



Sumandeep Vidyapeeth

An Institution Deemed to be University u/s 3 and 12B of UGC Act, 1956

Accredited by NAAC with CGPA of 3.61 on Four Point Scale at A⁺⁺ Grade in Second Cycle

Category I Deemed to be University under UGC Regulations 2018

At and Post: Piparia, Taluka: Waghodia, District: Vadodara, Gujarat State, INDIA, Pin code - 391760.

PG Diploma in Pharmaceutical Marketing and Management curriculum

(2023)

CHAPTER –I

Minimum qualification for admission

1.1 PG Diploma in Pharmaceutical Management:

Candidate shall have passed in B.Pharm./ M.Pharm and obtained/pursuing PhD. in Pharmacy or B.Sc./ M.Sc. with a work experience in the pharmaceutical industry in a sales/ marketing profile. Students awaiting the final year examination's results are eligible to apply too.

1.2. Duration of the program

The course of study for **PG Diploma in Pharmaceutical Management** shall extend over a period of two semesters (one academic year).

1.3. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

1.4. Working days in each semester

Each semester shall consist of not less than 100 working days. The first semesters shall be conducted from the month of June/July to November/December and the second semesters shall be conducted from December/January to May/June in every calendar year.

1.5. Attendance and progress

A candidate is required to put in at least 75% attendance in individual courses considering theory and practical separately. The candidate shall complete the prescribed course satisfactorily to be eligible to appear for the respective examinations.

1.6. Credit assignment

1.6.1. Theory and Practical courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L), and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having three lectures per week throughout the semester carries a credit of 3 similarly; a practical having four laboratory hours per week throughout semester carries a credit of 2.

1.7. Minimum credit requirements

The minimum credit points required for award of a **PG Diploma in Pharmaceutical Management** is 48. The credits are distributed semester-wise as shown in Table I & II. Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

1.8 Academic work

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of respective courses.

1.9. Course of study

The course of study for **PG Diploma in Pharmaceutical Management** shall include Semester Wise Theory & Practical as given in Table – I to II. The number of hours to be devoted to each theory and practical course in any semester shall not be less than that shown in Table – I to II.

Table-I: semester I

Course code	Name of the course	No. of Hours/ week	Credit	Mode of teaching
			Points	
PM 101	Principles of Management and Business Environment (Theory)	3	3	Online
PM 102	Accounting for Manager and Managing Finance (Theory)	3	3	Online
PM 103	Marketing Management (Theory)	3	3	Online
PM 104	Human anatomy & Physiology (Theory)	3	3	Online
PM 105	Pharmacology I (Theory)	3	3	Online
PM 106	Economics for Manager (Theory)	3	3	Online
PM 107	Human anatomy & Physiology (Practical)	3	3	Physical
PM 108	Pharmacology (Practical)	3	3	Physical
	Total	24	24	

Table-II: semester II

Course code	Name of the course	No. of Hours/week	Credit	Mode of teaching
			Points	
PM 201	Market Research (Theory)	3	3	Online
PM 202	Advanced Pharma Marketing (Theory)	3	3	Online
PM 203	Business Policy & Strategic Management (Theory)	3	3	Online
PM 204	Human Resource Management (Theory)	3	3	Online
PM 205	Pharmacology II (Theory)	3	3	Online
PM 206	Pharmacology (Practical)	3	3	Physical
PM 207	Dissertation work [Based on Elective] Elective: 1. Consumer Behavior 2. Service Marketing 3. Integrated Marketing Communication 4. Sales and Distribution Management 5. Brand Management 6. International Marketing Management	6	6	Online / Physical
	Total	24	24	

1.10 Examinations/Assessments

The scheme for internal assessment and end semester examinations is given in Table – III.

1.11 End semester examinations

The End semester Examination for each theory and Practical course through semesters I to II shall be conducted by the University in Table III and IV.

Table –III -Semester-I

Course code	Name of Course	Internal Assessment (Sessional Examination)				End semester Assessment (External Exam.)		
		Continuous Mode	Marks obtained in examination	Duration (hrs)	Total marks	Marks obtained (70]	Duration (hrs)	Total Marks
PM 101	Principles of Management and Business Environment (Theory)	10	20	1	30	70	3	100

PM 102	Accounting for Manager and Managing Finance (Theory)	10	20	1	30	70	3	100
PM 103	Marketing Management (Theory)	10	20	1	30	70	3	100
PM 104	Human anatomy & Physiology (Theory)	10	20	1	30	70	3	100
PM 105	Pharmacology (Theory)	10	20	1	30	70	3	100
PM 106	Economics for Managers	10	20	1	30	70	3	100
PM 107	Human anatomy & Physiology (Practical)	10	20	1	30	70	3	100
PM 108	Pharmacology I (Practical)	10	20	1	30	70	3	100

Table IV- Semester-II

Course code	Name of Course	Internal Assessment (Sessional Examination)				End semester Assessment (External Exam.)			
		Continuous Mode	Marks obtained in examination	Duration (hrs)	Total marks	Marks obtained (70]	Duration (hrs)	Total Marks	
PM201	Market Research (Theory)	10	20	1	30	70	3	100	
PM 202	Advanced Pharma Marketing (Theory)	10	20	1	30	70	3	100	
PM 203	Business Policy & Strategic Management (Theory)	10	20	1	30	70	3	100	
PM 204	Human Resource Management	10	20	1	30	70	3	100	
PM 205	Pharmacology II (Theory)	10	20	1	30	70	3	100	
PM 206	Pharmacology (Practical)	10	20	1	30	70	3	100	
PM 207	Elective : 1. Consumer Behaviour 2. Service Marketing 3. Integrated Marketing Communication 4. Sales and Distribution Management 5. Brand Management 6. International Marketing Management	30				70 (Presentation)			100

1.12 Internal assessment: Continuous mode

The marks allocated for Continuous mode of Internal Assessment shall be awarded as per the scheme given below.

Table-V: Scheme for awarding internal assessment: Continuous mode

Theory and Practical	
Criteria	Max. Marks
Attendance (Refer Table – VI)	4
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)	3
Student – Teacher interaction	3
Total	10

Table- VI: Guidelines for the allotment of marks for attendance

Percentage of Attendance	Max. Marks
95-100	4
90-94	3
85-85	2
80-84	1
Less than 80	0

1.13 Sessional Exams

Two Sessional exams shall be conducted for each theory / practical course as per the schedule fixed by the Department. The scheme of question paper for theory and practical Sessional examinations is given below. The average marks of two Sessional exams shall be computed for internal assessment as per the requirements given in tables – III and IV.

1.14. Question paper pattern for theory Sessional examinations

I. Objective Type Questions (5 x 2) = 05 x 2 = 10

(Answer all the questions)

I. Long Answers (Answer 1 out of 2) = 1 x 10 = 10

II. Short Answers (Answer 2 out of 3) = 2 x 5 = 10

Total = 30 marks

1.15. Question paper pattern for end semester theory examinations

I. Objective Type Questions (10 x 2) = 10 x 2 = 20

(Answer all the questions)

II. Long Answers (Answer 2 out of 3) = 2 x 10 = 20

III. Short Answers (Answer 6 out of 8) = 6 x 5 = 30

Total = 70 marks

1.16. Promotion and award of grades

A student shall be declared PASS and eligible for getting grade in a course of B.Pharm. program if he/she secures at least 50% marks in that particular theory and practical course including internal assessment.

1.17 Carry forward of marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 1.16, then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessment shall be carried over and he/she shall be titled for grade obtained by him/her on passing.

1.18 Improvement of internal assessment

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

1.19. Re-examination of end semester examinations

Reexamination of end semester examination shall be conducted as per the schedule given in table VII. The exact dates of examinations shall be notified from time to time.

Table-VII: Tentative schedule of end semester examinations

Semester	For Regular candidate	For Failed candidate
I	Nov/Dec	May / June
II	May / June	Nov/ Dec

1.20 . Grading of performances

1.20.1. Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in Table – VIII.

Table – VIII: Letter grades and grade points equivalent to Percentage of marks and performances

% of Marks obtained	Letter grade	Grade point	Performance
90-100	O	10	Outstanding
80-89.99	A	9	Excellent
70-79.99	B	8	Good
60-69.99	C	7	Fair
50-59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

1.21. The Semester grade point average (SGPA)

The performance of a student in a semester is indicated by a number called ‘Semester Grade Point Average’ (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student take courses (theory/practical) in a semester with credits C1, C2, C3, C4 and C5 and the student’s grade point in these courses are G1, G2, G3, G4 and G5, respectively, and then students’ SGPA is equal to:

$$\text{SGPA} = \frac{C_1G_1 + C_2G_2}{C_1 + C_2}$$

1.22. Cumulative Grade Point Average (CGPA)

The CGPA is calculated with the SGPA of all the two semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all two semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$\text{CGPA} = \frac{C_1S_1 + C_2S_2}{C_1 + C_2}$$

Where C_1, C_2, \dots is the total number of credits for semester I, II, \dots and S_1, S_2, \dots is the SGPA of semester I, and II.

1.23 . Declaration of class

The class shall be awarded on the basis of CGPA as follows:

First Class with Distinction = CGPA of. 7.50 and above

First Class = CGPA of 6.00 to 7.49

Second Class = CGPA of 5.00 to 5.99

1.24 Project work

All the students shall undertake a project under the supervision of a teacher and submit a report. The area of the project shall directly relate any one of the elective subject opted by the student in semester I. The project report shall be submitted in triplicate (typed & bound copy not less than 50 pages). The internal and external examiner appointed by the University shall evaluate the project. The projects shall be evaluated as per the criteria given below.

Evaluation of Dissertation Book:

Objective(s) of the work done 10 Marks

Methodology adopted 15 Marks

Results and Discussions 15Marks

Conclusions and Outcomes 20 Marks

Question and Answer skill 10 Marks

Total 70 Marks

The supervisor will evaluate the candidate for 30 internal marks of the project on the basis of regularity, communication skill,

Semester 1

PM 101 Principles of Management and Business Environment (Theory)

45 hours

Scope:

1. To comprehend details about the basic psychological and sociological processes in understanding human behavior.
2. To inculcate theoretical and practical understanding of personality effectiveness, perceptual processes and motivational processes to determine job satisfaction.
3. To understand the importance of effective communication processes in details and the applicability of current issues related to organizational communications.
4. To understand theoretical and practical understanding of organizational Leadership, Organizational Culture and power functions.
5. To develop in depth understanding of formation as well as Effective Management of Work Teams in organizations.
6. To come across the detail conceptual understanding of Stress and its Management principles in the organizations.
7. Describe and discuss the elements of effective management.
8. Identify environmental issues as they impact management and develop strategies to adapt to these environments.
9. Identify and explain issues involved in managing a diverse workforce and conduct necessary research to address these issues.
10. Discuss and apply the planning, organizing and control processes.
11. Identify, discuss and/or describe various theories related to the development of leadership skills, motivation techniques, teamwork and effective communication.
12. Communicate effectively through both oral and written presentations.
13. Conduct research and analyze information by using both human and technological resources.
14. Work effectively as a team member through group projects, case studies and problem analysis.

Objectives:

1. Comprehending the deep understanding of the psychology of human behavior and apply the same in the context of work organizations.
2. Understanding personality determinants and its influence on behaviors in organizations.
3. Inculcating the importance of the major theories of Perception, Motivation & Communication processes in work organizations and its application in organizational functions.
4. Creating the effective reward system by understanding motivational concepts.
5. Understanding the reasons and the practical methods of managing stress effectively to control psychosomatic disorders.
6. Knowing details of organizational conflicts and its effective management for the smooth management.
7. Developing effective leadership Styles by understanding various contemporary leadership issues appropriate for today's organizations.
8. Comprehending a thorough understanding on the organizational Culture and the maintenance of it.

Course Content

Unit –I (Principles of Management)

Contact Hours	Topics	
1.	Nature of Management Concept, Management and Administration, Importance of management, Nature of management, Science or Art, Profession, Universality of Management, Applying Management Theory in Practice	3
2.	Development of Management Thought Evolution, Early contributions, Taylor and Scientific Management, Fayol's Administrative Management, Hawthorne Experiments and Human Relations, Social Systems Approach	3
3.	Fundamentals of Planning Concept, Nature, Importance, Steps, Types, Corporate and functional, Strategic and operational, Types of plans, Barriers to effective Planning	3
4.	Fundamentals of organizing and organization structure Concept of organization and organizing, Organization theory, Classical organization theory, Neoclassical organizational theory, Modern organization theory : Systems approach, Factors affecting organizational structure, Environment, Strategy, Technology, Size of organization, People Line and staff organization structure, Functional organizational structure, Divisional organizational structure, Project organizational structure, Matrix organizational structure, Free-Form organizational structure, Task force, Team Committee, Virtual organization	6
5.	Organizational change Nature of organizational change, Factors of organizational change, Planned change, Process of planned change, Human response to change, Resistance to change, Overcoming resistance to change, Change agents, Role of change agents	3
6.	Fundamentals of directing & Controlling Concept of Direction, Principles of Direction, Direction and supervision, effective supervision, order giving, techniques of direction, directing and human factor, managerial models. Concept of controlling, Steps in controlling, Types of control, Control Areas, Controlling and Management by Exception, Benefits of management by exception, Design of effective control system, Essential of effective control system	6

Unit-II (Business environment)

Chapter /Module	Topics	Contact Hours
1.	An introduction to business and its environments	03
2.	Meaning and rationale for globalization	03
3.	Strategies for going global	05
4.	Foreign Direct Investments	05
5.	India, WTO and Trading Blocks	05

Reference Books:

1. Business Environment; Francis Cherunilam; Himalaya Publishing House; 19th edition.
2. International Business Environment & Business; Bhalla V K and S. Shivaramu; Anmol; New Delhi; '95.

PM 102 Accounting for Manager and Managing Finance (Theory)

45 hours

Scope:

1. To educate students of management with different concept of accounting
2. To develop ability among management student to evaluate and use accounting information which assist in decision making for manager
3. To equip students with basic understanding finance and its utility
4. To enable students to take decisions related with financial feasibility and working capital management

Objectives:

After completion of this course students are acquaint with the language of Accounting and to develop in them the ability to evaluate and use accounting data and statements as an aid to decision making. Through Financial management, students are able to appreciate different concept of Financial Management which assist them in financial decision making. Students are also able to test preliminary aspects of financial feasibility and working capital management with the highest level of evidences.

Course Content

Unit –I Accounting for Managers

Chapter/ Module	Topics to be covered	Contact Hours
1	Introduction: Basics of accounting, Different concepts in accounting, Types of Account, Principle of Accounting, GAAP, About Managerial Account, Need-Importance and scope of Managerial accounting	05
2	Final Account: About Journal, Ledger & Final Account (Theory)	10
3	Depreciation Accounting (Only theoretical concept) Inventory valuation (Meaning, importance and method of inventory valuation)	05
4	Analysis and Interpretation of Financial statement: Introduction, Types of financial statement, Method of analysis, Ratio Analysis, Fund flow statement & cash flow statement	08
5	Introduction of GST for accounting of healthcare organization, History, Importance	02

Unit-II Managing Finance

Chapter/ Module	Topics to be covered	Contact Hours
1	Introduction, Sources of Finance((Meaning, Characteristics, Types, Advantages & Disadvantages) & Financial Environment, Meaning & Importance of Present & Future value of Single cash flow, multiple cash flow and annuity,	10
2	Working Capital Management: Receivable Mgt, Cash Mgt, Inventory Mgt, Corporate Restructuring, Merger & Acquisition	05

Reference Books:

1. S Maheshwari - Accounting for Manager - Vikas Publication
2. Bhattacharya S K and DeardenJ. : Accounting for Management, Text and Cases. New Delhi, Vikas Publication
3. Pandey I M – Financial Management Text and Cases – Vikas Publication
4. Prasanna Chandra – Financial Management Theory and Practice – TMH Publication

PM 103 Marketing Management (Theory)

45 hours

Scope:

1. Understand Concepts of Marketing and Customer Value
2. Take decisions related Marketing Planning Process and Strategy Formulation
3. Understand and Analyzing Consumer Behavior and Satisfaction
4. Prepare Competitive Marketing Strategies
5. Take decisions related with price, product, place and promotions
6. Get idea about service marketing, advertising and international marketing

Objectives:

1. To become familiar with the range of decisions implicit in strategic marketing management and Planning.
2. To develop skill in using a variety of analytical frameworks for making such decisions.
3. To develop an understanding of how markets contrast in terms of
4. Their “enduring characteristics.”
5. Their stage of development and how the nature of competition in such markets is impacted
6. To develop skills in planning a variety of marketing management tools, ranging from new product entry Strategy to international market product life cycle management and strategy.
7. To develop skill in organizing for effective strategic marketing and in implementing the market Planning process.

Course Content

Unit –I

Chapter/ Module	Topics to be covered	Contact Hours
1	Defining Marketing, Importance, Scope, Core Marketing, New Marketing, Company Orientation	5
2	Capturing Marketing Insights, Gathering Information and scanning the Environment, Conducting Market Research	5

Unit-II

Chapter / Module	Topics to be covered	Contact Hours
1	Connecting with Customers, Creating Customer Value, Satisfaction and Loyalty, Analyzing Consumer Markets, Analyzing Business Markets, Identifying Business Segments and Targets	5
2	Building Strong Brands, Creating Brand Equity, Crafting Brand Positioning	5

Unit-III

1	Building Strong Brands, Creating Brand Equity, Crafting Brand Positioning	5
2	Shaping Market, Setting Product Strategy, Designing and Managing Services, Developing Pricing Strategies and Programs	5
3	Creating Brand Equity, Introduction, Building Brand Equity, Measuring, Brand Strategy, Customer Equity	4

Unit-IV

1	Managing Mass Communications, Advertising Program, Sales Promotion, Events and Experiences, Public Relations	4
2	Managing Personal Communications, Direct Marketing, Interactive Marketing, Word of Mouth, Personal Selling, Managing the sales force	4
3	Managing Marketing in the Global Economy, Competing on a Global basis, Internal Marketing, Managing the marketing process,	3

Reference Books:

1. Marketing Management by Kotler, Keller, Koshy and Jha, Pearson publication
2. Marketing Management - Text and Cases – By Panda – Excel Publication
3. Marketing Management - Text and Cases – By Kazmi – Excel Publication
4. Marketing Management - Philip Kotler Pearson publication
5. A Framework for Marketing Management by Philip Kotler, Kevin Lane Keller Published By: - Pearson Education
6. Fundamentals of Marketing – Stanton; TMH Publication; New Delhi
7. Marketing Management - V.S.Ramaswamy and S.Namakumari; Himalaya publication.

PM 104 Human Anatomy and Physiology (Theory)

45 hours

Scope: This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy

Objectives: Upon completion of this course the student should be able to

- Explain the gross morphology, structure and functions of various organs of the human body
- Describe the various homeostatic mechanisms and their imbalances
- Identify the various tissues and organs of different systems of human body
- Perform the various experiments related to special senses and nervous system
- Appreciate coordinated working pattern of different organs of each system

Course Content

Unit –I

Chapter /Module	Topic	Contact Hours
1	Scope of Anatomy and physiology. Definition of various terms used in Anatomy. Structure of cell, function of its components	2
2	Elementary tissues: Elementary tissues of the body, i.e. epithelial tissue, muscular tissue, connective tissue and nervous tissue	2
3	Skeletal System Structure and function of Skelton Classification of joints and their function. Joint disorders.	2
4	Haemopoetic system Composition and functions of blood Process of Haemopoesis Characteristics and functions of RBC's, WBC's and platelets Mechanism of Blood Clotting Importance of Blood groups	4
5	Cardiovascular system Anatomy and Physiology of heart Blood vessels and circulation (Pulmonary, coronary and systemic circulation) Cardiac cycle and Heart sounds, Basic knowledge of ECG Blood pressure and its regulation	6

Unit-II

1.	Reproductive system Anatomy of Male and female reproductive system Physiology of menstruation Spermatogenesis and Oogenesis Pregnancy and parturition	5
2.	Urinary System: Various parts of urinary system and their functions, Structure and functions of kidney. Physiology of urine formation, Renin - angiotensin system, Clearance tests and micturition.	4
3.	Central Nervous System: Various parts of central nervous system, brain and its parts, functions and reflex action. Anatomy and physiology of automatic nervous system.	5
4.	Digestive System: Names of various parts of digestive system and their functions. structure and functions of liver physiology of digestion and absorption	4

Unit-III

1.	Endocrine System Location of endocrine glands, their hormones and functions	3
2.	Respiratory system Anatomy of respiratory organs and their functions. Regulation of respiration. Respiratory volumes and capacities (definition)	4
3.	Sensory Organs: Elementary knowledge of structure and functions of the organs of taste, smell, ear, eye and skin. Physiology of pain.	4

Text Book

1. Tortora Gerard J. and Nicholas, P. Principles of anatomy and physiology Publisher Harpercollins college New York
2. Wilson, K.J.W. Ross and Wilson's foundations of anatomy and physiology. Publisher: Churchill Livingstone, Edinburg

Reference Book

1. Guyton arthur, C. Physiology of human body. Publisher: Holtsaunders
2. Chatterjee, C.C. Human physiology. Volume 1&11. Publisher: medical allied agency, Calcutta
3. Peter L. Williams, Roger Warwick, Mary Dyson and Lawrence, H. Gray's anatomy. Publisher: Churchill Livingstone, London

PM 105 Pharmacology I (Theory)

45 Hours

Scope: The main purpose of the subject is to understand what drugs do to the living organisms and how their effects can be applied to therapeutics. The subject covers the information about the drugs like, mechanism of action, physiological and biochemical effects (pharmacodynamics) as well as absorption, distribution, metabolism and excretion (pharmacokinetics) along with the adverse effects, clinical uses, interactions, doses, contraindications and routes of administration of different classes of drugs.

Objectives: Upon completion of the subject student shall be able to (Know, do, appreciate) –

- a. understand the pharmacological aspects of drugs falling under the above-mentioned chapters
- b. handle and carry out the animal experiments
- c. appreciate the importance of pharmacology subject as a basis of therapeutics; and
- d. correlate and apply the knowledge therapeutically

Unit I

Chapter /Module	Topic	Contact Hours
1	General Pharmacology a. Introduction, definitions and scope of pharmacology b. Routes of administration of drugs c. Pharmacokinetics (absorption, distribution, metabolism and excretion) d. Pharmacodynamics e. Factors modifying drug effects f. Adverse drug reactions g. Drug toxicity - Acute, sub- acute and chronic toxicity. h. Drug discovery and clinical evaluation of new drugs -Drug discovery phase, preclinical evaluation phase, clinical trial phase, phases of clinical trials and pharmacovigilance i. Drug interactions	5
2	Pharmacology of drugs acting on ANS a. Steps involved in neurohumoral transmission b. Definition, classification, pharmacological actions, dose, indications, and contraindications of i. Adrenergic and antiadrenergic drugs ii. Cholinergic and anticholinergic drugs iii. Neuromuscular blockers and skeletal muscle relaxants (peripheral) iv. <i>Ganglionic stimulants and blockers</i> v. Local anesthetic agents	12

Unit II

Chapter	Topic	Hours
1	Drugs Acting on the Central Nervous System General anesthetics and pre-anesthetics Sedatives, hypnotics and centrally acting muscle relaxants Anticonvulsants Antipsychotics antidepressants anti-anxiety agents Analgesic and anti-inflammatory agents Psychotropic drugs Alcohols and disulfiram CNS stimulants and cognition enhancers Pharmacology of local anesthetics Drugs used in Parkinsonism and Alzheimer's disease	13

Unit III

Chapter / Module	Topic	Contact Hours
1	Pharmacology of drugs acting on cardio vascular system Anti-hypertensive drugs Anti-anginal drugs Anti-arrhythmic drugs Drugs used for therapy of Congestive Heart Failure Anti-hyperlipidemic drugs	10
2	Pharmacology of drugs acting on Respiratory system Anti -asthmatic drugs Drugs used in the management of COPD Expectorants and antitussives Nasal decongestants Respiratory stimulants	5

Text Books (Latest Editions)

1. Rang H. P., Dale M. M., Ritter J. M., Flower R. J., Rang and Dale's Pharmacology, Churchill Livingstone Elsevier
2. K.D.Tripathi. Essentials of Medical Pharmacology, JAYPEE Brothers Medical Publishers (P) Ltd, New Delhi.
3. Satoskar, R.S. and Bhadarkar, S.D. Pharmacology and pharmacotherapeutics, Publisher: Popular, Dubai

Reference Books (Latest Editions)

1. Goodman and Gilman's, The Pharmacological Basis of Therapeutics
2. Katzung B. G., Masters S. B., Trevor A. J., Basic and clinical pharmacology, Tata Mc Graw-Hill
3. Craig, C. R. & Stitzel, R.E. Modern Pharmacology. Latest edition. Publisher: Little Brown. Co

PM 106 Economics for Managers (Theory)

OBJECTIVES:

In today's dynamic economic environment, effective managerial decision making requires timely and efficient use of information. The purpose of this course is to provide students with a basic understanding of the economic theory and analytical tools that can be used in decision making problems. Students who successfully complete the course will have a good understanding of economic concepts and tools that have direct managerial applications. The course will sharpen their analytical skills through integrating their knowledge of the economic theory with decision making techniques. Students will understand that health is unlike any other good and train them in tools of health economics to analyze health outcomes, processes and policies.

LEARNING OUTCOMES:

On the successful completion of the course student should be able:

1. To understand about various types of economy i.e. capitalist, socialist, and mixed, developed, developing and under developed.
2. To understand demand supply analysis, elasticity and its various determinant.
3. To understand demand for healthcare services
4. To Understand Health Production function
5. To apply the cost concepts in their personal and professional career.
6. To understand about the market structure, characteristics of various markets, price determination under different market condition & public Intervention.
7. To know about National Income Measurement, Inflation, unemployment, poverty and its consequences.

Course Content

Unit -I

Chapter /Module	Topics to be covered	Contact Hours
1.	Economics and its definition Subject matter of economics Branches of economics. The Application of Economics in the life of Common man The Firm: Objectives & Constraints; Basic Principles: Opportunity Cost. Health Economics: What is it? Elements of Health Economics: Organization Components of the health care market Structure of a health care system	4
2.	Demand and Revenue Analysis: Meaning and Concept of Demand Types of Demand, Determinant of Demand, Demand Function. Elasticity: Meaning and Concept of Elasticity, Demand Elasticity and its measurement, Types of Elasticity, Uses of Elasticity	3
3.	Demand of Healthcare services Factor affecting healthcare demand Demand: consumers, patients, elasticity Supply: firms, hospitals physicians; Efficiency, Efficacy, Effectiveness, Equity, Opportunity cost.	2

4.	Concept of Supply Law of Supply Elasticity of Supply Supply Schedule, Supply Curve; Slope of Supply Curve; Factor effecting supply Equilibrium of supply and demand Shortage and surplus. Concept of Supply and Healthcare Services.	6
5.	Production Analysis and Inputs Demand: Meaning and Concept of Production Production Function; Health Production: Relevance of production function Estimating a Household (Health) Production function.	3
6.	Concept of Cost and its different types Uses & Application of cost concepts Cost and Production Cost function Cost Benefit analysis of Healthcare.	5
7.	Concept and definition of Market and its Structure Various types of market; perfect competition; Monopoly; Oligopoly; Monopolistic Competition; Concept of Consumer surplus and Producer Surplus Concept of Market in Health care Sector, why is it different	4
8.	Role of government in Healthcare Role of regulation in healthcare market Economic Perspective of Health Policy.	6

Unit-II

1.	9.1 Macroeconomics of Healthcare. 9.2 An Overview of Macroeconomics 9.3 Subject matter of Macro economics; Micro Vs macro 9.4 Methodology in Economics 9.5 Theory of Aggregation, National Income	2
2.	10.1 Concept of macroeconomics: Inflation, Unemployment, Poverty, National Income and its Measurement	4
3.	11.1 Uncertainty, risk and Insurance in Healthcare 11.2 Introduction 11.3 Factors Affecting 11.4 Implications	3
4.	12.1 The National and International health Economic Scenario: An Overview. 12.2 Introduction 12.3 National Health Economic Scenario 12.4 International Health Economic Scenario	3

REFERENCE BOOKS:

1. Mithani, D.M “Managerial Economics Theory and Applications” Himalaya Publishing House (2014).
2. Dholakia, R.H. & A.N. Oza, (1996) “Microeconomics for Management Students”Oxford University press, New Delhi.
3. Michael F. Drummond (2005) “Methods for the Economic Evaluation of Health Care Programmes”, Oxford University Press.
4. Ann Clewer, David Perkins (2006), “Economics for Health Care Management”, Pearson Education, New Delhi.
5. Gupta, G.S (2012), “Managerial Economics”, 3rd edition, Tata McGraw Hill Publication, Daryaganj, New Delhi.
6. Mankiw N. Gregory, “Principal of Economics”, 5th edition, Cengage Publication
7. H.L. Ahuja, “Modern Economics”, 19th Edition, S. Chand Publishing
8. William, Jack, Principles of Health Economics for Developing Countries, World Bank Institute Development Studies, 1999.
9. World Development Report, Investing in Health, The World Bank, 1993.

PM 107 Human Anatomy and Physiology (Practical)

45 Hours

Sr. No.	Practical	Hours
1	Study of compound microscope	3
2	General techniques for the collection of blood	3
3	Microscopic examination of Epithelial tissue, Cardiac muscle, Smooth muscle, Skeletal muscle, connective tissue and Nervous tissue	3
4	Study with the help of charts and models of the following system and organs: Digestive system, Respiratory system, Ear, Cardiovascular system, Urinary system, Reproductive system, Eye	3
5	Study of Human Skeleton-Axial skeleton and appendicular skeleton	3
6	Study of appliances used in Haematological experiments	3
7	Examination of blood films for TLC and DLC	3
8	Determination of RBCs	3
9	Determination of clotting time of blood, bleeding time	3
10	Determination of blood group	3
11	Determination of erythrocyte sedimentation rate	3
12	Determination of Haemoglobin content of blood	3
13	Recording of Body temperature, Pulse rate and Heart rate	3
14	Recording of Blood Pressure	3
15	Recoding of ECG	3

Books

1. Ranade VG, Text book of practical physiology, Latest edition, Publisher: PVG, Pune
Anderson Experimental Physiology, Latest edition, Publisher: NA
2. Goyal, R. K, Natvar M.P, and Shah S.A, Practical anatomy, physiology and biochemistry, latest edition, Publisher: B.S Shah Prakashan, Ahmedabad
3. Textbook of Practical Physiology by C.L. Ghai, Jaypee brother's medical publishers, New Delhi
4. Practical workbook of Human Physiology by K. Srinageswari and Rajeev Sharma, Jaypee brother's medical publishers, New Delhi

PM 108 Pharmacology I (Practical)

45 Hours

Sr. No.	Practical	Hours
1	Introduction to experimental pharmacology	3
2	Study of laboratory appliances used in experimental pharmacology	3
3	Study of laboratory animals and their handling (a. Frogs, b. Mice, c. Rats, d. Guinea pigs, e. Rabbits).	3
4	CPCSEA guidelines for maintenance of laboratory animals	3
5	Common laboratory techniques. Blood withdrawal, serum and plasma separation,	3
6	Study of anesthetics and euthanasia used for animal experiments	
7	Dose calculation in pharmacological experiments	3
8	Study of Mydriatic and Mitotic effect on rabbit eye	3
9	Demonstration of effect of analgesics using Analgesiometer	3
10	Demonstration of effect of anti-convulsant in mice or rats using convusiometer	3
11	Demonstration of effect of Muscle relaxants using Rota Rod apparatus	3
12	Demonstration of effect of CNS stimulants and depressants using actophotometer	3
13	Pyrogen testing by rabbit method	3
14	Study of effect of drugs on isolated heart	3
15	Effect of drugs on ciliary motility on frog's buccal cavity	3

Books

1. Kulkarni, S. K. and Dandia, P. C. Hand book of experimental pharmacology. Latest edition, Publisher: Vallab, Delhi
2. Ghosh, M.N. Fundamentals of experimental pharmacology. Latest edition, Publisher: Scientific book agency, Kolkata
3. Ex- Pharm 1.00 soft ware
4. X-Cology Software

Semester II
PM 201 Market Research

45 Hours

Unit I

Chapter/ Module	Topics to be covered	Contact Hours
1.	Marketing Research Dynamics- Introduction, Meaning of Research, Research Characteristics, Various Types of Research, Marketing Research and its Management, Nature and Scope of Marketing Research, Marketing Research in the 21st Century (Indian Scenario), Marketing Research: Value and Cost of Information	9
2.	Planning the Research Process- Introduction, Research Process: An Overview, Formulation of a Problem, Research Methods, Research Design, Data Collection Methods, Sample Design, Data Collection, Analysis and Interpretation, Report Writing, Components of Research Proposal, Components of Research Paper	9
3.	Research Design- Introduction, Meaning of Research Design, Types of Research Design, Descriptive Research, Causal Research Design, Research Design and Marketing Decision Process, Choosing a Good Research Design	9
4.	Data Collection Sources and Methods: Introduction, Meaning and Nature of Secondary Data, Advantages of Secondary Data, Drawbacks of Secondary Data, Types of Secondary Data Sources, Primary Data and its Types	9

Unit-II

Chapter/ Module	Topics to be covered	Contact Hours
1.	Designing a Questionnaire- Introduction, Questionnaire Design, Questionnaire Building, Process of Questionnaire Design, Information Required, Interview Method, Questionnaire Format and Question Composition, Individual Question Content, Questions Order, Form and Layout, Pilot Testing the Questionnaire	9
2.	Measurement and Scaling Techniques- Introduction, Importance of Measurement and Scaling in Marketing Research, Scales of Measurement: Fundamental Properties, Primary Scales of Measurement, Attitude Measurement Scales, Types of Comparative Scales, Non – Comparative scale, Selecting an Appropriate Scale, Scale Evaluation	9

REFERENCE BOOKS

1. Market Research by Naresh Malhotra.

PM 202 Advanced Pharmaceutical Marketing

Scope:

45 Hours

The pharmaceutical industry not only needs highly qualified researchers, chemists and, technical people, but also requires skilled managers who can take the industry forward by managing and taking the complex decisions which are imperative for the growth of the industry. The Knowledge and Know-how of marketing management groom the people for taking a challenging role in Sales and Product management.

Course Objective:

The course aims to provide an understanding of marketing concepts and techniques and their applications in the pharmaceutical industry.

Unit I

Chapter/ Module	Topics to be covered	Contact Hours
1.	Marketing: Definition, general concepts and scope of marketing; Distinction between marketing & selling; Marketing environment; Industry and competitive analysis; Analyzing consumer buying behavior; industrial buying behavior.	5
2.	Pharmaceutical market: Quantitative and qualitative aspects; size and composition of the market; demographic descriptions and socio-psychological characteristics of the consumer; market segmentation & targeting. Consumer profile; Motivation and prescribing habits of the physician; patients' choice of physician and retail pharmacist. Analyzing the Market; Role of market research.	5

Unit II

Chapter/ Module	Topics to be covered	Contact Hours
1.	Product decision: Classification, product line and product mix decisions, product life cycle, product portfolio analysis; product positioning; New product decisions; Product branding, packaging and labeling decisions, Product management in pharmaceutical industry.	10

Unit III

Chapter/ Module	Topics to be covered	Contact Hours
1.	Promotion: Methods, determinants of promotional mix, promotional budget; An overview of personal selling, advertising, direct mail, journals, sampling, retailing, medical exhibition, public relations, online promotional techniques for OTC Products.	10

Unit IV

Chapter/ Module	Topics to be covered	Contact Hours
1.	Pharmaceutical marketing channels: Designing channel, channel members, selecting the appropriate channel, conflict in channels, physical distribution management: Strategic importance, tasks in physical distribution management.	5
2.	Professional sales representative (PSR): Duties of PSR, purpose of detailing, selection and training, supervising, norms for customer calls, motivating, evaluating, compensation and future prospects of the PSR.	5

Unit V

Chapter/ Module	Topics to be covered	Contact Hours
1.	Pricing: Meaning, importance, objectives, determinants of price; pricing methods and strategies, issues in price management in pharmaceutical industry. An overview of DPCO (Drug Price Control Order) and NPPA (National Pharmaceutical Pricing Authority).	5
2.	Emerging concepts in marketing: Vertical & Horizontal Marketing; Rural Marketing; Consumerism; Industrial Marketing; Global Marketing.	5

Recommended Books: (Latest Editions)

1. Philip Kotler and Kevin Lane Keller: Marketing Management, Prentice Hall of India, New Delhi
2. Walker, Boyd and Larreche : Marketing Strategy- Planning and Implementation, Tata MC GrawHill, New Delhi.
3. Dhruv Grewal and Michael Levy: Marketing, Tata MC Graw Hill

4. Arun Kumar and N Menakshi: Marketing Management, Vikas Publishing, India
5. Rajan Saxena: Marketing Management; Tata MC Graw-Hill (India Edition)
6. Ramaswamy, U.S & Nanakamari, S: Marketing Managemnt:Global Perspective, IndianContext,Macmilan India, New Delhi.
7. Shanker, Ravi: Service Marketing, Excell Books, New Delhi
8. Subba Rao Changanti, Pharmaceutical Marketing in India (GIFT – Excel series) Excel Publications.

PM 203 Business Policy & Strategic Management

45 hrs.

Course Description:

This course includes the understanding of the importance of Strategic Management. The Course is clubbed with ample case studies and live projects which help the students to have an idea about the possibilities and various strategies which can be incorporated in Various Corporate.

Course Objective:

To familiarize the participants with the basic concepts of business strategy and to facilitate the participants to apply the concepts to live corporate situations and secondly explain contemporary concepts of strategy.

Learning Outcome:

At the end of the semester the students will have a basic understanding about the environments and the strategies required to cope up with them.

Unit-I

Chapter /Module	Topics to be covered	Contact Hours
1.	Conceptual Framework for Strategic Management What is Strategy, Strategic Thinking, Phases, Emerging Approaches	6
2.	Strategic Intent Vision, Mission and Values, Preparation of vision and mission statements	6
3.	Generic Tools of Analysis Decision Trees, SWOT Analysis, PESTLE Analysis	6
4.	Strategic Analysis – Business Environment The Mega Environment, The Micro Environment, The Technological Environment	6

Unit-II

1.	Internal Environment Strategic Capability, Resource Analysis, Core Competencies, Organizational Capabilities	8
2.	Strategic choice – grand strategies Strategic Formulation Growth Strategies, Corporate Parenting,	7
3.	Competitive strategies –Business unit Strategies Porter's Competitive Strategies, Resource Based Theory	6

Reference Books

1. Strategic Management by Upendra Kachru
2. Business Policy by Azhar Kazmi
3. Strategic Management - Concepts and Cases by Arthur A. Thompson Jr. and A.J.Strickland
4. Management Policy and Strategic Management by R.M.Shrivastava
5. Business Policy and Strategic Management by P.Subba Rao
6. Strategic Management by Pearce
7. Strategy & Business Landscape by Pankaj Ghemawat
8. Strategic Planning Formulation of Corporate Strategy by Ramaswamy

PM 204 Human Resource Management

45 hrs.

1. **Scope:** Provide a good example that illustrates HR's Role in formulating and executing company strategy.
2. Develop clear cut understanding of how all the managers can use human resource management concepts and techniques.
3. Develop knowledge to write job descriptions including job functions, job specifications, using the internet and traditional methods.
4. Develop understanding about the techniques used in employment planning forecasting, recruitment and selection processes.
5. Develop, administer and evaluate performance appraisal tools in the organizations.
6. Establish a job plan and describe how to price managerial jobs and professional jobs.
7. Develop understanding to use different techniques and to go about identifying training requirements of organizations.

Define the most popular organization wide variable pay plans by outlining the steps in developing effective incentive plans and employ fair disciplinary practices at work.

Objectives:

Besides having a number of objectives as a part of the syllabus the following are some of the major objectives:

1. To understand deeply what HRM is and how it relates to the management process.
2. To understand the nature of job Analysis and describe the process of conducting it and also to come across various techniques of Job Analysis.
3. To make aware students about the prerequisites and the how aspects for the successful planning and Recruiting process.
4. To learn and to know what and 'how to use' aspects of different testing and selection processes used in the organizations.
5. To describe the performance appraisal process and to develop, administer different performance appraisal tools used for appraising employees.
6. To inculcate knowledge about the ethical misconduct in the personal function and ethical decision making in the HRM.

To indicate the objectives and benefits of employee counseling and mentoring and knowing the steps involved in the effective use of these in the organization.

Unit-I

Chapter /Module	Topics	Contact Hours
1	Nature and Scope of Human Resource Management Nature, Scope, Semantics, Functions, Personnel Policies, HRM Model, Evolution, Human Capital Management	4
2	Context of Human Resource Management External Forces, Internal Forces, HRM and environment scanning	3
3	Integrating HR Strategy with Business Strategy Nature of Strategic HRM	2
4	Human Resource Planning Nature, Importance, Factors, Planning Process, Barriers to HRP	3
5	Analyzing Work and Designing Jobs Nature of Job Analysis, Competitive Advantage, Process, Methods, Potential Problems, Job Design, Factors affecting Job Design, Issues in Job Design, Case Study	4

Unit-II

1.	Recruiting HR Nature, Purpose, Factors, Recruitment Process, Searching, Screening, Evaluation and Control, Case Study	3
2.	Selecting & Inducting Human Resources Nature, process, barriers, Induction, Orientation Programme, Problems, Placement, Case Study	3
3.	Training, Development and Career Management Nature, Inputs, Gaps, Training Process, Career Development, Case Study	3
4.	Appraising and Managing Performance Performance Appraisal, Process, Challenges, legal issues, Job Evaluation, Process, methods, alternative to Job Evaluation, Case Study	4
5.	Managing Basic Remuneration Components, theories, Importance, pause and ponder, factors, remuneration plans and Business Strategy, challenges, Incentives, Case Study	4

Unit-III

1.	Remunerating the Top Brass Components, extent, justification, relevant Issues, Remedial	3
2.	Industrial Relations : An introduction, meaning, Characteristics, Factors Affecting IR, Approaches to IR, Participation in IR, Objectives of IR and Human Relations, IR and Productivity, Various Dimensions of IR	3
3.	Evaluating HRM Effectiveness Nature and Need for HR Evaluation, Evaluation Framework, Approaches, Case Study	3
4.	The e-HR Nature of e-HR, e-HR Activities, e-Recruitment, e-Selection, e-Performance Management, e-Learning, e-Compensation, Case Study	3

Core Book

1. Human Resource Management, Text and Cases by K.Asawahappa, Mc-GrawHill

Reference books

1. Human Resource Management by Snell and Bohlander, 1st Edition, Thomson Learning.
2. Fundamentals of Human Resource Management by David Deconzo and Stephen Robbins, 8th Edition, Wiley Publication.
3. Human Resource Management by Biswajeet Patnaik, 3rd Edition, Prentice Hall Publication,
4. Human resource management- texts and cases by VSP Rao, second edition 2005, Excel books
5. HRM by Madhurima Lal and Sakina Qasim Zaidi, 2008, Excel books, New Delhi

PM 205 Pharmacology II (Theory)

45 Hours

Scope: This subject is intended to impart the fundamental knowledge on various aspects (classification, mechanism of action, therapeutic effects, clinical uses, side effects and contraindications) of drugs acting on blood, urinary system, gastrointestinal system, infectious disease and immunopharmacology.

Objectives: Upon completion of the subject student shall be able to (Know, do, appreciate) –

- e. understand the pharmacological aspects of drugs falling under the above-mentioned chapters
- f. handle and carry out the animal experiments
- g. appreciate the importance of pharmacology subject as a basis of therapeutics; and
- h. correlate and apply the knowledge therapeutically

Unit I

Chapter /Module	Topics	Contact Hours
1	Pharmacology of drugs acting on the Gastrointestinal Tract Antiulcer agents Drugs for constipation and diarrhea; Appetite stimulants and suppressants; Emetics and anti-emetics	4
2	Pharmacology of Drugs acting on Blood and blood forming agents Coagulants & anticoagulants; Fibrinolytics (thrombolytics) and antifibrinolytics Antiplatelet agents ;Haemopoietics and plasma expanders	5

Unit II

Chapter /Module	Topic	Hours
1.	Pharmacology of drugs acting on urinary system Diuretics; Anti-diuretics	3
2.	Pharmacology of drugs acting on endocrine system Basic concepts in endocrine pharmacology;Anterior Pituitary hormones-analogues and their inhibitors ;Thyroid and Antithyroid drugs; Insulin, Insulin analogues and oral hypoglycemic agents; ACTH and corticosteroids Androgens and Anabolic steroids; Estrogens, progesterone and oral	13

	contraceptives; Drugs acting on the uterus	
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Unit II

Chapter /Module	Topic	Hours
1.	Chemotherapy Introduction; Sulfonamides and co-trimoxazole; Penicillin and Cephalosporins Tetracyclines and Chloramphenicol; Macrolides, Aminoglycosides, Polyene & Polypeptide antibiotics Quinolones and Fluroquinolones; Antifungal antibiotics; Antiviral agents; Chemotherapy of tuberculosis and leprosy; Chemotherapy of Malaria; Chemotherapy of protozoal infections; Anthelmintic drugs; Chemotherapy of cancer	16
2.	Immunopharmacology Pharmacology of immunosuppressants and stimulants	4

Text Books (Latest Editions)

1. Rang H. P., Dale M. M., Ritter J. M., Flower R. J., Rang and Dale's Pharmacology, Churchill Livingstone Elsevier
2. K.D. Tripathi. Essentials of Medical Pharmacology, JAYPEE Brothers Medical Publishers (P) Ltd, New Delhi.
3. Satoskar, R.S. and Bhadarkar, S.D. Pharmacology and pharmacotherapeutics, Publisher: Popular, Dubai

Reference Books (Latest Editions)

1. Goodman and Gilman's, The Pharmacological Basis of Therapeutics
2. Katzung B. G., Masters S. B., Trevor A. J., Basic and clinical pharmacology, Tata Mc Graw-Hill
3. Craig, C. R. & Stitzel, R.E. Modern Pharmacology. Latest edition. Publisher: Little Brown. Co

PM 206 Pharmacology II (Practical)

Practical

45 Hours

Sr. No.	Practical	Hours
1	Introduction to <i>in-vitro</i> pharmacology and physiological salt solutions	3
2	Effect of drugs on isolated frog heart	3
3	Effect of drugs on blood pressure and heart rate of dog	3
4	Study of diuretic activity of drugs using rats/mice	3
5	DRC of acetylcholine using frog rectus abdominis muscle	3
6	DRC of histamine using G. Pig ileum	3
7	Effect of atropine on DRC of acetylcholine using rat ileum	3
8	Effect of mepyramine on DRC of histamine using G. Pig ileum	3
9	Effect of physostigmine on DRC of acetylcholine using frog rectus abdominis muscle	3
10	Bioassay of histamine using guinea pig ileum by matching method	3
11	Bioassay of oxytocin using rat uterine horn by interpolation method	3
12	Bioassay of serotonin using rat fundus strip by three point bioassay	3
13	Bioassay of acetylcholine using rat ileum/colon by four point bioassay	3
14	Effect of spasmogens and spasmolytics using rabbit jejunum	3
15	Biostatistics methods in experimental pharmacology (student's t test, ANOVA)	3

Books

1. Kulkarni, S. K. and Dandia, P. C. Hand book of experimental pharmacology. Latest edition, Publisher: Vallab, Delhi
2. Ghosh, M.N. Fundamentals of experimental pharmacology. Latest edition, Publisher: Scientific book agency, Kolkata
3. Ex- Pharm 1.00 soft ware
4. X-Cology Software

Elective Subjects

E-1 Consumer Behavior

COURSE OUTLINE

Focus of the course would be on the psychological and sociological elements and their impact on consumer decision making.

1. The course will help the students take a holistic view of the buyer
2. It will help equip them with knowledge of various models and frameworks to help understand buyer behavior and align the knowledge with formulation of appropriate marketing strategies.
3. The objective is to gain an understanding of the theoretical and conceptual concepts of buyer behavior and apply them to real life marketing situations and practices.

COURSE CONTENTS

1. **Introduction to Consumer Behavior;** Consumer Behavior and marketing Strategy, Methods of consumer research, Applications of consumer behavior knowledge in marketing. Contributing disciplines and area like psychology, social psychology, economics, anthropology etc. Diversity of consumers and their behaviors. Profiling the consumer and understanding their needs. Segmentation, Consumer Decision making process and decision making roles Information Search Process; Evaluative criteria and decision rules. Are consumers Rational or emotional. Involvement theory and applications
2. **Consumer needs theories of Motivation and their applications.** Process theories and content theories. Personality and self concept. Theories of personality. Trait theory and measurement. Motivational Research. Perception. Thresholds of perception, Subliminal perception, Perceptual process dynamics. Positioning methods and measurement. Perceptual mapping methods, multi dimensional scaling. Consumer imagery
3. **Learning theories and their applications,** Brand loyalty, Brand extensions. Conditioning theories, Cognitive learning theories. Attitudes and Attitude Change; Concept and measurement of attitudes. Strategies of attitude change. Attribution theory and Cognitive dissonance. Persuasion and persuasibility.
4. **Self Concept.** Concept of Multiple Selves. Development of the self. Image Congruence assumptions. Social Comparison theory. Self-esteem. Body image and body esteem. Fashion, Cosmetics and Conspicuous consumption.
5. **Psychographics and Lifestyle;** Reference Group Influence; Theory of reference group and applications. Endorsements and reference group influence.
6. **Culture, the concept meaning and measurement Content analysis.** Values and beliefs, Rituals, Customs, Tradition, Symbol and influence in consumption. Consumer learning of culture. Consumer Socialization. Semiotics. Subcultures and Cross Cultural issues in marketing.
7. **Family:** family life cycle and decision-making. Social Class. The concept and measurement. Mobility among social classes. Prestige products and status. Diffusion of Innovation and Opinion Leadership.
8. **Marketing, consumer behavior and society.** Consumption and persuasion-Issues of manipulation and long term impacts on society and children. . Consumer materialism. Consumer behavior knowledge for public policy. .

REFERENCE BOOK

1. Schiffman, L G and Kanuk, L Consumer Behaviour New Delhi, Prentice Hall of India, 1994
2. Assael, H. Consumer Behaviour and marketing Action, Ohio, South Western, 1995
3. Engle, J F etc. Consumer Behaviour, Chicago, Dryden Press, 1993
4. Howard, John A etc. Consumer Behaviour in marketing Englewood Cliffs, New Jersey, Prentice Hall Inc.1989

E-2 Service Marketing

COURSE DISCRIPTION

Services become very critical and dominant part in any of the economy especially developing economy like India. All the companies' weather manufacturing or purely service oriented viewed services as most critical key result are to retain their customer and attract new customer. And hence this course is designed to manage major marketing challenges related with services by budding marketing manager. The same course content foundation of service marketing, consumer behavior and satisfaction in services, understanding customer requirement, service recovery, service development and delivering and performing services which together help budding marketing manager to take marketing decision for services.

LEARNING OBJECTIVES

The objective of this course is to develop insights into emerging trends in the service sector in a developing economy and tackle issues involved in the management of services on national basis.

LEARNING OUTCOME

After completion of Program students are able to

- Differentiate services
- Measure and Analyze buying behavior and customer satisfaction
- Manage service recovery
- Delivering and Performing services

COURSE CONTENT

1. General Introduction to Marketing Management
2. Introduction to Service Marketing
What is Service, Characteristic of Services, Tangibility Spectrum of Services, Why Service Marketing, Service Marketing Mix, Buying Behavior in Services
3. GAP Analysis in Service Marketing
Theory of Satisfaction
4. Understanding Customer through Research
Basics of Market Research
5. Building Customer Relationship
Relationship Marketing., The Goal of Relationship Marketing, Relationship Value
6. Building Customer Relationship
CRM Strategies, CRM Challenges
7. Service Recovery
Concept, Impact of Service failure and recovery, Customer's Expectation towards service recovery
8. New Service Design and Development
Challenges, Types, Stages, Stages, Blue Print
9. Customer Defined Service standard for services
Physical Evidence and Service space, Employees Roles in Service Delivery
Customers Role in Service Delivery, Integrated Service Marketing Communication
Pricing of Services, Financial and Economic Aspect of Services

REFERENCE BOOK

1. Service Marketing – Zeithmal; Bithner; Gremler& Pandit – THM
2. Service Marketing – Lovelock C; Wirtz J; Chatterjee J. – Pearson Publication
3. Marketing of Services - O. S. Jha – Himalaya Publication
4. Marketing of Services - Ravi Shankar – Excel Publication

E-3 Integrated Marketing Communication

COURSE DESCRIPTION

The Course is dealing with concepts, techniques, and tools etc which are necessary for the advertising management and helps students to learn about various decisions related to advertising and linking knowledge of other subjects with Advertising Management.

COURSE CONTENTS

1. **An Introduction to Integrated Marketing Communication:** Meaning and role of IMC in Marketing process, one voice communication V/s IMC.
2. **Introduction to IMC tools** – Advertising, sales promotion, publicity, public relations, and event sponsorship;
3. **The role of advertising agencies** and other marketing organizations providing marketing services and perspective on consumer behavior
4. **Understanding communication process:** Source, Message and channel factors, Communication response hierarchy- AIDA model, Hierarchy of effect model, Innovation
5. **Adoption model, information processing model,** The standard learning Hierarchy, Attribution Hierarchy, and low involvement hierarchy
6. **Consumer involvement-** The Elaboration Likelihood (ELM) model, The Foote, Cone and Belding (FCB) Model
7. **Planning for Marketing Communication (Marcom):** Establishing marcom objectives and Budgeting for Promotional Programmes-Setting communication objectives, Sales as marcom objective, DAGMAR approach for setting ad objectives.
8. **Budgeting for marcom-**Factors influencing budget, Theoretical approach to budgeting viz. Marginal analysis and Sales response curve, Method to determine marcom budget.
9. **Developing the IMC Programme:** Planning and development of creative marketing communication. Creative strategies in advertising, sales promotion, publicity etc.
10. **Creative strategy** in implementation and evaluation of marcom- Types of appeals and execution styles.
11. **Media planning and selection decisions-** steps involved and information needed for media planning,
12. **Measuring Effectiveness and control of Promotional Programmes:** Meaning and importance of measuring communication effectiveness, the testing process, measuring the effectiveness of other promotional tools and IMC.
13. **The ethical, social, and legal aspects of advertising and promotion** Different legislative and self-regulatory codes controlling advertising and promotions in India viz. advertising councils code, print media codes, broadcasting media codes and regulations governing sales promotion, packaging, direct marketing and internet marketing.

REFERENCE BOOKS

1. “Advertising & Sales Promotion” by S H H Kazmi & Satish K Batra. Excel Books.
2. “Foundations of Advertising” by K.C. Sethia & S.A. Chunnawala Himalaya Publishing House.
3. “Sales Promotion & Advertising Promotion” by M.N. Mishra. Himalaya Publishing House.

4. Advertising & Promotion by George Belch, Michael Belch & Keyoor Purani Tata MC Graw Hill Publication.

E-4 Sales & Distribution Management

COURSE DESCRIPTION

A company's sales team and channel partners have a larger role to play in fulfilling organizational objectives. The sales and distribution function of a modern day corporation must not merely sell products; they must also be actively involved in solving customer problems and building a relationship with customers. With these indicative set of issues in mind, this sales and distribution course has the following objectives:

1. To introduce course participants to national and international sales and distribution practices
2. To expose course participants to the tools and strategies necessary for designing, motivating and evaluating sales & distribution management systems
3. To sharpen decision making skills of future sales and distribution managers

The Sales and Distribution Management course is divided into two units. The first module will look at channel management issues, the second module will focus on sales force management issues. The aim is to facilitate an understanding of the connections between sales & distribution variables.

1. **Nature and Scope of Sales Management;** Objectives and functions of Sales management; Prospecting for customers; Modes of sales presentation, Designing and delivering of sales presentation; Recruiting and selecting Sales Personnel – Methods and administering selection procedures; Developing Sales Training Programmes, Executing and Evaluating sales training programmes; Motivating Sales Personnel; Compensating sales personnel, Designing and Administering various Compensation Plans; Controlling Sales personnel and managing sales evaluation programmes, Comparing standards with actual performances of sales personnel; Objective and Types of Quotas, Quota setting procedure, administering the quota system; Designing Sales Territories and Allocating Sales efforts to sales territories;
2. **An Overview of Marketing Channels:** Structure, Functions and Relationships of channels of Distribution; Channel Dynamics- Channel Planning and organizational Patterns in Marketing Channels; Channel Design Process and Channel Management Decisions Channel Intermediaries- Role and Types; Wholesaling- Types of Wholesalers, Wholesaler marketing decisions; Retailing- Types of retailers, retailer marketing decisions; Market Logistics- Logistics objectives, Market logistics decisions for Distribution Channels; Role of Information System in Distribution Channel Management; Assessing Performance of Marketing Channels.

REFERENCE BOOKS

1. Sales Management: Decisions, Strategies & Cases Richard R. Still, Edward W. Cundiff, Norman A.P. Govoni Pearson Latest Edition
2. Sales and Distribution management - Tapan Panda and Sahadev (Oxford publication)
3. Sales and Distribution management - Vasant Cavale & Havaladar (McGraw Hill publication)
4. Distribution and Retail Management - Abhijit Kulkarni (Nirali Prakashan)
5. Venugopal, P. Marketing Channel Management: A Customer-Centric Approach. New Delhi: Response Books

E-5 Brand Management

Course Description

The Course is dealing with concepts, Organizations, processes, procedures which are necessary for managing a brand. It helps to get an Idea about the various branding concepts, the stages of a brand, values attributed to a brand and successful brands Mantra. It helps the students appreciate the relationship between Corporate Strategy and Product and Brand Management. And equip them students with the various dimensions of product management such as product-line decisions, product platform and product life cycle. To provide a framework to understand the new product development process, the organizational structures for new product development and product management functions within an organization. To explore the various issues related to Brand Management and to enhance the understanding and appreciation of this important intangible strategic asset including brand associations, brand identity, brand architecture, leveraging brand assets, brand portfolio management etc. To develop familiarity and competence with the strategies and tactics involved in building, leveraging and defending strong brands in different sectors.

COURSE CONTENTS

1. **Product Management-** What is a Product- Product Personality, Types of Products- Product Line, Product Mix. Product Development- What is a Product- Factors influencing design of the product- Changes affecting product management- Developing Product Strategy; Setting objectives & alternatives, Product strategy over the lifecycle, Customer analysis, Competitor analysis, Design of manufacture.
2. **New product development:** Product Differentiation and Positioning strategies Market Potential & Sales Forecasting- Forecasting target market potential and sales- Methods of estimating market and sales potential, Sales forecasting, planning for involvement in international market.
3. **Brand Management-** What is a Brand- Brand Development: Extension, Rejuvenation, Re launch- Product Vs Brands, Goods and services, Retailer and distributors, People and organization, Brand challenges and opportunities, The brand equity concept, Identity and image. Brand Leveraging & Brand Performance- Establishing a brand equity management system, measuring sources of brand equity and consumer mindset, Co-branding, celebrity endorsement. Brand Positioning & Brand Building- Brand knowledge, Brand portfolios and market segmentation- Steps of brand building, Identifying and establishing brand
4. **Positioning:** Defining and establishing brand values. Designing & Sustaining Branding Strategies- Brand hierarchy, branding strategy, Brand extension and brand transfer- Managing brand over time.

Reference Books

1. "Strategic Brand Management" by Kevin lane Keller Pearson Education.
2. "Brand Management" by Harsh Verma Excel Books.
3. "Brand Management" by Dr. S.L. Gupta. Himalaya Publishing House
4. Product Management: Ramanujam
5. Product Management: Chunawalla
6. Product Management: Lehmann DR; Russel S Winner
7. Brand Management: Y L R Moorthi
8. Brand Positioning: Subratu Sen Gupta

E-6 International Marketing Management

COURSE OBJECTIVES

1. To familiarize the students with the theoretical base for International Marketing.
2. To enhance the students understanding of International Marketing Environment and
3. Strategies.
4. To enable students to develop skills.
5. To make Strategic and Operational Marketing Decisions in the context of different, complex marketing environments.

COURSE CONTENTS

1. **Overview of World Business and Framework of International Marketing:** Definition of International Marketing, International Dimensions of Marketing, Domestic v/s International Marketing, Process of Internationalization, Benefits of International Marketing.
2. **World Market Environment:** Political Environment- Political Systems, Political Risks, Indicators of Political Risk, Analysis and Measures to minimize Political Risk. Legal Environment- Legal Systems, Legal Form of Organization, Multiplicity of Legal Environment, Bribery, Branch v/s Subsidiary, Counterfeiting, Gray Market. Cultural Environment- Culture and its Characteristics, Influence of Culture on (a) Consumption (b) Thinking (c) Communication Process, Cultural Universals. Planning for International
3. **Marketing:** Marketing Research ,Marketing Information Sources, Marketing Information System, Market Analysis Foreign Market Entry Strategies – Exporting, Licensing, Joint Ventures, Strategic Alliances, Acquisitions Franchising, Assembly Operations , Management Contracts, Turnkey Operations, Free Trade Zones International
4. **Marketing Decisions - I:** Product Policy and Planning- Product Design and Standardization, Developing an International Product Line, Foreign Product Diversification, International Branding Decisions, International Packaging, International Warranties and Services. International Pricing Strategy- Role of Pricing, Price Standardization, Pricing Decisions, Price Distortion, Transfer Pricing, Counter Trade, Terms of Sale, Methods of Financing and Means of Payment International Channels of Distribution – Channel Members, Channel Management, Retailing in International Scenario, International Physical Distribution International
5. **Marketing Decisions - II:** International Promotion Strategies- Promotion Mix, Promotion and Communication, Personal Selling, International Sales Negotiations International Advertising – Patterns of Global Advertising, Global Advertising Regulations , Advertising Media, Standardized International Advertising International Organizational Control

CORE BOOK

1. Cherunilam F - International Trade and Export Management (Himalaya)

REFERENCE BOOKS

1. Onkvisit .S,Shaw.J - International Marketing (Pearson, 3rd Ed.)
2. Varshney R.L, Bhattacharya B - International Marketing Management (Sultan Chand & Sons, 9th Ed.)
3. Czinkota - International Marketing (Thompson, 8th Ed.)
4. Cateora Graham - International Marketing (TMH, 10th Ed.)
