Strategic Management

Unit 2: Strategic Intent:

- Vision
- Mission
- Defining Business
- Goals and Objectives

Unit 3: The General Environment:

- General Environment
- Analyzing the Environment
- Diagnosis of Environment
- Environment Appraisal:
  - Concept of Environment,
  - Environment Sector & Scanning

- Organizational Appraisal:
  - Dynamics of Internal Environment
  - Methods & Techniques used for Organizational Appraisal

Unit 4: Corporate Level Strategies:

- Grand Strategies
- Stability Strategies
- Expansion Strategies—Diversification
- Mergers
- Takeovers
- Joint Ventures
- Strategic Alliances
- Retrenchment Strategies
- Combination Strategies

Unit 5: Business Level Strategies:

- Business level Strategies
- Generic business,
- Tactics for Business strategies.

Unit 6: Strategic Analysis and Choice:

- The process of Strategic Choice
- Corporate level Strategic Analysis:
  - Corporate Portfolio Analysis- BCG Matrix
  - GE matrix
  - Hofer's Product/Market Evolution Matrix
  - Directional Policy Matrix
- Business Level Strategic Analysis-Experience Curve Analysis:
  - Life Cycle Analysis
  - Industry analysis
  - Porter's Five Forces Model of Industry Attractiveness
  - Strategic group analysis
  - Competitor analysis
  - Coming to a Strategic decision.

Unit 7: Strategy Implementation:

- Activating Strategies:
  - Interrelationship between Formulation & Implementation
  - Project & Procedural Implementation
  - Resource Allocation
- Structural Implementation:
  - Structures for Strategies
  - Organization Design & Change
- Behavioral Implementation:
  - Leadership Implementation

- Corporate Culture, Politics
- Personal Values, Social Responsibility & Business Ethics

- Functional & Operational Implementation:
  - Functional Strategies
  - Functional, Financial, Marketing, Operational & Personal Plans
  - Functional, Financial, Marketing, Operational & Personal Policies
  - Operational Implementation

Unit 8: Strategic Evaluation & Control:

- An overview of Strategic Evaluation and Control
- Strategic & Operational Control
- Techniques of Strategic Evaluation & Control

Text Readings:

1. Azhar Kazmi, *Business Policy and Strategic Management*, 2nd Ed., Tata-McGraw Hill
2. Lawrence R. Jauch, Rajiv Gupta and William F. Glueck, *Business Policy and Strategic Management*, 7th Ed., Frank Bros and Co.,
3. Thompson and Strickland, *Strategic Management-Concepts and Cases*, 12th Ed. Tata McGraw Hill.

FT-302C: PROJECT MANAGEMENT

Level of Knowledge: Expert Knowledge

Course Objectives:

- To acquaint students with project management method and to develop skills on project planning, analysis implementation and control.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination, carrying 60 marks will have two Sections, A and B. Section A, worth 24 marks, will consist of four theory questions out of which a student will be required to answer any two. Section B, worth 36 marks, will have five practical/ Numerical problem(s)/ or cases, out of which a student will be required to attempt any three. Each question will carry equal marks. A question may have one or more sub-parts.

Course Contents:

Unit 1: Project Planning and Phases:

- Need and importance
- Phases of capital budgeting
- Project analysis facts
- Resource allocation framework:
  - Investment strategies
  - Portfolio planning tools
  - Interface between strategic planning and capital budgeting
- Generation and Screening of Project Ideas.

Unit-2: Project analysis:

- Market and demand analysis (Including demand forecasting)
- Technical Analysis and Financial Analysis:
  - Cost of Project
  - Working capital requirement & its financing.

Unit-3: Project Selection:

- Project cash flows
- Time value of money
- Cost of capital
- Appraisal criteria

- Analysis of Risk.

Unit-4: Project Management and Control:

- Project Organizations
- Planning and Control of project
- Human aspects of project management
- Project control tools:
  - Gantt Charts
  - Line off Balance

Unit-5: Network techniques for Project Management:

- Basic concepts of networks
- line estimation and determination of critical path:
  - PERT models
  - CPM models
- Network cost systems and activity crashing
- Resource leveling.

Unit-6: Project Review: Need for reviews:

- Initial review
- Performance evaluation
- Abandonment analysis,
- Evaluating the capital budgeting systems.

Text Reading:

1. Prasanna Chandra. "Project Planning, Analysis, Selection, Implementation and Review", New Delhi, Tata McGraw Hill Publications, 2007.
2. Vasant Desai "Project Management" Mumbai, Himalaya Publishing House, 2007.
3. R.Panneerselvam and P.Senthilkumar "Project Management" New Delhi, PHI Learning Private Ltd.,2009.

Suggested Reading:

1. N.P.Agrawal and B.K. Mishra "Project Management" New Delhi, Ramesh Book Depot, 2008.
2. Bhaveh M Patel "Project Management" New Delhi, Vikas Publishing house Pvt. Ltd.2000.

FT 303 CA- SUMMER TRAINING PROJECT

Level of Knowledge: Expert Knowledge

Course Objectives:

- The Summer Training Project aims to widen the student's prospective by providing an exposure to real life organizational & environmental situations. It is positioned between first and second year (at the end of second semester).

Duration: 30 - 45 Days

Scheme of Examination:

After completing SIP the student gives the presentation and viva voce as part of evaluation.

Internal Examination Process:

1. Submission of Report
2. Presentation
3. Viva -Voce

FT303 CB: MAJOR RESEARCH PROJECT PHASE I (SYNOPSIS, DATA COLLECTION)

Level of Knowledge: Expert Knowledge

Course Objectives:

- To help the students to understand the Concept and Methods of Business Research.
- To familiarize the students and give them exposure of Synopsis design, objectives formulations and methodology to be used for data analysis.
- To guide the students in questionnaire design and giving the exposure of data collection
- To provide the knowledge to the students so that they will be able to plan, design
- and execute research proposals
- To familiarize the students with the various methods of data analysis and prepare the research reports.

Scheme of Examination:

Total Marks: 100
Internal Marks: 50
External Marks: 50

Activities and Marks Distribution:
In the third semester, each student will be allocated guide in their respective specialization. Students will finalize the topic of MRP with the guide and prepare synopsis in the standard format prescribed by the institute/concerned faculty time to time**.**

General format of the synopsis should be:

- Cover page containing the research topic, name of Institute with logo, Name of Guide and Student.
- Introduction/Conceptual Framework
- Review of Literature
- Objectives
- Methodology (Universe, Sample, hypothesis (if any), research design (if any)Tools for data collection and analysis)
- Expected Outcomes
- References in APA Style

Internal Marks (50):

- Synopsis submission to coordinator duly approved by Guide (10 Marks) to be awarded by the faculty/coordinator

- Presentation of Synopsis (10 Marks) to be awarded by a panel consisting of an expert and/or coordinator and Guide
- Presentation of Questionnaire (10 Marks) to be awarded by a panel consisting of an expert and/or coordinator and Guide
- Submission of collected data and synopsis in Spiral form (10 Marks) to be awarded by Guide
- Evaluation of data (10 marks) by Guide

External Marks (50):

There will be external evaluation by the external examiner and internal examiner appointed by the Principal.

FT-304 M PRODUCT & BRAND MANAGEMENT

Level of Knowledge: Working Knowledge

Course Objectives:

- To help student understand the concepts of Product & a Brand, various tools and models used for challenges faced by today's managers.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

External examination will have 9 questions out of which a student has to attempt five. In the external examination, there will be two sections A and B. Section A, worth 24 marks, will consist of four theory questions out of which a student will be required to answer any two. Section B, worth 36 marks, will have five practical/ Numerical problem(s), out of which a student will be required to attempt any three. Each question will carry equal marks. A question may have one or more sub-parts.

Unit 1: **Introduction to Product:**

- Product focused organization
- Market focused organization
- Buyer Behavior Models
- The Adaptation & Diffusion of new product development
- Seven stages of PLC
- Managerial Application of PLC

Unit 2: New Product Development:

- New Product Development Models
- New Product Development Process
- New Product Strategy
- Screening New Product Ideas
- Business Analysis & Product Testing

Unit 3: Product Management:

- Commercialization(Test Marketing & Launching New Product)
- Resistance to change
- Leveraging new product growth
- Maturity : Its Nature & Causes
- Extending PLC

Unit 4: Product Elimination:

- The Importance, Reasons & Scope of Product Deletion
- Identification & Evaluation of Deletion Products
- Implementing the Deletion Decision

Unit 5: Introduction to Brand:

- Brand
- Brand Reflection
- Commodities Vs brands
- Brand Name
- Developing appropriate Brand Strategies
- Hofstele Model for understanding Core Value of Brand
- Brand Significance

Unit 6: Brand Equity:

- Criteria of choosing Brand Elements
- Concept & Principle of Brand equity
- Communication Mix Strategy
- Measuring & Interpretation Brand Performance

Unit 7: Various Terms associated with Brand:

- Brand Positioning
- Brand Personality
- Brand Loyalty
- Brand Image
- Brand Building
- Brand Extension
- Brand Image
- Brand Valuation
- Strategic Brand Management & Global Branding

Text Reading:

1. Product Strategy and Management – Michael Baker, Susan Hart, Pearson Education Publication
2. Product management - Donal R. Lehmann, Russel S. Winer Tata Macgraw Hill
3. Brand Management: Y L R Murthy Vikas Publication
4. Strategic Brand Management - Kevin Lane Keller
5. Brand Management: S A Chunawalla

Suggested Reading:

1. Brand Management: U C Mathur Macmillan
2. Brand Management: S L Gupta Himalaya Publishing House
3. Brand Positioning Strategies for Competitive Advantage -Subrato Sen Gupta
4. Brand Management: Ajay Kumar

FT 305 M CONSUMER BEHAVIOUR

Level of Knowledge: Working Knowledge

Course Objective:

- To familiarize the students with the Basic Concepts of Supply Chain Management
- To Make the students understand the Role of IT in Supply Chain Management

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination will have Two Sections. Section A will carry 36 Marks Comprising 5 Theory questions out of which a student will be required to attempt any three questions. Section B will carry 24 Marks comprising of one or more Case(s).A question can have one or more sub-parts.

Course Contents:

Unit 1: Introduction to Consumer Behavior:

- Definition, Nature, Scope, Orientation in the study of Consumer behavior & Applications
- Understanding Product, Consumers, Market Strategy and Segmentation & Product Positioning

Unit 2: Environmental Influences on Consumer behavior:

- Culture, Sub Culture, Cross cultural understanding , Social Class and consumer behavior, Significance of Family in consumer behavior, Personal Influence and Diffusion of Innovations ,Life style Marketing ,Personal influence and the opinion Leadership Process

Unit 3: Consumer as an Individual:

- Consumer Needs & Motivation, Consumer Personality and Self Concept , Consumer Perception
- Nature of Consumer attitude, Changing attitude, Consumer attitude formation and change, The process of learning Consumer behavior

Unit 4: Consumer Decision Process:

- Pre-Purchase Process: Information processing(Concept of Consumer Research ,Importance ,Process & Design)
- Post Purchase Process : Consumer Decision rules (Consumer Buying Process, Stages, Participants ,Industrial/Organizational buying behavior)

- Post purchase Process : Framework, Dissonance Satisfaction/ Dissatisfaction

Unit 5: Consumer Behavior models:

- Nicosia model
- Howard Sheth Model
- Engel-Blackwell and Miniard Model
- Sheth Family and decision making Model

Unit 6: CRM:

- CRM and Consumer Behavior, Consumer Roles market value & CRM
- Communication, Advertising & Consumer behavior
- Consumerism &public Policy issues

Books Recommended:

1. David L. Loudan and Albert J. Della Biita, *Consumer Behavior,* New York, McGraw Hill, 4th Edition 1993
2. Leon G. Schiffman and Leslie lazar Kanuk, *Consumer Behavior*, London, Prentice Hall, 6Th Edition 1995.
3. Dr. S.L. Gupta and Sumitra Pal ,An Indian Perspective, *Consumer Behavior, Text & Cases*
4. Satish K Batra and S H H Kazmi, Consumer Behaviour, *Text & Cases*

Suggested Readings:

1. William L. Wilkie, Consumer *behavior*, New York, John Wiley and Sons, 3rd Edition, 1994.
2. Dish Sheth, Banwari Mittal and Bruce I. Newman, Consumer behavior and Beyond, 1999.

FT-306 M ADVERTISING & SALES PROMOTION

Level of Knowledge: Working Knowledge

Course Objectives:

- To help student understand the concepts of Advertising, Sales, Sales Promotion & various tools and models used for challenges faced by today's managers.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

External examination will have 9 questions out of which a student has to attempt five. In the external examination, there will be two sections A and B. Section A, worth 24 marks, will consist of four theory questions out of which a student will be required to answer any two. Section B, worth 36 marks, will have five practical/ Numerical problem(s), out of which a student will be required to attempt any three. Each question will carry equal marks. A question may have one or more sub-parts.

Unit 1: Advertising – An Introduction:

- Origin and Development,
- Marketing Mix & Advertising,
- PLC & Advertising, Indian Advertising,
- Functions & Benefits of Advertising,
- Advertiser's Role in Organising for Advertising,
- Advertising Agency,
- Agency Structures,
- Agency Compensation & Evaluation.

Unit 2: **Copy Decisions**:

- Visualization of Ad Layout,
- Preparation of Layout I & II,
- Advertising Copy for Print Media,
- Copywriting for Radio,
- TV & Outdoor Media,
- Styles and Stages in advertising copy creation -Copy (Pre-) Testing methods and measurements.

Unit 3: **Branding Environment:**

- Segmentation & Positioning,
- Brand Awareness & Brand Attitudes & Feelings,

- Brand Image,
- Equity & Personality,
- Advertising Objectives & Budget Allocation

Unit 4: Media Planning & Strategy:

- Types of media,
- Identifying the Target Market,
- Establishing Media Objectives,
- Develop & Implementing Media Strategies.
- Media Evaluation:
  - Television,
  - Buying TV Time,
  - Audience Measures, Radio,
  - Newspapers,
  - Newspaper Advertising & Types,
  - Purchasing, Circulation & Readership,
  - Purchasing Space.
- Planning Advertising Campaign

Unit 5: Introduction to Sales Promotion:

- Definitions-Sales Promotion,
- Promotion Mix,
- Factor Influencing Sales Promotion Growth
- Advantages & Drawbacks of Sales Promotion,
- Promotion of Sales Force.

Unit 6: Sales Planning & Promotion:

- How Sales Promotion Affects Sales,
- Sales Promotion Objectives & Budget Allocation,
- Sales Promotion Design Issues,
- Planning Guidelines & Evaluation

Unit 7: Sales Promotion-Tools & Techniques:

- Types of Sales Promotion,
- Sales Promotion Tools & Technique,
- Price Deals,
- Price-Packs,
- Refunds & Rebates,
- Coupons,
- Contests & Sweepstakes,

- Product Sampling,
- Trade Coupons,
- Exchange or Buyback Offers

Text Reading:

1. S H H Kazmi & Satish K Batra: Advertising & Sales Promotion
2. Foundations of Advertising S A Chunawalla K C Sethia
3. Aaker, Batra & Myers: ADVERTISING MANAGEMENT; Prentice Hall India.

Suggested Reading:

1. Wright, Winter & Zeigler: ADVERTISING; Tata McGraw Hill.
2. Wells, Burnett &Moriarty: ADVERTISING PRINCIPLES AND PRACTICES, Prentice-Hall

3. Sandage,Fryburger&Rotzoll:ADVERTISING;Irwin.
4. J. T Russel & Ronald Lane: KLEPPNER'S ADVERTISING PROCEDURE; Prentice Hall.
5. Don E. Schultz: STRATEGIC ADVERTISING CAMPAIGNS; NTC Business Books.

FT304F- BUSINESS TAXATION

Level of Knowledge: Expert knowledge

Course Objectives:

- To Lay a Conceptual Framework for Business Taxation
- To develop an ability in the student to apply theoretical concepts with Practical life problems

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

Section A: 24 Marks Comprising Three Theory questions out of which a student will be required to attempt any Two Questions.

Section B: 36 Marks Comprising Four Practical Problems out of which a student will be required to attempt any Three questions.

Course Contents:

Applicable Assessment Year 2010-11, Previous Year 2009-10.

Unit 1: Basic Concepts and framework of Income tax Act, 1961:

- Framework
- Definitions under Income Tax Act ,1961
  - Assessment Year
  - Previous Year
  - Income
  - Person
  - Assessee
- Residential Status and Incidence of Tax

Unit 2: Income under the 'head Income from Salaries:

- Basis Of Charge
- Meaning
- Terms Taxable as Salary:
  - Advance Salary
  - Leave Encashment/Salary
  - Bonus
  - Gratuity
  - Pension

- Taxability of Allowances U/s 10(14) and Rule 2BB:
  - House Rent Allowance U/s 10(13A)
  - Traveling allowance
  - Conveyance Allowance
  - Daily, Helper, Uniform allowance
  - Children education allowance (Rule 2BB)
  - Transport allowance(Rule 2BB)
- Taxability of perquisites:
  - Concept of Specified and Non specified employee
  - Valuation of Rent-free unfurnished and furnished accommodation
  - Leave Travel Concession
  - Free Education
  - Lunch/refreshments
- Permissible deduction:
  - Entertainment Allowance
  - Professional Tax
- Simple problems based on the computation of Income from Salaries

Unit 3: Income under the head 'income from House property:

- Basis of Charge
- Concept of House property:
  - Concepts of Municipal Valuation, Fair Rent, Standard rent
  - Determination of Gross and Net Annual value
- Deductions u/s 24:
  - Standard deduction
  - Interest on Borrowed capital
- Special Cases:
  - One House property Partly Let out and Partly Self occupied
  - More than One House, Deemed to be let out
- Simple problems based on the computation of Income from house property

Unit 4: Income under the head 'Profit and gains of business and professions:

- Basis Of charge
- Basic concepts and principles
- Specific allowances:
  - Rent, Rates , Taxes, Repairs, Insurance for building u/s 30
  - Repairs and insurance of Machinery plant and furniture u/s 31
  - Depreciation u/s 32 and concept of block of Assets
  - Expenditure on scientific research u/s 35
  - Amortization of Preliminary expenses u/s 35D
  - Interest on borrowed capital 36(1)(iii)

- Bad Debts u/s 36(1)(vii)
- Conditions under Section 37(1)

- Specific disallowances:
  - Income tax , Wealth Tax, Security Transaction Tax
  - disallowances in respect of expenditure exceeding Rs. 20,000 U/s 40A(3) and exception in Rule 6DD
- Special Provisions of Section 44AD,44AE,44AF
- Maintenance of Books of accounts U/s 44AA
- Tax Audit U/s 44AB

Unit 5: Income under the Head 'Income from Capital Gains:

- Basis Of Charge
- Concepts:
  - Capital Assets
  - Short term and Long Term Capital Assets
  - Cost of Acquisition and Improvement
  - Indexation
  - Transfer
  - Full Value of Consideration
- Simple problem based on Computation of Capital gains (Including Shares)
- Deduction:
  - Capital gain arising from the transfer of residential house property u/s 54,
  - Capital gain arising from the transfer of land used for agricultural purposes u/s 54B ,
  - Capital gain not to be charged on investments in certain bonds 54EC ,
  - Capital gain arising from the transfer of a long term capital asset other than a house property u/s 54F

Unit 6: Income under the head 'Income from Other Sources:

- Basis of Charge
- Concepts and Few examples of Income from other sources
- Taxability of :
  - Income from Lottery, Horse race Puzzles and card games
  - Interest on securities
  - Simple concepts relating to dividend and dividend distribution Tax

Unit 7: Permissible Deductions under Chapter VIA:

- Deductions relating to:
  - Section 80C relating to various investments
  - Section 80CCC Pension fund
  - Section 80D in respect of medical insurance premium
  - Section 80DD relating to dependent being a person with disability

- Section 80DDB relating to medical treatment
- Section 80E in respect of repayment of Education loan

Unit 8: Return of Income and TDS:

- Basic concepts relating to filing of return:
  - Filing of return U/s 139(1)
  - Concepts relating to PAN u/s 139A
  - Tax return preparers Scheme 139B
- Tax Deducted at Source:
  - TDS provisions relating to Salary u/s 192
  - Interest on securities u/s 193
  - Interest , other than Interest on securities u/s 194A
  - Payment to Contractors U/s 194C
  - Rent U/s 194-I

Text Readings:

1. Student guide to Income Tax Dr. V.K Singhania Dr.Monica Singhania, Taxman publications
2. Income Tax S.C., Saklecha, Satish Publication House

Suggested Readings:

Direct Taxes ,T.N Manoharan, Snow White Publications

FT305F: FINANCIAL ENGINEERING

Level of Knowledge: Expert knowledge

Course Objectives:

- To Lay a Conceptual Framework for Financial Engineering
- To develop an ability in the student to apply theoretical concepts with Practical life problems

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

Section A: 24 Marks Comprising Three Theory questions out of which a student will be required to attempt any Two Questions.

Section B: 36 Marks Comprising Four Practical Problems out of which a student will be required to attempt any Three questions.

Course Contents:

Unit 1: Introduction to Derivatives:

- Concept and terminology of derivatives
- Types of derivatives:
  - Future
  - Forward
  - Options
  - Swaps
- Concept of Participants:
  - Hedgers
  - Speculators
  - Arbitragers
- Use of Derivatives
- Types of Order

Unit 2: Futures Contract:

- Concepts relating to futures
- Difference between futures and forward Contracts
- Concept of Margin, Clearing house, Hedging
- Types of futures:
  - Stock Index futures
  - Interest rate futures

- Foreign exchange and currency futures etc.

- Simple problems based on valuation of futures

Unit 3: Option Contracts:

- Concept and Meaning of Options
- Types of Options:
  - Call Option
  - Put Option
- Various trading Strategies Involving Bull and Bear
- Preparation of Pay-Off table/schedule from the point of view of:
  - Holder
  - Writer
- Valuation of Options using:
  - Black-Schole model
- Concepts of Delta Theta Gamma Vega
- Exchange Traded Options:
  - Stock Option
  - Foreign currency options

Unit 4: Swaps:

- Introduction and meaning of Swaps
- Mechanics of Swaps transactions
- Interest rate Swap
- Currency rate swaps

Text Readings:

1. John C Hull, Options, Futures and Other Derivatives, New Delhi Pearson Education Asia publication.
2. Derivatives, SSS Kumar, Prentice Hall Pvt Ltd.
3. N D Vohra , B R Bagri, Tata McGraw Hill Publication

Suggested Readings:

Derivatives, Robert A Strong, Thomson Publications

FT-306F WORKING CAPITAL MANAGEMENT

Level of Knowledge: Expert Knowledge

Course Objectives:

- To Lay a Conceptual Framework for Working Capital Management
- To develop an ability in the student to apply theoretical concepts with Practical life problems

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

Section A: 24 Marks Comprising Three Theory questions out of which a student will be required to attempt any Two Questions.

Section B: 36 Marks Comprising Four Practical Problems out of which a student will be required to attempt any three questions.

Course Contents:

Unit 1: Basic Concepts and overview of Working capital:

- Concept and definition of working capital
- Need of working capital
- Components of Working capital
- Meaning of Operating cycle, Current Assets and Current liabilities

Unit 2: Computation of Working Capital:

- Simple problems relating to computation of working capital using
  - Operating Cycle method
  - Current assets and Current liabilities Method using:
    - Normal Problems
    - Cash Cost Method
- Mini Cases based on Working Capital

Unit 3: Cash Management:

- Introduction and basic concepts
- Objectives of Cash Management
- Measurement of Cash using:
  - Baumol Model
  - Miller-Orr Model

- Preparation of Cash Budget
- Concept of Cash Management Techniques
- Mini Cases based on Cash Management

Unit 4: Inventory Management:

- Basic Concepts
- Trade-off Between cost and benefit associated with level of Inventory
- Techniques for managing Inventory and problems based on:
  - EOQ Model
  - ABC Analysis
  - Pareto Analysis
- Inventory Management using the following Methods and problems based on:
  - First in first out (FIFO)
  - Last in first out(LIFO)
  - Weighted average
  - Base Stock Method
- Computation of Stock out Costs and problems based on Stock out
- Mini Cases based on Inventory Management

Unit 5: Receivable Management:

- Basic Concept
- Category of Cost Related to receivables
- Concept of Credit Policy and Bad debts
- Concept of Factoring
- Problems based on:
  - Effect of change in Credit Policy
  - Using Factoring
- Mini Cases based on Receivable Management

Unit 6: Working Capital Financing:

- Trade
- Bank Credit:
  - Cash Credit/Over draft
  - Bill purchase/discounted
  - Terms loans
  - Letter of Credit
  - Hypothecation, Pledge ,Mortgage, charge
- Commercial Paper
- Certificate of Deposit

- Factoring
- Mini Cases based on Working Capital Financing

Text Readings:

1. I M Pandey, Vikas Publication House Pvt. Ltd.
2. Prasanna Chandra, Tata McGraw-Hill Publishing Company Ltd.

Suggested Readings:

M Y Khan and P K Jain, Text and Problems and Cases Tata McGraw-Hill Publishing Company Ltd.

FT-304 H: INDUSTRIAL RELATIONS AND LABOUR LAWS

Level of Knowledge: Working Knowledge

Course Objective:

- To expose the student to the multidimensional complexities of industrial relations to enable him to develop the right perspective of this delicate responsibility to deal with union constructively.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination will have Two Sections. Section A will carry 36 marks Comprising 5 Theory questions out of which a student will be required to attempt any three questions. Section B will carry 24 Marks comprising of one or more Case(s).
A question can have one or more sub-parts.

Course Contents:

Unit 1: Industrial Relations in India:

- Overview
- Approaches to Industrial Relations
- Industrial Disputes Act, 1947

Unit 2: Workers Participation in Management:

- Meaning
- Objectives
- Essential Conditions
- Forms
- Reasons for Limited Success and Suggestions for Improvement
- WPM in India

Unit 3: Collective Bargaining:

- Meaning
- Functions
- Process
- Importance of Collective Bargaining to Employer and Employees

Unit 4: Trade Union:

- Meaning
- Functions
- Problems
- Trade Union Movement in India
- Trade Union Act, 1926

Unit 5: Factories Act, 1948

Unit 6: E.S.I.C Act, 1948.

Unit 7: Payment of Gratuity Act, 1972

Unit 8: Contract Labour (Regulation and Abolition) Act, 1970

Text Readings:

1. R.C. Chawla and K.C. Garg, Industrial Law, Ludhiana, Kalyani Publichers, 1993.
2. N.D. Kapoor, Handbook of Industrial Law, Sultan Chand & Sons, New Delhi.

Suggested Reading:

1. J.K. Bareja, Industrial Law, New Delhi, Galgotia Publishing Co., 2001.

FT 305 H: HUMAN RESOURCE AND ORGANISTIONAL DEVELOPMENT

Level of Knowledge: In-depth Knowledge

Course Objective:

- To help the students develop an understanding of the need and methods of HRD & importance of Organization Development. The course is also intended to give insights in the design, development and delivery of HRD & OD Programmes.

Scheme of Examination:

Total Marks :100
Internal Marks : 40
External Marks: 60

The External Examination will have Two Sections. Section A will carry 36 marks Comprising 5 Theory questions out of which a student will be required to attempt any three questions. Section B will carry 24 Marks comprising of one or more Case(s).
A question can have one or more sub-parts.

Course Contents:

Unit 1: Basics of HRD:

- Definition
- Characteristics
- Historical Perspective

Unit 2: Employees' Acquisition and Development:

- Training and Development Needs
- Methods and Measuring its Effectiveness
- Career Planning & Development
- Performance Appraisals and Methods
- Coaching, Mentoring.

Unit 3: Behavioral Tools:

- FIRO-B
- Johari Window
- Transactional Analysis

Unit 4: **Organization Development**:

- Introduction
- Definition
- History

- Assumptions
- Values and Beliefs in Organization Development (OD) and Transformation.

Unit 5: Theory and Management of OD:

- Foundations of OD
- OD Process
- Action Research and OD

Unit 6: OD Interventions:

- Overview
- Types
- Team Interventions, Inter-Group Interventions, Comprehensive and Structural Interventions
- Choosing the Depth of Organizational Intervention.

Text Readings:

1. VSP Rao, Human Resorce Management, 2nd Edition, Excel Publications, A, 45, Naraina, Phase-I, New Delhi
2. David S. Decenzo and Stephen P. Robbins, Personnel/ Human Resource
3. Management, New Delhi, Prentice Hall, 3rd edition.
4. Wendell L. French and Cecil N. Bell Jr., Organization Development,
5. New Delhi, Prentice Hall, 5th Edition, 1999.

Suggested Readings:

1. Arun Monappa and Mirza S. Saiyadain, Personnel Management, New Delhi, Tata Mcgraw hill, 1995.
2. Don Harvey and Donald R. Brown, **An Experiential Approach to Organizational Development,** New Jersey, Prentice Hall Inc., 1996

FT-306 H: COMPENSATION AND REWARD MANAGEMENT

Level of Knowledge: Working Knowledge

Course Objective:

- To Familiarize students with the dynamics of wage and salary administration and current trends in India.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination will have Two Sections. Section A will carry 36 marks Comprising 5 Theory questions out of which a student will be required to attempt any three questions. Section B will carry 24 Marks comprising of one or more Case(s).
A question can have one or more sub-parts.

Course Contents:

Unit 1: Wage and Salary Administration:

- Definition
- Goals/Objectives
- Job Evaluation
- Wage and Salary Surveys
- Time and Piece Rate
- Merit Pay/ Skill Based Pay
- Factors Affecting Wage Concept of Pay of Performance.

Unit 2: Incentives Plans:

- Individual and Group Incentive Plans
- Productivity Gain Sharing Plans
- Profit Sharing Plans.
- Non Financial and Financial Incentives

Unit 3: Employee Benefits:

- Supplemented Pay Benefits(Pay for time not worked)
- Insurance Benefits
- Retirement Benefits
- Employees Service Benefits
- ESOPs
- Flexible Benefits

Unit 4: Governing Laws:

- Provident Fund Act 1952
- Minimum Wages Act, 1948
- Payment of Wages Act, 1948
- Payment of Bonus Act, 1965

Unit 5: Current Trends in Compensation and Reward Management:

Text Readings:

1. Garry Dessler, Personnel/ Human Resource Management, London, Prentice Hall, 1994
2. VSP Rao, Human Resorce Management, 2nd Edition, Excel Publications, A,45Naraina, Phase-I ,New Delhi
3. David S. Decenzo and Stephen P. Robbins, Personnel/ Human Resource Management, New Delhi, Prentice Hall, 3rd edition.

Suggested Reading:

1. William B. Werther Jr. and Keith Davis, Human Resource & Personnel Management, Singapore, McGraw Hill, 4th Edition. 1993

FT 304 I: OBJECT ORIENTED PROGRAMMING USING C++

Level of Knowledge: Working Knowledge

Course Objective:

Object Orientation is a new approach to understand the complexities of the real world. In contrast to the earlier approaches like procedural etc, object orientation helps to formulate the problems in a better way giving high reliability, adaptability and extensibility to the applications. This course offers the Modern Programming Language C++ that shall help the students to implement the various concept of Object Orientation practically. The students will be able to program in the Object Oriented Technology with the usage of C++.

Scheme of Examination:

Total Marks: 100
Internal Marks: 20
Practical Marks 20
External Marks: 60

There will be an internal assessment of 20 marks and external examination of 60 marks. External examinations will have 8 questions out of which a student has to attempt any five questions. Each question will carry equal marks.

Course Content:

Unit 1: Object Oriented Programming:

- Introduction
- Procedure Oriented Programming Vs. Object Oriented Programming (OOP)
- Overview:
  - Objects
  - Classes
  - Encapsulation
  - Data Binding
  - Inheritance and Polymorphism
  - Dynamic Binding
  - Message Passing.

Unit 2: Review of constructs of C used in C++:

- Variables
- Type Declarations:
  - User defined Data Types
  - Increment and Decrement Operators
  - Relational and Logical Operators

- If then else clause
- Conditional Expressions

- Input and Output statement:
  - Loops
  - Switch Case
  - Arrays
  - Structure
  - Unions
  - Automatic
  - External and Static Data Members and Member Function

- Pointers, Preprocessor Directives

Unit 3: Arrays & Pointers:

- Arrays of Objects
- Pointer to Object
- this Pointer
- Function:
  - General form
  - Prototypes
  - Returning
  - Passing Objects to Functions Returning Objects
  - Friend Function
  - Recursion
  - References.

Unit 4: Inheritance:

- Multilevel and Multiple Inheritance
- Constructor
- Destructor and Inheritance
- Private
- Public and Protected Access Specifies
- Function and Operator Overloading.

Unit 5: Templates:

- Virtual Function
- Pure Virtual Function
- Polymorphism
- Generic Functions
- Generic types
- Overloading of Templates and Functions
- Standard parameters with Template Functions
- Applying Generic Functions
- Generic Class

- File and Exception Handling
  - Introduction to Templates and Exception Handling
  - File Classes
  - Opening and Closing a file
  - Reading and writing a Text File
  - Detecting EOF

Text Readings:

1. E. Balagurusamy, **"Object Oriented Programming with C++"**, Tata McGraw Hill Pub. Co. Ltd., New Delhi, 2000
2. Robert Lafore, **"Object Oriented Programming in Turbo C++"**, Galgotia Pub. Pvt. Ltd., New Delhi, 2000

Suggested Readings:

1. Herbert Schildt, "C++ : The Complete Reference", Tata McGraw Hill Publishing Company Ltd., New Delhi, 1999
2. D. Ravichandran, "Programming with C++", Tata McGraw Hill Pub. Co. Ltd., New Delhi, 2000

FT- 305 I COMPUTER NETWORKS

Level of Knowledge: Expert Knowledge

Course Objective:

- The objective of this course is to help students to understand the concepts of Data Communication and Computer Networks and related issues and their use in organization and processing complex business information.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

Course Contents:

Unit 1: Computer Networks:

- Introduction
- Distributed Systems
- Network Goals & its Applications
- Protocol Hierarchies,
- Network Architecture
- Design Issues for the Layers:
  - Simplex
  - Half-duplex
  - Full-duplex
- Interfaces and Services:
  - Connection Oriented
  - Connection less Services
  - Service Primitives.

Unit 2: Reference Models:

- The OSI Reference Model
- The TCP/IP Reference Model
- Comparison and Critique o**f the OSI and TCP/IP Reference Models.**

Unit 3: Physical Layer:

- Concepts of Data Transmission
- Transmission media
- Guided and Unguided Media
- Digital and Analog Transmission
- Transmission Impairments

- Multiplexing:
  - TDM
  - WDM
  - FDM

- Switching Techniques:
  - Circuit
  - Packet and Message
  - Cellular Radio
  - Wireless Transmission
  - Modems
  - DSL
  - Cable Modem
- ISDN
  - Introduction
  - ISDN Channels
  - ISDN Layers
  - Services
  - Communication Satellites.

Unit 4: Data Link Layer:

- Framing, Error Control
- Flow Control
- Unrestricted Simplex
- Simplex Stop-and-Wait Protocol
- Sliding Window Protocols:
  - HDLC
  - SLIP
  - PPP
- Network Layer:
  - Internal Organization
  - Routing
  - Congestion
  - Routing:
    - Shortest Path
    - Multipath
    - Congestion Control Algorithm
    - Preallocation of Buffers
    - Choke Packets
    - Deadlocks and Services of Network Layer.
- Transport Layer:
  - Services of Transport Layer,
  - Transport Protocols
  - Connection Management.

Unit 5: Upper OSI layers:

- Session Layer and Transport Interaction
- Presentation Layer:
  - Translation
  - Authentication
  - Data Compression
- Application layers:
  - Message Handling System(MHS)
  - File transfer
  - Access and Management (FTAM)
- Transmission Technology:
  - Broadcast Networks
  - Point-to-Point Networks**:**
    - LAN
    - MAN & WAN Topologies
    - Wireless Networks
    - Internetworking
    - Introduction to Bridges
  - Routers
  - Switches
  - Gateways
  - Repeaters
  - Introduction Functioning and Services:
    - Novell Netware
    - Window NT
    - NOS (Network Operating Systems)

Text Reading:

1. Andrew. S. Tannanbaum, "Computer Networks", Prentice-Hall 2006.
2. Behrouz A. Forouzan, "Data Communication and Networking", Tata
3. McGraw Hill Pub. Co. Ltd., New Delhi, 2006.

Suggested Readings:

1. Martin, J., **"Computer Networks and Distributed Processing"**, Prentice-Hall, 1985.
2. Tom Sheldon, **"Encyclopedia of Networking"**, Tata McGraw Hill Pub. Co. Ltd., New Delhi, 1998.
3. William Stallings, **"Data and Computer Communication"**, Prentice Hall India, New Delhi, 2001.
4. William A. Shay, **"Understanding Data Communications and Networks"**, Vikas Publishing House, New Delhi, 2001.
5. Parag Diwan and Dharam Bir Singh, **"Computer Networks Driven e-Commerce Technologies"**, Excel Publisher Pvt. Ltd., New Delhi, 2000.

6. S. Keshav, **"An Engineering Approach to Computer Networking"**, Addision- Wesley Longman (Singapore) Pte. Ltd., New Delhi, 2001.
7. D.E.Comer, "Data and Network Communication" Delmar Thomson Learning Singapur 2000.

FT-306 I SOFTWARE ENGINEERING

Level of Knowledge: Expert Knowledge

Course Objective:

- The objective of this course is to help students to understand the basics of Software Engineering, Project Management, Software Quality and related issues and their use in organization and processing complex business information.

Scheme of Examination:

Total Marks : 100
Internal Marks : 40
External Marks : 60

Course Contents:

Unit 1: The Product and the Process:

- The Evolving Role of Software
- Software Characteristics A layered Technology
- Process
- Methods and Tools
- The Software Process
- Software Process Models
- Linear Sequential Model
- Prototyping Model
- RAD Model
- The Incremental Model
- The Spiral Model
- The Concurrent Development Model
- The Component-Based Development
- The Formal Methods Model
- Fourth Generation Techniques.

Unit 2: Projects Management Concepts, Software Process and Project Metrics:

- The Management Spectrum:
  - The People
  - The Product, The Process
- The Project Measures, Metrics, and Indicators
- Metrics in the Process and Project Domains
- Software Measurement
- Reconciling Different Metrics Approaches
- Metrics for Software Quality
- Integrating Metrics within the Software Engineering Process.
- Project Scheduling and Tracing:
  - Basic Concepts
  - The Relationship Between People and Effort
  - Defining a Task Set for the Software Project
  - Selecting Software Engineering Tasks
  - Refinement of Major Tasks
  - Defining a Task Network, Scheduling
  - Earned Value Analysis
  - Error Tracking
  - The Project Plan.

Unit 3: Software Project Planning, Risk Analysis and Management:

- Observations for Estimation
- Project Planning Objectives
- Software Scope, Resources
- Software Project Estimation
- Decomposition Techniques
- Empirical Estimation Models
- The Make/Buy Decision
- Automated Estimation Tools
- Reactive versus Proactive Risk Strategies:
  - Software Risks
  - Risk Identification
  - Risk Projection
  - Risk Refinement
  - Risk Mitigation, Monitoring, and Management,
  - Safety Risks and Hazards.

Unit 4: Software Quality Assurance:

- Quality concepts, the quality movement
- Software quality assurance, software reviews
- Formal technical reviews
- Formal approaches to SQA
- Statistical software quality assurance

- Software reliability, mistake-proofing for software
- The ISO 9000 quality standards
- SQA Plan

- Software Testing Techniques & Strategies:
  - Objectives white box testing methods
  - Black box testing
  - Testing for specialized environments
  - Architectures
  - Applications
  - A strategic approach to software testing, strategic issues
  - Unit Testing, Integration Testing
  - Validation Testing
  - System Testing and the Art of Debugging.

Unit 5: Analysis & Design Concepts and Principles:

- Mechanics of structured analysis
- Data flow design and Entity Relationship design
- Overview of Object Oriented Design Concepts
- Design Concepts and principles
- Effective modular design
- Data modeling.

- Client/Server Software Engineering, Re-engineering:
  - The Structure of Client/Server Systems
  - Software Engineering for Client/Server systems
  - Analysis modeling issues
  - Design for Client/Server systems and testing issues
  - Software Maintenance Software Re-engineering
  - Software reengineering process model
  - Reverse engineering

- Reverse engineering user interfaces restructuring:
  - Code restructuring
  - Data restructuring
  - Forward engineering
  - Economics of reengineering
  - Introduction to CASE.

Text Readings:

1. Roger S. Pressman, **"Software Engineering"**, 6th Ed., Mc Graw Hill Inc., New York, 2005.
2. Pankaj Jalote " **Software Engineering**" Narosa Publishing House 2nd Edition 1999
3. Ian Sommerville " **Software Engineering**" Pearson Education 7th Edition 2006.

Suggested Readings:

1. Martin L. Shooman, **"Software Engineering"**, McGraw Hill International Book
2. company, New Delhi, 1985
3. Richard E.Fairely, **"Software Engineering Concepts"**, Mc Graw Hill Inc. New York, 1997
4. G. Meyers, **"The Art of Software Testing"**, Willey-Inter-Science, 1979.
5. Bruce I. Blum, **"Software Engineering- A Holistic View"**, Oxford University Press, New York, 1992
6. uramah Finzi, "**Software Testing in Real World**", Addison-Wesley, New Delhi, 2000
7. Barbara ktchenham, **"Software Metrics"**, Blackwell, UK, 1996

FT-304 P: PRODUCTION PLANNING AND CONTROL

Level of Knowledge: Expert Knowledge

Course Objectives:

- The course is design to equip the students with the concepts of Production Planning and Control (PPC). The emphasis will be on the application of concepts and tools used in PPC for achieving efficiency and quality superiority.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination, carrying 60 marks will have two Sections, A and B. Section A, worth 36 marks, will have five theory questions, out of which students will be required to attempt three questions. Section B, worth 24 marks, will have one or more practical/ Numerical problem/ case(s). A question may have one or more sub-parts.

Course Contents:

Unit-1: Introduction to Production Planning and Control:

- Production Management Technologies
- Evaluation
- PPC
- PLC
- Appropriate Technology
- Decision in Production systems
- Planning Horizon Type decision
- Market Driven System:
  - Wheel and Hub
  - World Class Manufacturing
  - Lean Production
- Agile manufacturing and lean v/s Agile Need of PPC
- Functions of PPC
- Factors Influencing PPC in the Organization
- Manufacturing Methods
- Managerial Policies
- Pre-requisites of PPC.

Unit-2: Materials Planning and Control:

- Input Required for Materials Planning and Control

- Steps in Materials Planning and Control
- Techniques of Materials Planning and Control
- Machining Allowances, Make or Buy Decision
- Scientific Stock Control Techniques (Inventory Control Models).

Unit-3: Factors Influencing Process Planning:

- Step in Process Planning
- Process Selection
- Tools control.

Unit-4: Manufacturing resource planning (MRP II):

- Introduction
- Aggregate production planning
- Master production scheduling
- MRP II (Introduction, concepts)
- MRP II with Just in Time
- Choice of software
- Making MRP II system work
- Achieving business objectives with MRP

Unit-5: Scheduling:

- Factors Influencing Scheduling
- Working and Scheduling Charts
- Job Sequences:
  - n job on two machines
  - n job on three machines
- Project Scheduling
- Critical Ratio Schedulin
- Assignment Techniques (Assignment - Model).

Unit-6: Capacity Planning:

- Capacity Planning
- Integrated Production Planning and Control
- Push system
- Pull system
- Bottleneck
- Hybrid Push-Pull system.

Text Reading:

1. Jhamb L. C. “Production Planning and Control”, Pune: Everest Publications, 2001.
2. Hari Raghu Rama Sharma, “Production Planning and Control Concepts and Application”,
3. New Delhi: Deep and Deep Publications, 2000.

Suggested Reading:

1. Bill Scott, “Manufacturing Planning System”, London : McGraw-Hill Publications, 1995.
2. George W. Plossl, O. R. Licky’s. “Materials Requirement Planning”, New York:
3. McGraw-Hill Publications, 1994.

FT-305 P: BUSINESS PROCESS REENGINEERING

Level of Knowledge: Expert Knowledge

Course Objectives:

- To help student understand the concepts of Business Process Reengineering, various tools and models used for problems faced by managers.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination, carrying 60 marks will have two Sections, A and B. Section A, worth 36 marks, will have five theory questions, out of which students will be required to attempt three questions. Section B, worth 24 marks, will have one or more case(s). A question may have one or more sub-parts.

Course Contents:

Unit-1: Introduction to BPR:

- What is BPR
- Philosophy of BPR
- Fundamental tenets of BPR
- Benefits & pitfalls of BPR
- Drivers to BPR.

Unit-2: Process reengineering framework:

- Opportunity assessment
- Planning the process re-engineering project.

Unit-3: Organizing for process reengineering:

- Process Focused organization
- Organization process reengineering team

Unit-4: Process analysis and design:

- Process analysis
- Process design.

Unit-5: Planning and implementing the transition:

- Planning the transition
- Implementing the transition
- Tracking and measuring process performance

- Success factors of BPR
- Managing barriers to BPR success

Unit-6: Tools and techniques used in BPR:

- Case tools
- Work flow systems
- Imaging technology
- Floware
- Business design facility tools
- Change management tools.

Unit-7: Risk and impact measurement:

- Role of IT in BPR

Suggested Reading:

1. Lon Roberts, “Process Re-engineering: The Key to Achieving Breakthrough Success”, New Delhi: Tata McGraw Hill, 1992.
2. Henry J. Johnson, Palrik Mchine, A.John Pandilebury, William A Wheater, “Business Process Reengineering: Breakpoint Strategies for Market Dominance”, Chichester, John Wiley & Sons, 1993.

FT-306 P: TOTAL QUALITY MANAGEMENT

Level of Knowledge: Expert Knowledge

Course Objectives:

- To help student understand the concepts of Total Quality Management, and Research of various tools and models used for problems faced by managers.

Scheme of Examination:

Total Marks: 100
Internal Marks: 40
External Marks: 60

The External Examination, carrying 60 marks will have two Sections, A and B. Section A, worth 36 marks, will have five theory questions, out of which students will be required to attempt three questions. Section B, worth 24 marks, will have one or more practical/ Numerical problem/ case(s). A question may have one or more sub-parts.

Course Contents:

Unit 1: Core Concepts of Total Quality Management:

- Customer focus
- Quality for profits right first time
- Cost of quality

Unit 2: TQM Organization:

- Structure
- Mangers role Models
- Recognition & awards
- Quality delivery process
- Pitfalls in Operationalising TQM and methods of avoiding them

Unit 3: Learning from quality gurus:

- Edward Deming
- Joseph M. Juran
- Karon Ishikawa
- Philip B. Crosby
- William E. Conway and their applications in today's Business Environment

Unit 4: Bench marking:

- Definition
- Reason to benchmark
- What to benchmark

- BM process
- Pitfalls& criticism of BM
- Appraisal of TQM and improvement program

Unit 5: Tools and techniques of TQM:

- Techniques for analyzing a quality process
- Quality Circles
- Statistical process control
- Failure Mode & Effect analysis
- Computer aided inspection
- Data collection & analysis
- Six sigma and control chart

Unit: 6: Quality Award and certifications:

- ISO-14000:
  - Concepts
  - Certifications
  - methods and implementations
- ISO-9000:
  - Concepts
  - Certifications
  - Methods and implementations Malcolm Bal ridge Quality Award
  - Methods and implementations Rajiv Gandhi Quality Award.

Text Reading:

1. Sharma D.D "**Total Quality Management: Principles Practices &cases"** New Delhi, sultan chand & sons, 2004.
2. Sunraraju S.M. "**Total Quality Management: a premier"** New Delhi, Tata McGraw -Hill Publication,1999
3. Besterfield Dale H. "**Total Quality Management"** New Delhi Pearsons Education,2004.

Suggested Reading:

1. J. M. Juran and Frank M. Gryna Eds. "**Juran's Quality Control Handbook",** New York: McGraw-Hill Publications, 2001.
2. Tapan P. Bagchi, "**ISO 9000: Concepts, Methods and Implementation",** Allahabad: Wheeler Publishing.
3. Kit Sadgrove, "**Making TQM Work"**, New Delhi: Kogan Page India P. Ltd., 2000.
4. Eugene L. Grant and Richards, Leavenworth, "**Statistical Quality Control"**. New York: McGraw-Hill Publications, 2000.