

# MBA (Pharmaceutical Management)

## COURSE STRUCTURE

### Semester-1

S.No.	Code	Course	Credits
1	MBA 701	Essentials of Management	3-1-0=4
2	BAM 709	Principles of Accounting	4-1-0=3
3	BAM 752	Business Communication and Soft Skills Development	3-1-0=4
4	BAM-755	Business Environment	4-0-0=4
5	BAM-754	Organizational Behaviour	3-0-0=3
6	PH-702	Basic Epidemiology	3-0-0=3
7	BAM 756	Disaster Management	2-0-0=2
8	MBA-702	Personality Development	2-0-0=2
		Total Credits	25

### Semester-2

S.No.	Code	Course	Credits
1	BAM-760	Marketing Management	3-1-0=4
2	PHA-632	Pharmacology and Microbiology	3-0-0=3
3	MBPM 703	Pharma Logistics Management	3-0-0=3
4	MBPM 704	Pharmaceutical Marketing & Research	2-0-2=3
5	MBPM 704	Pharmaceutical Marketing Research & Statistics	2-0-2=3
6	MBPM 705	Soft Skills Development-II	0-0-4=2
7	PHA 325	Introduction to Physiology and Human Anatomy	3-0-0=3
8	BAM 856	Management Science	4-0-0=4
9	BAM-823	Product and Brand Management	3-0-0=3
		Total Credits	28

### Semester-3

S.No.	Code	Course	Credits
1	BAM 864	Management Information System	4(2-1-2)
2	BAM 859	Entrepreneurship & SBM	4 (4+0+0)
3	MBA 703	Business Analytics	3(3+0+0)
4	MBPM 706	Pharma Sales & CRM	4(4+0+0)
5	MBPM 707	Pharmaco-economics	4(4+0+0)
6	PHM 734	Drug Regulatory Affairs	3(3+0+0)
7	BAM 816	Seminar (Summer Training)	1(0+1+0)
		Total Credits	23

### Semester-4

S.No.	Code	Course	Credits
1	BAM-865	Strategic Management	4-0-0=4
2	BAM-808	Intellectual Property Rights	3-0-0=3
3	BAM-809	Total Quality Management	3-0-0=3
4	BAM-799	Labour Law	3-0-0=3
5	BAM-897	Comprehensive Viva-voce	0-1-0=1
6	BAM-899	Project Report	0-0-20-10
		Credits	24
		Total Credits	102

# MBA (Pharmaceutical Management)

## SYLLABUS

### Semester-1

**MBA-701**

**Essentials of Management Credits 4 (4-0-0)**

#### **Course Objective:**

This course enables students to learn about basic fundamentals of management, theories of management and functions of management. Course is very important for non-management background students to get the basic fundamentals and for management background to refresh the course contents.

#### **UNIT I: Introduction to Management and Organization:**

Management functions, Roles and Skills, Universality of management, Management history: Historical background of management, Classical Approach, Quantitative Approach, Behavioral Approach, Contemporary Approach.

#### **UNIT II: Decision making process**

Types of decisions, Planning process, Types of plans, Contemporary issues in planning, Criticism of planning.

#### **UNIT III: Designing organizational structure**

Departmentalization, Chain of command, Span of control, Centralization and Decentralization, Organizational design.

#### **UNIT IV: Early theories of motivation**

Contemporary theories of Motivation, Early theories of Leadership, Contingency theory of leadership, Contemporary views of leadership, Principles of coordination.

#### **UNIT V: Control process**

Controlling for organizational performance, Measures for organizational performance.

#### **Suggested Readings:**

1. **Management, Stephen P. Robbins, 10<sup>th</sup> edition, Pearson Publication**
2. **Organization and management, R.D Agarwal, Tata McGraw Hill publishing**
3. **Management Theory and Practices, P. Subba Roa, Himalaya Publishing House**
4. **Principles and Practice of Management, L.M Prasad, 7<sup>th</sup> edition, Sultan Chand & Sons publication**
5. **Principles of Management: Concepts and Cases, Dr. Rajeesh Viswanathan, Himalaya Publishing House**

**BAM-709 Principles of Accounting Credits 3 (2-1-0)**

**Course Objective:** - Accounting is the major part for any business organization to measure their financial and non-financial transactions. This course useful for students in terms of understand the concept of accounting, its importance, various books of transactions and their preparations.

**Unit: I**

Meaning & Scope of Accounting , Objectives of Accounting

Concepts of Accounting

Transactions & Types

Book Keeping VS Accounting

Types of Accounts

Golden Rules

**Unit: II**

Introduction to Journal, Journal

Compound Entry Examples

Intro to Ledger

Ledger Balancing

Subsidiary Books of Accounts

**Unit: III**

Cash Book

Cash Book Practicals

Double Column Cash Book

**Unit: IV**

Triple Column

Petty Cash Book

Trial Balance

**Unit: V**

Rectification of Errors

Types of Errors

Depreciation, Depreciation Practical's

Dep- Reducing Balance, Dep- Fixed Instalments

**Unit: VI**

Intro to BRS, BRS practical

Intro to Final Accounts

Intro to Final Accounts-Theory

Intro to Final Accounts-Practical's

**Unit: VII**

Trading Accounts

Profit /Loss Account-adjustments

Intro to Balance Sheet

Balance Sheet Practical-Simple

Balance Sheet-Adjustments

Final Accounts

**Text Books Recommended**

**1. Modern Accountancy – Mukherjee & Hanif**

**2. Advanced Accountancy – Jain and Narang**

**3. An Introduction to Accountancy – S.N. Maheshwari & S.K. Maheshwari**

## **BAM-752 Business Communication Credits 3 (2-1-0)**

**Course Objective:** - Effective communication is the major quality of an effective leader or manager. This course helpful for management students to learn basics of business communication, importance of effective communication, and what are the theories and principles for business communication.

### **Unit: 1**

Concept of communication, objective,

Defining communication

Role of communication, Importance of effective communication

Objective of Communication ( Downward, Upward, Horizontal, Vertical, Grapevine )

### **Unit: 2**

External Communication

Essential features of modern business

Process of communication( Encoding, decoding, Transmitter, Two-way communication)

### **Unit: 3**

Barriers to Communication ( External Barrier's and Psycho-Sociological Barriers)

Defects in the Channel, Noise

Self-centred Attitudes

Group identification

Self-image

Status Block

Closed Mind

Poor Communication Skills

State of Health ,Overcoming barriersWritten Communication

### **Unit: 4**

Notice, Agenda

Minutes,(essential part of a minutes which should never omitted) Memorandum

Tender, (Details required while inviting a tender)

Tender, (Details required while inviting a tender)

Oral Communication

Dyadic Communication, Meeting, Seminars

Conference, Group discussion, Audio-Video Aids

### **Unit: 5**

Non-Verbal Communication

Personal Appearances,

Posture, Gesture, Facial Expressions- Discussion.

## **Text Book Recommended:**

**1. Business Communication – Lesikar & Pettit**

**2. Business Communication – Guffey**

**MBA-755 Business Environment****Credits 4(4-0-0)**

**Course Objective:** - There are several factors which affecting the business and business operations. These factors are coming under the broader area of business environment. This course enables students to learn about business policies, ethical codes, macro factors and micro factors.

**Unit I:** -Concept of Business Environment

**Unit II:** -Basic philosophies of Socialism, Capitalism and Mixed Economy

**Unit III:** -Socio-cultural environment: Business and its relationship with society and culture

**Unit IV:** -Political environment: Functions of State, Economic role of Government

**Unit V:** -Major Government Policies – Fiscal Policy, Monetary Policy, Policy related to Pharma Industry and industrial Policy

**Unit VI:** -Business Ethics

**Unit VII:** -Consumer Rights, Consumerism and Business

**Unit VIII:** - Globalisation: Meaning, Dimensions and Impact on Indian Economy

**Text Books Recommended:**

**1. Business Environment – Francis Cherunillam**

**2. Business Environemnt – Raj Agatwal & Parag Diwan**

**BAM-754****Organizational Behaviour****Credit-3(3-0-0)****Course Objective**

1. To identify the specific steps managers can take to motivate employees
2. To apply the different concepts of organizational behaviour at work place

**Unit I: Managing Organizational Behaviour:**

- Definition, Key elements of OB, Need for studying OB, Contributing Discipline.
- Organization behaviour process.
- Organization, Management and organizational Behaviour.
- Theories of Management leading to organization Behaviour.
- Models of Organization behaviour.

**Unit II: Perception:**

- Introduction: What is perception? , Why should Managers Study perception? How perceptions differ from Sensation?
- Factors affecting perception, How to improve perception?
- Perception and its application in OB
- Perception Process, Errors of perception.

**Unit III Learning:**

- Meaning and Definition , Importance of learning , barriers of learning
- Determinants of learning , Approaches of learning
- Theories of learning, How do people differ in how they learn?
- Contingencies of Reinforcement

#### **Unit IV: Motivation:**

- Meaning of Motivation , Nature of Motivation , Motivation process
- Theories of Motivation : Need hierarchy Model by Abraham Maslow , Dual factor theory by Frederick Herzberg
- Alderfer's ERG Model of motivation
- Application of Motivation: Motivation By goal setting, why goal setting is important, basic feature of goal setting process.
- Limitation to goal setting.

#### **Unit V: Leadership:**

- Introduction: What is leadership? Difference between Leader and Manager
- Trait Perspective of leadership : Leadership traits and its effectiveness , Leadership style,
- Behavioral Perspective of leadership : Ohio State university ,Managerial Grid
- Leadership Theories.
- What make leadership effective? Transformational Versus Transactional leadership.

#### **Unit VI Team and Group:**

- Definition and characteristics of group , why do people form and join groups
- Theories of group formation
- Stages of group development
- Group Behaviour: Group Norms, Group cohesion, Group Role, Inter group Conflicts.

#### **Suggested Reading**

1. Kavita Singh.Organisational Behaviour text and cases
2. Organisational Behaviour Text and Cases Dr. S.S.Khanka
3. Understanding organization Behaviour Udai Pareek

**Code- PH-702 Basic Epidemiology**

**Credits 3(3-0-0)**

**Course Objective:** - Measurement of health related data, their analysis and re-presentation is major contents of this course. Course is useful to understand basic tools used for estimation health related data.

**Unit I:** - Epidemiology: Definition, Components, Aims of Epidemiology, Terminology used, tool for Measurement.

**Unit II:** -Rate, Ratio and Proportion

**Unit III:** -Numerators and Denominators used in Epidemiology

**Unit IV:** -Basic Measurement in Epidemiology, Morbidity and Mortality measurements, Mortality rates, Morbidity rates, Relation between Incidents and Prevalence

**Unit V:** -Epidemiological study designs, types of studies:

- Descriptive study
- Ecological Study
- Cross Sectional Study
- Case Control

- Cohort

**Unit VI: -Experimental Study- Drug Trials and Community Trails**

**Books Recommended:**

- 1. Basic Epidemiology by- R. Bonita, R. Beaglehole, Tord Kjellström, World Health Organization.**

**BAM-756Disaster Management Credits: 2(2-0-0)**

**Course Objective:** Disasters at work place and surroundings is common. This course enable students to understand how we can manage a disaster whether it is natural or man-made effectively.

**Unit-1 Introduction**

Concept of Disaster Management, Definitions of Disaster and Disaster Management, Principles of Disaster Management, Objectives of Disaster Management, Importance of the study of disaster management, Scope of Disaster Management, Disaster Cycle, Objectives of Disaster management.

**Unit-IIFactors Responsible for Disasters**

Environmental Factors: - Climate Change, Pollution (Air, Water, Soil), Geographical Factors: - Geographical Distributions of Areas (Hill Areas, Sea coastal Areas, Desert habitats), Industrial Factors: - Working Methods, Organizational Rules and Regulations and their acceptance.

**Unit-III**Types of disasters: - **Natural** (Detail Concept): - Geographical Disasters- : Land-slides, Earthquake, Mud-Flow, Air Cyclone and Rock-slides, Water Related Disasters: - Flood, Heavy Raining, Cloud Bursting, Acid Rain, and Drought. Biological Disasters- : Pest Attacks, Viral Infections, Bacterial Infections.

**Man Made** (Detail Concept): - Industrial Disasters, Chemical Disasters, Nuclear Disasters, Transportation related disasters (Road, Air and water ways).

**Unit-IV**Causes of disasters: - Man-made Causes and Natural Causes. Effects of the Disasters: - Economical Effects, Social Effects, Geographical Effects, Demographical Effects. Disaster related Awareness: - Medium for awareness, Responsible Authorities, Factors Affecting. Communication role of media, Disasters related Preventions, Preparedness, Vulnerable areas, damaged assessment.

**Unit -V**Rehabilitation and Reconstruction: -Assessment of Damage, Allocation of resources, resource implementation, Role of government and other non-governmental organizations.

**Unit-VI**Contingency Plan, Case studies

**Recommended Books: -**

**1. Disaster Management: - B. Narayan**

**2. Disaster Management: - Ram Kumar and S. L. Goel**

**MBA-702**

**Personality Development Credit: 2 (2+1+0)**

**Course Objective:** This course enables students to understand the basics of personality, how we can develop a smart personality which is important for a good manager.

**UNIT I Personality**

- Concept: Determinants
- Recognizing the social Value of Personality
- What is Personality
- Personality verses Character
- Personality verses Individuality
- How Personality Consciousness shows itself Personality

**UNIT II Leadership**

- Introduction to leadership
- Leadership Power
- Leadership Styles
- Leadership in Administration

**UNIT III Interpersonal Relations**

- Introduction to Interpersonal Relations
- Analysis Relations of different ego states
- Analysis of Transactions
- Analysis of Strokes
- Analysis of life positions

**UNIT IV Communication**

- Introduction to Communication
- Flow of Communication
- Listening
- Barriers of Communication
- How to overcome Barriers of Communication

**UNIT V Stress**

- Introduction to Stress
- Causes of Stress
- Impact Management for Stress
- Managing stress

**UNIT VI Group Dynamics**

- Importance Groups in organizations
- Team interactions in Group
- Group Building Decision Taking
- Team Building
- Interaction with the team
- How to build a good team

**UNIT VII Conflict**



- Introduction to Conflict
  - Causes of Conflict
  - Managing Conflict
- UNIT -VIII Performance**
- Introduction to Performance Appraisal
  - Vertical Appraisal
  - Horizontal Appraisal
  - 360° Performance Appraisal
  - Methods or Techniques of improving Performance Appraisal
- UNIT -IX TIME**
- Time as a resource
  - Identify important Time Management
  - Individual Time Management Styles
  - Techniques for better Time Management
- UNIT -X Motivation**
- Introduction to Motivation
  - Relevance and Types of Motivation
  - Motivating the Subordinates
  - Analysis of Motivation

## Semester II

**BAM 760**

**Marketing Management**

**Credits: 4(4+0+0)**

### **Course Objective:**

The objective of the course is to develop the students' conceptual understanding and analytical abilities in the area of Marketing Management. It aims to hone students' knowledge and understanding of Marketing theories and concepts and their applications in different industries.

### **Unit I. Introduction to Marketing and Market Segmentation**

**Reading:** Levitt, Theodore (1960) 'Marketing Myopia', Harvard Business Review

### **UNIT II Positioning the Offering-I**

**Reading:** Aaker, David A. and Shansby, J. Gary (1982), Positioning your Product, Business Horizons, May/June, 25(3), 56-62

#### **Positioning the Offering-II**

**Reading:** Aaker, David A. and Shansby, J. Gary (1982), Positioning your Product, Business Horizons, May/June, 25(3), 56-62

### **Unit III Pricing and Product Strategy**

**Reading:** Pine, B. Joseph and Gilmore, James H. (1998), 'Welcome to the Experience Economy', Harvard Business Review, July-August, 97-105

### **Unit IV Understanding the Consumer Behaviour**

**Reading:** Levitt, Tedd (1965), 'Exploit the Product Life Cycle' Harvard Business Review

### **Unit V Marketing Communications and Promotion**

**Reading:**Chapter-3; Selecting the Appropriate Promotional tools, (From Schultz, Robinson, and Petrison)

## **Unit VI Sales and Distribution Management**

**Reading:** 1. Prahlad, CK and Hart, Stuart L.(2002). ‘The Fortune at the Bottom of Pyramid’, strategy+Business, 26, 1-14  
2. Jaiswal, anand K.(2008). ‘The fortune at the Bottom or the Middle of the Pyramid?’, Innovations, 3 (1), 85-100

## **Unit VII Developing Marketing Strategy**

**Reading:** Cavin Kare Private Limited(A): Challenges of Sustaining Growth and Expanding Business

## **Unit VIII Marketing Research for Understanding Consumers and Markets**

**Reading:** Philip Kotler, “Marketing Research” chapter

## **Unit IX Contemporary and Emerging Issues in Marketing**

### **Text Books:**

1. **Marketing Management (Pearson) by Philip Kotler, Kevin Keller, Koshy and Jha (ISBN 978-81-317-6716-0)**
2. **Marketing Management by Rajan Saxena**
3. **Cases from Ivy, Harvard Business Review**

## **PHA 632 Pharmacology & Microbiology Credits 3 (2-1-0)**

**Course Objective:** - It is helpful for pharmaco-managers to understand the basics of drugs. This course includes drugs, their forms, their effects, their mechanism and manufacturing.

### **Unit I: - Pharmacology**

- Introduction to Dosage Form: Types of Dosage Form – Liquid dosage form, Solid dosage form, Semi-solid dosage form, Pharmaceutical inserts, steriledosage forms, Advanced dosage forms & delivery systems.
- Pharmacokinetics & Pharmacodynamics of Drug action : Drugs in medicine, targets of drug action, absorption, distribution, metabolism and elimination(ADME) of drugs, Classification of Receptors
- Drugs acting upon various systems : Autonomic nervous system; Central nervous System; Cardiovascular system; Autocoids; Respiratory System; Gastrointestinal system; chemotherapy.

### **Unit II: - Microbiology**

- Introduction to microbiology & Scope of Microbiology
- Morphology and physiology of bacteria, fungi & viruses, Nutrition & cultivation of bacteria, fungi & viruses
- Principles of microbial pathogenicity and epidemiology.
- Microorganisms in the production of pharmaceuticals & industrial chemicals
- Ecology of microorganisms & its effects in the pharmaceutical industry, Microbial spoilage & preservation of pharmaceutical products.
- Sterilization control and sterility assurance, Microbiological assay and tests
- Factory and hospital hygiene

### **Text Books Recommended:**

1. **Medical Pharmacology by K. D. Tripathi**
2. **Basics of Microbiology and Biotechnology by B. D. Singh**

### **MBAPM 703 Pharma Logistics Management Credits 3(3-0-0)**

**Course objective:** Medicine is the case of sensitivity, so carrying and forwarding of medicines is also different from general products. This course enables students to understand the basic fundamentals of drugs, their storage and transportation.

**Unit I:** - Importance of Logistics & Purchase / Supply in Pharma Management Objectives & Policies.

**Unit II:** - Electronic Data Interchange; Bar Coding.

**Unit III:** - Purchase Description; Specification; Standardization.

**Unit IV:** - Outsourcing – Make or Buy Decision; Global Servicing

**Unit V:** - Pricing & Cost Analysis.

**Unit VI:** - Inventory Management

**Unit VII:** - Purchasing Transportation Services

**Unit VIII:** - Warehousing Decisions

**Unit IX:** - Legal Aspects of Purchasing.

#### **Text Books Recommended:**

1. **Purchasing & Supply Management – Pearson Publications**

### **MBAPM-704                      Pharmaceutical Marketing Credits 3(2-1-0)**

**Course Objective:** There is a huge difference between the general marketing and pharmaceutical marketing. This course enables students to learn about the channel of pharmaceutical marketing, effects of promotional strategies, and physician's prescriptions.

**Unit I:** - Introduction to Pharmaceutical Marketing: Identification of pharmaceutical market; market behaviour; physician prescribing habits; patient motivation; market analysis.

**Unit II:** - The Pharmaceutical Products: Drug Development and the Marketing Research Interface; Diversification and Specialisation; Marketing Generic Drugs; Non-prescription drugs.

**Unit III:** - Distribution Channels: Manufacturer; Wholesaler; Retailer; Hospital and Government Agencies.

**Unit IV:** - Competitive Practices: Economic and Competitive Aspects of the Pharmaceutical Industry; Advertising; Detailing and other forms of Promotion; Retail Competition – The Community Level; International Marketing.

**Unit V:** - Controls: Internal & External Controls

#### **Text Books Recommended**

1. **Principles of Pharmaceutical Marketing – Mickey C. Smith**

## **MBAPM-704Pharma Marketing Research & StatisticsCredits 4(2-0-2)**

### **Course Structure:**

**Unit I:** -Introduction to Marketing Research Management : Value of Information; Meaning & Objectives of Research; Research Approaches; Types of Research; Research Process; Problems encountered by Researchers India.

**Unit II:** -Research Problem: Defining & selecting the Problem; Technique involved in defining the Research problem.

**Unit III:** -Research Design: Meaning; Need & features of a Research Design; some important Concepts related to Research Design; Types of Research Design.

**Unit IV:** -Sampling Design: Census & Sample Survey; Steps in Sampling; Characteristics of a good Sample Design; Types of Sample Design; Random Sampling.

**Unit V:** -Measurement & Scaling Techniques, Methods of Data collection, Processing & Analysis of Data, Testing of Hypothesis; Chi-square Test; Variance & Co-variance.

**Unit VII:** -Sales Analysis & Forecasting; New Product Development & Test Marketing

**Unit VIII:** - Advertising Research, Interpretation & Report Writing

### **Text Books Recommended**

**1. Research Methodology – C.R.Kothari**

**2. Marketing Research – Tull**

## **MBAPM-705Soft Skills Development**

**Credits 3(2-0-2)**

- I.** Curriculum vitae
- II.** Spoken English
- III.** Role plays
- IV.** Techniques of discussions at different meetings, seminars, workshops & conferences
- V.** Interview Skills
- VI.** Personality Development
- VII.** Public speaking
- VIII.** Motivational skills

## **PHA-325**

### **Introduction to Human Anatomy and Physiology**

**Credits: 3(3-0-0)**

#### **UNIT 1: Organisational level of human body structure and function:**

- Levels of human structure
- Basic chemistry of life
- Cell structure and function
- Tissue, membrane and body cavities
- Human body position, section and planes

#### **UNIT 2: Human body protection, support and movement:**

- Human Anatomy and Physiology of the Integumentary systems
- Human Anatomy and Physiology of the skeletal systems
- Human Anatomy and Physiology of the Muscular systems

### **UNIT 3: Human body control and regulation:**

- Human Anatomy and Physiology of the Nervous system
- Human Anatomy and Physiology of the Sensory system
- Human Anatomy and Physiology of the Endocrine system

### **UNIT 4: Circulatory system**

- Human Anatomy and Physiology of the cardiovascular system
- Human Anatomy and Physiology of the Lymphatic system

### **UNIT 5: Input and out-put of body required components:**

- Human Anatomy and Physiology of the Respiratory system
- Human Anatomy and Physiology of the Digestive system
- Human Anatomy and Physiology of the Urinary system

### **Text Books Recommended**

#### **1. Human Anatomy and Physiology by Kapit& Elson (Pearson Publications)**

**MAS-856**

**Management Science**

**Credit: 4 (4+0+0)**

**Course Objectives:** There are several decisions taking by a manager in the business operations, this course includes methods and techniques for forecasting and planning.

#### **Unit I Scientific Decision Making**

Quantitative approach to decision making, features of operation approach, operation approach to solving problems, Models and modeling in operation research, Advantage of model building, methods of solving operations models, methodology of operation research.

#### **Unit II Linear Programming: Application and Model Formation**

Structure of linear programming models, advantage of using linear programme, limitation of linear programming, application area of linear programming, Guidelines of linear programming problems

#### **Unit III Linear Programming: Graphical Methods**

Graphical solution Methods, Extreme point solution method, Maximization solution methods, Minimization solution methods, Mixed constraint LP problems.

#### **Unit IV Linear Programming: The simplex methods**

Standard form of an LP problem, Simplex Algorithm (maximization Case), simplex algorithm (minimization case), two phase model, Big M Models.

#### **Unit V Linear Programming: Duality and sensitivity analysis**

Formulation of dual linear programming problem, Symmetrical form, Economic interpretation of dual variable, Economic interpretation of Dual Constraint, Standard result of duality, Advantage of duality, Sensitivity analysis.

#### **Unit VI Transportation Problem**

Mathematical model of transportation problem, The transportation algorithm , methods of finding initial solutions, north west corner methods, least cost methods, Vogel's approximation methods.

#### **Unit VII Assignment Problem**

Mathematical model of assignment problem , Hungarian methods of solving assignment problem, variations of assignment problem, multiple optimal solutions, maximization case in optimal solutions, unbalanced assignment problem, Restriction of assignment problems.

### **Unit VIII Theory of games**

Introduction, Two person zero sum games, pure strategies: game with saddle points, Rules to determine saddle points, Mixed strategies: game without saddle points, Rule of dominance, Solution methods games without saddle point: Algebraic method, Arithmetic method, Matrix method

### **Unit IX Project Management: PERT and CPM**

Introduction, Basic difference between PERT and CPM, Phases of project management, PERT/CRM Network component and precedence relationship, critical path analysis, Project scheduling with uncertain activity time

### **Unit X Simulation**

Introduction, simulation defined, types of simulation, steps of simulation process, Advantage & disadvantage of simulation

### **Text Book Recommended:**

**1. Operation Research Theory & application - JK Sharma**

**2. Quantitative Technique in Management - N.D. Vohra**

## **BAM-823 Product and Brand Management**

**Credit 3(3-0-0)**

**Course Objective:** This course enables students to learn about the basics of brand and development of brand of a product.

**Unit I:** -Product: Concept, classification, levels, Product Mix.

**Unit: II:** -Concept of Brand: Introduction, Role of brand, Advantages of Branding, Core Values of Brand.

**Unit: II:** - Brand Equity: Concept, Brand elements. Principles of Branding, Communication Mix Strategy.

**Unit IV:** - Brand Media: Communication Channels and techniques, Advertising, Brand Perception, and Packaging.

**Unit V:** -Brand Extension: Nature, advantages and disadvantages, factors of brand extension. Brand personality: Nature, advantages, brand personality and user imagery. Concept of Brand positioning.

**Unit VI:** -Brand Strategy: Introduction and type of strategies.

**Unit VII:** -Brand valuation: Meaning, techniques, methods of valuing a brand. Introduction to service brands.

### **Text Books Recommended:**

- **Product Management by Lehman & Winer**

### **Summer Training**

## **Semester III**

### **BAM-864 Management Information Management Credit:4(2+0+2)**

**Objectives of the Course:** To give students thorough concepts of the principles, objectives, applications and design of MIS. To learn about the types of MIS designed for different needs of the organization. To learn about the technological updates in Information systems making the decision making process more easy and sophisticated. To learn about the Business Applications of Information Systems

### **UNIT-I- INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS:**

Nature of MIS, Scope of MIS, Objectives of MIS, Limitations of MIS, Role of MIS in Business functions and organizations Operating Elements of MIS, Information Systems Pyramid Structure Based and Management Activity Based role of MIS, MIS Structure Based on Organizational Function, Advantages and Disadvantages

#### **UNIT –II- CLASSIFICATION OF INFORMATION SYSTEMS:**

TPS: Concepts/Types/Functions/, MIS: concept as management support tool ESS: Concepts/Types/Functions/, DSS: Concepts/Types/Functions/, EIS: Concepts/Types/Functions/

Office Automation Systems: Concepts/Types/Functions /Tools of Office Automation Systems Artificial Intelligence: concepts/components/functions, Concepts/Meaning and Definition Components of Artificial Intelligence, Advantages and Disadvantages Robotics: concepts/functions Expert Systems: concepts/components/functions/ Knowledge Work Systems Concepts/Types/Functions /Activities

**UNIT –III- DECISION MAKING PROCESS: TYPES AND MODELS:** Concepts of Decision Making, Types of Decisions Decision Making Process, Models of Decision Making

**UNIT –IV-COMPUTER SYSTEMS: A TOOL FOR MIS:** Functions of a computer, Computer Hardware, Computer Software Communication Technology

**UNIT –V-CONCEPTS OF INFORMATION:** Information: Concepts and Meaning, Data: Concepts and Meaning, Characteristics of Information Source Types: Type of Decisions and source

**UNIT –VI-TELECOMMUNICATIONS AND NETWORKS:** Concepts of Networking Internet/Intranet: Concepts/Roles/ Advantages/Disadvantages Types of Telecommunication Networks Problems of Networked Enterprise

**UNIT –VII- INFORMATION SECURITY and CYBER CRIME** Information Security: Concepts/Methods/Need/Methods of Defence Networks and Website security risks, Viruses Cyber Crimes Phishing/Copyright Computer Ethics: Nature /Characteristics/Ethical Guidelines/

**UNIT –VIII- LEGAL AND ETHICAL ISSUES:**The Information Technology Act 2000/Highlights/important concepts in IT Act-2000

**UNIT –IX- ERP: ENTERPRISE RESOURCE PLANNING:** Evolution of ERP; what is ERP? Reasons for the Growth of ERP; Scenario and Justification of ERP in India; Evaluation of ERP; Various Modules of ERP; Advantage of ERP.Future Directions in ERP; New Markets; New Channels; Faster Implementation Methodologies; Business Modules and BAPIs; Convergence on Windows NT; Application Platform; New Business Segments; More Features; Web Enabling; Market Snapshot.ERP and Related Technologies; Business Process Reengineering (BPR); Management Information System (MIS); Executive Information System (EIS); Decision support System(DSS); Supply Chain Management (SCM).

**UNIT –X- GENERAL TECHNOLOGICAL KNOWLEDGE:**Computer basics: OS/memory/Input/ Output/Characteristics Microsoft Word: Basic Features/Formatting Features/Inserting Tables/Document formatting Microsoft Excel: Basic Features /functions/Creating Tables and Graphs/Managing worksheets Microsoft Power-point: Creating PPT Presentations with formatting/design/animation E-Mail and Communication: Computer and IT Tools for Communication

#### **Books Recommended:**

- **Introduction to Information Systems- James A O'brien**

- **Management Information Systems- Gorden B. Davis &MargrettheH.Olson**
- **Management Information Systems-Dharminder Kumar and Sangeeta Gupta**
- **Management Information Systems in Knowlwdge Economy- Joseph S.J. Mahapatra**
- **Fundamentals of Computers- Peter Norton**

**BAM -859                      Entrepreneurship & Small Business Management                      Credit 4(4+0+0)**

**Course Objective:** Pharmaceutical industry is the third largest industry in India, there more than 10 thousand small and big organizations are working for manufacturing of medicines. This course enables students to get insight about entrepreneurship development.

**Unit: 1**

Concept of Entrepreneurship, history, Small Business Management

Meaning, Definitions

Importance, role for the development of the economic

Environment for Entrepreneurship

**Unit: 2**

Barriers for Entrepreneurship

Types of Entrepreneurs

Definitions, Theories of Entrepreneurs

Characterstics& Roll of Small Business

**Unit: 3**

New Ventures & Business Plans, Government Plans,& Policies Training Infra Structural Assistance

Entrepreneur development and Training

Institutional Assistance to Small Business

Sources of Information, Financial Institutions

Marketing Assistant

**Unit: 4**

Procedure for setting up Small Business

Rules & Regulations for S.B, Market Survey,

Preparation of Feasibility Report

Managerial Competence and Infrastructure

**Text Book Recommended-**

1. Small Business Management by **Vasant Desai**
2. Rai Bahadur Mohan Singh Oberoi Did All His Way
3. Right Rails by Ravindra Bam

**MBAPM 706PharmaceuticalSales and Customer Relationship ManagementCredits 4(4-0-0)**

**Course Objective:** Study of pharmaceutical sales is different from study of general sales, various factors like physicians behaviour, promotional strategy, marketing reputations of organizations etc. This course enable students to understand about selling of medicines and pharmaceutical market dynamic



**Unit I:** -Need and scope of Pharmaceutical selling

**Unit II:** -Direct selling – concepts & types

**Unit III:** -Role & responsibility of medical representatives

**Unit IV:** -Distribution channel and network in pharmaceutical industry

**Unit V:** -Managing sales force

**Unit VI:** -Pricing of pharmaceutical products

**Unit VII:** -Sales forecasting of pharmaceutical products

**Unit VIII:** -Principal channel relationship

**Text Books Recommended:**

1. **Pharmaceutical Marketing by Mickey C. Smith**
2. **Pharmaceutical Product Development by N. K. Jain**

**MBA 703**

**Business Analytics**

**Credit: 03 (3-0-0)**

**Course Objectives:**

1. To provide an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making.
2. To provide an understanding of the processes needed to develop, report, and analyse business data.

**Unit 1: Overview of Business Analytics:**

- Definition, Evolution, Architecture, Benefits, Future.
- Business, Analytics as Solution for Business Challenges.
- Effective Predictive Analytics, Integrating Analytics in Business Processes, Unstructured Data Analytics, Balanced Scorecard, Dashboards, KPI based on Dashboard and Scorecard,
- LOFT effect, Data Quality, Master Data Management, Data Profiling.
- Why are Business Analytics important

**Unit 2: Descriptive Analytics, Predictive Analytics and Prescriptive Analytics:**

- Introduction to Descriptive Analytics, Visualizing and Exploring Data, Descriptive Statistics, Sampling and Estimation, Introduction to Probability Distributions
- Introduction to Predictive Analytics, Predictive Modelling (Logic-driven models and data driven models)
- Introduction to Prescriptive Analytics, Prescriptive Modelling, Non-linear Optimization

**Unit 3: Data Issues:**

- Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Classification
- Data Warehouse: Definition, Features, Applications, Types of data warehouse,
- Architecture: Business Analysis framework, 3-tier data warehouse framework.
- Data Warehouse Models: Virtual Warehouse, Data Mart and Enterprise warehouse.
- Metadata: Meaning and Categories, Role of metadata, Metadata respiratory, Challenges for metadata management, Data Cube
- Online Analytical Processing Server (OLAP): Types, OLAP operations, OLAP Vs Operational Database (OLTP).
- SCHEMA: Star Schema, Snowflake schema, Fact Constellation schema

**Unit 4: Data Mining and Testing:** Definition, Concepts, Applications and Methods.

**Unit 5: Security:** Security requirements, User Access, Data classification, User Classification, Data Movement, And Impact of security on design.

**Unit 6: Decision Modelling and Forecasting:**

- Optimization: Using excel to solve business problems Eg: Marketing Mix, Portfolio optimization etc.
- Linear Programming: Introduction, Types of Linear programming problems/Models, Linear programming Model elements, Model formulation procedure, Computer based solutions for linear programming using Simplex method
- Duality and Sensitivity Analysis: What is Duality?, Duality and Sensitivity analysis problems
- Integer Programming: Introduction, Solving IP problems/Models
- Forecasting: Introduction, Types of Variation in Time series data, Simple Regression Model, Multiple Regression Models
- Simulation: Introduction, Types of Simulation
- Decision Theory: Introduction, Decision theory model elements, types of decision environments, decision theory formulation, decision making under uncertainty and risk, Decision trees.

**Unit7: Fundamentals of R Language:**

- Introduction, Basic Statistical Analysis using R, Process of Business Analytics,
- BA Process-Walk through with R,
- Multiple regression- Theory and Walk through with R,
- Clustering and Segmentation- Theory and Walk through with R

**Suggested Readings:**

1. **Fundamentals of Business Analytics by RN Prasad and Seema Acharya, Wiley India Publication**
2. **Win With Advanced Business Analytics by Jean Paul Isson and Jesse S. Harroitt, Wiley Publication, 2013**
3. **Successful Business Intelligence: Secrets to Making BI a Killer App by Cindi Howson, Tata McGraw Hill Edition 2012**
4. **Analytics at Work by Thomas H. Davenport, Jeanne G. Harris and Robert Morison, Harvard Business Press**

**PHM 631 Pharmaco-economicsCredits4(4-0-0)**

**Course Structure:** Pharmaceutical industry is a major source of revenue for Indian economy.This course helpful to understand the economical parameters of pharmaceutical industry.

**Unit I:** -Nature and Scope of Pharmaco-economics

**Unit II:** -Demand Analysis: Meaning of Demand, Law of Demand, Elasticity of Demand

**Unit III:** -Demand Forecasting

**Unit IV:** -Production Analysis: Production Function; Laws of Production, Theory of Cost and Concepts: Accounting Concepts, Analytical Concepts; Cost Theory – Short-run Cost-Output Relations; Long-run Cost-Output Relations.

**Unit V:** -Policy Relating to Pharmaceutical Industry.

**Unit VI:** -Market Dynamics and Structure: Perfect Competition, Monopoly andImperfect Competition.

**Unit VII:** -Pricing Strategies and Practices: Cost based and Demand based.

**Unit VIII:** - Business Cycles and Stabilisation.

**Text Books Recommended:**

1. **Managerial Economics – R.L. Varshey & K.L. Maheshwari**
2. **Micro Economics – Sameulson & Nordhaus**
3. **Managerial Economics: Concepts and Cases – Mote, Paul & Gupta**

**PHM 734 Drug Regulatory Affairs Credits 3(3-0-0)**

**Unit I:** -Historical perspective on the impact of Food and Drug laws.

**Unit II:** -Manufacturing: Introduction, regulatory requirements as per Indian and other regulatory authorities for manufacturing information formula, process, validation of manufacturing process, equipment, documentation, inspection requirement, regulatory guidelines for active ingredients and formulations. Regulatory guidelines for packaging materials, test and evaluation of packaging materials, biological test, microbiological test and evaluation of closures.

**Unit III:** -Federal Laws – FD & C Act - Definitions, History of FDA; Evolution of Drug Regulations – 1906 Act, 1938 Act, 1962 Amendments; Laws governing evaluation of New Drug products like IND, NDA, ANDA etc.; FDA Product recalls; DESI and OTC Review; Other regulations of 1962 Amendments like labelling requirements of prescription and OTC drugs.

**Unit IV:** - FDA Enforcement powers, other federal laws affecting pharmaceutical industry (includes latest amendments in the Indian and international systems), Intellectual property rights: Introduction, purpose, guidelines as per Indian and other regulatory authorities.

**Unit V:** -Clinical trials: Definition, Phase I, Phase II, Phase III and Phase IV studies, design documentation, presentation and interpretation, statistical analysis of clinical data, factorial design, guidelines as per Indian and other regulatory authorities.

**Text Books Recommended:**

1. **The Sciences & Practice of Pharmacy – Remington**
2. **Community Pharmaceutical Management by Lechman**

**PHM 816Seminar on Summer Training Credits 1(0-1-0)**

Each student is required to undertake training. The emphasis here is on involving the students in learning processes that help them relate concepts and theories to business requirements. It is therefore desirable that the students interact and interface with the industry during the summer vacation after Semester II examinations. After the training Students are required to submit their project report; certificate of training issued by the organization in which they have worked; and also make a presentation on the work done by them and their experiences for which they will marked satisfactory/ unsatisfactory. The objective of this project is to help students gain practical experience and exposure to work culture and prevalent practices in the Indian pharmaceutical industry.

**Semester IV****BAM 865Strategic ManagementCredits 4(4-0-0)**

**Course Objective:** Managers are known as good strategist, this course include knowledge about formulation and effective implementation of strategies.

- I. Concept of Strategic Management
- II. Role of Strategist
- III. Process of Strategic Management
- IV. Environmental Appraisal
- V. Organisational Appraisal & Scanning Capability Factors
- VI. Strategic Alternatives and Choice
- VII. Grand Strategies, Strategic Plan
- VIII. Strategy Implementation – Structural and Functional Implementation
- IX. Strategy Evaluation and Control

**Text Books Recommended:**

1. Strategic Management – Concepts and Cases – Thompson & Strickland
2. Strategic Management – Concepts and Cases – Fred R. David
3. Business Policy – Azhar Kazmi

**BAM 808 Intellectual Property Rights (IPR) Credits 3(3-0-0)**

**Course Objective:** This course includes basic fundamental knowledge about patents, copy rights and other IP rules which are important for a business organization.

**Unit I:** -Copy Right: Requirements & Rights

**Unit II:** - Patent: Requirements & rights

**Unit III:** - Related Rights: Requirements & Rights

**Unit IV:** - Geographical Indications: Requirements & Rights

**Unit V:** - Trademarks: Requirements and Rights

**Unit VI:** - Trade Secretes and Designs

**Unit VII:** Indian Plant Protection Act

**Unit VIII:** - Authorities (WIPO, WTO, TRIPS, GATT)

**Text Books Recommended:**

1. Intellectual Property Rights in India by Lexis-Nexis Publications

**BAM 809 Total Quality Management Credits 3(3-0-0)**

**Course Objective:** Medicines are the matter of quality and standards. This course include basic fundamental about quality and effective management of quality for organizational development.

- I. Introduction to Quality; Concept of TQM; Elements of TQM
- II. Philosophies of TQM-Deming's; Juran's; Crosby's
- III. Focusing on Customers
- IV. Leadership & strategic planning for TQM
- V. Human Resource Development and Management for TQM
- VI. Process Management; Tools for Process Management
- VII. Organizing for TQM

VIII. ISO-9000

IX. Total Quality Management in Services

**Text Books Recommended:-**

- **Total Quality Management by B.Senthil Arasu and J. Praveen Paul**
- **The Essence of Total Quality Management by John Bank**
- **Quality Management by Kanishka Bedi**
- **Total Quality Management by Rajesh Kumar Shukla**
- **Total Quality Management by Dale H. Besterfield**

**BAM-799**

**Labour Laws & IR Credit:3(3+0+0)**

**Objectives of Course:**

- To elaborate with the importance and role of Industrial Labour Laws
- To understand the various Acts and its applications in the business organisations with terms and conditions of employment
- To facilitate knowledge about the benefits and penalties under each Act
- To elaborate a highlight with the rights and liabilities of both the Employees and Employers in the business Organisations or Industries.

**UNIT-I**

- Importance, concept and history of labour laws, Labour policy in India, Industrial Peace and Industrial Relations concepts

**UNIT-II Factory Act 1948**

- Introduction
- Scope of the Act
- Main features of the Act
- Changes introduced
- Important Definitions under the Act: Industry/Worker/Factory/Employee/Employer/Labours / Inspection and Inspection staff
- Health Provisions under the Act
- Safety Provisions under the Act
- Interpretation: Competent Persons
- Hazardous Process and Provisions under the Act
- Manufacturing Process Provisions under the Act
- Welfare facilities and Provisions under the Act
- Annual Leave with wages and Provisions under the Act
- Special Provisions under the Act
- Definition of working Hours for Adults and Child labours

**UNIT-III Industrial Disputes Act, 1947**

- Introduction
- Scope of the Act
- Main features of the Act
- Important Definitions under the Act: Industry/Labour Court/ay-Off/ Lock –Out/Retrenchment/ Settlement/Strikes/Trade Unions role/Tribunal/

#### **UNIT-IV Trade Unions Act, 1926**

- History of Trade Unions in India
- Development of Trade Unions in India
- Important Definitions under the Act
- Introduction
- Scope of the Act
- Main features of the Act
- Registration of Trade Unions under the Act
- Rights and Liabilities of Registered Trade Unions Act
- Regulations and Penalties under the Act

#### **UNIT-V Payment of Wages Act, 1936**

- Introduction
- Scope of the Act
- Main features of the Act
- Object and Applications of the Act
- Important Definitions under the Act
- Payments of Wages and Deductions from Wages
- Fixation of Wage Periods

#### **UNIT-VI Minimum Wages Act, 1948**

- Object of the Act
- Constitutional Validity of the Act
- Salient Features of the Act
- Applications of the Act
- Important Definitions under the Act: Adolescent/Child/Competent Authority/wages/Wage Structure
- Fixation of Minimum Rates of Wages/Working Hours and determination of Wages and Claims etc.

#### **UNIT-VII Employee State Insurance Act, 1948**

- Introduction
- Scope of the Act
- Main features of the Act
- Object and Applications of the Act
- Permanent or partial Disablement
- Corporation, Standing Committee and Medical Benefit Council
- Employee's State Insurance Fund
- Expenses Budget Estimates Employer Contribution
- Methods of Payments
- Benefits under the Act
- Adjudication of Disputes and Claims
- Penalties

#### **UNIT-VIII Workmen Compensation Act, 1923**

- Introduction
- Scope of the Act

- Main features of the Act
- Employer's liability for Compensation
- Amount of compensation under the Act
- Commutations of Payments
- Notice and claims of the accidents

#### **UNIT-IX Employee's Provident Fund & Miscellaneous Provisions Act**

- Introduction
- Object and Scope of the Act
- Main features of the Act
- Important Definitions
- Employee's Provident fund Scheme
- Employee's Pension Schemes

#### **UNIT-X Gratuity Act, 1972**

- Introduction
- Object and Scope of the Act
- Main features of the Act
- Important Definitions: Employee/ Employer/ Factory/ Family/ Wages
- Determination of the amount of Gratuity
- Inspectors and power of Inspectors
- Recovery of Gratuity
- Penalties

#### **Books Recommended:**

1. **Human Resource Management and Practices : S.S.Khanka**
2. **Human Resource Management and Practices: K.Ashwathapa**
3. **Labour Laws –Ajay Garg**

**BAM-899**

**Project Report Credits**

**Credit: 10(0-0-20)**

A project will be assigned to each student. Data will be collected by the students after Class and during the weekends. A report will be submitted, having the following chapters:

1. Introduction
2. Research Design
4. Data Analysis
5. Conclusion

Project work will be done under the supervision of a faculty member allotted by the program co-ordinator.

**BAM 897 Comprehensive Viva**

**Credit: 1(0-1-0)**

At the end of the fourth semester, a viva-voce examination will be held for 100 marks. In this oral examination the student will be asked questions related to the entire syllabus taught in all four semesters in the MBA-PM program