



PCET's
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F.Y MBA Pharma

Pimpri Chinchwad Education Trust's

Pimpri Chinchwad University

Sate, Pune - 412106



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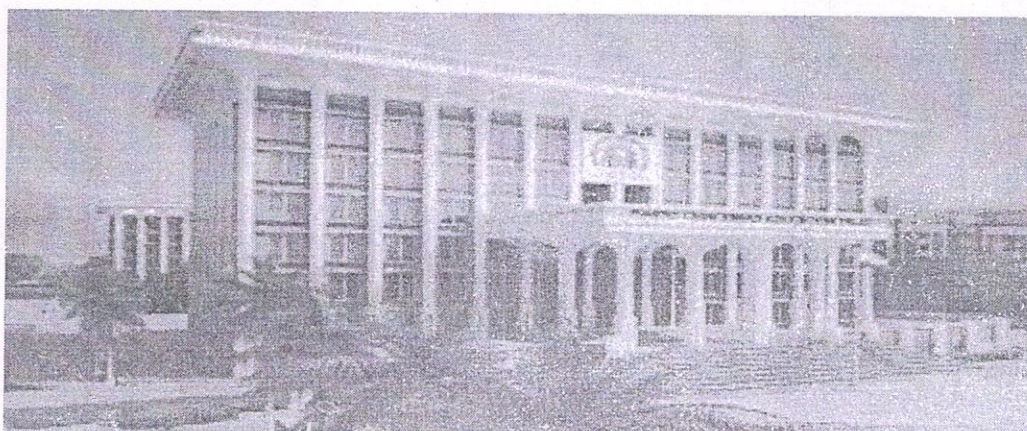
Curriculum Structure

Master of Business Administration (MBA)

Pharmaceutical Management

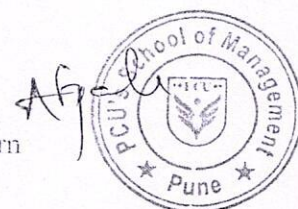
(Pattern 2026)

School of Management



Effective from Academic Year 2026-27

PCET's PCU/School of Management/MBA Pharma/2026 Pattern





Program Structure

Preamble:

Pharmaceutical Management program combines the study of basic and pharmaceutical sciences with marketing and management studies; and that prepares individuals for careers in pharmaceutical sales, marketing, management, and related fields within the health care industry. The business world has changed significantly in the past few decades. The pace at which technology has evolved is unheard and unseen. The fourth industrial revolution is bringing advanced robotics and autonomous transport, artificial intelligence (AI) and machine learning, advanced materials and biotechnology. For instance, AI will almost certainly automate some jobs, particularly those that rely on assembly lines or data collection. The mobile internet and cloud technology are already impacting the business world to a larger extent. What is certain is that the future managers will need to align their skillset to keep pace in this VUCA world. It is therefore imperative for management education to meet the challenges of rapid changing times and technologies.

In this fast disruptive digital economy and VUCA world, high-quality management education is essential for India. Use of technology is one of the powerful ways to enhance the students' ability to meet the ever-changing requirements of the corporate world and society. MBA students be equipped to work across time zones, languages, and cultures. Employability, innovation, theory to practice connectedness are the central focus of MBA curriculum design and development. The core curriculum is designed to give students an in-depth mastery of the academic disciplines and applied functional areas necessary to every non-business and business leader's success.

Vision and Mission of Programme:

Vision

Nurture Leaders and Responsible Corporate Citizens for an era of Digital Business and Transformations.

Mission

- M1: Evolve the curriculum in tune with emerging technology trends and industry needs.
- M2: Develop skills and competencies in the business domains and leading-edge technology.
- M3: Nurture agile leader with ability to drive change, innovation, and transformation.
- M4: To make the students pleasantly employable.

Program Educational Objectives (PEOs):

Post-Graduates from the MBA program are expected to attain or achieve the following.

Program Educational Objectives:

PEO1: Wider comprehending of technical concepts, technology platforms and solutions.

AP





PEO2: Exhibit good business functional knowledge and skills.

PEO3: Inculcate key attributes of visualization of technology, innovation, critical and integrative thinking enable to solve business problems.

PEO4: Inculcate attributes of human values, ethics, and sustainability.

PEO5: Contribute actively to technology and end-user industry or in general management roles in techno rich environments.

PEO6: Demonstrate intra/entrepreneurial spirit required for driving change and transformation in the business world.

Program Outcomes (POs)

- **PO1: Leadership:** Students will proactively demonstrate the ability to take initiative. They will be able to generate agreement, fairly and objectively, by working through different, even conflicting, points of view. They will be result oriented and have the ability to take calculated risks.
- **PO2: Innovation:** Students will demonstrate the ability to visualize innovative solutions and gather user needs holistically.
- **PO3: Critical & Analytical Thinking:** Students will be able to analyse a situation to its root cause, using tangible and intangible information.
- **PO4: Communication:** Students will be able to make a good personal impact, and articulate good written and spoken skills.
- **PO5: Global Perspective:** Students will be aware of contemporary globally accepted practices, tools, and techniques. They will demonstrate ability to view problems and solutions from a global perspective – organizational, locational, and cultural.
- **PO6: Role of Self in the organization & in the society:** Students will demonstrate clarity on their personal goals, while being aware of the social context. They will be sensitive to ethical issues and believe in working out solutions based on sustainability principles.
- **PO7: Techno-Proponent (PO):** Apply the knowledge and passion for technology to solve business problems in an effective manner. Demonstrate and apply appropriate cross functional management, statistical and technological tools to analyse business situations, sense opportunities and suggest innovation solutions. Evangelize technology and drive transformational changes in order to achieve business value. Support, Develop and Empathize with all stakeholders and uphold professional ethics in all settings, and drive transformational changes in order to achieve business value. Support, Develop and Empathise with all stakeholders and uphold professional ethics in all settings.

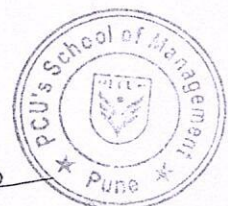


- **PO8: Entrepreneurial Mindset:** Graduates will exhibit an entrepreneurial mindset, demonstrating creativity, innovation, and an ability to identify and pursue business opportunities.
- **PO9: Business Acumen:** Graduates will possess a comprehensive comprehending of various business functions, including finance, marketing, operations, and human resources, and will be able to apply this knowledge to solve real-world business problems.
- **PO10: Decision-Making:** Students will demonstrate a comprehending of ethical considerations in business and possess the ability to make informed and responsible decisions that align with ethical principles and social responsibility.

Program Specific Outcomes (PSO)

PSO1: Apply pharma technical and managerial skills to make ethical and socially responsible decisions to deal with complex business scenarios and achieve organizational success in pharma Business Sector.

PSO2: Develop strong leadership skills, to inspire and guide teams towards achieving pharma business objectives with global mind-set, to comprehend the impact of globalization and cultural diversity on pharmaceutical business operations.



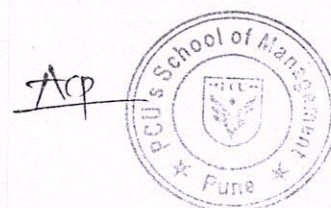
Curriculum Framework for MBA
Curriculum Framework for MBA (Pharmaceutical Management)

Sr. No.	Type of course	Abbreviations
1.	Program Core	PC
2.	General Elective	GE
3.	Skill Enhancement Course	SEC
4.	Value Added Course	VAC
5.	Indian Knowledge System	IKS
6.	Foreign Language	FL

SEMESTER WISE CREDIT STRUCTURE

Semesters	Program Core	PC MOOCS	DSE	AE C	SEC	VAC+IKS +Foreign Language	GE	Summer Internship	Research Project/ Dissertation	Total
I	09--12	0-3	0	2	2	4 (2+1+1)	3	0	0	23
II	09--12	0-3	0	2	2	4 (2+1+1)	3	0	0	23
Total (PG Diploma)required 40	18-24	0-6	0	4	4	8	6	0	0	46
III	03—00	0-3	9	0	2	3 (2+1)	3	4	0	23
IV	03—00	0-3	9	0	2	3 (2+1)	3		4	23
Total (MBA degree) required 80	24-30	0-12	18	0	8	14	12	4	4	92

- Student can complete 3 credits from core either offline or from the MOOCS (Swayam/ NPTEL/ PCU approved platform)
- VAC, SEC & Multidisciplinary subjects can be chosen from the basket given from the basket





School of Management

Program Structure of MBA Pharmaceutical Management 2026-28

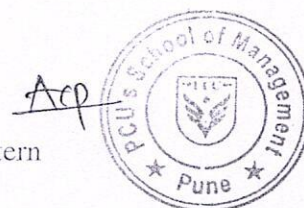
WEF: A.Y. 2026-27 (Pattern 2026)

Semester I

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Cr-Min	Cr-Max	CA	ESE
1	PC	Program Core	Principles of Management and OB	3	0	0	3	3	40	60
	PC	Program Core	Pharma Business Environment	3	0	0	3	3	40	60
	PC	Program Core	Pharmaceutical Production Operations & Quality Management	3	0	0	3	3	40	60
	PC	Program Core	Research Methodology	3	0	0	3	0	40	60
	PC	Program Core(MOOCs)	Research Methodology	3	0	0	0	3	40	60
2	GE I	General elective I	Choose from GE Basket	3	0	0	3	3	40	60
3	SEC1	Skill Enhancement Course – I	Choose from SEC Basket	2	0	0	2	2	20	30
4	VAC1	Value Added Course – I	Choose from VAC basket	2	0	0	2	2	20	30
	VAC	IKS	Choose from IKS basket	1	0	0	1	1	10	20
	VAC	Foreign Language	Choose from Basket	0	0	1	1	1	10	20
		Total					21			

SEC Basket for Semester I

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	SEC A	HR for Pharma & Sales Force Management	SEC	2	0	0	2	20	30
2	SEC B	Applied Pharma Operations and Supply Chain Management	SEC	2	0	0	2	20	30





VAC Basket for Semester I

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	VAC A	Sustainability and Climate Change	VAC	2	0	0	2	20	30
2	VAC B	Legal Aspects of Business	VAC	2	0	0	2	20	30

IKS Basket for Semester I

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	IKS A	Exploring Indian Knowledge Systems: A Comprehensive Resource	IKS	1	0	0	1	10	20
2	IKS B	Indian Concepts and Theories in Psychology	IKS	1	0	0	1	10	20

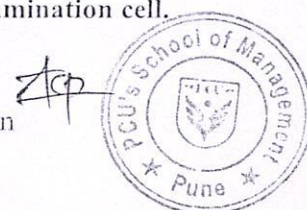
General Elective Basket for Semester I

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	GE A	Basics of Accounting	General elective	3	0	0	3	40	60
2	GE B	Managerial Economics	General elective	3	0	0	3	40	60

Foreign Language Basket for Semester I

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	FL A	Korean – I	Foreign Language	1	0	0	1	10	20
2	FL B	German – I	Foreign Language	1	0	0	1	10	20
3	FL C	Japanese – I	Foreign Language	1	0	0	1	10	20

*Course Codes to be finalised in consultation with ERP coordinator and University Examination cell.





School of Management

Program Structure of MBA Pharmaceutical Management 2026-28

WEF: A.Y. 2026-27 (Pattern 2026)

Semester II

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Cr-Min	Cr-Max	CA	ESE
1	PC	Program Core	Basics of Finance	3	0	0	3	3	40	60
	PC	Program Core	Pharma Market Research	3	0	0	3	3	40	60
	PC	Program Core	Pharmaceutical Product and Brand Management	3	0	0	3	3	40	60
	PC	Program Core	Entrepreneurship Development	3	0	0	3	0	40	60
	PC	Program Core(MOOCs)	Entrepreneurship Development	3	0	0	0	3	40	60
2	GE I	General elective II	Choose from GE Basket	3	0	0	3	3	40	60
3	SEC1	Skill Enhancement Course – II	Choose from SEC Basket	2	0	0	2	2	20	30
4	VAC1	Value Added Course – II	Choose from VAC basket	2	0	0	2	2	20	30
	VAC	IKS	Choose from IKS basket	1	0	0	1	1	10	20
	VAC	Foreign Language	Choose from Basket	0	0	1	1	1	10	20
		Total					21			

SEC Basket for Semester II

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	SEC B	Applied Pharma Operations and Supply Chain Management	SEC	2	0	0	2	20	30
2	SEC A	HR for Pharma & Sales Force Management	SEC	2	0	0	2	20	30



VAC Basket for Semester II

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	VAC B	Legal Aspects of Business	VAC	2	0	0	2	20	30
2	VAC A	Sustainability and Climate Change	VAC	2	0	0	2	20	30

IKS Basket for Semester II

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	IKS B	Indian Concepts and Theories in Psychology	IKS	1	0	0	1	10	20
2	IKS A	Exploring Indian Knowledge Systems: A Comprehensive Resource	IKS	1	0	0	1	10	20

General Elective Basket for Semester II

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	GEB	General elective	Managerial Economics	3	0	0	3	40	60
2	GEA	General elective	Basics of Accounting	3	0	0	3	40	60

Foreign Language Basket for Semester II

Sr. No.	Course Code*	Course Title / Category	Course Type	L	T	P	Credits	CA	ESE
1	FL A	Korean – II	Foreign Language	1	0	0	1	10	20
2	FL B	German – II	Foreign Language	1	0	0	1	10	20
3	FL C	Japanese – II	Foreign Language	1	0	0	1	10	20

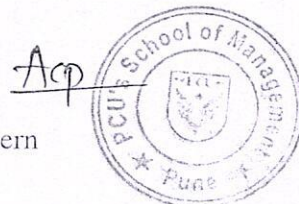


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SEMESTER I

PCET's PCU/School of Management/MBA Pharma/2026 Pattern





PC I COURSE CURRICULUM

Principles and Practices of Management & Organizational Behavior

Name of the Program:		MBA				Semester: I		Level: PG	
Course Name		Principles and Practices of Management & Organizational Behavior				Course Code/ Course Type		PC	
Course Pattern		2026		Version		1.0			
Teaching Scheme					Assessment Scheme				
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)		Practical/Oral	
3	-	-	3	3	40	60		-	
Pre-Requisit		Bachelor's Degree							
Course Objectives (CO):			The objectives of PPOM & OB course are: 1. Recall the basic concepts and principles of management. 2. Recognize the ability to apply the multifunctional approach to organizational objectives. 3. Apply professional mastery; managers, both present and prospective, are required to be fully equipped with principles of management and how these principles can be put into practice in an organization. 4. Evaluate and have better control over resources for effective management. 5. Design and create an evaluation system where principles of management will enhance decision-making abilities and sharpen tools for the purpose.						
Course Learning Outcomes (CLO):			Students would be able to: 1. Identify cases as real time experience in the field of Management and Organizational Behavior. 2. Explain conceptual knowledge of management, various functions of Management and theories in OB. 3. Comprehend and apply management and behavioral models to relate attitude, perception and personality. 4. Analyze the recent trends in Management and models in organizational behavior for better control. 5. Decide/evaluate ongoing business situations through the application of the management principles.						

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
Introduction: Meaning, Objectives, Differences between Administration and Management, Levels of Management, Kinds of Managers, Managerial roles, History of Management, Recent trends in Management	CLO 1	9



UNIT II		
Planning: Importance, Process, Benefits of Planning, Types of Plans, Planning tools and techniques; Organising: Meaning, Types of Organisation structures, Traditional structures, Directions in organisation structures; Leading: Meaning, Nature, Traits and Behaviour, Contingency approaches to Leadership, Transformational leadership; Controlling: Meaning, Importance, Steps in the control process, Types of Control	CLO 2	9
UNIT III		
Organisational Behaviour: Introduction, Meaning, History of Organisational Behaviour, Organisational effectiveness, Organisational learning process, Stakeholders, Contemporary challenges for Organisations	CLO 3	9
UNIT IV		
Behavioural Dynamics: MARS Model of individual behaviour and performance, Types of Individual behaviour, Personality in Organization, Values in the workplace, Types of values; Perception: Meaning, Model of Perceptual process. Emotions in workplace, Types of emotions, Circumplex Model of Emotion, Attitudes and Behaviour, Work-related stress and its management; Motivation: Meaning, Maslow's Hierarchy of Needs, Four Drive Theory of Motivation	CLO 4	9
UNIT V		
Teams & Culture: Teams: Advantages of Teams, Model of Team Effectiveness, Stages of Team Development, Power, Meaning, Sources, and Contingencies of Power, Consequences of Power; Culture: Meaning, Elements of Organizational Culture, Importance of Organisational Culture. Organisational Change, Meaning, Resistance to change, Approaches to Organisational Culture, Action Research Approach, Appreciative Inquiry Approach, Large Group Intervention Approach, Parallel Learning Structure Approach, and Ethical issues of Organisational Behaviour	CLO 5	9
Total Hours		45

Textbooks:

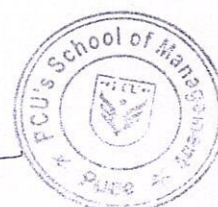
1. Organizational Behavior, Steven L. McShane & Mary Ann Von Glinow, 6/e, McGraw Hill Education, 2015
2. Essentials of Management, Koontz, McGraw Hill, 8/e, 2014
3. Management, John R. Schermerhorn, Jr., 8/e, Wiley India, 2010. 01.02.2023 12.01.2023

Reference Books:

1. Gupta, R.S., Sharma, B.D., & Bhalla. N.S. (2011). Principles & Practices of Management (11th edition). New Delhi: Kalyani Publishers
2. Williams. Management, (International edition) South-western Cengage Learning.
3. L M Prasad, (2007). Principles and Practices of Management, Himalaya Publishing House

Online Resources/E-Learning Resources:

1. Principles of Management (<https://www.coursera.org/learn/principlesofmanagement>)
2. Certification in Principles and Practices of Management (<https://www.udemy.com/course/certification-in-principles-and-practices-of-management/?couponCode=ST8MT40924>)
1. Principles of Management (<https://open.lib.umn.edu/principlesmanagement/>)



PC2 COURSE CURRICULUM

Name of the Program:		MBA Pharma			Semester : I		Level: PG	
Course Name		Pharmaceutical Business Environment			Course Code/ Course Type		PC	
Course Pattern		2026			Version		1.0	
Teaching Scheme					Assessment Scheme			
Th e o r y	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral	
3	-	-	3	3	40	60	-	
Pre-Requisite		: Basic terms of Pharma						
Course Objectives (CO):					The objectives of Pharmaceutical Business Environment are: 1. To comprehend several factors affecting business. 2. To Learn about various business policies and business ethics 3. To recognize different factors responsible for changing dimensions of corporate environment 4. To apply knowledge for various business strategies in pharmaceutical sector 5. To create various new strategies for starting new pharma business			
Course Learning Outcomes (CLO):					Students would be able to: 1. Define key terms related to Business Environment. 2. Explain concepts of pharmaceutical business environment. 3. Discuss various models of environmental analysis. 4. Analyze emerging trends in pharmaceutical sector. 5. Propose strategies for various pharma research and development.			

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
Introduction to Business Environment: Meaning & Importance of Business Environment Dimensions of Business Environment, Impact of Internal & External Environment of Business on Pharmaceutical Industry.	CLO 1	9
UNIT II		
Environmental, Political, Social and Economical cultural environment of pharmaceutical business: Various Processes for Environmental Analysis, PEST Model, Structural Industry Analysis (Porter's Five Forces), SWOT Analysis, Changing Market Access Strategies in Pharmaceutical Industry Concept of Economic Environment of Business, Component (fiscal and monetary policy) and development (pre-globalization), Political legal environment for pharmaceutical business	CLO 2	9
UNIT III		



Evolution of Indian Pharmaceutical Industry Global Pharmaceutical Business Environment: Different Evolution Phases of Indian Pharmaceutical Industry, Present status of Indian Pharma Industry (Present value, Key Players, Indian Bulk Drug Market).	CLO3	9
UNIT IV		
International and technological environment: Global Pharma Developments, Multinational Corporation, Mergers & Acquisitions of pharmaceutical industry at global level & India level, International Financial Environment (FDI, FDI in Drugs & Pharmaceuticals)	CLO4	9
UNIT V		
Strategies & Trends – Research & Development in Pharmaceutical Industries: Various types of Research, R& D Funds, and pharmaceutical research and development support fund (PRDSF), R&D Opportunities, and Contract research Opportunities, Research in generics, changing the conventional façade of drug discovery research, Six Sigma and its approach to drug discovery.	CLO5	9
Total		45

Learning resources

Textbooks:

1. Business Environment by F. Cherunilam, Himalaya Publishing House, Revised edition 2019
2. Business Environment by Raj Aggarwal and Parag Diwan, 2002
3. Government and Business by N K Sengupta, 1999
4. Technology and Economic Development the Indian Case by Debashish Mallick, 2014

Reference Books:

1. Business Laws by N D Kapoor, 2019
2. Business Policy and Strategic Management by W F Glueck and Jauch, 1988
3. Pharmaceutical Industrial Management, Shah, 2010
4. Pharmaceutical Marketing in India, Subba Rao, 2018

Online Resources/E-Learning Resources

1. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3926255
2. <https://www.pfizer.com/about/responsibility/environmental-sustainability/pharmaceuticals-in-the-environment>
3. <https://www.pharmaceutical-technology.com/features/pharma-and-the-environment-pollution-trend/>
4. https://www.researchgate.net/publication/354658964_Business_Environment_Indian_Pharma_Sector





PC3 COURSE CURRICULUM

Name of the Program:		MBA Pharma			Semester: I		Level: PG	
Course Name		Pharmaceutical Production Operations & Quality Management			Course Code/ Course Type		PC	
Course Pattern		2026			Version		1.0	
Teaching Scheme					Assessment Scheme			
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral	
3	-	-	3	3	40	60	-	
Pre-Requisite: Basic terms of Pharma								
Course Objectives (CO):					The objectives of the course are: 1. Comprehend knowledge base to promote the use of best practices and operational excellence within pharmaceutical operations management. 2. Learn about introduction to operations management, facilities planning, production planning, and selection of raw materials through to the quality aspect of final product. 3. Comprehend different factors responsible for changing dimensions of pharma business environment. 4. Comprehend various formation of drugs. 5. Apply knowledge to solve various problems related to quality control and rejection of drugs			
Course Learning Outcomes (CLO):					Students would be able to: 1. Define key terms related to Production Operations & Quality Management 2. Explain concepts of production and operations management 3. Apply different planning and resources methods. 4. Analyze emerging trends in pharmaceutical production. 5. Evaluate and interpret various case studies			

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
Introduction to Production and Operations Management: Definition, concept and Evolution of Production and operations management, Nature and Scope of production/operations management, Production function and its environment, Functions of production/operations manager, Organization of production function in Pharma industry	CLO 1	9
UNIT II		
Facilities Planning, Layout Planning: Product selection and design, service design, Process and technology, selection, Location of manufacturing/service facility, Center of gravity and median models, dimensional analysis, Brown and Gibson model. Product layout, process layout, fixed position and group layout, layout design, Relationship based and load-distance cost matrix, Materials handling concepts	CLO 2	9
UNIT III		
Production Planning, Materials Planning and Control: Need and definition, factors affecting planning- external and internal, dependent and independent demand system, techniques of planning, Materials Requirement Planning,	CLO 3	9



Aggregate production planning, Operations Scheduling and Production activity control for mass manufacturing, batch processing		
UNIT IV		
Drug and Pharmaceutical Plants, Resources Requirement Planning: Building layout, equipment layout, regulatory requirements for the same, GMP and cGMP Capacity Planning, Labour Planning etc.	CLO 4	9
UNIT V		
Inventory Control & Quality Control & Management: Importance and scope, costs, economic order quantity, Inventory control techniques. Quality control functions, Acceptance sampling, Statistical Process control, Application of control charts, Operating characteristic curve and its applications, Total Quality improvement, Six sigma.	CLO 5	9
Total Hours		45

Learning resources

Textbooks:

1. Operations Management by Bernard Taylor, 2011
2. Production and Operations Management by Adam, Ronald and Ebert, 1992
3. Production and Operations Management by Aswath Appa and Bhat, 2010

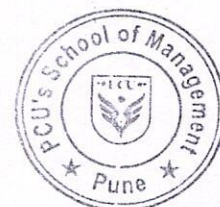
Reference Books:

1. Pharmaceutical Operations Management: Manufacturing for Competitive Advantage, 2016
2. Pharmaceutical Quality Assurance, 2006
3. Concepts of Quality Management in Pharmaceutical Industry, 2017
4. Concepts of Quality Management in Pharmaceutical Industry (Manohar A. Potdar), 2016

Online Resources/E-Learning Resources:

1. Pharmaceutical Production & Operation Management, <https://royed.in/course/pharmaceutical-production-and-operation-management/>
2. Pharma Quality Management Systems online course, <https://www.inspiredpharma.com/pharma-quality-management-systems-online-course/>
3. Quality Management System (QMS) in Pharmaceutical Industry, <https://www.udemy.com/course/quality-management-system-qms-in-pharmaceutical-industry/?couponCode=ST8MT40924>

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PC4 COURSE CURRICULUM

Name of the Program:		MBA		Semester : I		Level: PG	
Course Name		Research Methodology		Course Code/ Course Type		PC	
Course Pattern		2026		Version		1.0	
Teaching Scheme					Assessment Scheme		
Theor y	Practic al	Tutori al	Total Credit s	Hours	CIA (Continuo us Internal Assessment t)	ESA (End Semester Assessment)	Practical/Oral
3	-	-	3	3	40	60	-
Pre-Requisite:							
Course Objectives (CO):					1. 1.To develop firm understanding of the basic framework of research process 2. To develop a thorough understanding of various research designs and techniques 3. To identify various sources of information for literature review and data collection 4. To demonstrate knowledge of research process by conducting a literature review in their research area interest 5. 5. Define and develop a possible research interest area to be taken ahead in their business research projects later to conduct an independent publishable research project		
Course Learning Outcomes (CLO):					1. Apply knowledge of fundamental principles of statistics. 2. Explain statistics processes for the betterment of the organisation. 3. Assess various formulas and inferences of statistical methods and theories for data science. 4. Analyze statistical inferences influencing various data science procedures. 5. Create data science models based on the statistical inferences.		

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
UNIT I – Foundations of Business Research Introduction to Business Research, Nature and Scope of Business Research, Types of Business Research used in management studies, Scientific Investigation in Business, Concepts and Constructs, Definitions and Variables, Propositions and Hypotheses, Theory Building and Models, Information Needs of Managers, Technology Applications in Business Research including Internet, E-mail, Browsers and Websites, Role of Research in Managerial Decision-Making, Ethical Issues in Business Research.	1	9
UNIT II		
UNIT II – Research Design and Research Approach Meaning and Purpose of a Research Design, Elements of a Research Design, Types of Research Designs (Exploratory, Descriptive, Causal), Formulation of the Research Problem, Developing the Problem Statement, Hypothesis Formulation and Characteristics of a Good Hypothesis, Testing of Hypothesis (basic	2	9



framework), Selection of Appropriate Research Approach, Importance of Research Design in Business Studies.		
UNIT III		
UNIT III – Sampling Design, Measurement and Scaling Concept of Sampling and Sample Design, Probability and Non-Probability Sampling Methods, Determination of Sample Size, Concept of Measurement in Business Research, Levels of Measurement (Nominal, Ordinal, Interval, Ratio), Scaling Techniques, Thurstone Scale, Likert Scale, Guttman Scale and Semantic Differential Scale, Reliability of Measurement, Validity of Measurement.	3	9
UNIT IV		
UNIT IV – Data Collection Methods and Instruments Sources of Data (Primary and Secondary), Methods of Primary Data Collection used in academic research such as Interviews, Surveys, Observations and Experiments, Structured and Unstructured Interviews, Face-to-Face and Telephone Interviews, Observation Methods, Design and Construction of Questionnaires, Principles of Question Wording, Question Sequencing, Structured and Unstructured Questionnaires, Guidelines for Developing Valid and Reliable Questionnaires as used in university research methodology courses.	4	9
UNIT V		
UNIT V – Research Report Writing and Presentation Meaning and Importance of Research Reports, Types of Research Reports, Components of a Standard Research Report including Title Page, Table of Contents, Executive Summary, Introduction, Main Body, Findings and Interpretation, Conclusion and Recommendations, Acknowledgements, References and Appendices, Formatting Guidelines similar to university project standards, Oral Presentation of Research, Designing Presentation Content, Use of Visual Aids, Role of the Presenter, Effective Delivery and Handling Questions.	5	9
Total Hours :		45

Learning resources

Textbooks:

1. Research Methodology, CR Kothari & Gaurav Garg (Methods & Techniques), New Age International Publishers
2. Schindler, Business Research Methods, McGraw Hill Education, 13th Edition
3. Research Methods for Business: A Skill Building Approach, 7th Edition, Uma Sekaran, Roger Bougie

Reference Books:

1. Zikmund, W. G., Carr, J. C., & Griffin, M. (2013). Business Research Methods. Cengage Learning
2. Bryman, Alan & Bell, Emma (2015). Business Research Methods (Fourth Edition), Oxford University Press
3. G.C. Beri, Marketing Research, Tata McGraw- Hill Publishers

Online Resources/E-Learning Resources

https://www.youtube.com/watch?v=5pPsU7ZIUs&utm_source=
<https://www.youtube.com/watch?v=eDw-Xhnx6tU>
<https://www.youtube.com/watch?v=iSHcC-QNCP4>

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GENERAL ELECTIVES

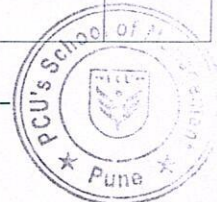
COURSE CURRICULUM

Basics of Accounting

Name of the Program:		MBA Pharma			Semester: I		Level: PG	
Course Name		Basics of Accounting			Course Code/ Course Type		GE	
Course Pattern		2026			Version		1.0	
Teaching Scheme					Assessment Scheme			
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral	
3	-	-	3	3	40	60	-	
Pre-Requisite		:						
Course Objectives (CO):					The objectives of Basics of Accounting are: 1. To facilitate comprehending accounting as an information system and the language of the business. 2. To comprehend preparation and presentation of financial statements. 3. To familiarize the participants with various financial tools and techniques that will facilitate the participants in enhancing their analytical power to make rational decisions related to business. 4. To enable students acquainted with current trends and social responsibility accounting. 5. To familiarize the students about accounting in difficult economic conditions.			
Course Learning Outcomes (CLO):					Students would be able to: 1. Comprehend accounting during difficult times to ensure sustainability. 2. Comprehend and apply accounting concepts, principles, and conventions for their routine monetary transaction. 3. Create and prepare financial statements and Cash flow in accordance with Generally Accepted Accounting Principles 4. Analyse and interpret the financial statements of a company. 5. Recognise various types of accounting and utilize the technology and social responsibility in facilitating and enhancing accounting and financial reporting processes			

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
Introduction to Financial Accounting Meaning and Scope of Accounting, Nature of Accounting, Accounting Concepts and Conventions, Types of accounts, Double Entry System of Accounting, recording of transactions: journalizing, ledger posting, preparation of Trial Balance.	CLO 1	9





UNIT II		
Preparation of Financial Statements Final Account, Preparation of Companies Financial Statements: as per Revised Schedule III of Companies Act, 2013: Income Statement and Balance Sheet	CLO 2	9
UNIT III		
Preparation of Cash Flow Statements Cash flow Statement as Per AS-3. Direct method and Indirect method, Accounting for Depreciation, Methods of Depreciation.	CLO 3	9
UNIT IV		
Analysis of Financial Statements Ratio Analysis: Liquidity ratios, Solvency ratios, Profitability ratios, activity/turnover ratios, Market capitalization ratios, Comparative and Common Size Statement, Inter Firm Comparison,	CLO 4	9
UNIT V		
Latest Developments, Trends & Practices Human Resource Accounting, Forensic Accounting, Accounting for corporate social responsibility, Introduction to Sustainability Accounting, ESG reporting. Comprehensive Case study/Numericals	CLO 5	9
Total Hours		45

Learning resources

Textbooks:

1. Financial Management -Prasanna Chandra, 9/e, TMH.
2. Financial Management, I M Pandey, 11th Edition, Vikas Publishing House.
3. Horngren T Charles 2012, Introduction to Financial Accounting,9th Ed, Pearsons Education

References:

1. Narayanaswamy R 2014, Financial Accounting – A Managerial Perspective,5th Ed, Prentice Hall of India.
2. Maheshwari S N and S K Maheshwari 2013, Accounting for Management,3rd Ed, Vikas Pub.House.
3. Fundamentals of Financial Management, Brigham & Houston, 10/e, Cengage Learning.

Online Resources/E-Learning Resources

1. <https://www.ddegjust.ac.in/studymaterial/mba/cp-104.pdf>
 2. <https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-5New.pdf>
- <https://mrcet.com/downloads/MBA/Financial%20Accounting%20and%20Analysis.pdf>

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COURSE CURRICULUM

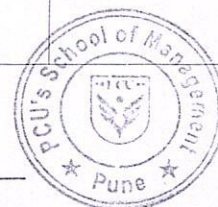
Managerial Economics

Name of the Program:		MBA Pharma			Semester: I		Level: PG	
Course Name		Managerial Economics			Course Code/ Course Type		GE	
Course Pattern		2026			Version		1.0	
Teaching Scheme					Assessment Scheme			
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral	
3	-	-	3	3	40	60	-	
Pre-Requisite		:						
Course Objectives (CO):		The objectives of Managerial Economics are: 1. To comprehend the importance of Managerial Economics in management and businesses 2. To apply the principles of managerial economics in achieving business objectives 3. To be equipped with the tools necessary in forecasting product demand 4. To comprehend and be able to apply latest pricing strategies 5. To comprehend and analyze the macro environment affecting the business decision making.						
Course Learning Outcomes (CLO):		Students would be able to: 1. Remember the concepts of microeconomics and able to comprehend the various micro economic principles to make effective economic decisions under conditions of risk and uncertainty. 2. Comprehend the law of demand & supply & their elasticities, evaluate & analyze these concepts and apply them in various changing situations in industry. Students would be able to apply various techniques to forecast demand for better utilization of resources. 3. Comprehend the production concept and how the production output changes with the change in inputs and able to analyze the effect of cost to business and their relation to analyze the volatility in the business world. 4. Comprehend the production concept and how the production output changes with the change in inputs and able to analyze the effect of cost to business and their relation to analyze the volatility in the business world. 5. Analyze the macroeconomic concepts & their relation to micro economic concept & how they affect the business & economy.						

Course Contents/Syllabus:

(All the units carry equal weightage in Summative Assessment and equal engagement)

Descriptors/Topics	CLO	Hours
UNIT I		
Basic Concepts and principles: Concept of Economy, Economics, Microeconomics, Macroeconomics, Nature, and Scope of Economics-Micro Economics and Macro Economics, Managerial Economics, and its relevance in business decisions. Concept of Firm, Market, Objectives of Firm: Profit Maximization Model, Economist Theory of the Firm. Fundamental Principles of Managerial Economics - Incremental Principle, Marginal Principle, Opportunity Cost Principle, Discounting Principle, Concept of Time Perspective, Equi-Marginal Principle. Utility – Meaning, Cardinal Utility and Ordinal Utility, Utility analysis, Measurement of utility, Law of diminishing marginal	CLO 1	9





utility, Indifference curve, Consumer's equilibrium - Budget line and Consumer surplus.		
UNIT II		
Demand and Supply Analysis: Theory of Demand, Types of Demand. Determinants of demand, Demand Function, Demand Schedule, Demand curve, Law of Demand, Exceptions to the law of Demand, Shifts in demand curve, Elasticity of Demand, and its measurement. Price Elasticity, Income Elasticity, Arc Elasticity. Cross Elasticity and Advertising Elasticity. Uses of Elasticity of Demand for managerial decision making, Demand forecasting meaning, Forecasting: Introduction, Meaning and Forecasting, Level of Demand Forecasting, Criteria for Good Demand Forecasting, Methods of Demand Forecasting, Survey Methods, Statistical Methods, Qualitative Methods, Demand Forecasting for a New Product. Supply & Market Equilibrium: Introduction, Meaning of Supply and Law of Supply, Exceptions to the Law of Supply, Changes or Shifts in Supply. Elasticity of supply, Factors Determining Elasticity of Supply, Practical Importance, Market Equilibrium and Changes in Market Equilibrium.	CLO 2	9
UNIT III		
Production and Cost analysis: Concepts of Production, production function with one variable input - Law of Variable Proportions. Production function with two variable inputs and Laws of returns to scale, Indifference Curves, ISO-Quants & ISO-Cost line, least cost combination factor, Economies of scale, Diseconomies of scale. Technological progress and production function. Cost concept and analysis: Cost, Types of costs, Cost output relationship in the short-run. Cost output relationship in the Long-run. Estimation of revenue. Average Revenue, Marginal Revenue.	CLO 3	9
UNIT IV		
Market structure and Pricing Practices: -Perfect Competition, Features, Determination of price under perfect competition, Monopoly: Features, Pricing under monopoly, Price Discrimination. Monopolistic Competition: Features, Pricing Under monopolistic competition, Product differentiation. Oligopoly: Features, Kinked demand Curve, Cartels, Price leadership. Descriptive Pricing Approaches: - Full cost pricing, Product line pricing, Pricing Strategies: Price Skimming, Penetration Pricing, Loss leader pricing, Peak Load pricing.	CLO 4	9
UNIT V		
General Economics and Indian Business Environment Open and Closed Economies, Primary, secondary and Tertiary sectors and their contribution to the economy. SWOT Analysis for the Indian economy. Measuring the Economy: Measuring GDP and GDP Growth rate, Components of GDP. Business Cycle: Introduction, Meaning and Features, Phases of Business Cycles, Measures to Control Business Cycles, Business Cycles and Business Decisions. Indian Business environment: -Nature, Scope, Structure of Indian Business Environment – Internal and External Environment. Political and Legal Environment, Economic Environment, Socio – Cultural Environment, Global Environment	CLO 5	9
Total Hours		45

Learning resources

Text Books:

1. Managerial Economics Geethika, Ghosh & Choudhury McGraw Hill
2. Managerial Economics Dominick Salvatore, Oxford Publishers

Reference Books:

1. Managerial Economics, Homas and Maurice, Tata McGraw Hill
2. Managerial Economics - Analysis, Problems and Cases, P.L. Mehta, Sultan Chand Sons, New Delhi



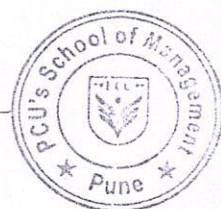


3. Managerial Economics, Varshney and Maheshwari, Sultan Chand and Sons, New Delhi.
4. Managerial Economics, D.M. Mithani
5. Managerial Economics, Joel Dean, Prentice Hall, USA.
6. Managerial Economics by H L Ahuja, S Chand & Co. New Delhi.

Online Resources/E-Learning Resources:

1. https://www.opentextbooks.org.hk/system/files/export/15/15497/pdf/Principles_of_Managerial_Economics_15497.pdf
1. https://www.lpude.in/SLMs/Master%20of%20Business%20Administration/Sem_1/DEECO515_MANAGERIAL_ECONOMICS.pdf

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VALUE ADDED COURSES

COURSE CURRICULUM

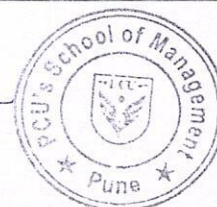
Sustainability and Climate Change

Name of the Program:		MBA		Semester: I		Level: PG	
Course Name		Sustainability and Climate Change		Course Code/ Course Type		VAC	
Course Pattern		2026		Version		1.0	
Teaching Scheme					Assessment Scheme		
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral
2	0	0	2	2	20	30	NA
Pre-Requisite: Bachelor's Degree							
Course Objectives (CO):			The objectives of this course are: 1. Recall the basic concepts of sustainability, environment, and climate change. 2. Understand the causes and impacts of climate change on society, economy, and business. 3. Apply sustainability principles in managerial and organizational decision-making. 4. Analyze environmental challenges, climate risks, and sustainable development practices. 5. Evaluate strategies for climate action, corporate sustainability, and responsible business practices.				
Course Learning Outcomes (CLO):			1. Identify key concepts of sustainability, sustainable development, and climate change. 2. Explain the causes, effects, and global responses to climate change. 3. Apply sustainability practices in business and management contexts. 4. Analyze climate-related risks, environmental challenges, and stakeholder responsibilities. 5. Evaluate sustainable business models, ESG practices, and climate action strategies				

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
Unit 1: Introduction to Sustainability and Sustainable Development		
Meaning and scope of sustainability, Concept of sustainable development, Triple Bottom Line: People, Planet and Profit, Sustainable Development Goals, Importance of sustainability in management, Role of businesses in sustainable development	CLO 1	6
Unit 2: Climate Change: Concepts, Causes and Impacts		

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Meaning of climate change, Difference between weather and climate, Greenhouse effect and global warming, Major causes of climate change, Carbon footprint, Impact of climate change on environment, society, economy, agriculture, health and business	CLO 2	6
Unit 3: Environmental Challenges and Climate Risk Management		
Pollution, biodiversity loss, deforestation, resource depletion, waste management, water scarcity, climate-related risks for organizations, disaster risk and resilience, adaptation and mitigation strategies, role of technology in climate risk reduction	CLO3	6
Unit 4: Sustainability in Business and Management		
Corporate social responsibility and sustainability, Green business practices, Sustainable supply chain management, Circular economy, Renewable energy, Energy efficiency, Sustainable consumption and production, Green marketing and sustainable innovation	CLO4	6
Unit 5: Climate Governance, ESG and Future Strategies		
Climate policies and international agreements, Paris Agreement, ESG concept and reporting, Corporate climate responsibility, Carbon neutrality and net zero, Climate finance, Sustainable leadership, Future trends in sustainability and climate action	CLO5	6
Total Hours		30 hours

Learning resources

Textbooks:

- Rogers, P. P., Jalal, K. F., & Boyd, J. A. An Introduction to Sustainable Development. Earthscan/Routledge.
- Henson, R. The Thinking Person's Guide to Climate Change. American Meteorological Society.
- Botkin, D. B., & Keller, E. A. Environmental Science: Earth as a Living Planet. Wiley.

Reference Books:

- Sachs, J. D. The Age of Sustainable Development. Columbia University Press.
- Esty, D. C., & Winston, A. S. Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage. Yale University Press.
- Hawken, P. The Ecology of Commerce: A Declaration of Sustainability. Harper Business.

Online Resources/E-Learning Resources

- United Nations Sustainable Development Goals: <https://sdgs.un.org/goals>
- Intergovernmental Panel on Climate Change: <https://www.ipcc.ch>
- United Nations Framework Convention on Climate Change: <https://unfccc.int>



COURSE CURRICULUM –

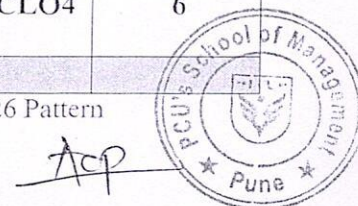
Legal aspects of Business

Name of the Program:		MBA		Semester : I		Level: PG	
Course Name		Legal Aspects of Business		Course Code/ Course Type		VAC	
Course Pattern		2026		Version		1.0	
Teaching Scheme				Assessment Scheme			
Theo ry	Practic al	Tutor ial	Total Cred its	Ho urs	CIA	ESA	Practical/Ora l
2	0	0	2	2	20	30	0
Pre-Requisite:							
Course Objectives (CO):		The objectives of this course are: 1. To understand the legal framework that governs business operations. 2. To explore the role of legal aspects in business decision-making. 3. To analyze contracts, corporate structures, and laws affecting business. 4. To provide an overview of intellectual property rights (IPR) and their relevance to business. 5. To develop the ability to identify and manage legal risks in business activities					
Course Learning Outcomes (CLO):		Students would be able to: 1. Demonstrate an understanding of the legal principles applicable to business operations. 2. Apply legal knowledge in making strategic business decisions. 3. Analyze contracts and corporate legal structures for risk management. 4. Understand the importance of intellectual property rights in business. 5. Evaluate and address legal challenges in business contexts.					

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
Unit 1: Introduction to Legal Environment of Business		
Overview of legal systems (Common law, Civil law, etc.) Role of law in business and society. Understanding business laws: Civil, Criminal, and Commercial Laws	CLO 1	6
Unit 2 : Contract Law and Business Agreements		
Elements of a contract: Offer, Acceptance, Consideration, etc. Types of contracts: Bilateral, Unilateral, and Executed Contracts Breach of contract and remedies	CLO 2	6
Unit 3 : Company Law and Corporate Governance		
Structure of business organizations: Sole Proprietorship, Partnership, and Corporations Legal requirements for forming and operating a company. Corporate governance and responsibilities of directors.	CLO3	6
Unit 4 : Labor and Employment Laws		
Employment contracts and employee rights , Labor laws: Worker's compensation, discrimination, and harassment , Termination, dismissal, and redundancy laws	CLO4	6
Unit 5 : Intellectual Property Rights (IPR)		

PCET's PCU/School of Management/MBA Pharmaceutical Management/2026 Pattern



Introduction to Intellectual Property (IP). Types of IP: Patents, Trademarks, Copyrights, and Trade Secrets. Importance of IPR for business protection and innovation	CLO5	6
Total Hours		30 hours

Learning resources

Textbooks:

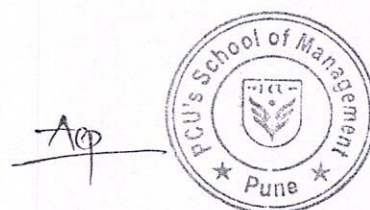
1. Business Law and the Legal Environment by Jeffrey F. Beatty, Susan S. Samuelson, Patricia Sanchez Abril (17th Edition).
2. Business Law: A Hands-On Approach by Neal Bevans (5th Edition).

Reference Books:

1. Business Law and the Regulation of Business by Neal Bevans (12th Edition).
2. Business Law and the Legal Environment: A Comprehensive Guide by Jeffrey F. Beatty, Susan S. Samuelson.

Online Resources/E-Learning Resources:

1. Business Law – Harvard Online Course
2. Intellectual Property Rights: An Overview – Coursera



IKS VAC

Indian Concepts and Theories in Psychology

Name of the Program:		MBA		Semester: I		Level: PG	
Course Name		Indian Concepts and Theories in Psychology		Course Code/ Course Type		VAC	
Course Pattern		2026		Version		1.0	
Teaching Scheme					Assessment Scheme		
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral
1	-	-	1	1	10	20	
Pre-Requisite: 12 th pass							
Course Objectives (CO):				CO1: Explain the foundations of Indian psychology and its sources. CO2: Analyse concepts of self, mind, and consciousness in Indian thought. CO3: Describe mental processes as explained in Indian philosophical systems. CO4: Apply Yoga and meditation concepts for psychological well-being. CO5: Integrate Indian psychological ideas with modern behavioral sciences.			
Course Learning Outcomes (CLO):				CLO1: Identify key features of Indian psychological traditions. CLO2: Compare Indian and Western views of mind and behavior. CLO3: Explain concepts like Atman, Chitta, and Buddhi. CLO4: Demonstrate understanding of Yoga-based mental health practices. CLO5: Relate Indian psychology to modern personal and professional life.			

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I Introduction to Indian Psychology		
Meaning, scope, and evolution of Indian Psychology, Difference between Indian and Western psychology, Sources: Vedas, Upanishads, Bhagavad Gita Concept of mind (Manas) and consciousness	CLO 1	03
Unit 2: Self and Consciousness in Indian Thought		
Concept of Atman and Purusha. Layers of consciousness (Koshas theory) Mind-body relationship in Indian tradition. Ego, self-realization, and identity	CLO 2	03
Unit 3 Mental Processes in Indian Psychology		
Chitta, Manas, Buddhi, Ahamkara. Emotions (Rasa theory). Attention, perception, and cognition in Indian texts. Role of meditation in mental regulation	CLO 3	03
Unit 4: Yoga and Psychological Well-being		
Patanjali's Yoga Sutras (Ashtanga Yoga). Stress, anxiety, and mental health	CLO 4	03



management. Meditation and mindfulness practices. Holistic health and lifestyle psychology

Unit 5: Applications of Indian Psychology

Positive psychology in Indian context. Leadership and decision-making (Bhagavad Gita insights). Emotional intelligence in Indian thought. Relevance in modern counseling and therapy

CLO 5

03

Total Hours

15

Learning resources

Textbooks:

1. Exploring Indian Knowledge Systems: A Comprehensive Resource – Prof. V. Ramanathan (IIT BHU)
2. What Indian Knowledge Systems is all about – Gautam R. Desiraju (IISc Bangalore)

Reference Books:

1. *The Wonder That Was India* – A.L. Basham
2. *Indian Knowledge Systems* – Edited academic compilations (UGC/IKS Division resources)

Online Resource

1. Indian Knowledge Systems Division <https://www.iksindia.org>
2. National Education Policy 2020 <https://www.education.gov.in>

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Exploring Indian Knowledge Systems: A Comprehensive Resource

Name of the Program:		MBA		Semester: I		Level: PG	
Course Name		Exploring Indian Knowledge Systems: A Comprehensive Resource		Course Code/ Course Type		VAC	
Course Pattern		2026		Version		1.0	
Teaching Scheme				Assessment Scheme			
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral
1	-	-	1	1	10	20	
Pre-Requisite: 12 th pass							
Course Objectives (CO):				CO1: Explain the foundations and scope of Indian Knowledge Systems. CO2: Describe major Indian philosophical traditions and ideas. CO3: Identify contributions of India in mathematics, science, and astronomy. CO4: Analyze traditional Indian approaches to environment and society. CO5: Relate Indian knowledge systems to modern interdisciplinary applications.			
Course Learning Outcomes (CLO):				CLO1: Recognize key sources and features of IKS. CLO2: Summarize basic Indian philosophical concepts. CLO3: Explain contributions of Indian scholars in science and mathematics. CLO4: Describe traditional ecological and health knowledge systems. CLO5: Connect IKS concepts with contemporary global challenges.			

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I Foundations of Indian Knowledge Systems		
Meaning, scope, and evolution of IKS Sources of Indian knowledge: Vedas, Upanishads, Sutras Concept of knowledge in Indian tradition Holistic and interdisciplinary nature of IKS	CLO 1	3
Unit 2: Indian Philosophy & Thought Systems		
Schools of Indian philosophy (Nyaya, Vaisheshika, Sankhya, Yoga, etc.) Concepts of Dharma, Karma, and Moksha Logic and reasoning in Indian tradition Ethical and value-based systems	CLO 2	03
Unit 3: Science, Mathematics & Astronomy in India		
Ancient Indian mathematics and numerals Contributions of Aryabhata, Bhaskara, and others Indian astronomy and calendar systems Scientific reasoning in classical texts	CLO 3	03
Unit 4: Indian Knowledge in Society, Environment & Life Sciences		
Traditional ecological knowledge Ayurveda and health sciences (basic introduction) Water management and sustainability practices Indigenous technologies and environmental balance	CLO 4	03

Unit 5: Applications & Contemporary Relevance of IKS		
IKS in modern education and research Indian knowledge in AI, computing, and design thinking Role of IKS in sustainable development Integrating traditional knowledge with modern innovation	CLO 5	03
Total Hours		15

Learning resources

Textbooks:

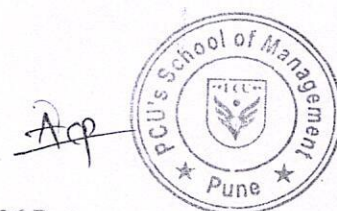
1. Exploring Indian Knowledge Systems: A Comprehensive Resource – Prof. V. Ramanathan (IIT BHU)
2. What Indian Knowledge Systems is all about – Gautam R. Desiraju (IISc Bangalore)

Reference Books:

1. *The Wonder That Was India* – A.L. Basham
2. *Indian Knowledge Systems* – Edited academic compilations (UGC/IKS Division resources)

Online Resource

1. Indian Knowledge Systems Division <https://www.iksindia.org>
2. National Education Policy 2020 <https://www.education.gov.in>



SKILL ENHANCEMENT COURSES

COURSE CURRICULUM -

Name of the Program:		MBA Pharma			Semester: I		Level: PG
Course Name		HR for Pharma & Sales Force Management			Course Code/ Course Type		SEC
Course Pattern		2026			Version		1.0
Teaching Scheme					Assessment Scheme		
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/ Oral
2	-	-	2	2	20	30	-
Pre-Requisite:							
Course Objectives (CO):		The objectives of the course are: 1. To provide understanding of HR practices in pharmaceutical industry. 2. To develop skills for managing medical representatives and sales teams. 3. To understand performance management and incentive systems in pharma. 4. To familiarize students with compliance and ethical HR practices. 5. To enhance practical HR decision-making in pharma organizations.					
Course Learning Outcomes (CLO):		Students would be able to: 1. Explain HR functions in pharmaceutical organizations. 2. Design recruitment and training strategies for pharma sales force. 3. Apply performance appraisal and incentive systems. 4. Ensure compliance with ethical and regulatory standards. 5. Analyze real-life HR challenges in pharma companies.					

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
Introduction to Pharma HRM • Overview of pharmaceutical industry structure (manufacturing, marketing, R&D) • Role of HR in pharma organizations • Socio-economic and cultural factors influencing workforce behaviour • Key HR challenges: absenteeism, skill gaps, retention, and productivity issues • Emerging trends: digital transformation and its impact on pharma HR	CLO 1	6
UNIT II		
Recruitment, Selection & Training of Pharma Sales Force • Recruitment strategies for medical representatives and pharma professionals • Competency mapping for sales roles • Selection techniques: interviews, role plays, and aptitude assessments • Induction programs and product training	CLO 2	6



• Continuous learning: soft skills, communication with doctors, and digital tools usage		
UNIT III		
Performance & Incentive Management • Designing KPIs for medical representatives (targets, coverage, conversion rates) • Incentive plans, bonuses, and reward systems • Performance appraisal methods in pharma companies • Challenges in performance evaluation and bias management	CLO 3	6
UNIT IV		
Compliance & Ethical Practices • Regulatory environment in pharmaceutical industry • Ethical issues in pharma sales and marketing practices • Code of conduct for medical representatives • HR's role in ensuring compliance and governance • Handling disciplinary actions and ethical violations	CLO 4	6
UNIT V		
Case Studies & Practical Applications • Real-world cases on pharma sales force management challenges • Managing doctor relationships and ethical dilemmas • Conflict and stress management in sales teams • Role plays: sales pitch, performance review, and conflict resolution • Designing a sales force management plan for a pharma company	CLO 5	6
Total Hours		30

Learning resources

Textbooks:

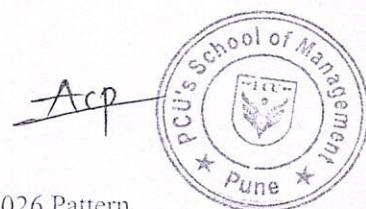
- Stone, R. J., Cox, A., Gavin, M., & Carpini, J. (2024). *Human resource management*. John Wiley & Sons.
- Lussier, R. N., & Hendon, J. R. (2025). *Human resource management: Functions, applications, and skill development*. Sage publications.
- Boselie, P., & Van der Heijden, B. (2024). *Strategic human resource management: A balanced approach*. McGraw Hill.

Reference Books:

- Vijay Bhargale (2023), *Pharmaceutical Marketing 4.0 – Indian Context*, PharmaMed Press
- Vivek Mehrotra (2023) *Essentials Of Pharmaceutical Sales Management*, AssessPro

Online Resources/E-Learning Resources:

- World Health Organization – Pharma workforce & ethics guidelines
- Central Drugs Standard Control Organization – Regulatory framework
- India Brand Equity Foundation – Pharma industry reports
- NPTEL – HR Analytics & Sales Management courses



COURSE CURRICULUM

Name of the Program:		MBA Pharma			Semester: I		Level: PG	
Course Name		Applied Pharma Operations and Supply Chain Management			Course Code/ Course Type		PC	
Course Pattern		2026			Version		1.0	
Teaching Scheme					Assessment Scheme			
Theory	Practical	Tutorial	Total Credits	Hours	CIA (Continuous Internal Assessment)	ESA (End Semester Assessment)	Practical/Oral	
2	-	-	2	2	20	30	-	
Pre-Requisite		: Basic terms of Pharma						
Course Objectives (CO):					The objectives of the course are: 6. Understand operations and supply chain concepts in pharmaceutical and healthcare settings. 7. Identify manufacturing processes, regulatory frameworks, and quality systems in pharma operations. 8. Apply forecasting and production planning techniques for drug manufacturing and distribution. 9. Evaluate pharmaceutical supply chains in terms of compliance, cold chain, and patient service levels. 10. Design integrated pharma supply chain solutions considering regulations, risk, and global distribution.			
Course Learning Outcomes (CLO):					Students would be able to: 6. Apply operations and SCM concepts to pharmaceutical manufacturing and healthcare delivery systems. 7. Analyze pharma production processes and service systems. 8. Apply demand forecasting and capacity planning for drugs, vaccines, and healthcare products. 9. Evaluate inventory and supply chain strategies considering regulatory compliance, shelf-life, and cold chain requirements. 10. Design integrated pharmaceutical supply chain solutions incorporating sourcing, distribution, compliance, and risk management.			

Course Contents/Syllabus:

Descriptors/Topics	CLO	Hours
UNIT I		
Introduction to Pharma Operations & SCM: Operations Management in Pharmaceutical Industry vs General Manufacturing. Evolution: Manufacturing, Pharma Operations, Global Pharma Supply Chains. Types of pharma products: Generics, APIs, Biologics, Vaccines. Regulatory Environment: GMP, WHO guidelines, CDSCO, USFDA.	CLO 1	6
UNIT II		



Pharma Operations Processes & Facility Design: Process Characteristics: High regulation, batch production, validation. Types of processes: Batch production, Continuous processes, Sterile production. Process-Product Matrix in pharma. Facility layout: Clean rooms, sterile zones, contamination control. Service systems: Hospital operations. Pharmacy retail chains. Service Blueprinting in healthcare delivery	CLO 2	6
UNIT III		
Production Planning & Control in Pharma: PPC in regulated environments. Demand Forecasting: Seasonal demand (flu drugs, vaccines). Epidemic / pandemic forecasting. Aggregate Planning for drug production. Master Production Schedule (MPS) in pharma. Capacity Planning with regulatory constraints. Scheduling: Batch scheduling.	CLO 3	6
UNIT IV		
Inventory Management in Pharma: Types of inventory: Raw materials (APIs). Work-in-progress. Finished drugs. Special considerations: Expiry dates. Cold storage. Controlled substances. Inventory Costs in pharma. EOQ, Inventory classification: ABC + VED. Inventory Turnover in pharma retail chains. Safety stock for critical medicines. Distribution challenges in rural healthcare.	CLO 4	6
UNIT V		
Pharmaceutical Supply Chain Management: Pharma Supply Chain Structure: Manufacturer → C&F agents → Distributors → Pharmacies → Hospitals Cold Chain Logistics. Key Issues: Counterfeit drugs. Regulatory compliance. Global sourcing of APIs. Customer Service: Drug availability. Service reliability. Patient safety. Enablers: Technology (ERP, blockchain for traceability). Transportation. Pricing regulations. Risk Management: Supply disruptions. Drug recalls.	CLO 5	6
Total Hours		30

Learning resources

Textbooks:

- Operations Management by Bernard Taylor, 2011
- Production and Operations Management by Aswath Appa and Bhat, 2010

Reference Books:

- Pharmaceutical Operations Management: Manufacturing for Competitive Advantage, 2016
- Pharmaceutical Supply Chains: Medicines Shortages – Springer
- Good Manufacturing Practices for Pharmaceuticals – Sidney Willig
- Pharmaceutical Operations Management – David Bamford

Online Resources/E-Learning Resources:

- Pharmaceutical Production & Operation Management, <https://royed.in/course/pharmaceutical-production-and-operation-management/>
- Pharma Quality Management Systems online course, <https://www.inspiredpharma.com/pharma-quality-management-systems-online-course/>
- Quality Management System (QMS) in Pharmaceutical Industry, <https://www.udemy.com/course/quality-management-system-qms-in-pharmaceutical-industry/?couponCode=ST8MT40924>