First Year

SEMESTER 1

S. No.	Code	Course	Credits
1	MPM 01	Essentials & Scope of Pharma Management with Overview of Pharmaceutical Industry	4
2	MPM 02	Pharma Sector Business Environment (Management-Marketing Environment)	4
3	MPM 03	Principles & Concepts of Accounting	4
4	MPM 04	Organizational Behaviour	4
5	MPM 05	Applied Quantitative Techniques	4
6	MPM 06	Computer Application for Managers	4
7	MPM 07	Quality Cultural in Pharmaceuticals	4
8	MPM 08	Managerial Personality Development-I Communicative English Workshop -I	4
Total Credits			32

MPM-01 Essentials & Scope of Pharma Management with Overview of Pharmaceutical Industry Credits 4 (4-0-0)

Course Objective:

Essentials in Pharma management:

Compliance and quality-based, mindset, decision making, corrective and preventive action, risk analysis, gap analysis, strategy and action plan for long-term business success, complex, market-oriented factors required for start-ups to major international companies to succeed in the market.

Product positioning in both the local and global marketplaces

Priority optimization for new market space creation and client retention activities

Case analysis and discussion about market complain resolution.

Product management, new product launch strategy, response to regulatory query, internal audits, product portfolio management, market authorization, mergers and acquisition in pharma market.

New product development strategy, expanding production capability, vendor management, Technology adaptation for compliance and better productivity, effective implementation of strategy, Project management in pharma start-up.

Scope in Pharma Management:

Strategy making and Implementation as Manager, Role and responsibility of following: Production planning manager, product manager, qc manager, QA manger, QMS manager, DRA manager, international marketing manager, marketing manager, R & D manager, purchase manager, Market research manager, brand manager, hr manager, training manager.

MPM-02 **Pharma Sector Business Environment** Credits 4 (4-0-0)

(Management-Marketing Environment)

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: Globalization: Meaning, Dimensions and Impact on Indian Economy

Suggested Readings:

1. Business Environment-Francis Cherunillam

2. Business Environemnt-Raj Agatwal&ParagDiwan

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 understands 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 Practical's, 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 Installments

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

Suggested Readings

- 1. Modern Accountancy- Mukherjee & Hanif
- 2. Advanced Accountancy Jain and Narang
- 3. An Introduction to Accountancy S. N. Maheshwari & S. K. Maheshwari

Course Objective

To identify the specific steps managers can take to motivate employees & to apply the different concepts of organizational behaviour at workplace

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, Intergroup Conflicts.

Suggested Reading

- 1. Kavita Singh. OrganisationalBehaviour text and cases
- 2. OrganisationalBehaviour Text and Cases Dr. S. S. Khanka
- 3. Understanding organization BehaviourUdaiPareek

Objective: this course helps students to understand and formulate managerial situations in a decision theoretic framework. It focuses on developing skills in structuring and analyzing problems and to inculcate the attitude of developing an executable solution to the problem with the help of some advanced statistical techniques.

Unit I: Basic Statistical Methods: Measures of Central tendency and Dispersion.

Unit II: Decision Theory & Decision Tree: Probability – Definition and Rules of Probability, Baye's Theorem; Probability Distribution – Discrete distribution – (Binomial, Poisson & Multinomial), Continuous distribution – (Normal & Exponential).

Unit III: Statistical Tools & Techniques: Co-Relation & Regression; Single Linear Regression; Multiple Regression: Use of Software in Multiple Regression, Building Multiple Regression Models, Different types of models, Multi-collinearity.

Unit IV: Forecasting Methods: Subjective Delphic, Nominal grouping and Jury of Opinion; Quantitative – Input-Output Model, Time Series Method, Moving Average, Exponential Smoothing, Linear Trend Line, Method of Least Square, Measuring error – MAD, MAPD, CE, MSE, MSPE.

Unit V: Estimation Theory and Hypothesis Testing: Sampling theory; Formulation of Hypotheses; Application of Z-test, ttest, F-test and Chi-Square-test in testing of the hypothesis. Techniques of association of Attributes & Testing.

Unit VI: Linear programming: Mathematical formulations of LP Models for product-mix problems; graphical and simplex method of solving LP problems; sensitivity analysis; duality. Transportation problem: Various method of finding Initial basic feasible solution and optimal cost. Assignment model: Algorithm and its applications. Game Theory: Concept of

game; Two-person zero-sum game; Pure and Mixed Strategy Games; Saddle Point; Odds Method; Dominance Method and Graphical Method for solving Mixed Strategy Game. Queuing Theory.

Suggested Readings:

- 1. Quantitative Techniques in Management by Vohra, Tata McGraw-Hill, Latest edition.
- 2. Quantitative Techniques by Kothari, Vikas Publication, 1996, 3rded.
- 3. Business Statistics for Contemporary Decision Making by Ken Black (Fourth or later edition) Wiley Student Edition.
- 4. Statistics for Management by Richard I. Levin and David S. Rubin (Pearson Education).
- 5. Statistics for Management, T N Srivastava and ShailajaRego, TMH.
- 6. Complete Business Statistics, Amir D Aczel and JayavelSounderpandian, TMH.
- 7. Business Statistics by J. K. Sharma (2nd Edition or later edition) Pearson
- 8. Mathematics and Statistics for Management, K. B. Akhilesh & S. B. Balasubrahmanyam, Vikas Publishing.
- 9. Statistical Method by Gupta, S.C., Himalaya Publication.
- 10. Business Statistics by R.S.Bharadwaj, Excel Books.
- 11. Comprehensive Statistical Methods by P.N. Arora, S. Chand

MPM-06 Computer Application for Managers Credit 4 (4-0-0)

Unit I: Introduction to Computer Systems

Introduction: Evolution of Computers, Characteristics, Classification Generations; Computer Architecture: Components of Computer Systems (I/O Devices); Computer Memory; Data Representation.

Unit II: Computer Software

Introduction to Software: Relation Between Hardware and Software; Types of Software: System Software, Application Software; Software Development Life Cycle; Introduction to Algorithm; Flow chart

Unit III: Operating Systems

Operating System: Functions of OS, Measuring System Performance; Evolution of Operating Systems: Serial Processing, Batch Processing, Multiprogramming; Types of Operating System; Operating System Techniques Multitasking, Multithreading, Multiprocessing; Some Popular Operating Systems: DOS (Disk Operating System), UNIX Operating System, Linux, Microsoft Windows, Microsoft Windows NT

Unit IV: Business Data Processing

Data Processing; File Management System: File Types, File Organization, File Utilities; Database Management System: Database Models, Main Components of a DBMS, Creating and Using a Database

Unit V: Data Communications

Basic Elements of a Communication System: Data Transmission Modes, Transmission Basics; Types of Data Transmission Media; Modulation Techniques, Modems, Analog versus Digital Transmission; Multiplexing Techniques

Unit VI:Computer Networks

Need for Computer Communication Networks; Types of Network; Network Topologies;

Network Protocol; OSI and TCP/IP model; The Future of Internet Technology; Internet Protocol; World Wide Web; E-mail; Search Engines

Suggested Readings:

- 1. Fundamentals of Computers by Rajaraman, Publisher: Prentice Hall of India, New Delhi
- 2. Data Communication & Computer Network by White, Publisher: Thomas Learning, Bombay
- 3. Business Data Communication by Shelly, Publisher: Thomson Learning, Bombay 4. Computer Fundamentals by B.Ram, New Age Int.
- 5. Computer Fundamentals by P.K Sinha, Priti Sinha, Publisher Kalyani Publishers, 2nd Edition,

Course Objective:

Students will get the knowledge to support and promote a focus on quality processes, product quality, and meeting patient needs. It hones student knowledge and understanding of regulatory compliance and benefits of quality culture to achieve quality targets and reduce none conforming of regulatory compliance.

Unit I: Quality and Compliance culture

Definition, scope, characteristics, models, importance of quality and compliance culture, implementation and changes in quality culture, behavior-based quality culture, sign of a weak culture of quality, CAPA.

Unit II: Quality Culture Principle

Leadership at top, accountability and engagement to all level, acceptance of personal responsibility of quality, transparency in leadership and management ,quality and compliance-based decision making, sharing of knowledge and information, creating quality and compliance performance expectation, education and training to influence behavior, need of skill development and on job training of employee. Developing quality and compliance goals and matrices, Quality Behavior and its Indicator

UNIT III: Employee Quality Management

Employee engagement, effective supervision, adequate staffing, competence management and personnel management, workplace involvement, motivate employee towards quality culture, recognition and awards, leadership development, change management, design thinking.

UNIT IV: Training

Training competence and performance, competence management, design of training program according to compliance and quality requirement, errors in training, evaluation, measuring training effectiveness, on job training record management, human errors

&retraining.

Unit V: Documentation and Compliance

Good documentation practice, data integrity, audit trial, training records, procedure and forms, protocol design as per regulatory requirement, Evaluating progress towards desired culture.

Unit VI: Quality Tools

Scope, principle, characteristics, implementation and benefits of Total Quality Management, Quality By Design, Corrective And Preventive Action, ICH Q10, Data Integrity, cGMP, Quality Audits,21 CFR part11,Quality Management System, Quality Risk Assessment, Route Cause Analysis.

Suggested Readings

- 1. Quality Culture in the Pharmaceutical Industry: Implementing a Behavior-based Quality and Compliance Culture by <u>Jose (Pepe) Rodríguez-Pérez PhD</u>
- 2. The Journey, Achieving Sustained Organizational Success, Charles A. Cianfrani, Isaac Sheps, John E. (Jack) West
- 3. Unleash Quality, build a Winning Strategy for a Culture of Quality that Will Unleash Your Growth and Profit Potential Arron S. Angle, 2019
- 4. The Joy of Lean, Transforming, Leading, and Sustaining a Culture of Engaged
 Team Performance, DoddStarbird 2016
- Root Cause Analysis, Second Edition, The Core of Problem Solving and Corrective Action, Duke Okes, 2019
- 6. Handbook Of Investigation And Effective CAPA Systems, Second Edition, José Rodríguez-2016
- 7. The Art Of Integrating Strategic Planning, Process Metrics, Risk Mitigation, And Auditing, J.B. Smith; 2016
- 8. Senior Management And Quality, How to Leverage Quality for Profit, Fin Rooney, 2018
- 9. www.ich.org
- 10. www.usfda.gov

MPM-08 Managerial Personality Development-I Credit 4 (4-0-0) Communicative English Workshop –I

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