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PIMPRI CHINCHWAD EDUCATION TRUST'S PUNE BUSINESS SCHOOL

PGDM

(ACADEMIC BATCH 2025-27)

SEMESTER III - SYLLABUS

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Strategic Human Resource Management

Class of : 2025-27

Academic Year : Second Year

Course Code : PBSHRM309

Semester : III

Credit : 3

Sessions : 30

Detailed Syllabus:

Unit 1: Introduction to Strategic HRM

- Traditional HRM vs. Strategic HRM
- Typology of HR activities
- 'Best fit' vs. 'Best practice' approach
- HR strategy and the role of national, sectoral, and organizational context
- Investment perspective of human resources

Unit 2: Aligning HR Systems with Business Strategy

- Sustained competitive advantage: HR as scarce, inimitable, and non-substitutable resource
- Linking HRM practices to organizational outcomes
- Assessing and reducing costs, behavioral impact of HR practices
- Marginal utility models, auditing HR practices and departments
- Corporate HR philosophy, company-wide HR standards
- Alternative HR systems: universalistic, contingency, configurational approaches
- Designing congruent and integrated HR systems

Unit 3: HR Strategy Formulation and Workforce Utilization

- Overview of strategic planning and planning in SBUs
- HR strategy and HR planning in multinational, global, and transnational companies
- HR contributions to strategy: competitive intelligence and resource reallocation decisions
- Workforce utilization strategies: cross-training, flexible work assignments, work teams, non-unionization
- Strategies for employee shortages and surpluses



Unit 4: Strategies for Performance, Training, and Development

- Strategic dimensions of performance management: balanced scorecard, EVA
 - HR strategy for training and development: benefits, planning, and integration with performance and compensation systems
-

Unit 5: HR Strategy in Global Economy & High Performance Work Practices

- Strategy and structure in divisionalized companies
 - HR implications of DE-initialization, mergers & acquisitions, corporate office controls
 - High Performance Work Practices (HPWP): individual practices vs. systems, universal vs. contingency perspectives
 - Employee engagement, talent management, and retention strategies
-

Unit 6: Evaluating HR Function and Emerging HR Issues

- HR evaluation: scope, strategic impact, level of analysis, criteria, ethical dimensions
- Approaches: audit, analytical, quantitative/qualitative, outcome/process criteria
- HR Scorecard: HR as strategic partner, 7-step implementation model, systems alignment map
- Emerging issues in SHRM: workforce diversity, virtual teams, flexitime, telecommuting, HR outsourcing, contingent labour, global sourcing, expatriation/repatriation, gender discrimination, glass ceiling effect

Reference Books for Strategic Human Resource Management

1. **Strategic Human Resource Management: A General Managerial Approach**, 2nd Edition
 - **Author:** Charles R. Greer
 - **Publisher:** Pearson Education Asia, 2000
2. **The HR Scorecard**, 1st Edition
 - **Authors:** Brian E. Becker, et al.
 - **Publisher:** HBS Press, 2001
3. **Aligning Human Resource and Business Strategy**, 2nd Edition
 - **Author:** Linda Holbeche
 - **Publisher:** Butterworth Heinemann, 2009
4. **Human Resource Strategy**
 - **Authors:** George F. Dreher, Thomas W. Dougherty
 - **Publisher:** Tata McGraw Hill
5. **Handbook of Strategic HRM – The Key to Improved Business Performance**
 - **Authors:** Michael Armstrong, Angela Baron



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HR Operations

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHRM310	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Human Resource Administration

- Definition, nature, scope, and objectives of HR administration
- Structure of the personnel department
- Personnel policies and their types
- Maintenance of personnel files and records
- Drafting communications in personnel department: appointment letters, promotion letters, transfer orders, deployment, appreciation letters, notices, circulars

Unit 2: Disciplinary Measures and Communication

- Drafting memos, warnings, show-cause notices, charge sheets, suspensions
- Inquiry procedure correspondence
- Termination, dismissal, and reinstatement in service

Unit 3: Social Security Laws – Provident Fund and Employee State Insurance

- **Employee Provident Fund & Miscellaneous Provisions Act, 1952:**
 - Contribution, online procedure, required documents
 - Employer and employee contribution rates, administrative charges, interest, penalties
 - PF calculations, forms, and amendments
- **Employee State Insurance Act, 1948:**
 - Contributions and benefits (all 6 benefits)
 - Calculation of benefits and compensation
 - Applicability and amendments

Unit 4: Compensation and Labour Welfare

- **Workmen's Compensation Act, 1923:**
 - Definitions, permanent/partial/total disablement, theory of notional extension
 - Calculation of compensation in case of death and disability
 - Amendments till date



-
- **Payment of Bonus Act, 1965:**
 - Definition, applicability, eligibility, minimum & maximum bonus, set-on/set-off, disqualification
 - Amendments till date
 - **Payment of Gratuity Act, 1972:**
 - Definition, applicability, eligibility, minimum service, maximum limit
 - Calculation of gratuity in case of retirement, resignation, death, and disablement
 - Amendments till date
-

Unit 5: Payroll Management and Statutory Compliance

- Components of payroll system
- Maintenance of statutory returns: TDS, Professional Tax, Form 16A & B, Form 26AS, PF, ESI
- Calculation of Cost to Company (CTC) and designing salary structures
- Income from salaries, deductions, meaning of salary for different purposes
- Perquisites and valuation of rent-free accommodation

Reference Books:

1. Guide on Labour Management forms and precedents (Law, Practice and Procedure) – S D Puri (Snowwhite publication)
2. Introduction of Labour and Industrial Laws by Avatar Singh
3. Elements of Mercantile Law by N. D. Kapoor, Sultan Chand
4. Bare Acts
5. Elements of Mercantile Law-N. D Kapoor

1. Personnel Management – C B Matoria
2. Dynamics of Personnel Administration – Rudrabaswaraj
3. Personnel Management – Edwin Flippo
4. Industrial and Labour Laws – S. P. Jain
5. Employee Relations Management-P N Singh, Pearson Publications
6. Dynamics of Industrial Relations–Matoria & Matoria
7. Industrial Relations: Emerging Paradigms, BD Singh, Excel Books, 2004 Edition



Industry & Commercial Law

Class of : 2025-27

Academic Year : Second Year

Course Code : PBSHRM311

Semester : III

Credit : 3

Sessions : 30

UNIT I

The Factories Act (Sec 1 to 84) Preliminary – The Inspecting staff – Health, Safety and Welfare of Workers – Working Hours of Adults – Employment of Women and Young persons- Leave with Wages.

UNIT II

- Industrial Disputes Act 1947 – Definition – What is an Industrial Dispute Sec 2(K) Sec 2a – Lay Off
- Lockout – Strike – Retrenchment – Closure and Transfer of Undertaking – Difference between Lock out and Lay Off, Retrenchment and Closure, Lock –Out and Closure – Lockout and Retrenchment – Unfair
- Labour Practice – Authorities –Procedure and Powers of Authorities – Reference to Arbitration Conciliation Machinery – Adjudication Machinery – Labour Courts – Industrial Tribunal – National Tribunal – Reference of Disputes to Boards , Courts or Tribunals and Voluntary Reference.

UNIT III

- The Workmen's Compensation Act – Nature and Scope – Definitions – Workmen's Compensations
- Employ's Liability – Meaning of Accident Compensation Permanent – Partial and Temporary –Disablement – Compensation of Half Month Payment (Table Not Necessary).

UNIT IV

- The Payment of Bonus Act 1965 – Object – Application – Definitions – Methods of Computing Gross

Profits – Payment of Bonus – Importance.

UNIT V

- The Employees Provident Fund Act 1952.

Boos for Reference:

1. Tulsian, Business & Industrial Law, Tata McGraw-Hill Education, 2006
2. B. S. Moshal, Business & Industrial Law, Ane Books Pvt. Ltd. 2008
3. AnshuS.Vyas, A Text Book of Business & Industrial Law, Vision Publications
4. SK. Aggarwal& K. Singhal, Business & Industrial Laws, Galgotia Publications, 2008



Labour Welfare

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHRM312	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Introduction to Labour Welfare

- Origin and evolution of labour welfare
- Objectives, need, and importance of labour welfare
- Classification of labour welfare
- Work agencies of labour welfare
- Scope, concepts, philosophy, and principles of labour welfare
- Labour welfare plans and labour policy in India

Unit 2: Labour Legislations in India

- **Statutory Welfare Amenities:**
 - Factories Act, 1948
 - Plantation Labour Act, 1951
 - Motor Transport Workers Act, 1952
- **Non-statutory Welfare Agencies:**
 - Role of trade unions, NGOs, and local self-government
 - National Commission on Labour and Labour Welfare
 - Labour laws for elimination of child labour

Unit 3: Agencies of Labour Welfare

- Agencies of labour welfare in India: Central Government, State Government, Employers, Trade Unions
- Labour Welfare Officer: role, qualifications, functions, duties
- Labour administration in India

Unit 4: Industrial Hygiene and Occupational Health

- Working conditions and employee benefits
- Safety, accident prevention, and health & hygiene in factories
- Canteen organization and management
- Organization of credit and consumer cooperative societies
- Recreational and educational activities for workers, worker education in India
- Functions of labour welfare officers



Unit 5: Problems of Indian Labour

- Problems of women labour
- Problems of unorganized labour
- Issues related to workers' education

Suggested Text Books:

1. Labour Problem and Social Welfare in India, Memoria, C. B., Kitab Mahal Allahabad
2. Labour Welfare, Trade Unionism and Industrial Relation, Punekar, S. D. , Himalaya Publishing House, Bombay.
3. Labour Welfare and Social security, Kohli, A. S. and Sarma S. R., Anmol Publications Pvt. Ltd., New Delhi.
4. Child Labour in India, Misra, L., Oxford University Press, New Delhi.
5. Personnel Problems and Labour Welfare, Mathur D. C., Mittal Publication. New Delhi.

Suggested Reference Books:

1. Female Labour in India, Sharma Usha, Mittal Publication New Delhi
2. Aspects of Labour Welfare and Social Security, A.M.Sharma
3. Labour Problems and Social Welfare, R.C. Saxena
4. Labour economics and social welfare, Dr. B.P. Tyag



Conflict & Negotiation Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHRM313	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Fundamentals of Negotiation

- Definition and introduction to negotiation
- Importance and nature of negotiation
- Negotiation vs. other interactions
- Dimensions and types of negotiation
- Structure and prerequisites for successful negotiation
- Strategy and planning of negotiation
- Four-stage model of negotiation

Unit 2: Negotiation Process

- Perception and preparation for negotiation
- Goal setting, options, and criteria for negotiation
- Role of communication and influence in negotiation
- Identifying BATNA (Best Alternative to a Negotiated Agreement) and ZOPA (Zone of Possible Agreement)
- Ethics in negotiation
- Reaching an agreement

Unit 3: Negotiation Styles and Techniques

- Leigh Thompson's 5 negotiation mental models
- Importance of trust and relationship building
- Win-Win negotiation approach
- Use of creativity and problem-solving in negotiations
- Application of transactional analysis for negotiation

Unit 4: Conflict Management Fundamentals

- Concept, definition, and importance of conflict management
- Models of conflict: process and structural
- Sources of conflict and relationship between conflict and team performance
- Advantages and disadvantages of conflict



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- Creating conducive climate for conflict resolution
 - Applying conflict management fundamentals to team building
 - Designing organizational conflict management processes
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Unit 5: Types of Conflicts and Resolution Mechanisms

- Interpersonal and intrapersonal conflict management
- Conflict resolution strategies: difficult subordinates, bosses, and colleagues
- Team and organizational conflict evaluation
- Third-party conflict resolution (Alternative Dispute Resolution – ADR)
- Simulation exercises: case studies, role plays, and best business negotiation practices

Suggested Books:

- • **“Getting to Yes: Negotiating Agreement Without Giving In”** – Roger Fisher, William Ury, and Bruce Patton
(Covers principled negotiation, BATNA, ZOPA, and win-win strategies.)
- • **“Negotiation”** – Roy J. Lewicki, David M. Saunders, Bruce Barry
(Comprehensive guide on negotiation process, styles, planning, and ethics.)
- • **“The Handbook of Conflict Resolution: Theory and Practice”** – Peter T. Coleman, Morton Deutsch, and Eric C. Marcus
(Covers conflict types, resolution techniques, organizational conflict, and team conflict management.)
- • **“Crucial Conversations: Tools for Talking When Stakes Are High”** – Kerry Patterson, Joseph Grenny, Ron McMillan, Al Switzler
(Practical strategies for handling interpersonal and team conflicts.)
- • **“Conflict Management and Negotiation”** – William Ury
(Focus on negotiation in conflict management, third-party resolution, and ADR.)
- • **“Negotiation and Conflict Management Research”** – Michele J. Gelfand & Jeanne M. Brett
(Research-based approaches to negotiation, cultural dimensions, and organizational conflict.)



Agri Food & Retail Management

Class of : 2025-27
Course Code : PBSABM329
Credit : 3

Academic Year : Second Year
Semester : III
Sessions : 30

Unit 1: Introduction to Food Retail Management

Topics:

- Scope for Food Retail Management
- Food Market Dimensions
- Concept of Retail and Retail Formats
- Indian and Global Scenario of Food Retail

Learning Focus:

- Understand the structure, scope, and significance of food retailing
- Analyze trends and growth patterns in the Indian and global food retail sector
- Identify key players and formats in organized and unorganized food retail

Unit 2: Consumer and Market Analysis

Topics:

- Food Consumption Pattern
- Demographic Pattern
- Expenditure Pattern
- Why We Eat What We Eat (Cultural, Psychological, and Economic Factors)

Learning Focus:

- Study changing consumer preferences and buying behavior
- Analyze demographic influences on food consumption
- Understand socio-economic factors affecting food purchase decisions

Unit 3: Services and Value Chain in Food Retail

Topics:

- Services in Food Retail (In-store Experience, Convenience, Technology Integration)



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- Value Chain in Food Retail
 - Wholesaling and Distribution Channels
 - ATAR (Awareness-Trial-Availability-Repeat) Concept
 - BoP (Bottom of Pyramid) Concept and Food Retail Opportunities

Learning Focus:

- Understand how services and value chain management drive retail success
 - Learn distribution structures and their role in food retail logistics
 - Apply ATAR and BoP models to develop inclusive and effective retail strategies
-

Unit 4: Pricing and Customer Relationship Management

Topics:

- Price in Food Retail – Factors Influencing Pricing
- Pricing Strategies in Food Retail
- CRM (Customer Relationship Management) in Food Retail
- HRM (Human Resource Management) in Retailing
- Role and Importance of Salesperson in Retailing

Learning Focus:

- Evaluate pricing policies suitable for food retail formats
 - Develop customer engagement and loyalty strategies
 - Recognize the role of HR and frontline staff in customer satisfaction
-

Unit 5: Merchandise and Promotion Management

Topics:

- Merchandise Management – Meaning, Process, and Functions
- Product Mix and Category Management
- Pricing Revisited in Food Retail (Value Pricing, Discounts, Seasonal Pricing)
- Promotion Mix in Food Retail (Advertising, Sales Promotion, Digital Media, Events)
- Presentations and Visual Merchandising in Food Retail

Learning Focus:

- Manage merchandise planning, assortment, and product display
 - Design promotional strategies tailored for food retail environments
 - Understand visual merchandising as a tool for customer attraction
-



Unit 6: Legal, Ethical, and Contemporary Issues

Topics:

- Legal and Ethical Issues in Food Retail (FSSAI, Labeling, Fair Trade, Consumer Rights)
- Sustainability and Food Safety Concerns
- Emerging Trends in Food Retail (E-commerce, Online Grocery, Quick Commerce)

Learning Focus:

- Gain awareness of regulatory and ethical standards in food retail
- Evaluate sustainability initiatives and food safety compliance
- Explore modern technological and environmental challenges in food retail

Suggested Books:

1. **Retail Management: A Strategic Approach** – Barry R. Berman & Joel R. Evans, Pearson
 - Covers retail formats, consumer behavior, merchandising, pricing, and promotion strategies.
2. **Food Retailing: Structure and Strategy** – Dr. Anita K. Puri, Oxford University Press
 - Focuses on Indian and global food retail, supply chain, value chain, and retail strategy.
3. **Retailing Management** – Michael Levy & Barton Weitz, McGraw-Hill
 - Discusses retail operations, consumer analysis, CRM, merchandising, and in-store services.
4. **Food Retail Management: Strategies for Success** – N. V. R. Naidu, Himalaya Publishing
 - Covers food consumption patterns, market segmentation, pricing, and retail trends.
5. **Managing Retailing** – S. R. Ramaswamy & S. Namakumari, Macmillan
 - Includes merchandising, promotion, store operations, HR in retail, and emerging trends.



Agriculture Finance & Rural Credit

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSABM330	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Introduction to Agricultural Finance and Financial Inclusion

Topics:

- Introduction to Agricultural Finance
- Concept and Importance of Financial Inclusion
- Role and Significance of Agricultural Finance in Rural Economy
- Classification of Credit (Short-term, Medium-term, Long-term)
- Overview of Agricultural Finance–Related Current Events

Learning Focus:

- Understand the nature and need of agricultural finance
- Identify barriers to financial inclusion and policy initiatives
- Analyze recent trends and government efforts in rural credit

Unit 2: Structure of Agricultural Credit System

Topics:

- Credit Structures in India:
 - **Three-Tier Structure** of Co-operative Societies:
 - State Co-operative Bank (SCB)
 - District Central Co-operative Bank (DCCB)
 - Primary Agricultural Credit Societies (PACS)
 - **Two-Tier Structure** of Co-operative Societies
 - Long-term Credit Structure:
 - Central Land Development Bank (CLDB)
 - Primary Land Development Bank (PLDB)
- Functions and Working of Each Institution
- Concepts of Share Capital – Authorised, Issued, and Paid-Up Capital
- Debentures and Role in Agricultural Financing



Learning Focus:

- Understand the cooperative banking structure in India
- Analyze functional differences between short-term and long-term credit institutions
- Learn about financing instruments used by agricultural credit institutions

Unit 3: Principles and Evaluation of Creditworthiness

Topics:

- 3 R's of Credit:
 - Returns to Investment
 - Repayment Capacity
 - Risk Bearing Ability
- 5 C's of Credit:
 - Character, Capacity, Capital, Collateral, Conditions
- 7 P's of Credit:
 - Purpose, Person, Payment, Profitability, Protection, Policy, Pricing

Learning Focus:

- Assess creditworthiness and risk in agricultural lending
- Apply principles of credit analysis for farmer assessment
- Understand behavioral and financial parameters influencing loan decisions

Unit 4: Role of Financial Institutions in Agriculture

Topics:

- Role and Functions of:
 - NABARD (National Bank for Agriculture and Rural Development)
 - RRB (Regional Rural Banks)
 - ADB (Asian Development Bank)
 - IMF (International Monetary Fund)
 - World Bank
 - WTO (World Trade Organization)
 - FCI (Food Corporation of India)
 - Public Distribution System (PDS)
 - RBI (Reserve Bank of India) – Functions in Agricultural Finance

Learning Focus:

- Study the roles of key national and international financial institutions
- Understand how these institutions influence rural and agricultural development
- Link government policy and institutional finance mechanisms



Unit 5: Agricultural Insurance and Risk Management

Topics:

- Concept and Importance of Crop Insurance
- Role of DICGC (Deposit Insurance and Credit Guarantee Corporation)
- National Agricultural Insurance Scheme (NAIS)
- Comprehensive Crop Insurance Scheme (CCIS)
- Pradhan Mantri Fasal Bima Yojana (PMFBY)
- Review of Union Budget 2022–23 (Agriculture-Related Provisions)
- RBI Bulletin 2022 – Key Agricultural Insights

Learning Focus:

- Understand the need and functioning of agricultural insurance schemes
 - Evaluate policies for risk mitigation in farming and credit protection
 - Interpret recent government initiatives and financial data
-

Unit 6: Financial Statements and Measures of Credit Evaluation

Topics:

- Understanding Financial Statements:
 - Balance Sheet
 - Income Statement (Receipts and Payments)
- Scale of Finance for Agricultural Loans
- Numerical Problems on:
 - Repayment Plans
 - Undiscounted Measures for Credit Evaluation (Payback Period, ARR)
 - Discounted Measures (NPV, BCR, IRR)

Learning Focus:

- Learn to prepare and interpret agricultural financial statements
- Apply financial tools for credit evaluation and loan decision-making
- Solve practical problems related to repayment and investment analysis



Suggested Books:

1. **Agricultural Finance and Credit** – S. K. Singh, Himalaya Publishing
 - Covers agricultural credit systems, types of loans, and cooperative banking structures.
2. **Agricultural Finance** – K. P. Basu, Kalyani Publishers
 - Explains short-term, medium-term, and long-term credit, creditworthiness evaluation, and financial instruments.
3. **Rural Banking and Agricultural Finance** – B. Santhanam, Macmillan India
 - Focuses on cooperative banks, RRBs, NABARD, and credit policies in rural India.
4. **Financial Inclusion in India** – Anjali Bansal, Sage Publications
 - Discusses financial inclusion initiatives, barriers, and policy frameworks.
5. **Agricultural Economics and Finance** – H. L. Ahuja, Rawat Publications
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Marketing of Retail Agri Inputs

Class of : 2025-27
Course Code : PBSABM331
Credit : 3

Academic Year : Second Year
Semester : III
Sessions : 30

UNIT I

Agricultural input marketing – meaning and importance; Management of distribution channels for agricultural input marketing; Agricultural Inputs and their types – farm and non-farm, role of cooperative, public and private sectors in agri- input marketing.

Inputs – Private, Government, Co-operative and Joint sector. Agri inputs promotional programme – concepts and techniques.

UNIT II

Demand and supply of seeds; Seed marketing channels, pricing, export-import of seeds; Role of NSC and State Seed Corporation.

Issues in seed marketing – determinants of seed demand – private sector contribution – public sector support to private sector - Distinctive features of Seed Marketing vis – a – vis other Input Marketing – strengths and weaknesses on Indian seed industry.

UNIT III

Chemical Fertilizers- Production, export-import, supply of chemical fertilizers, Demand/consumption, Prices and pricing policy; subsidy on fertilizers; marketing system – marketing channels, problems in distribution; Role of IFFCO and KRIBCO in fertilizer marketing. Fertilizer industry scenario – public, private, co-operative and joint sector role – fertilizer production consumption, and imports – fertilizer marketing characteristics. Bio fertilizers – its role and scope – major constraints involved – production level – market level – field level. Marketing network/ channels.

UNIT IV

Plant Protection Chemicals- Production, export/import, consumption, marketing system –marketing channels; Electricity/Diesel Oil- marketing and distribution system; pricing of electricity for agriculture use; subsidy on electricity.

Pesticide industry – an overview – nature of industry growth – consumption crop wise, area wise – demand and supply – market segmentation.-IPM concept development – bio pesticides – its role and scope.

UNIT V

Farm Machinery- Production, supply, demand, Marketing and distribution channels of farm machines; Agro-industries Corporation and marketing of farm machines implements/Equipments.

Agricultural mechanization – benefits and importance and future priorities – scenario of farm implements and machinery sector – economic advantage of mechanization – contribution of agricultural mechanization – Need for the development of agricultural machinery and implements to suit the local resource endowments.



Suggested Books:

1. **Agricultural Marketing in India** – S. K. Sharma, Atlantic Publishers
 - Covers agricultural input marketing, channels, and distribution management.
 - Includes farm and non-farm inputs, role of cooperatives, private and public sectors.
2. **Principles of Agribusiness Management** – James G. Beierlein, Cengage
 - Focuses on marketing of seeds, fertilizers, pesticides, and farm machinery.
 - Discusses promotional programs, pricing strategies, and marketing channels.
3. **Agricultural Input Marketing and Management** – P. K. Agarwal, Kalyani Publishers
 - Deals with seed marketing, NSC, State Seed Corporations, private and public sector roles.
4. **Fertilizer Industry in India** – R. K. Sharma, Oxford & IBH
 - Covers fertilizer production, consumption, import/export, pricing, subsidy policies, and marketing networks.
5. **Plant Protection and Pesticide Marketing** – R. S. Singh, New Age International
 - Includes pesticide industry overview, marketing systems, IPM concepts, bio-pesticides, and consumption patterns.



Post- Harvest Production Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSABM332	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Overview of Horticulture and Fruit Industry

Topics:

- Horticulture Production in the World and India
- Present Status of the Fruit Industry in India
- Emerging Scenario and Future Prospects of the Fruit Sector

Learning Focus:

- Understand global and national trends in horticultural production
- Analyze India's position and competitiveness in the global fruit market
- Study emerging technologies and opportunities in fruit cultivation

Unit 2: Orchard Establishment and Crop Management

Topics:

- Management of Horticultural Crops – Establishment of an Orchard
- Selection of Site, Layout, Planting Systems
- Basic Cultural Practices – Irrigation, Pruning, Training, Nutrient Management
- Regulation of Flowering, Fruiting, and Thinning

Learning Focus:

- Learn principles of orchard establishment and crop planning
 - Understand cultural practices that enhance productivity and fruit quality
 - Study techniques to regulate flowering and fruit development
-



Unit 3: Crop Protection and Maintenance

Topics:

- Protection against Insect Pests, Diseases, and Weeds
- Integrated Pest and Disease Management (IPDM)
- Use of Biocontrol and Eco-friendly Practices

Learning Focus:

- Identify major pests and diseases affecting fruit crops
 - Implement sustainable protection measures
 - Apply integrated management practices to maintain crop health
-

Unit 4: Pre- and Post-Harvest Management

Topics:

- Pre-Harvest Practices Influencing Quality and Shelf Life
- Harvesting Indices and Handling Techniques
- Post-Harvest Management – Sorting, Grading, Cleaning, and Storage
- Procurement Management in Horticultural Supply Chains

Learning Focus:

- Understand the impact of pre-harvest factors on fruit quality
 - Learn post-harvest operations for extending shelf life
 - Explore procurement and handling logistics in fruit marketing
-

Unit 5: Processing and Value Addition in Horticulture

Topics:

- Development of Fruit-Based Carbonated Drinks
- Development of Dehydrated Products from Important Fruits
- Storage of Fruit Pulp in Pouches
- Extraction of Essential Oils from Fruit Waste
- Processing and Packaging of Dehydrated Fruits



Learning Focus:

- Learn techniques of value addition and product diversification
- Understand the role of processing in reducing post-harvest losses
- Apply innovation in fruit-based product development

Unit 6: Marketing, Standardization, and Quality Control

Topics:

- Important Aspects of Marketing, Standardization, and Quality Control
- Packaging for Fresh and Processed Fruits
- Market Structure and Export Potential of Fruits
- Problems in the Marketing of Fruits and Government Policy
- Quality Standards for Domestic and International Trade (APEDA, FSSAI, Codex)

Learning Focus:

- Analyze the marketing channels and export potential of horticultural produce
- Understand quality standards and certification for trade
- Study government schemes and policies for fruit marketing and export promotion

SUGGESTED READINGS

1. Chadha, K. L. & Pareek, O. P. 1993. Advances in Horticulture. Vols. I-IV. Malhotra Publ. House.
2. Kader, A. A. 1992. Post-harvest Technology of Horticultural Crops. Univ. of California. Div. of Agri. & Natural Resources.



Livestock Management

Class of : 2025-27
Course Code : PBSABM333
Credit : 3

Academic Year : Second Year
Semester : III
Sessions : 30

Unit 1: Livestock Sector and Its Role in Agribusiness

- Significance of livestock in Indian agriculture and rural economy.
- Contribution to GDP, employment, and nutritional security.
- Structure of livestock industry – dairy, poultry, meat, fisheries, and allied sectors.
- Government policies, schemes, and institutional support (NDDB, NABARD, cooperatives).

Unit 2: Breeding, Nutrition, and Housing Management

- Major breeds of cattle, buffalo, goat, sheep, swine, and poultry.
- Breeding methods: selection, crossbreeding, AI, biotechnology in livestock.
- Principles of livestock nutrition and feed formulation.
- Fodder resources and feeding strategies for dairy, poultry, and small ruminants.
- Housing systems and management practices for dairy, poultry, and meat animals.

Unit 3: Health, Welfare, and Sustainable Practices

- Common livestock diseases and their management.
- Vaccination, biosecurity measures, and preventive healthcare.
- Animal welfare standards and ethics in livestock rearing.
- Environmental sustainability, climate change impact, and waste management in livestock.

Unit 4: Production and Value Chain Management

- Dairy management: milk production, procurement, chilling, processing.
- Poultry and meat industry: production, processing, packaging, and cold chain logistics.
- Value chain and supply chain management of milk, meat, and eggs.
- Role of cooperatives, FPOs, and private agribusiness in livestock products.



Unit 5: Economics, Marketing, and Emerging Trends

- Cost of production and profitability analysis of dairy, poultry, and goat farming.
- Financial planning, sources of credit, livestock insurance.
- Marketing channels and strategies for milk, poultry, meat, and by-products.
- Export potential and branding of livestock products.
- Digital livestock management, AI/IoT in dairy and poultry, and future opportunities.

Recommended books and Reference materials:

- **“Animal Husbandry” – M. K. Gupta**
(Covers breeding, nutrition, housing, and general livestock management.)
- **“Livestock and Poultry Production” – S. A. Sadhu & S. P. Singh**
(Good for understanding the livestock sector, industry structure, and allied sectors.)
- **“Dairy Production and Management” – A. Y. Reddy**
(Focus on milk production, value chain, and dairy management.)
- **“Economics of Livestock Production” – R. C. Aggarwal**
(Covers cost, profitability, marketing, and financial planning.)
- **“Animal Nutrition” – McDonald et al.**
(Essential for livestock feeding strategies and fodder management.)



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Strategic Management

Class of : 2025-27
Course Code : PBSCC301
Credit : 3

Academic Year : Second Year
Semester : III
Sessions : 30

Detailed Syllabus

Unit 1: Introduction to Strategic Management

- Concept and importance of strategic management
- Evolution of strategic thinking: views of eminent thinkers
- Strategic vs. operational management
- Strategic management process
- Levels of strategy: corporate, business, functional

Unit 2: Strategic Position

- **External Environment Analysis:** Porter's Five Forces, PESTEL, strategic gaps, SWOT
- Challenges in international business environment, Hofstede cultural dimensions, internationalization
- **Organizational Purposes & Stakeholders:** Core values, ideology, vision, mission, objectives, stakeholder mapping
- Strategic capability: critical success factors, experience curve, resources, core competencies, value chain analysis
- Competition view of strategy vs. resource-based view (RBV)

Unit 3: Strategy Development and Choices

- Multiple approaches: strategic planning system, logical incrementalism, learning organization, strategic leadership
- Strategy implications: intended, realized, emergent strategy, strategic drift
- Corporate-level strategy: value creation, corporate parent roles (portfolio manager, synergy manager, resource allocator, restructurer, parental developer)
- Portfolio management: BCG Matrix, GE Matrix, managing corporate portfolio
- Product/market diversity: related vs. unrelated diversification
- International strategy: market selection and entry



Unit 4: Business-Level Strategy and Implementation

- Generic strategies: cost leadership, product differentiation, focus, hybrid strategy
- Directions for strategy development: product development, market development, TOWS matrix
- Strategy implementation: McKinsey 7S Framework
- Competing for future: emerging strategy paradigms, unlearning curve, strategy as stretch and leverage, co-creation

Unit 5: Corporate Restructuring, Turnaround, Alliances, and M&A

- Corporate restructuring: forms, asset capital, organizational/business restructuring outcomes, force field analysis
- Turnaround management: decline, response initiation, transition, outcome
- Strategic alliances and joint ventures: franchising, licensing, motives and types, lifecycle, success and failure factors
- Mergers & acquisitions: organic vs. inorganic growth, theories, types and motives, synergy, LBO financing, reasons for failures

Unit 6: Strategic Tools and Contemporary Issues

- Strategic tools: benchmarking, business process re-engineering, reverse engineering, balanced scorecard
- Contemporary issues: blue ocean strategy, competitive innovation, bottom of the pyramid (BoP) strategies

Suggested Books:

- • **“Strategic Management: Concepts and Cases” – Fred R. David & Forest R. David**
(Covers strategic management process, strategy formulation, corporate and business-level strategies, and implementation.)
- • **“Exploring Strategy” – Gerry Johnson, Richard Whittington, Kevan Scholes, Duncan Angwin & Patrick Regnér**
(Detailed coverage of strategic position, strategy development, strategic tools, and contemporary issues.)
- • **“Strategic Management” – Michael A. Hitt, R. Duane Ireland, Robert E. Hoskisson**
(Emphasizes corporate-level strategy, mergers & acquisitions, alliances, and international strategy.)
- • **“Competitive Strategy” – Michael E. Porter**
(Classic reference for industry analysis, Porter’s Five Forces, competitive advantage, and value chain.)



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- • **“Strategic Management: Theory & Practice” – John A. Parnell**
(Focus on strategic tools, strategy implementation frameworks like McKinsey 7S, and evaluation techniques.)
 - • **“Blue Ocean Strategy” – W. Chan Kim & Renée Mauborgne**
(Covers contemporary strategic paradigms, innovation, and market creation strategies.)



Project Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSCC302	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Overview of Project Management & Project Definition

- Concept of a project, attributes, and importance of project management
- Project management process and project lifecycle
- Project stakeholders and project management structures
- Choosing appropriate project management structures and organizational culture implications
- Causes of project failure
- **Project Definition:**
 - Defining scope and establishing priorities
 - Work Breakdown Structure (WBS) and its integration with organization
 - Coding WBS for information systems, project roll-up
 - Process Breakdown Structure and responsibility matrices

Unit 2: Project Planning

- Estimating project times and costs: influencing factors, estimation guidelines, macro vs. micro estimating
- Methods for estimating project times, costs, and resources
- Developing budgets, types of costs, refining estimates, and contingency funds
- **Developing a Project Plan:**
 - Developing project networks from work packages
 - Constructing project networks (Activity-on-Arrow fundamentals)
 - Forward and backward pass computations
 - Extended network techniques

Unit 3: Project Scheduling and Risk Management

- **Scheduling Resources and Reducing Project Duration:**
 - Types of project constraints and scheduling problems
 - Resource allocation methods, splitting, multitasking
 - Assigning project work and multi-project resource schedules
 - Options and techniques for accelerating project completion
 - Project cost-duration graph



- **Risk Management:**
 - Risk identification, assessment, and response development
 - Contingency planning and change control management
 - Risk response control

Unit 4: Project Organization and Team Management

- **The Project Manager:**
 - Roles and responsibilities: planning, organizing, controlling
 - Skills: leadership, coaching, communication, interpersonal, stress handling, problem-solving, time management, delegation, managing change
- **Managing Project Teams:**
 - Five-stage team development model
 - Situational factors affecting team development and team effectiveness
 - Sources of conflict and handling conflict
 - Managing virtual project teams and team pitfalls

Unit 5: Project Evaluation and Closure

- **Progress and Performance Management:**
 - Structure of project monitoring information system
 - Project control process, monitoring time performance
 - Integrated information systems, dashboards, status reports, indexes
 - Forecasting final project cost, other control issues
- **Project Audit and Closure:**
 - Project audit process
 - Project closure procedures
 - Team, team member, and project manager evaluations

Suggested Text Books:

1. Clifford Gray, Erik Larson and Gautam Desai, Project Management, The Managerial Process, Tata McGraw Hill
2. Effective Project Management, Clements and Gido, Thomson – India Edition.
3. Samuel Mantel, Jack Meredith, Scott Shafer, Margret Sutton and M.R.Gopalan, Project Management, Wiley India
4. Prasanna Chandra, Projects, Planning, Analysis, Selection, Financing, Implementation and Review, Tata McGraw



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Pharmaceutical Brand Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHCM326	Semester	: III
Credit	: 3	Sessions	: 30

Detailed Syllabus:

Chapter 1: Introduction to Brand Management in Pharma

- Concept of brand in pharmaceuticals vs. FMCG
- Importance of branding in regulated industries
- Pharma product life cycle and the role of branding
- Branding challenges in generics-driven market

Chapter 2: Brand Building in Pharma Industry

- Stages of brand creation – from molecule to market
- Naming strategies: INN (International Nonproprietary Names), brand/trade names,

Trademarks

- Differentiation in a highly competitive pharma market
- Case studies of successful pharma brands (e.g., Crocin, Lipitor, Revlimid)

Chapter 3: Consumer and Prescriber Behavior in Pharma

- Role of doctors, pharmacists, and patients in brand acceptance
- Prescribing behavior of physicians – drivers and influencers
- Patient awareness and consumerization of healthcare
- OTC vs. prescription brand strategies

Chapter 4: Pharma Marketing and Brand Positioning

- Positioning strategies in branded generics & patented products
- Promotion tools: detailing, CMEs (Continuing Medical Education), samples, digital

platforms



- Visual aid design and communication strategies
- Brand recall, loyalty, and perception management

Chapter 5: Pricing and Brand Value in Pharma

- Pharma pricing strategies: penetration vs. premium pricing
- Role of NPPA, DPCO, and government regulations
- Value-based pricing in innovative therapies
- Impact of pricing on brand image and accessibility

Chapter 6: Brand Portfolio and Lifecycle Management

- Managing multiple brands and line extensions
- Brand cannibalization in pharma companies
- Lifecycle management: pre-launch, growth, maturity, decline
- Strategies for extending product life: line extension, repurposing, combinations

Chapter 7: Digital and Contemporary Branding Approaches

- Role of digital marketing in pharma branding
- Social media, health apps, and online engagement strategies
- Direct-to-consumer (D2C) branding (OTC & wellness products)
- Influence of AI, big data, and e-pharmacies on brand building

Chapter 8: Global and Ethical Perspectives in Pharma Branding

- Pharma branding in emerging vs. developed markets
- Cross-border branding challenges: language, culture, regulation
- Ethical issues in pharma branding: misleading claims, aggressive marketing
- Future of branding in personalized medicine & biologics

Reading Material & References

- Textbook: Philip Kotler & Keller – Marketing Management.
- Reference: Subba Rao Chaganti – Pharma Marketing in India.
- Case Studies: Pfizer Lipitor, Sun Pharma–Ranbaxy, GSK Crocin, Dabur OTC.



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- Regulatory: NPPA & DPCO Guidelines.
- Journals: Journal of Pharmaceutical Marketing & Management.



PARALLELS OF PHARMA MANAGEMENT

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHCM328	Semester	: III
Credit	: 3	Sessions	: 30

Detailed Syllabus

Unit 1: Introduction to Pharma Management & Cross-Industry Parallels
Evolution, need for cross-industry study, global vs. Indian pharma, benchmarking with FMCG/IT/Healthcare. Pedagogy: Lecture + Case Study (Pfizer vs. Infosys expansion).

Unit 2: Marketing Parallels

Pharma vs. FMCG marketing, brand building, sales force management, digital trends. Pedagogy: Case comparison (Cipla vs. Unilever brand strategy) + Role Play.

Unit 3: Operations & Supply Chain Parallels

Pharma vs. FMCG distribution, cold chain vs. food supply, lean pharma vs. auto, tech in logistics. Pedagogy: Simulation + Industry Expert Lecture.

Unit 4: Regulatory & Compliance Parallels

Pharma vs. F&B regulations, ethics, global compliance, GMP vs. ISO. Pedagogy: Debate on Ethics in Pharma vs. Finance.

Unit 5: HR & Training Parallels

Training MRs vs. FMCG, talent retention, motivation, role of culture. Pedagogy: Group Discussion + Comparative Assignment.

Unit 6: Innovation & R&D Parallels

Drug discovery vs. IT innovation, CROs vs. outsourcing, innovation risk, open innovation. Pedagogy: Case study on Biocon vs. Google innovation model.

Unit 7: Healthcare Infrastructure & Public Policy Parallels

Pharma in public health, PPP in healthcare, insurance penetration, pharma-hospital collaborations. Pedagogy: Policy Review + Seminar Presentation.

Unit 8: Globalization & Future Parallels

Outsourcing, global MNC strategies, future trends, ESG sustainability. Pedagogy: Project Work – 'Pharma Strategy 2030'.



Suggested Textbooks

- Gupta, V. (2020). Pharmaceutical Management: A Strategic Approach. McGraw Hill.
- Kotler, P., Keller, K.L. (2019). Marketing Management. Pearson.
- Chary, S.N. (2018). Production and Operations Management. McGraw Hill.
- Hill, C.W.L. (2021). International Business: Competing in the Global Marketplace. McGraw Hill.

Suggested Reference Books

- Drucker, P. (2018). Innovation and Entrepreneurship. Harper Business.
- Kotler, P., Keller, K.L., Koshy, A., & Jha, M. (2020). Marketing Management – South Asian Perspective. Pearson.
- Govindarajan, V., & Trimble, C. (2019). Reverse Innovation in Health Care. Harvard Business Press.
- World Health Organization Reports (2022–2025) on Pharma Regulations and Public Health.
- Drucker, P. (2018). Innovation and Entrepreneurship. Harper Business.
- Kotler, P., Keller, K.L., Koshy, A., & Jha, M. (2020). Marketing Management – South Asian Perspective. Pearson.
- Govindarajan, V., & Trimble, C. (2019). Reverse Innovation in Health Care. Harvard Business Press.
- World Health Organization Reports (2022–2025) on Pharma Regulations and Public Health.



HEALTHCARE SERVICES AND MARKETING STRATEGIES

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHCM324	Semester	: III
Credit	: 3	Sessions	: 30

UNIT I: INTRODUCTION

Unit 1: CRM in Pharma (6 Hours)

- Concept in Pharma & Healthcare
- Challenges in CRM
- Role of Doctors & Retailers

Unit 2: Corporate Hospitals (6 Hours)

- Concepts in Corporate Hospitals
- Marketing Strategies
- Scope of Medical Tourism
- Hospital Devices

Unit 3: Inside the Hospital (6 Hours)

- Clinical Trials
- Hospital Management Information Systems (HMIS)
- Pharmacovigilance
- Case Studies – Bill Gates, Broken System

Unit 4: Health Policies (6 Hours)

- IEC (Information, Education, Communication)
- National Health Policies
- National Health Programme
- Medical Insurance

Unit 5: International Health Organizations (6 Hours)

- Structure & Role of WHO
- CDC
- AIIMS
- Nosocomial Infections, Laws & Ethics in Hospitals and Pharma

Suggested Reading Material

- CRM in Pharmaceutical and Healthcare Marketing – Shailendra Tripathi
- Customer Relationship Management in Healthcare: A Strategic Framework – Alexander G. Bockelmann
- Selected policy documents from MoHFW, WHO, CDC



Advanced Pharmaceutical Marketing

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHCM325	Semester	: III
Credit	: 3	Sessions	: 30

Detailed Unit-wise Syllabus

Unit 1: Introduction to Advanced Pharmaceutical Marketing

- **Key Topics:** Definition, scope, evolution, role of marketing in healthcare, key stakeholders.
- **Learning Focus:** Understanding fundamentals of pharma marketing and its healthcare relevance.

Unit 2: Consumer Behavior & Market Segmentation

- **Key Topics:** STP framework, prescriber vs. patient behavior, decision-making process.
- **Learning Focus:** Analyzing segmentation and behavioral patterns in pharma markets.

Unit 3: Branding & Positioning in Pharma

- **Key Topics:** Brand equity, differentiation, brand recall, and lifecycle management.
- **Learning Focus:** Understanding strategic brand development in regulated markets.

Unit 4: Marketing Channels & Distribution Strategy

- **Key Topics:** Supply chain structure, intermediaries, e-pharmacies, and logistics.
- **Learning Focus:** Exploring efficient channel management and supply network challenges.

Unit 5: Digital Marketing & Omnichannel Strategies

- **Key Topics:** CRM, automation tools, tele-detailing, content marketing, digital touchpoints.
- **Learning Focus:** Implementing omnichannel and tech-enabled engagement in pharma marketing.

Unit 6: Regulatory & Ethical Framework

- **Key Topics:** WHO guidelines, IFPMA codes, Indian laws, and compliance requirements.
- **Learning Focus:** Understanding ethical promotion and global policy implications.

Unit 7: Pricing, Promotion & Competitive Intelligence

- **Key Topics:** Pricing regulations, market access, promotional mix, competitive insights.
- **Learning Focus:** Designing effective pricing and promotion strategies using data analytics.



Unit 8: Marketing Analytics & Research

- Key Topics:** Market forecasting, consumer data, predictive modeling, ROI assessment.
- Learning Focus:** Applying marketing analytics tools for strategic decision-making.

Unit 9: Future of Pharma Marketing

- Key Topics:** AI, blockchain, personalization, sustainability, future market trends.
- Learning Focus:** Preparing for next-gen marketing and innovation in pharma.

Suggested Reference Books

- WHO Reports on Global Pharmaceutical Marketing Regulations.**
- IQVIA Reports – Global Pharma Marketing Trends.**
- Deloitte Insights (2023) – Digital Transformation in Pharma.**
- Kotler, P. – Marketing 5.0: Technology for Humanity.**



PARADIGMS OF PHARMA MANAGEMENT

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSHCM327	Semester	: III
Credit	: 3	Sessions	: 30

Chapter 1: Introduction to Pharma Management Paradigms

- Concept of 'paradigm' in management
- Evolution of pharma management practices – from traditional to modern models
- Historical overview of Indian and global pharma industry
- Role of innovation, regulation, and globalization in paradigm shifts

Chapter 2: Global & Indian Pharma Sector – Changing Dynamics

- Growth of Indian pharma: 'Pharmacy of the World'
- Global competition and international trade policies (WTO, TRIPS)
- Emerging markets vs. developed markets
- Case studies: Indian vs. Global MNC strategies

Chapter 3: Market Paradigm Shifts

- From branded dominance to generics and biosimilars
- Rise of contract manufacturing and outsourcing (CRAMS, CROs)
- OTC growth and consumer-driven healthcare markets
- Digitalization and e-pharmacies reshaping market behavior

Chapter 4: Disease Burden and Healthcare Demand Paradigms

- Epidemiological transition: communicable → chronic & rare diseases
- Impact of urbanization, aging population, and environment
- Pharma responses: biologics, vaccines, gene therapy
- Public health challenges and preventive medicine focus

Chapter 5: Regulatory & Compliance Paradigm

- Changing drug approval processes (India vs. global regulators: DCGI, CDSCO, FDA, EMA)
- IPR and compulsory licensing debates
- Post-marketing surveillance and pharmacovigilance
- Ethical practices in pharma – marketing, trials, patient safety

Chapter 6: Marketing and Sales Paradigm

- Traditional MR-driven detailing vs. digital engagement
- Patient-centric vs. prescriber-centric marketing models
- Multichannel and evidence-based promotion
- Case study: Digital pharma marketing campaigns

Chapter 7: Supply Chain and Operations Paradigm

- Pharma supply chain vs. FMCG – lessons learned
- COVID-19 disruptions and resilience building
- Cold chain management for vaccines and biologics
- AI, blockchain, and IoT in pharma logistics



Chapter 8: Pharma–Healthcare Integration Paradigm

- Collaboration between hospitals, diagnostics, and pharma
- Insurance penetration and its effect on pharma business

- Public–Private Partnerships (PPP) in healthcare delivery
- Telehealth and digital healthcare ecosystem

Chapter 9: Emerging and Future Paradigms

- Personalized medicine & precision healthcare
- Pharma 4.0 – automation, robotics, smart factories
- Sustainability and ESG in pharma sector
- India Pharma Vision 2030

Suggested Textbooks &References

- Chaturvedi, S. (2021). Pharmaceutical Management in India. McGraw Hill.
- Kotler, P. & Keller, K. (2020). Marketing Management. Pearson.
- Munos, B. (2019). The Innovation Crisis in Pharmaceuticals. Wiley.
- Chaudhury, R. R. (2020). The Indian Pharmaceutical Industry: Global Trends & Local



Financial Services

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSFM314	Semester	: III
Credit	: 3	Sessions	: 30

Detailed Syllabus

Unit 1: Evolution of Financial Services

- Overview of financial services in India and globally
- Evolution of leasing, hire purchase, consumer finance, and installment credit
- Portfolio management schemes and credit rating
- Plantation schemes as investment instruments

Unit 2: Leasing

Introduction to Equipment Leasing:

- History and development of leasing
- Concept and classification of leases
- Types of leases: finance lease, operating lease, sale and leaseback, etc.
- Advantages and disadvantages of leasing
- Evolution of Indian leasing industry and integration with commercial banking sector
- Leasing product profile

Legal Aspects of Leasing:

- Legislative framework
- Lease documentation process
- Key contents of a lease agreement

Tax Aspects of Leasing:

- Income tax considerations
- Depreciation allowance on leased assets
- Rental income taxation
- Tax planning for leasing



Lease Evaluation:

- **Lessee's perspective:** Alternative evaluation methods, breakeven lease rental, lease vs. buy, practical evaluation
- **Lessor's perspective:** Break-even rental, lease pricing, gross/add-on yield, lease-related risk assessment, tax/regulatory impact, appraisal and approval process, monitoring receivables, recovery mechanisms

Unit 3: Hire Purchase

- Concept and characteristics
- Mathematical calculations (effective interest rate)
- Legal aspects and tax implications
- Financial evaluation: perspective of hirer and finance company

Unit 4: Consumer Finance

- Role of consumer credit in the financial system
- Features and structure of consumer credit transactions
- Mathematics of consumer credit
- Legal framework and portfolio management
- Credit evaluation, screening methods, and innovative structuring

Unit 5: Factoring

- Concept and types/forms of factoring
- Factoring vs. bill discounting, credit insurance, forfaiting
- Legal and financial evaluation
- Current developments of factoring in India

Unit 6: Housing Finance

- Housing finance companies (HFCs) and refinance schemes
- Regulatory guidelines and prudential norms for HFCs

Unit 7: Credit Cards

- Concept, billing, and payment procedures
- Settlement, commission sharing, defaults, and recovery mechanisms
- Add-on facilities, corporate & business cards, debit cards
- Member establishments, affiliates, and VisaNet system



Unit 8: Credit Rating

- Concept and types of credit rating
 - Advantages and disadvantages
 - Credit rating agencies and methodologies
 - Emerging areas in rating services and international practices
-

Unit 9: Regulatory Environment of Financial Services

- Recommendations of various committees
 - Prudential norms for income recognition
 - Provisioning for bad and doubtful debts
 - Capital adequacy and credit concentration norms
 - RBI guidelines for finance companies, advertising rules, fixed deposits, and credit rating regulations
-

Unit 10: Mortgages and Mortgage Financing

- Mortgages and mortgage instruments
 - Types of mortgages: whole loans, GPMs, PAMS, buy-down loans, ARMs, SAMs
 - Mortgage-backed securities and collateralized mortgage obligations (CMOs)
-

Unit 11: Insurance and Mutual Funds

- Introduction to life and non-life insurance
- Concepts, types, and regulatory framework
- Introduction to mutual funds: types, operations, and role in financial services



Direct Taxation

Class of	: 2024-26	Academic Year	: Second Year
Course Code	: PBSFM315	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Introduction to Income Tax

- Overview of **Income Tax Act, 1961**
- Basic concepts: Direct Tax, Indirect Tax, Person, Assessee, Deemed Assessee, Assessment Year, Previous Year
- Residential status of individuals and companies
- **Income exempt from tax:**
 - Gratuity
 - Leave Travel Concession (LTC)
 - Encashment of unutilized earned leave on retirement
 - Pension, Voluntary Retirement Receipts, Retrenchment Compensation
 - Receipts from Life Insurance Corporation
 - House Rent Allowance (HRA)
 - Payment from NPS Trust on closure or partial withdrawal
 - Agricultural income

Unit 2: Income under the Head “Salaries”

- Meaning and basis of charge of salary income
- Forms of salary: basic pay, allowances, perquisites
- Permissible deductions from salary income
- Tax treatment of provident fund, gratuity, and retirement benefits

Unit 3: Income from House Property

- Basis of charge and exemptions
- Self-occupied property vs. let-out property
- Computation of income from house property
- Deduction under section 24

Unit 4: Income under the Head “Profits and Gains of Business or Profession”

- Computation of profit or gain from business and profession
- Expenses: expressly allowed, general, and specifically disallowed



-
- Basis of charge and chargeable incomes
 - Specific deductions and non-deductible amounts

Unit 5: Income under the Head “Capital Gains” & “Other Sources”

- **Capital Gains:**
 - Meaning and basis of charge
 - Key definitions: Capital Asset, Short-term/Long-term Capital Asset, Transfer
 - Computation of short-term and long-term capital gains
- **Other Sources:**
 - Incomes chargeable under section 56
 - Allowable deductions (Sec. 57) and disallowable deductions (Sec. 58)
 - Bond washing transactions and dividend stripping (Sec. 94)

Unit 6: Net Taxable Income and Tax Compliance

- Computation of net total income (all 5 heads)
- Carry forward and set-off of losses
- Deductions under Sec. 80
- Computation of income tax liability
- Advance tax and Tax Deducted at Source (TDS)
- Tax planning vs. tax evasion
- Filing of Income Tax Returns (ITR) and **e-filing process**

Suggested Text Books:

1. Direct Taxes, Ravi Kishore
2. Direct Taxes, J.P. Jakhotiya
3. Direct Taxes, Dr. Girish Ahuja & Dr. Ravi Gupta
4. Direct Taxation, Dr. Pradip Kumar Sinha



Financial Modeling

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSFM316	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Excel for Finance & Financial Modelling

1. Excel Usage

- Excel Layout & Settings
- Basic Functions (SUM, AVERAGE, IF, COUNT, etc.)
- Advanced Functions (VLOOKUP, HLOOKUP, INDEX-MATCH, SUMIFS, IFERROR, etc.)
- Charts and Graphs (Column, Line, Combo, Pie, Waterfall)

2. Financial Data Analysis

- Sorting & Filtering
- Data Tables and Pivot Tables
- Trend & Sensitivity Analysis
- Conditional Formatting

3. Time Value of Money

- Present Value (PV), Future Value (FV)
- NPV, IRR, PMT functions
- Loan amortization schedules

4. Macros

- Recording Macros
- Assigning Macros to Buttons

5. Basics of VBA

- Introduction to VBA Editor
 - Writing Simple VBA Scripts
 - Automating Repetitive Financial Tasks
-



Unit 2: Business Understanding & P&L Statement

1. Business & Industry Analysis

- Understanding Business Models
- Industry Structure & Key Drivers
- Boston Consulting Group (BCG) Matrix
- McKinsey 7S / GE Matrix

2. P&L Statement Modelling

- Structure and Components of P&L
 - Revenue Modelling
 - Expense Forecasting
 - Linking P&L to Financial Model
-

Unit 3: Balance Sheet Forecasting

- Understanding Tangible & Intangible Assets
 - Non-Current Assets Forecasting (PPE, Depreciation)
 - Current Assets Forecasting (Inventory, Receivables, Cash)
 - Non-Current Liabilities Forecasting (Debt, Bonds)
 - Current Liabilities Forecasting (Payables, Short-Term Loans)
 - Balancing the Balance Sheet
-

Unit 4: Cash Flow Statement

- **Operating Cash Flow (Part 1)**
 - Adjustments for Non-Cash Items
 - Changes in Working Capital
 - **Operating Cash Flow (Part 2)**
 - Indirect Method
 - Reconciliation with P&L
 - **Financing & Investing Cash Flow**
 - Cash Flow from Investing (CapEx, Sale of Assets)
 - Cash Flow from Financing (Debt, Equity, Dividends)
-



Unit 5: Valuation Techniques

1. Absolute Valuation

- Cost of Equity (CAPM)
- Weighted Average Cost of Capital (WACC)
- Perpetual Growth Rate

2. Discounted Cash Flow (DCF)

- FCFF (Free Cash Flow to Firm)
- Terminal Value
- Intrinsic Value Calculation

3. Relative Valuation

- Multiples (P/E, EV/EBITDA, P/BV, etc.)
 - Peer Comparison
-

Unit 6: Risk Management

- Scenario Analysis (Base, Bull, Bear Cases)
 - Sensitivity Analysis
 - Football Field Analysis (Valuation Range Presentation)
-

Unit 7: Model Evaluation / Test

- Integrated Financial Model Test
 - Linking P&L, Balance Sheet, and Cash Flow
 - Checking Circular References & Integrity
 - Error Checks and Audit Trail
 - Presentation of Financial Model



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Introduction to Banking

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSFM317	Semester	: III
Credit	: 3	Sessions	: 30

Detailed Syllabus:

Unit 1: Introduction to Banking Operations

- Changing nature of banking operations
- Importance of Customer Relationship Management (CRM) in banks
- Role of technology in banking operations
- Overview of service design and delivery strategies in banks
- Products and services offered by banks
- Implications of service intangibility

Unit 2: Electronic Banking (e-Banking)

- Introduction to electronic banking and computerization
- Finance portals for banking industry
- Multi-channel operations / remote banking
- Internet banking, e-commerce, and e-banking in India
- Branch renaissance and migration to online environment
- Core banking solutions, universal banking
- Risks in e-banking and regulatory framework

Unit 3: Security Considerations in e-Banking

- Need for security in electronic banking
 - Sources, types, and causes of risks
 - Control measures at system and network levels
 - Disaster recovery and contingency plans
 - Legal aspects, frameworks, and security policies
-



Unit 4: Facilities and Payment Systems Management

- Payment and settlement systems in India and abroad
- RTGS, clearing houses (manual, MICR, high-value, national clearing)
- Clearing Corporation of India Ltd.
- Emerging systems: ECS (debit & credit), EFT, MEFT, RTGS, LERM
- Remittance channels: INFINET, BANKNET, SWIFT, and non-banking channels
- Risk factors, cost reduction, and central bank's role

Unit 5: Service Quality and Operational Controls

- Service quality metrics: technical quality, functional quality, process capability
- Customer perception of banking service quality
- Quality assurance and ISO 9000 certification
- Improving productivity and performance: Six Sigma in banking
- Operational controls: banking regulations, maintenance of records, CRAR, reporting
- Asset-liability management, audit, vigilance, organizational structure

Unit 6: Risk Management in Banks

- Introduction to risk management: purpose and process
- Types of risks in banks (operational, financial, systemic)
- Enterprise-wide risk management
- The New Basel Accord: Basel II framework, three-pillar architecture, implications
- Risk management strategies: operational, financial, systemic, IT implementation risks
- Operational risk: sources, measurement, and management



Advanced Financial Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSFM318	Semester	: III
Credit	: 3	Sessions	: 30

Detailed Syllabus:

Unit 1: Financial Forecasting and Pro-Forma Statements

- **Sales Forecasting:** Methods and techniques for projecting sales
- **Pro-Forma Financial Statements:** Preparation of projected income statement and balance sheet
- **Growth and External Funds Requirement (EFR):** Concept and computation

Unit 2: Leverage and Capital Structure

- **Leverage Analysis:** Operating leverage, financial leverage, and total leverage; implications for risk and profitability
- **Capital Structure Theories:**
 - Net Income Approach
 - Net Operating Income Approach
 - Traditional Approach
 - Modigliani-Miller Model (MM) and Miller Model
 - Criticisms of MM and Miller Models
 - Financial distress and agency cost
 - Asymmetric information theory
- **Capital Structure Policy:**
 - Business & financial risk perspectives
 - Determinants of capital structure decisions
 - Estimating target capital structure
 - EBIT/EPS analysis and ROI/ROE analysis

Unit 3: Dividend Policy

- Traditional position and approaches
- Walter Model
- Gordon Model
- Miller-Modigliani Position
- Rational Expectations Model
- Implications for firm value and shareholder wealth



Unit 4: Capital Budgeting and Project Analysis

- **Basics of Capital Expenditure Decisions:**
 - Capital budgeting process and principles
 - Estimating costs and benefits of investments
- **Appraisal Criteria:**
 - Discounted methods: Net Present Value (NPV), Internal Rate of Return (IRR), Benefit-Cost Ratio
 - Non-discounted methods: Payback Period, Average Rate of Return
- **Project Cash Flow Analysis:**
 - Cash flow estimation and relevant cash flows
 - Replacement decisions, cash flow estimation bias
 - Evaluating projects with unequal lives

Unit 5: Working Capital Management

- **Estimation of Working Capital Needs:**
 - Objectives (conservative vs aggressive policies)
 - Static vs dynamic views of working capital
 - Factors affecting composition and independence of components
 - Operating cycle approach
- **Inventory Management:**
 - Role and purpose of inventory in working capital
 - Types, costs, and techniques of inventory management
 - Pricing of investments, inventory planning, and control
- **Receivables Management:**
 - Purpose and cost of maintaining receivables
 - Credit policy variables (standards, period, cash discount, collection program)
 - Credit evaluation and monitoring receivables

Unit 6: Financing Current Assets and Treasury Management

- **Financing Current Assets:**
 - Behaviour of current assets and financing patterns
 - Sources: accruals, trade credit, provisions, short-term bank finance, factoring
- **Treasury Management:**
 - Cash management: meaning, objectives, and need
 - Cash forecasting and budgeting
 - Cash reports and efficient cash management



Productions & Operations Management

Class of : 2025-27

Academic Year : Second Year

Course Code : PBSOSCM319

Semester : III

Credit : 3

Sessions : 30

Detailed Syllabus:

Unit 1: Introduction to Production and Operations Management

Topics:

- Concepts of Production and Operations Management
- Functions of Production and Operations Management
- Objectives of Production and Operations Management
- Factors to be Considered for Plant Location

Learning Focus:

- Understanding the role and scope of POM
- Decision areas in production and operations
- Importance of facility and location planning

Unit 2: Manufacturing Systems and Plant Layout

Topics:

- Types of Manufacturing Methods (Job, Batch, Mass, Continuous, Cellular, Flexible, etc.)
- Comparison of Various Manufacturing Methods
- Types of Layouts (Product, Process, Fixed, Combination, Cellular)
- Comparison of Various Types of Layouts

Learning Focus:

- Differentiating manufacturing methods
- Selecting suitable layout for production type
- Understanding material flow and layout efficiency

Unit 3: Production Planning and Control (PPC)

Topics:

- MRP-II System (Manufacturing Resource Planning)
- Applying MRP-II System



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- Master Production Scheduling (MPS)
 - MPS Problems
 - Aggregate Planning Concepts
 - Aggregate Planning Strategies
 - Aggregate Planning Problems

Learning Focus:

- Role of planning in operations
 - Balancing demand and capacity
 - Use of MRP-II and MPS in production control
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Unit 4: Material Requirement Planning (MRP) and Bill of Materials (BOM)

Topics:

- MRP Concepts
- BOM (Bill of Materials) Concepts
- MRP Problems

Learning Focus:

- Structure and working of MRP
 - Application of BOM in production systems
 - Calculating net requirements and planning schedules
-

Unit 5: Inventory Management

Topics:

- Inventory Concepts
- EOQ (Economic Order Quantity) Concepts
- EOQ Problems
- EMQ (Economic Manufacturing Quantity) Problems
- P-System and Q-System Concepts
- Deterministic Inventory Problems
- Probabilistic Inventory Problems

Learning Focus:

- Understanding inventory control techniques
 - Applying EOQ and EMQ models
 - Analyzing deterministic vs. probabilistic approaches
-



Unit 6: Forecasting and Demand Management

Topics:

- Forecasting Concepts
- Various Forecasting Methods (Qualitative & Quantitative)
- Forecasting Problems

Learning Focus:

- Importance of forecasting in production
- Using time series and causal models
- Evaluating forecasting accuracy

Unit 7: Lean Manufacturing and Continuous Improvement

Topics:

- Lean Manufacturing Concepts
- Toyota Production System (TPS)
- Just-In-Time (JIT) Concepts
- Total Productive Maintenance (TPM) Concepts
- Kaizen Concepts

Learning Focus:

- Principles of lean manufacturing
- Waste reduction and efficiency improvement
- Application of JIT, TPM, and Kaizen in modern manufacturing

Suggested Books:

1. **Production and Operations Management** – K. Aswathappa & K. Shridhara Bhat, Himalaya Publishing
 - Covers fundamentals, manufacturing systems, PPC, MRP, BOM, and inventory management.
2. **Operations Management** – Jay Heizer & Barry Render, Pearson
 - Explains forecasting, production planning, lean manufacturing, and continuous improvement with solved examples.
3. **Production and Operations Management** – S. N. Chary, Tata McGraw Hill
 - Emphasizes plant location, layouts, inventory control, and aggregate planning.
4. **Operations Management: Theory and Practice** – B. Mahadevan, Pearson
 - Good for MRP-II, PPC, scheduling, forecasting, and lean manufacturing concepts.
5. **Fundamentals of Operations Management** – R. Panneerselvam, PHI Learning



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- Includes EOQ, EMQ, deterministic and probabilistic inventory problems, JIT, TPM, and Kaizen principles.
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Supplementary / Reference Books

6. **Manufacturing Planning and Control for Supply Chain Management** – Thomas E. Vollmann, William L. Berry, et al., McGraw-Hill
 - Focus on MRP, aggregate planning, production scheduling, and inventory models.
7. **Lean Production Simplified** – Pascal Dennis, Productivity Press
 - Focuses on TPS, lean concepts, JIT, and continuous improvement methods.
8. **Factory Physics** – Wallace J. Hopp & Mark L. Spearman, McGraw-Hill
 - Quantitative approach to production planning, inventory control, and forecasting accuracy.
9. **Operations Management for Competitive Advantage** – Richard Chase, F. Robert Jacobs, Nicholas Aquilano, McGraw-Hill
 - Covers modern POM techniques, facility planning, and lean manufacturing.



Logistics Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSOSCM320	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Introduction to Supply Chain Management (SCM)

Topics:

- Brief Overview of SCM
 - Definition, Scope, and Importance
 - Key Components and Functions of SCM
 - Integration of Logistics in SCM
 - Role of Freight Forwarding in Global Supply Chains

Learning Focus:

- Understand the concept and objectives of SCM
- Analyze how logistics supports efficient supply chain operations

Unit 2: Outsourced Logistics and Service Providers

Topics:

- A Look at Outsourced Logistics
- First-party Logistics (1PL)
- Second-party Logistics Provider (2PL)
- Third-party Logistics Provider (3PL)
- Fourth-party Logistics Provider (4PL)
- Fifth-party Logistics Provider (5PL)

Learning Focus:

- Understand various logistics service provider models
 - Compare responsibilities and capabilities of 1PL–5PL
 - Evaluate outsourcing decisions in logistics
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Unit 3: Freight Forwarding and Its Functions

Topics:

- Responsibilities of a Freight Forwarder
- The Process of Freight Forwarding
 - Booking, Documentation, Customs, and Delivery
- Coordination with Carriers and Clients

Learning Focus:

- Understand how freight forwarding facilitates global trade
 - Learn the operational workflow of freight forwarding
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Unit 4: Export Documentation

Topics:

- Commercial Invoice
- Packing List
- Export Shipping Bill
- Bill of Lading
- Certificate of Origin
- Letter of Credit
- Insurance Certificate
- Hazardous Cargo Declaration

Learning Focus:

- Study key export documents and their significance
 - Learn how to prepare and verify documentation for international shipping
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Unit 5: Freight Forwarding Regulations and Associations

Topics:

- International Federation of Freight Forwarders Association (FIATA)
- Important Projects of FIATA
- Regulatory Compliance and Safety Standards

Learning Focus:

- Understand FIATA's global role in standardizing freight forwarding
- Explore FIATA documentation, projects, and training initiatives



Unit 6: Global Freight Forwarding Industry

Topics:

- Leading Freight Forwarders (Global and Indian Context)
- The Global Scenario and Outlook of Freight Forwarding Industry
- Challenges and Emerging Trends (Digital Freight, Green Logistics, Automation)

Learning Focus:

- Gain awareness of major players in freight forwarding
 - Analyze global trends, growth patterns, and technological changes
-

Unit 7: Operational Flow of Freight Forwarding

Topics:

- The Basic Flow of Freight Forwarding (Sea Shipments)
 - Pre-Shipment Activities
 - Cargo Handling and Customs Clearance
 - Shipment Tracking and Delivery

Learning Focus:

- Map the step-by-step process in sea-based freight forwarding
- Identify coordination between stakeholders at each stage

Suggested Books:

1. **Global Logistics and Supply Chain Management** – John Mangan, Chandra Lalwani, Tim Butcher, Pearson
 - Covers SCM basics, integration of logistics, freight forwarding functions, and global perspectives.
2. **International Logistics: The Management of International Trade Operations** – Pierre A. David, Kogan Page
 - Focus on freight forwarding, documentation, and operational flow of global shipments.
3. **Freight Forwarding and Multi Modal Transport Contracts** – Alan E. Branch, LLP International
 - Detailed coverage of responsibilities of freight forwarders, contracts, and multimodal logistics.
4. **Export Management: A Global Marketing Approach** – Rakesh Mohan Joshi, Oxford University Press
 - Strong emphasis on export documentation, compliance, and international trade practices.



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5. **International Freight Forwarding: The Logistics of International Trade** – Alan E. Branch, Kogan Page
 - Operational processes, regulatory compliance, and emerging trends in freight forwarding.
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Supplementary / Reference

6. **Supply Chain Management: Strategy, Planning, and Operation** – Sunil Chopra, Peter Meindl, Pearson
 - Good for understanding SCM strategy, outsourced logistics (1PL–5PL), and supply chain integration.
7. **Global Supply Chain Management** – Matt Drake, Routledge
 - Covers global industry outlook, trends like green logistics, automation, and digital freight.
8. **International Trade and Export Management** – Francis Cherunilam, Himalaya Publishing
 - Provides examples of FIATA standards, export documentation, and trade regulations.



Material & Stores Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSOSCM321	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Introduction to Materials and Inventory Management

Topics:

- Review and Overview of Basic Concepts
- Definition of Materials and Inventory Management
- Objectives, Scope, and Importance
- Independent and Dependent Demands
- Deterministic and Stochastic Demands
- Different Types of Materials and Inventory Systems
- Materials and Inventory Costs (Ordering, Holding, Shortage, and Purchase Costs)

Learning Focus:

- Understand the role of materials and inventory in production systems
- Differentiate between types of demands and inventory systems
- Learn cost components affecting inventory decisions

Unit 2: Service Levels and Inventory Policies

Topics:

- Service Level and Safety Stock Concepts
- Inventory Policy Design
- Order Quantity and Reorder Point Decisions

Learning Focus:

- Define and calculate service levels and safety stocks
 - Determine appropriate order quantities and reorder points
 - Understand trade-offs between stock availability and cost
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Unit 3: One-Item Inventory Models

Topics:

- Deterministic Demand Models (EOQ Model and Variants)
- Stochastic Demand Models
- Newsvendor Model
- Optimal Solutions and Approximation Techniques

Learning Focus:

- Apply mathematical models to single-item inventory problems
 - Analyze deterministic vs. stochastic inventory behavior
 - Compute optimal order levels using analytical or approximate methods
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Unit 4: Multi-Item Inventory Models

Topics:

- Independent and Dependent Demands in Multi-Item Systems
- ABC Analysis and Classification of Inventory
- Joint Replenishment Problem
- Series, Assembly, Tree, and General Production Network Systems
- Optimal Solution, Heuristics, and Approximation Approaches

Learning Focus:

- Manage inventory for multiple products simultaneously
 - Prioritize inventory control using ABC and other analytical tools
 - Understand interdependencies among items in complex production systems
-

Unit 5: Materials Planning and Control Systems

Topics:

- Bill of Materials (BOM)
- Material Requirements Planning (MRP) Concepts and Applications
- MRP Logic and Netting Process
- Integration of MRP with Production Planning and Scheduling

Learning Focus:

- Understand BOM structure and its use in MRP
- Apply MRP for dependent demand planning



- Link inventory planning with production schedules
-

Unit 6: Strategic Aspects of Material Management

Topics:

- Supply Chain Management Overview
- Material Management Organization Structures
- Centralized vs. Decentralized Material Management
- Coordination and Information Flow in Supply Chains

Learning Focus:

- Examine the strategic role of material management in SCM
- Compare centralized and decentralized management structures
- Understand coordination challenges in modern supply chains

Suggested Books:

- **Materials Management: Text and Cases** – R. S. Bhattacharya, Pearson
 - Covers BOM, MRP concepts, and integration with production planning.
- **Manufacturing Planning and Control for Supply Chain Management** – Thomas E. Vollmann, William L. Berry, D. Clay Whybark, F. Robert Jacobs, McGraw-Hill
 - Excellent for MRP logic, netting process, and production scheduling.
- **Production and Operations Management** – R. Panneerselvam, PHI Learning
 - Provides practical examples of materials planning, MRP, and production scheduling.
- **Operations Management: Processes and Supply Chains** – Lee J. Krajewski, Larry P. Ritzman, Manoj K. Malhotra, Pearson
 - Includes modern materials planning methods and integration with supply chain processes.
- **Materials and Supply Chain Management** – B. R. Dhillon, John Wiley & Sons
 - Focus on planning systems, integration, and strategic alignment with production.



Operations Research

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSOSCM322	Semester	: III
Credit	: 3	Sessions	: 30

Topics:

Unit 1: Linear Programming – Basics and Graphical Solutions

Topics:

- Introduction to Linear Programming (LP)
- Two-Variable LP Problems
- Problem Formulation (Objective Function & Constraints)
- Graphical Solution Procedure
- Use of Spreadsheet Solver Software in LP
- Applications of LP in Organizational Decision-Making

Learning Focus:

- Understand LP concepts and formulation
- Solve two-variable LP problems graphically
- Apply LP for decision-making in operations, marketing, finance, and HR

Unit 2: Sensitivity and What-If Analysis

Topics:

- What-If Analysis in Decision Models
- Sensitivity Analysis and Interpretation of LP Solutions
- Importance of What-If Analysis for Managers
- Using Spreadsheet Tools for Scenario and Sensitivity Testing

Learning Focus:

- Evaluate the effect of parameter changes on LP solutions
- Interpret sensitivity ranges and managerial implications
- Use data-driven approaches for robust decision-making



Unit 3: Linear Programming – Multi-Variable Models

Topics:

- Formulation of Multi-Variable Linear Programming Problems
- Solving Using Spreadsheet Solver Software
- Real-Life Applications of Multi-Variable LP
 - Production Planning
 - Resource Allocation
 - Workforce Scheduling

Learning Focus:

- Extend LP understanding to multi-variable and real-world problems
- Utilize spreadsheet solvers for larger LP models
- Interpret optimal solutions for managerial decisions

Unit 4: Distribution and Network Models

Topics:

- Transportation Problem – Formulation, Initial Feasible Solution, and Optimization
- Assignment Problem – Hungarian Method and Applications
- Transshipment Problem
- Shortest-Route Problem (Dijkstra's Algorithm)
- Minimum Spanning Tree Technique (Kruskal's/Prim's)
- Maximal Flow Problem

Learning Focus:

- Understand network-based decision models
- Apply quantitative methods to logistics and supply chain networks
- Solve real-world routing, allocation, and distribution problems

Unit 5: Project Scheduling and Network Analysis

Topics:

- Program Evaluation and Review Technique (PERT)
- Critical Path Method (CPM)
- Project Scheduling with Known Activity Times
- Project Scheduling with Uncertain Activity Times
- Time-Cost Trade-Offs and Crashing of a Project



Learning Focus:

- Construct project networks and compute critical paths
- Analyze project timelines under uncertainty
- Apply time-cost optimization for efficient project management

Unit 6: Simulation and Risk Analysis

Topics:

- Concept of Simulation Models
- Risk Analysis in Decision-Making
- Inventory Simulation
- Waiting Line and Queuing Simulation
- Random Numbers and Monte Carlo Simulation
- Advantages and Disadvantages of Simulation in Business

Learning Focus:

- Develop an understanding of simulation as a problem-solving tool
- Use simulation for analyzing uncertainty in business operations
- Apply Monte Carlo and queuing models to real-world cases

Indicative Reading:

- Anderson David R., Sweeney Dennis J., Williams Thomas A., Jeffrey D. Camm Jeffrey D. And Martin Kipp , An Introduction to Management Science-Quantitative Approaches to Decision, Cengage Publishing
- Hillier Fred S. and Hillier Mark S., Introduction to Management Science: A Modelling and Case Studies Approach with Spreadsheets, McGraw Hill Education (India) Private Limited Publishing
- Hillier F.S and Lieberman , Introduction to Operations Research, McGraw Hill International Edition, New Delhi



Global Supply Chain Management

Class of	: 2025-27	Academic Year	: Second Year
Course Code	: PBSOSCM323	Semester	: III
Credit	: 3	Sessions	: 30

Unit 1: Introduction

- Meaning and objectives of International Logistics and Supply Chain Management
- Importance in global economy
- Characteristics of global supply chains
- Supply chain relationship to business performance
- Key tasks of logistics and supply chain managers
- Role of government in international trade and impact on logistics

Unit 2: Supply Chain Strategy

- Supply chain as a competitive advantage
- Global supply chain strategy
- Structuring supply chain capabilities
- Aligning supply chain design with business strategy

Unit 3: Transportation

- Strategic importance of transport in global logistics
- Logistical objectives of transport
- International Ocean, Air, and Land Transportation – types, characteristics, salient features
- Intermodal transportation
- Factors influencing mode and carrier selection

Unit 4: Outsourcing and Logistics Service Providers

- Intermediaries and alliances in global logistics
- 3PL and 4PL service providers: role, types of services, considerations
- Concept, need, and determinants of outsourcing
- Role of outsourcing in global supply chain management

Unit 5: Customer Service

- Marketing and logistics interface
- Customer service and retention
- Service-driven logistics systems



- Customer service priorities, standards, and strategy

Unit 6: Planning Global Supply Chain

- Planning global supply chain and network design
- Risk management in global context
- Measuring logistics cost and performance
- Benchmarking and performance evaluation

Unit 7: Global Trade Environment

- Trade blocks, Free Trade Zones (FTZ)
- Customs, regulations, and documentation
- International contracts, terms of trade and payment
- Currency considerations, INCOTERMS
- Logistical packaging and containerization

Unit 8: Network Design

- Strategic importance of network design
- Location of plants, warehouses, and facilities
- Capacity and number of warehouses
- Factors influencing network design decisions

Unit 9: Inventory Flow and Modeling

- Inventory management approaches in global supply chains
- Distribution Resource Planning (DRP)
- Symptoms of poor inventory management
- Inventory models, safety stock, lead time, and forecasting
- Routing problems

Unit 10: Coordination in Supply Chain

- Importance of coordination
- Bullwhip effect and its impact
- Obstacles to coordination
- Strategies to achieve coordination
- Building strategic partnerships and trust

Unit 11: Information Technology in Supply Chain

- Role and importance of IT in supply chain management
- IT solutions and technologies for global supply chains
- Practical applications of supply chain IT



Unit 12: Performance Measurement and Trends

- Dimensions and approaches for performance measurement
- Measuring logistics costs and benchmarking
- Impediments to improving performance
- Current trends in international supply chain management

Suggested Books:

Global Logistics and Supply Chain Management – John Mangan, Chandra Lalwani, Tim Butcher, Roya Javadpour

- Covers strategy, network design, transportation, outsourcing, and performance measurement in global supply chains.

International Logistics: The Management of International Trade Operations – Pierre A. David & Richard Stewart

- Focus on global trade environment, transportation modes, customs, documentation, and international contracts.

Supply Chain Management: Strategy, Planning, and Operation – Sunil Chopra & Peter Meindl

- Comprehensive coverage of supply chain planning, inventory management, coordination, and IT applications.

Logistics & Supply Chain Management – Martin Christopher

- Emphasizes customer service, competitive advantage, outsourcing, and 3PL/4PL service providers.

Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies – David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi

- Focus on network design, inventory modeling, risk management, and coordination in global supply chains.



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