Curriculum Book

and

Assessment and Evaluation Scheme

based on

Outcome Based Education (OBE)

in

Master of Business Administration in Production and Operation Management

MBA (P&O)

2 Years Degree Program

Revised as on 01 August 2023
Applicable w.e.f. Academic Session 2023-24

AKS University

Satna 485001, Madhya Pradesh, India

Faculty of Management Studies
Department of Business Administration

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Faculty of Management Studies
AKS University, Satna (M.P.)

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Professor B.A. Chopade
Vice-Chancellor
AKS University
Satna, 485001 (M.P.)

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Forwarding

I am delighted to present the updated curriculum of the Department of Business Administration for the specialized MBA Program in Production and Operation Management (P & O). This curriculum is meticulously designed to integrate the latest trends and advancements specific to Production and Operation Management, while still adhering to the guidelines set forth by AICTE and UGC. The curriculum aligns with the transformative directives of NEP-2020, with a special emphasis on the dynamic and rapidly evolving domain of P & O.

The alignment of course outcomes (COs), Programme Outcomes (POs), and Programme Specific Outcomes (PSOs) has been carefully executed, ensuring a comprehensive understanding and expertise in production and operation management, logistics management, supply chain analytics, global distribution strategies, and sustainable production and operation practices. This alignment is in perfect sync with the requisites of NEP-2020 and NAAC standards, particularly focusing on the distinctive competencies required in the P & O sector.

I firmly believe that this specialized syllabus will not only enhance the skills of our students but also significantly elevate their employability by providing them with the tools and knowledge necessary to excel in the dynamic field of production and operation management.

With immense satisfaction, I hereby present the revised curriculum for the MBA in Production and Operation Management (P & O) program for implementation in the upcoming session.

ER. Anant Soni
Pro Chancellor & Chairman
AKS University, Satna

01 August 2023

From the Desk of the Vice-Chancellor

AKS University is currently undergoing a process to revamp its curriculum into an outcome-based approach, with the aim of enhancing the teaching and learning process. The foundation of quality of quality education lies in the implementation of a curriculum that aligns with both societal and industrial needs, focusing on relevant outcomes. This entails dedicated and inspired
faculty members, as well as impactful industry internships.

Hence, it is of utmost importance to begin this endeavor by crafting an outcome-based curriculum in collaboration with academia and industry experts. This curriculum design should be informed by the latest technological advancements, market demands, the guidelines outlined in the National Education Policy (NEP) of 2020, and sustainable goals.

I'm delighted to learn that the revised curriculum has been meticulously crafted by the Department of Business Administration, in consultation with an array of experts from the industry, research institutes, and academia. This curriculum effectively integrates the principles outlined in the NEP-2020 guidelines, as well as sustainable goals. It also adeptly incorporates the latest advancements in the field of business management.

Furthermore, the curriculum takes into account the specific needs of the Indian Industries, focusing on the creation of effective and efficient managers as well as entrepreneurs. This curriculum will not only imparts knowledge but also encourages students' independent thinking for potential enhancements in the area of business management.

The curriculum goes beyond theoretical learning and embraces practical applications. To enhance students' skills, the curriculum integrates industrial visits, and On-Job Training experiences, research projects. This well-rounded approach ensures that students receive a comprehensive education, fostering their skill development and preparing them for success in the field of Business Management.

I am confident that the updated curriculum for Department of Business Administration will not only enhance students' managerial skills but also contribute significantly to their employability. During the process of revising the curriculum, I am pleased to observe that the Department of Business Administration has diligently adhered to the guidelines provided by the AICTE and UGC. Additionally, they have maintained a total credit requirement of 101 for the MBA program.
It's worth noting that curriculum revision is an ongoing and dynamic process, designed to address the continuous evolution of managerial and technological advancements and both local and global concerns. This ensures that the curriculum remains responsive and attuned to the changing landscape of education and industry.

AKS University warmly invites input and suggestions from industry experts and technocrats and Alumni students to enhance the curriculum and make it more student-centric. Your valuable insights will greatly contribute to shaping an education that best serves the needs and aspirations of our students.

Professor B. A. Chopade
Vice- Chancellor
AKS University, Satna

01 August 2023

Preface

As part of our commitment to ongoing enhancement, the Department of Business Administration consistently reviews and updates its MBA program curriculum every three years. Through thisprocess, we ensure that the curriculum remains aligned with the latest managerial developments, as well as local and global industrial and social demands.

During this procedure, the existing curriculum for the MBA Program undergoes evaluation by a panel of industry specialists, and academicians. Following meticulous scrutiny, the revised curriculum has been formulated and is set to be implemented starting from August 01, 2023.This implementation is contingent upon the endorsement of the curriculum by the University's Board of Studies and Governing Body.

This curriculum closely adheres to the AICTE model syllabus distributed in May 2023. It seamlessly integrates the guidelines set forth by the Ministry of Higher Education, Government of India, through NEP-2020, as well as the principles of Sustainable Development Goals. In order to foster the holistic skill development of students, a range of practical activities, including Industrial Visits, Project planning and execution, Report Writing, Seminars, and Industrial On-Job Training, have been incorporated. Furthermore, in alignment with AICTE's directives, the total credit allocation for the MBA program is capped at 101 credits.

This curriculum is enriched with course components in alignment with AICTE guidelines, encompassing various disciplines such as Management Core Course (MCC): 24 credits, Production and Operation (PO): 25 credits, Projects (PJT) OJT Training: 52 credits.

To ensure a comprehensive learning experience, detailed evaluation schemes and rubrics have also been meticulously provided.

For each course, a thorough mapping of Course Outcomes, Program Outcomes, and Program Specific Outcomes has been undertaken. As the course syllabus is being meticulously developed, various elements such as session outcomes, laboratory instruction, classroom instruction, self-learning activities, assignments, and mini projects are meticulously outlined.

We hold the belief that this dynamic curriculum will undoubtedly enhance independent thinking, skills, and overall employability of the students.

Professor (Dr.) Harshwardhan Shrivastava
Dean, Faculty of Management Studies
AKS University, Satna

01 August 2023

Introduction:

The Faculty of Management Studies offers various courses for students to impart the key concepts of management and its applications in an organization. Apart from the basic courses of management like BBA and MBA, the department has also designed some major courses i.e. Ph.D. (Management), MBA in Logistics, and Supply Chain Management. Our professional courses emphasize on the combination of core business subjects and skill courses which lead to the holistic development of the students.

VISION

Our vision encompasses the overall development of the professionals who would become the torchbearer of the financial planning revolution. We strive to impart management education to prepare business leaders and entrepreneurs to stand up to the global competition.

MISSION

M 1: The Faculty of Management Studies provides programs that meet educational needs required by industries and other institutions.

M 2: Our aim is to provide and maintain an emphasis on the continuous improvement of programs and services.

M 3: We believe in nurturing the young minds of students by effective training in the concerned subject and guiding them to lay the strong foundation for a successful career.

Program Educational Objectives (PEOs):

PEO 1: To facilitate high-quality management education to the students of the management program and prepare them to meet the local & global challenges through their managerial competence.
PEO 2: To incorporate the spirit of learning and support the leaders with the recent managerial skills in the various dimensions of the business domain for attaining the organizational excellence.
PEO 3: To encourage the leaders, both in the field of business management and public administration to maintain human values in their leadership roles.
PEO 4: To motivate the students, researchers, and corporate participants in the management program for developing their entrepreneurial skills to bring positive changes for the development of the economy.

Program Outcomes (POs):

PO 1: Business Environment and Domain Knowledge: Socio-economic, legal and technological environment of Indian business. Students are able to improve their awareness and knowledge about functioning of local and global business environment and society. This helps in recognizing the functioning of businesses, identifying potential business opportunities, evolvement of business enterprises and exploring the entrepreneurial opportunities.

PO 2: Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions: Competencies in quantitative and qualitative techniques. Students are expected to develop skills on

analyzing the business data, execution of relevant analysis, and problem solving in other functional areas such as marketing, business strategies.

PO 3: International Exposure and Cross-Cultural Understanding: Demonstrate a global outlook with the ability to identify aspects of the international business and Cross-Cultural Understanding.

PO 4: Social Responsiveness and Ethos: Developing responsiveness to contextual social issues/ problems and exploring solutions, understanding business ethos and resolving ethical dilemmas. Students are expected to identify the contemporary social problems, exploring the opportunities for social entrepreneurship, designing business solutions and demonstrate ethical standards in organizational decision making.

PO 5: Effective Business Communication: Usage of various forms of business communication, supported by effective use of appropriate technology, logical reasoning, articulation of ideas. Students are expected to develop effective oral and written communication especially in business applications, with the use of appropriate digital technologies.

PO 6: Leadership Development and Synergy: Understanding leadership roles at various levels of the organization and leading teams. Students are expected to collaborate and lead teams across organizational boundaries and demonstrate leadership qualities, maximize the usage of diverse skills of team members in the related context. Students are expected to work in different form of organizational groups.

PO 7: R&D Aptitude: Develop a Research Aptitude and learn hands-on practical experience with respect to critical business problems and challenges using Data Analysis Techniques, Case Studies, Summer Internship, and Major Project Works, ultimately learning to solve business problems in real-life situations.

PO 8: Contemporary issues: Learning and understanding the latest developments in the management field related to contemporary issues through an extensive review of literature and research work.

Program Specific Outcomes (PSOs):

PSOs 1: Theoretical as well as practical knowledge: After studying for 2 years, the students get the theoretical as well as practical knowledge about the different aspects of the business perspectives which prepare them to work in the government and private organizations at executive, middle and top level posts.

PSOs 2: Work in various functional areas: Students can work in various functional areas like Marketing, Finance, Human Resource Management, Agri-business, and Operations Management.

PSOs 3: Work in various industries: Students will work in various industries like manufacturing, service, retail, telecommunication, automobile, banking and finance etc.

PSOs 4: To set up business enterprise: Program prepares the students to set up business enterprise and manage diversified growth of entrepreneurship.

Consistency / Mappings of PEOs with Mission of the Department

PEO	M 1	M 2	M 3
PEO 1	H	M	H
PEO 2	H	H	H
PEO 3	H	M	H
PEO 4	M	H	H

Correlation Indices: H=High, M=Medium, L=Low, N=Nil

GENERAL COURSE STRUCTURE & THEME

Definition of Credit

1 Hr. Lecture (L) per week	1 Credit
1 Hr. Tutorial (T) per week	1 Credit
2 Hours Practical (P) per week	1 Credit

Range of Credits:

In the light of the fact that a typical Model Two-year Post Graduate degree program in Management has about 100 credits, the total number of credits proposed for the Two-year Master of Business Administration in Production and Operations is kept as 101 considering NEP-20 and NAAC guidelines.

Structure of PG Program in Master of Business Administration:

The structure of PG Program in Master of Business Administration in Production and Operations shall have essentially the following categories of courses with the breakup of credits as given:

Components of the Curriculum

(Program curriculum grouping based on course components)

S l No	Course Component	% of total number of credits of the Program	Total number of Credits
1	Management Core Course (MCC)	23.30	24
2	Production and Operations (PO)	24.27	25
3	Projects and OJT (PJT)	52.43	52
	Total	100%	101

General Course Structure and Credit Distribution

Curriculum of Master of business administration

Semester –I		**Semester – II**	
Course Title	**Credit**	**Course Title**	**Credit**
Basics of Management Principles	6:0:0 = 6	Managerial Economics	6:0:0 = 6
Accounting for Managers	6:0:0 = 6	Financial Management	6:0:0 = 6
Production & Operations Management	3:0:0 = 3	Logistics & Supply Chain Management	3:0:0 = 3
Production Planning and Control	3:0:0 = 3	Operations Strategy	3:0:0 = 3
Quality Management and Six Sigma	3:0:0 = 3	Product Design and Development	3:0:0 = 3
Facility Location and Layout	3:0:0 = 3	Business Process Modelling and ERP	2:0:0 = 2
		Personality Development & Analytical Skills	2:0:0 = 2
Total Credit	**24**	**Total Credit**	**25**
Semester –III		**Semester – IV**	
Course Title	**Credit**	**Course Title**	**Credit**
OJT and Major Project	0:0:25 = 25	OJT and Major Project	0:0:27 = 27
Total Credit	**25**	**Total Credit**	**27**

Major Projects: major projects are compulsory for all IIIrd and IVth Semester students in a particular topic of management.

Course code and definition:

L	=	Lecture
T	=	Tutorial
PC	=	Practical Credit
BSC	=	Basic Science Courses
ESC	=	Engineering Science Courses
HSMC	=	Humanities and Social Sciences including Management courses
PCC	=	Professional core courses
PEC	=	Professional Elective courses
OEC	=	Open Elective courses
LC	=	Laboratory course
MC	=	Mandatory courses
IKS	=	Indian Knowledge System
SDGs	=	Sustainable Development Goals

Course level coding scheme:

Three-digit number (odd numbers are for the odd semester courses and even numbers are for even semester courses) used as suffix with the Course Code for identifying the level of the course. Digit at hundred's place signifies the year in which course is offered. e.g. 101, 102 etc. for first year. 201, 202 Etc. for second year. 301, 302 for third year.401. 402 for Fourth year

Category-wise Courses
Management Core Course (MCC)
Number of Management Core Course (MCC): 04, Credits: 24

Sl.	Code No.	Subject	Semester	Credits
1	31PO101	Basics of Management Principles	1	6:0:0 = 6
2	31PO104	Accounting for Managers	1	6:0:0 = 6
3	31PO201	Managerial Economics	2	6:0:0 = 6
4	31PO202	Financial Management	2	6:0:0 = 6
Total Credits:				**24**

Production and Operations (PO)

(ii) Number of Production and Operations (PO): 09, Credits: 25

Sl.	Code No.	Subject	Semester	Credits
1	31PO102	Production & Operations Management	1	3:0:0 = 3
2	31PO103	Production Planning and Control	1	3:0:0 = 3
3	31PO105	Quality Management and Six Sigma	1	3:0:0 = 3
4	31PO106	Facility Location and Layout	1	3:0:0 = 3
5	31PO203	Logistics & Supply Chain Management	2	3:0:0 = 3
6	31PO204	Operations Strategy	2	3:0:0 = 3
7	31PO205	Product Design and Development	2	3:0:0 = 3
8	31PO206	Business Process Modelling and ERP	2	2:0:0 = 2
9	31PO207	Personality Development & Analytical Skills	2	2:0:0 = 2
Total Credits:				**25**

Projects and OJT (PJT) 6, Credits = 54

Sl.	Code No.	Subject	Semester	Credits
1	31PO351	On- Job Training (OJT)	3	0:0:25 = 25
2	31PO352	Minor Project	3	
3	31PO353	Viva	3	
4	31PO451	On- Job Training (OJT)	4	0:0:27 = 27
5	31PO452	Major Project	4	
6	31PO453	Viva	4	
Total Credits:				**52**

Induction Program

Induction program for students to be offered right at the start of the first year. It is mandatory. AKS University has designed an induction program for 1st year student, details are below:

i. **Physical activity**
ii. **Creative Arts**
iii. **Universal Human Values**
iv. **Literary**
v. **Proficiency Modules**
vi. **Lectures by Eminent speakers**
vii. **Visits to local Areas**
viii. **Familiarization to Dept./Branch &**

InnovationsMandatory Visits/ Workshop/Expert

Lectures:

i. **It is mandatory to arrange one industrial visit every semester for the students.**

ii. **It is mandatory to conduct a One-week workshop during the winter breakafter third semester on professional/ industry/ entrepreneurial orientation.**

iii. **It is mandatory to organize at least one expert lecture per semester foreach branch by expert resource per sons from industry.**

Evaluation Scheme:

1. **For Theory Courses:**
   i. The weightage of Internal assessment is 50% and
   ii. End Semester Exam is 50%
   The student has to obtain at least 40% marks individually both ininternal assessment and end semester exams to pass.
2. **For Practical Courses:**
   i. The weightage of Internal assessment is 50% and
   ii. End Semester Exam is 50%
   The student has to obtain at least 40% marks individually both ininternal assessment and end semester exams to pass.
3. **For Summer Internship / Projects / Seminar etc.:**
   Evaluation is based on work done, quality of report, performance in viva-voce, presentation etc.
4. **For On-The-Job Training.**
   i. The weightage of Major project is 100%
   The student has to obtain at least 40% marks individually project to pass.

Semester wise Course Structure
Semester wise Brief of total Credits and Teaching Hours

Semester	L	T	P	Total Hour	Total Credit
Semester –I	24	0	0	24X15=360	24
Semester –II	25	0	0	25X15=375	25
Semester –III	0	0	50	50X15=750	25
Semester – IV	0	0	54	54X15=810	27
Total	**84**	**13**	**104**	**2295**	**101**

Details of Semester Wise Course Structure

Semester – I

SN	Category	Code	Course Title	L	T	P	Total Hour	Credit
1	MCC	31PO101	Basics of Management Principles	6	0	0	6	6
2	PO	31PO102	Production & Operations Management	3	0	0	3	3
3	PO	31PO103	Production Planning and Control	3	0	0	3	3
4	MCC	31PO104	Accounting for Managers	6	0	0	6	6
5	PO	31PO105	Quality Management and Six Sigma	3	0	0	3	3
6	PO	31PO106	Facility Location and Layout	3	0	0	3	3
Total				**24**	**0**	**0**	**24**	**24**

Semester - II

SN	Category	Code	Course Title	L	T	P	Total Hour	Credit
1	MCC	31PO201	Managerial Economics	6	0	0	6	6
2	MCC	31PO202	Financial Management	6	0	0	6	6
3	PO	31PO203	Logistics & Supply Chain Management	3	0	0	3	3
4	PO	31PO204	Operations Strategy	3	0	0	3	3
5	PO	31PO205	Product Design and Development	3	0	0	3	3
6	PO	31PO206	Business Process Modelling and ERP	2	0	0	2	2
7	PO	31PO207	Personality Development & Analytical Skills	2	0	0	2	2
Total				**25**	**0**	**0**	**25**	**25**

Semester - III

SN	Category	Code	Course Title	L	T	P	Total Hour	Credit
1	PJT	31PO351	On- Job Training (OJT)	0	0	10		
2	PJT	31PO352	Minor Project	0	0	12	50	25
3	PJT	31PO353	Viva	0	0	3		
Total				**0**	**0**		**50**	**25**

Semester - VI

SN	Category	Code	Course Title	L	T	P	Total Hour	Credit
1	PJT	31PO451	On- Job Training (OJT)	0	0	10		
2	PJT	31PO452	Major Project	0	0	15	54	27
3	PJT	31PO453	Viva	0	0	2		
Total				**0**	**0**		**54**	**27**

Total Credit: 101

Semester I

Course Code:	**31PO101**
Course Title:	**Basics of Management Principles**
Pre-requisite:	**Course assessment methods: CT & EA**
Rationale:	The students studying principles and practice of management will be able to understand the application of principles of management which makes the manager more realistic, thoughtful, justifiable and free from personal bias. The decisions taken on the basis of principles of management are subject to evaluation and objective assessment.

Course Outcomes:

31PO101.1: Application of management and understanding the management school thought and role of managers.
31PO101.2: Summarize the overview of planning and objective in management.
31PO101.3: Write the role of strategies in management.
31PO101.4: Illustrate the concept of organizing and staffing,
31PO101.5: Analyze the organizational power and politics. Scheme of Studies:

Code	Course	Course Title	Scheme of studies (Hours/Week)					Total Credits(C)
			Cl	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
MCC	**31PO101**	Concept of management	6	0	2	1	9	6

Legend:

CI: Classroom Instruction (Includes different instructional strategies i.e. Lecture(L)and Tutorial (T)and others),
LI: Laboratory Instruction (Includes Practical performances in laboratory workshop, field or other locations using different instructional strategies)
SW: Sessional Work (includes assignment, seminar, mini project etc.),
SL: Self Learning,
C: Credits.

Note: SW&SLhastobeplannedandperformedunderthecontinuousguidanceandfeedbackofteacherto ensure outcome of Learning.

Scheme of Assessment:

Theory

code	Couse Code	Course Title	Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)						End Semester Assessment (ESA)	Total Marks (PRA+ESA)
			Class/HomeAssignment5number 3-mark seach (CA)	Class Test2 (2best out of3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)		
MCC	**31PO101**	Concept of Management	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should how case their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO101.1: Application of management and understanding the management school thought and role of managers.

Approximate Hours

Item	Appx Hrs.
Cl	19
LI	0
SW	1
SL	1
Total	21

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO1.1 Understanding organization and Management. SO1.2Analyzing Functions and responsibilities of manager. SO1.3School of management thoughts. SO1.4Developing excellent managers. SO1.5 Cross culture issues in management.	.	**Unite-1. Function of manager (Hrs.19)** 1.1. Introduction of Organization 1.2. Introduction of management 1.3. Responsibility of manager Concept and school management 1.4. Concept and school management thought 1.5. concept of management 1.6. theory in management. 1.7. Classification of management theories 1.8. classical management theory 1.9. Scientific management 1.10. Administrative management 1.11. Bureaucratic management 1.12. Criticism on classical management theory 1.13. neo classical theory 1.14. modern management theory 1.15. System theory 1.16. contingency theory 1.17. organizational humanism theory 1.18. management science 1.19. management system	1. Principles of management by Henry Fayol. 2. Techniques of Scientific Management. 3. Levels of management. 4. Skills of an ideal manager. 5. Cross culture challenges in business.

SW-1Suggested Sessional Work (SW):

a. Assignments:
- Discuss the contribution of Henry Fayol in the field of administrative management.

b. Mini Project:
- Evolution of school of management thoughts.

c. Other Activities (Specify):
- Group discission, presentation

31PO101.2: Summarize the overview of planning and objective in management.

Approximate Hours

Item	App X Hrs.
Cl	17
LI	0
SW	1
SL	1
Total	19

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO2.1Understandpurpose of planning process. SO2.2 Types of planning. SO2.3Advantages and limitations of planning SO2.4Understanding Concept and nature of objective, types of objectives. SO2.5Importance of objective, Management by objective (MBO), Process, benefits and weakness of MBO.		**Unite-2. purpose of planning (Hrs.17)** 2.1. principles of planning 2.2. concept of planning 2.3. the planning processes 2.4. types of planning 2.5. advantages of planning 2.6. advantages of planning 2.7. objective of planning 2.8. limitation of planning 2.9. types of objectives 2.10. sitting of objectives 2.11. Benefits of MBO 2.12. importance of objectives 2.13. MBO Process 2.14. introduction of MBO 2.15. management by objectives 2.16. weakness of MBO 2.17. strength of MBO	1.Planning process 2.Types of planning 3.Pros of Planning 4. Use of Management by objective to enhance the performance of the organization. 5.Benefits and weakness of MBO.

SW-2 Suggested Sessional Work (SW):

a. Assignments:

- Explain nature and the purpose of planning and write the planning process, principles of planning types of planning, process advantage or limitation of planning.

b. Mini Project:

- Process of management by objective

c. Other Activities (Specify):

- case analysis, presentation

31PO101.3: Write the role of strategies in management.

Approximate Hours

Item	App X Hrs.
Cl	15
LI	0
SW	1
SL	1
Total	17

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO3.1Concept of corporate strategies, formation of strategies, types of Strategies SO3.2The strategic planning process, TOWS matrix, Portfolio Matrix. SO3.3Three generic competitive, strategy by porter, effective implementation of strategy SO3.4Types of policies, principles of formulation of policies. SO3.5Decision making process, individual decision-making models.	.	**Unite-3. Strategies and policy (Hrs.15)** 3.1. introduction of corporate 3.2. strategy 3.3. The tows matrix 3.4. the portfolio matrix 3.5. concept of corporate strategy 3.6. formulation of corporate strategy 3.7. strategy planning process 3.8. types of strategy 3.9. Three generics competitive 3.10. strategies of porter 3.11. Effective implementation of strategies 3.12. types of policy 3.13. decision making process 3.14. individual decision model 3.15. principle and formulation of policy	Different corporate strategies. TOWS matrix analysis of an organization. Effective implementation of strategy. Difference between policies and strategies. Effective decision making.

SW-3Suggested Sessional Work (SW):

a. Assignments:

- Explain different types of Strategies with Examples.

b. Mini Project:

- Prepare chart of Different types of strategies.

c. Other Activities (Specify):

- Case analysis and group discussion

31PO101.4: Illustrate the concept of organizing and staffing,

Approximate Hours

Item	App X Hrs.
Cl	20
LI	0
SW	1
SL	1
Total	22

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO4.1Nature and purpose of organizing, Bases of departmentation. SO4.2Span of management, Determinants of Span of Management. SO4.3 Line and Staff Relationship, Line and Staff conflict SO4.4Bases of delegation, kinds of delegation and decentralization, method of decentralization SO4.5Staffing: meaning and importance.		**Unite-4. introduction of organizing (Hrs.20)** 4.1. nature of organizing 4.2. purpose of organizing 4.3. function of organizing 4.4. importance of organizing 4.5. bases of departmentation 4.6. determinants of span of management 4.7. line and staff relationship 4.8 line and staff conflict 4.9. conflict 4.10. delegation 4.11. bases of delegation 4.12. kinds of delegation 4.13. decentralization 4.14.vcentralization 4.15. method of decentralization 4.16. staffing 4.17. staffing meaning 4.18. staffing objective 4.19. staffing importance 4.20. staffing management	Importance of Organizing in achieving company's objective and Goal Different types of Spans Two main categories within which employees are organized in a company. How to delegate effectively. Importance of Staffing in HR management

SW-4Suggested Sessional Work (SW):

a. Assignments:
- Explain Nature and purpose of organizing and discuss meaning or Importance of Staffing.

b. Mini Project:
- Explain Recruitment and different sources of recruitment

c. Other Activities (Specify):
- Case analysis and group discussion

31PO101.5: Analyze the organizational power and politics. Scheme of Studies:

Approximate Hours

Item	App X Hrs.
Cl	19
LI	0
SW	1
SL	1
Total	21

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO5.1Direction: meaning, nature and principles SO5.2Controlling: Concept and Process of control, control techniques, human aspects of control SO5.3Control as a feedback system, feedforward control, preventive control, profit and loss control SO5.4Control through return on investment, the useof computer for controlling and decision making. SO5.5 Challenges created by IT as a control tool		**Unite-5. introduction of directing (Hrs.19)** 5.1. meaning of directing 5.2. objective of directing 5.3. importance of directing 5.4. nature and principle of controlling. 5.5. nature and principle of direction 5.6. controlling introduction 5.7. concept of controlling 5.8. process of controlling 5.9. techniques of controlling 5.10. Huma aspects of control 5.11. control as a feedback system 5.12. feed forward control 5.13. preventive control 5.14. profit and loss control 5.15. the use of computer for controlling 5.16. the use for controlling and decision making 5.17. challenge in controlling 5.18 controlling tools 5.19 control management	I. Importance of Direction in management ii. Human aspects of control iii. control as a feedback system iv. Use of computers for controlling v. Issues created by IT as a control tool

SW-5Suggested Sessional Work (SW)

a. Assignments:

- What do you understand by direction. Write nature and principles of direction.

b. Mini Project:

- Techniques of controlling

c. Other Activities (Specify):

- Case analysis and group discussion

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+ SW+ Sl)
31PO101.1: Application of management and understanding the management school thought and role of managers.	19	1	1	21
31PO101.2: Summarize the overview of planning and objective in management.	17	1	1	19
31PO101.3: Write the role of strategies in management.	15	1	1	17
31PO101.4: Illustrate the concept of organizing and staffing,	20	1	1	22
31PO101.5: Analyze the organizational power and politics. Scheme of Studies:	19	1	1	21
Total Hours	90	5	5	100

Suggestion for End Semester Assessment
Suggested Specification Table (ForESA)

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Function of manager					
CO-2	purpose of planning					
CO-3	Strategies and policy					
CO-4	introduction of organizing					
CO-5	introduction of directing					
Total						

Legend: Ap: Apply An: Analyze Ev: Evaluate Cr: Create
Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks

Teacher scan also design different task sapper requirement, for end semester assessment
Suggested Instructional/Implementation Strategies:
1 Improved Lecture
2 Tutorial
3 Case Method
4 Group Discussion
5 Role Play
6 Visit to cement plant
7 Demonstration
8 ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook, Twitter, WhatsApp, Mobile, Online sources)
9 Brainstorming

Suggested Learning Resources:

Books:

S. No.	Title	Author	Publisher	Edition &Year
1	Fundamentals of management	Stephen P. Robbin David A Decenzo	Pearson Education	2009
2	Management theory and application	Kreitner	Cengage learning, India	2009
3	Management	Robbins	Pearson Education	9th edition,2008
4	Management principles and application	Griffin	Cengage learning, India	First edition

Curriculum Development Team

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Course Title: MBA(P&O) Course
Code: 31PO101
Course Title: Basics of Management Principles

Course Outcomes	Program outcomes									Program Specific Outcome		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO 1**	**PSO2**	**PSO3**	**PSO4**
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding:	Social Responsiveness sand Ethos:	Effective Business Communication	Leadership Development and Synergy:	R&D Aptitude	Contemporary issues:	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industryes	To set up business enterprise e
CO1: Application of management and understanding the management school thought and role of managers.	3	1	1	2	3	2	3	2	3	3	3	1
CO 2: Summarize the overview of planning and objective in management.	3	2	1	1	3	2	1	3	3	3	3	1

CO3: Write the role of strategies in management.	3	3	3	3	3	2	2	2	3	1	2	1
CO 4: Illustrate the concept of organizing and staffing.	3	1	1	1	2	2	1	2	3	3	3	1
CO 5: Analyze the organizational powers and politics.	3	2	1	2	3	3	3	2	2	3	3	1

Legend:1–Low,2–Medium,3–High

Course Curriculum Map: Cos, Pos and PSOs Mapping

POs& PSOs No.	Cos No.& Titles	SOs No.	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2,3,4	CO-1: Application of management and understanding the management school thought and role of managers.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit-1 Concept of management 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19	
PO 1,2,3,4,5,6,7,8 PSO 1,2,3,4	CO 2: Summarize the overview of planning and objective in management.	SO2.1 SO2.2 SO2.3 SO2.4 SO2.5		Unit-2Planning and objectives 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17	
PO 1,2,3,4,5,6,7,8 PSO 1,2,3,4	CO3: Write the role of strategies in management.	SO3.1 SO3.2 SO3.3 SO3.4 SO3.5		Unit-3: Strategies and policies 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15	
PO 1,2,3,4,5,6,7,8 PSO 1,2,3,4	CO 4: Illustrate the concept of organizing and staffing.	SO4.1 SO4.2 SO4.3 SO4.4 SO4.5		Unit-4: Organizing and Staffing 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	
PO 1,2,3,4,5,6,7,8 PSO 1,2,3,4	CO 5: Analyze the organizational powers and politics.	SO5.1 SO5.2 SO5.3 SO5.4 SO5.5		Unit5: Directing and controlling 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19	

Course Code: 31PO102

Course Title: Production and Operations Management

Pre-requisite: Students should have a foundational knowledge of basic business concepts and principles.

Rationale: This course is essential for understanding the comprehensive concepts and practical techniques involved in the management of production and operations within both manufacturing and service sectors. Emphasis is placed on process selection, capacity planning, scheduling, inventory control, and performance measurement to prepare students for challenges in the operations management field.

Course Outcomes:

31PO102.1: Explain the significance and evolution of production and operations management and its role in modern business.
31PO102.2: Evaluate forecasting methods and capacity planning in operations management.
31PO102.3: Implement job design and work measurement methods to enhance operational efficiency.
31PO102.4: Formulate project management schedules employing CPM and PERT techniques for efficient resource management.
31PO102.5: Distinguish between manufacturing and service operations and apply service quality management methods.

Scheme of Studies:

Code	Course Code	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	31PO102	Production and Operations Management	3	0	2	1	6	3

Legend:

CI: Classroom Instruction (Includes different instructional strategies i.e. Lecture (L) and Tutorial (T) and others),
LI: Not Applicable
SW: Sessional Work (includes assignment, seminar, mini project etc.),
SL: Self Learning
C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

			Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)							
Code	Couse Code	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ESA)
PO	**31PO 102**	**Production and Operations Management**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO102.1: Explain the significance and evolution of production and operations management and its role in modern business.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1 Understand the definition, scope, and types of operations systems. SO1.2 Identify and understand the production system models and the role of operations management in business strategy. SO1.3 Examine the functions and decision-making process in operations management.		**Unite-1. Overview of Production and Operations Management. (Hrs.04)** 1.1 Discussion on Operations System 1.2. Models and Business Strategy. 1.3 Exploring Operations Management Functions and Decision-making. 1.4 Case study discussion on Operations 1.5. Management Functions and Decision-making.	Study of case examples from different industries to understand the application of production system models.

SW-1 Suggested Sessional Work (SW):

a. Assignments on comparing various operations management functions across industries.

b. Case study analysis on the role of operations management in strategy formulation.

31PO102.2: Evaluate forecasting methods and capacity planning in operations management.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO2.1: Analyze different process types and their characteristics. SO2.2: Demonstrate the ability to design and select appropriate production processes. SO2.3: Apply process analysis for process improvement. SO2.4: Utilize flowcharting and mapping tools for process visualization. SO2.5: Conduct capacity planning and measure utilization.		**Unit II - Process Design and Analysis (Hrs.05)** 2.1: Exploration of Process Types and Characteristics. 2.2: Strategies for Process Design and Selection. 2.3: Techniques for Process Improvement and Analysis. 2.4: Process Flowcharting and Mapping Methodologies. 2.5: Fundamentals of Capacity Planning and Utilization.	Investigation of case studies focusing on process design and improvements in industry.

SW-2 Suggested Sessional Work (SW):

a. Assignments on process selection for different industries.

b. Development of process maps for a hypothetical manufacturing company.

31PO102.3: Implement job design and work measurement methods to enhance operational efficiency.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO3.1: Apply the principles of job design to real-world scenarios. SO3.2: Explore different approaches to job design and their implications. SO3.3: Evaluate ergonomic considerations and workplace design for employee efficiency. SO3.4: Utilize work measurement techniques to establish standard times. SO3.5: Calculate performance ratings based on standard work measurements.		**Unit III - Job Design and Work Measurement (Hrs.05)** 3.1: Principles and Approaches to Job Design. 3.2: Ergonomic Factors in Job Design. 3.3: Work Measurement Techniques and Time Study. 3.4: Setting Standards and Performance Ratings. 3.5: Case study discussion on Job Design	Research on ergonomic improvements and their impact on productivity.

SW-3 Suggested Sessional Work (SW):

a. Case studies on ergonomic job design.

b. Time and motion study exercises for a given task.

31PO102.4: Formulate project management schedules employing CPM and PERT techniques for efficient resource management.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO4.1: Understand the basics of project management. SO4.2: Develop skills for project planning and scheduling. SO4.3: Master the Critical Path Method (CPM) for project scheduling. SO4.4: Apply the Program Evaluation and Review Technique (PERT). SO4.5: Implement resource allocation and leveling techniques.		**Unit IV - Project Management (Hrs.05)** 4.1: Introduction to Project Management Principles. 4.2: Project Planning and Scheduling Techniques. 4.3: Critical Path Method (CPM) Analysis. 4.4: Program Evaluation and Review Technique (PERT) Application. 4.5: Strategies for Resource Allocation and Leveling.	Study of project management software tools like MS Project or Primavera.

SW-4 Suggested Sessional Work (SW):

a. Development of a project plan for a new product launch.

b. CPM and PERT analysis for a college event.

31PO102.5: Distinguish between manufacturing and service operations and apply service quality management methods.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO5.1: Understand the importance of maintenance in operations management. SO5.2: Differentiate between various types of maintenance strategies. SO5.3: Learn about Total Productive Maintenance (TPM) and its implementation. SO5.4: Plan and schedule maintenance activities effectively. SO5.5: Comprehend reliability concepts and calculate reliability measures.		**Unit V - Maintenance and Reliability (Hrs.05)** 5.1: The Role of Maintenance in Operations Management. 5.2: Overview of Preventive, Corrective, and Predictive Maintenance. 5.3: Introduction to Total Productive Maintenance (TPM). 5.4: Strategies for Maintenance Planning and Scheduling. 5.5: Fundamentals of Reliability in Operations Management.	Exploration of TPM case studies from various industries.

SW-5 Suggested Sessional Work (SW):

a. Maintenance plan development for manufacturing equipment.

b. Reliability analysis of a production system.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Discuss the role, importance, and historical development of production and operations management in business	5	2	1	7
CO2: Analyze forecasting techniques, capacity planning strategies, and their impact on operations management	5	2	1	8
CO3: Apply principles of job design and work measurement techniques to improve operational efficiency	5	2	1	8
CO4: Develop project management plans using CPM and PERT for effective resource allocation and scheduling	5	2	1	8
CO5: Evaluate the differences between manufacturing and service operations, and implement service quality management techniques	5	2	1	8
Total Hours	25	10	5	39

Suggestion for End Semester Assessment

Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Unit I - Introduction to Production and Operations Management					
CO-2	Unit II - Process Design and Analysis					
CO-3	Unit III - Job Design and Work Measurement					
CO-4	Unit IV - Project Management					
CO-5	Unit V - Maintenance and Reliability					
	Total					50

Legend: Ap: Apply, an: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT,

Blog, Facebook, Twitter, WhatsApp, Mobile, Online sources)
9. Brainstorming

Suggested Learning Resources:

Books: (a)

S. No	Title	Author	Publisher	Edition & Year
1	Operations Management – Sustainability and Supply Chain Management	Jay Heizer, Amit Sachan, Chuck Munson and Barry Render	Pearson Education	2017
2	Production and Operations Management	S.N. Chary	Tata McGraw Hill	2019
3	Operations Management: Theory and Practice	B. Mahadevan	Pearson India	2015
4	Production and Operations Management: Text and Cases	P. Rama Murthy	New Age International	2012
5	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Code: 31PO102.
Course Title: Production and Operations Management
Cos, POs and PSOs Mapping

Course Outcomes	**Program Outcomes**								**Program Specific Outcomes**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will discuss the role, importance, and historical development of production and operations management in business	3	2	1	2	1	1	1	2	3	3	2	1
CO2 Students will analyze forecasting techniques, capacity planning strategies, and their impact on operations management	2	3	1	1	2	2	3	2	3	3	3	1

CO3 Students will apply principles of job design and work measurement techniques to improve operational efficiency	2	3	1	1	1	3	3	1	3	3	3	2
CO4 Students will develop project management plans using CPM and PERT for effective resource allocation and scheduling	2	3	1	1	3	3	3	2	3	3	3	2
CO5 Students will evaluate the differences between manufacturing and service operations, and implement service quality management techniques	3	3	2	2	2	2	1	3	3	3	3	1

Legend: 3=High, 2=Medium, 1=Low

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning(SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO1: Explain the significance and evolution of production and operations management and its role in modern business.	SO1.1 SO1.2 SO1.3		Unit I - Introduction to Production and Operations Management 1.1, 1.2, 1.3, 1.4	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO2: Evaluate forecasting methods and capacity planning in operations management.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Process Design and Analysis 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO3: Implement job design and work measurement methods to enhance operational efficiency.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Job Design and Work Measurement 3.1, 3.2, 3.3, 3.4	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO4: Formulate project management schedules employing CPM and PERT techniques for efficient resource management.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Project Management 4.1, 4.2, 4.3, 4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO5: Distinguish between manufacturing and service operations and apply service quality management methods.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Maintenance and Reliability 5.1, 5.2, 5.3, 5.4, 5.5	

Course Code: 31PO103

Course Title: Production Planning and Control

Pre-requisite: Students should possess a foundational understanding of operations management, basic principles of manufacturing processes, and introductory statistics.

Rationale: This course is integral for students to comprehend the complexities of synchronizing manufacturing processes and resources. It covers systematic planning, control, and execution of production activities, ensuring efficiency and effectiveness in meeting customer demands while managing costs. Mastery of production planning and control is crucial for operational excellence and maintaining competitive advantage in manufacturing and service industries.

Course Outcomes:

31PO103.1: Comprehend the fundamentals of production planning and control systems.
31PO103.2: Apply various production planning techniques to manage inventory levels and production schedules.
31PO103.3: Analyze the impact of various production control methods on the overall manufacturing process.
31PO103.4: Develop strategies for implementing Just-In-Time and Lean production systems.
31PO103.5: Evaluate the effectiveness of production planning and control systems in different manufacturing settings.

Scheme of Studies:

Code	Course Code	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	31PO103	Production Planning and Control	3	0	2	1	6	3

Legend:
CI: Classroom Instruction
LI: Not Applicable

SW: Sessional Work

SL: Self Learning

C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

Scheme of Assessment (Marks) Progressive Assessment (PRA)										
Code	Couse Code	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ESA)
PO	31PO103	**Production Planning and Control**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO1033.1: Comprehend the fundamentals of production planning and control systems.

Approximate Hours

Item	App X Hrs.
CI	4
LI	0
SW	1
SL	1
Total	6

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Understand the objectives and overview of production planning and control (PPC). SO1.2: Recognize the functions and types of PPC systems. SO1.3: Grasp the role of PPC in operations management. SO1.4: Discuss the hierarchy of planning and control in production settings.		**Unit I - Introduction to Production Planning and Control (4 Hours)** 1.1 : Introduction to the concepts of PPC. 1.2 : Different types of production systems and their relevance to PPC. 1.3 : Strategic role of PPC in enhancing operations management. 1.4 : Case study discussion on PPC	Study of real-world examples where PPC plays a central role in organizational success.

SW-1 Suggested Sessional Work (SW):

a. Case study analysis on the impact of effective PPC systems in manufacturing companies.

b. Discussions on the role of PPC in various types of production systems.

31PO103.2: Apply various production planning techniques to manage inventory levels and production schedules.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	7

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO2.1: Comprehend the significance of demand forecasting in PPC. SO2.2: Identify different types of forecasts. SO2.3: Apply qualitative and quantitative forecasting methods. SO2.4: Measure and control forecast accuracy.		**Unit II - Demand Forecasting (5 Hours)** 2.1 Fundamentals of demand forecasting. 2.2: Examination of qualitative and quantitative forecasting techniques. 2.3: Tools for enhancing forecast accuracy. 2.4: Methods for enhancing forecast accuracy. 2.5: Case study discussion	Engagement with forecasting software to simulate demand prediction.

SW-2 Suggested Sessional Work (SW):

a. Forecasting projects using historical sales data.

b. Comparative analysis of different forecasting methods.

31PO103.3: Analyze the impact of various production control methods on the overall manufacturing process.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO3.1: Articulate the aims of aggregate production planning (APP). SO3.2: Evaluate various APP strategies. SO3.3: Contrast level, chase, and mixed production plans. SO3.4: Employ techniques and tools for APP.		**Unit III - Aggregate Production Planning (5 Hours)** 3.1 Overview of APP and its strategic importance. 3.2: Exploration of APP strategies and their implementation. 3.3: Analysis of level production plan. 3.4: Analysis of chase production plan. 3.5: Analysis of mixed production plan.	Investigation of case studies on APP strategies in different industries.

SW-3 Suggested Sessional Work (SW):

a. Simulation exercises on creating various aggregate plans.

b. Group discussions on the pros and cons of different APP strategies.

31PO103.4: Develop strategies for implementing Just-In-Time and Lean production systems.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO4.1: Understand the purpose of master production scheduling (MPS). SO4.2: Develop skills to create a master production schedule. SO4.3: Explore the concepts of available-to-promise (ATP) and capable-to-promise (CTP). SO4.4: Apply MPS techniques to balance supply and demand.		**Unit IV - Master Production Scheduling (5 Hours)** 4.1 Introduction to MPS and its key functions. 4.2 : The process of developing an MPS. 4.3 : Concepts of ATP in MPS. 4.4 : Concepts of CTP in MPS. 4.5 : Case study discussion.	Use of MPS software to create a production schedule for a given product.

SW-4 Suggested Sessional Work (SW):

a. Projects on developing an MPS for a new product introduction.

b. Exercises on calculating ATP and CTP for given scenarios.

31PO103.5: Evaluate the effectiveness of production planning and control systems in different manufacturing settings.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO5.1: Grasp the objectives of MRP. SO5.2: Understand MRP inputs, outputs, and processes. SO5.3: Perform MRP explosion and netting. SO5.4: Analyze various MRP lot sizing techniques. SO5.5: Comprehend the implementation and control of MRP systems.		**Unit V- Material Requirements Planning (MRP) (5Hours)** 5.1: MRP principles and its role in PPC. 5.2: Detailed MRP processes including explosion and netting. 5.3: MRP lot sizing techniques and their applications. 5.4: MRP lot sizing techniques and their applications. 5.5: Case study discussion on MRP lot sizing techniques and their applications.	Study of MRP systems in industry to understand practical challenges and solutions.

SW-5 Suggested Sessional Work (SW):

a. Practical exercises on MRP scenarios in class.

b. Analysis of case studies on MRP implementation.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Comprehend the fundamentals of production planning and control systems	4	2	1	7
CO2: Apply various production planning techniques to manage inventory levels and production schedules	5	2	1	8
CO3: Analyze the impact of various production control methods on the overall manufacturing process	5	2	1	8
CO4: Develop strategies for implementing Just-In-Time and Lean production systems	5	2	1	8
CO5: Evaluate the effectiveness of production planning and control systems in different manufacturing settings	5	2	1	8
Total Hours	24	10	5	39

Suggestion for End Semester Assessment

Suggested Specification Table

Unit Titles	Marks Distribution				Total Marks
	Ap	An	Ev	Cr	
Unit I - Introduction to Production Planning and Control					
Unit II - Demand Forecasting					
Unit III - Aggregate Production Planning					
Unit IV - Master Production Scheduling					
Unit V - Material Requirements Planning (MRP)					
Total					50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion

5. Role Play

6. Industry Visit

7. Demonstration

8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT,

Blog, Facebook, Twitter, Whatsapp, Mobile, Online sources)

9. Brainstorming

Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition & Year
1	Production Planning and Control: Text and Cases	S. K. Mukhopadhyay	PHI Learning	2015
2	Production Planning and Control	Dr. J. P. Saxena	Sultan Chand & Sons	2022
3	Production and Operations Management	S. N. Chary	Tata McGraw Hill	2019
4	Production and Operations Management	Kanishka Bedi	Oxford University Press India	2007
5	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Code: 31PO103

Course Title: Production Planning and Control

Cos, POs and PSOs Mapping

Course Outcomes	**Program Outcomes**								**Program Specific Outcomes**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R& D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1: Students will comprehend the fundamentals of production planning and control systems	2	3	1	1	1	1	3	2	2	3	3	1
CO2: Students will apply various production planning techniques to manage inventory levels and production schedules	1	3	1	1	2	2	3	2	2	3	3	1

CO3: Students will analyze the impact of various production control methods on the overall manufacturing process	2	3	1	1	2	1	3	3	2	3	3	1
CO4: Students will develop strategies for implementing Just-In-Time and Lean production systems	1	3	1	1	2	3	3	3	2	3	3	2
CO5: Students will evaluate the effectiveness of production planning and control systems in different manufacturing settings	2	3	1	1	2	2	3	3	3	3	3	1

Legend: 3=High, 2=Medium, 1=Low

Course Curriculum Map:

POs & PSOs No.	COs No. & Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Production Planning and Control 1.1, 1.2, 1.3, 1:4	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Demand Forecasting 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Aggregate Production Planning 3.1, 3.2, 3.3, 3.4, 3.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Master Production Scheduling 4.1, 4.2, 4.3, 4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Material Requirements Planning (MRP) 5.1, 5.2, 5.3, 5.4, 5.5	

Course Code:	**31PO104**
Course Title:	**Account for Managers**
Pre-requisite:	Student should have basic knowledge of Accounting Knowledge, Financial Analysis Skills, Budgeting and Forecasting, Cost Accounting and IT and Accounting Software
Rationale:	The students studying will able to understand accounting lies in its ability to provide relevant, accurate, and timely financial information, enabling managers to make informed decisions, allocate resources effectively, comply with legal requirements, and contribute to the overall success and sustainability of the organization.

Course Outcomes:

31PO104.1: Define basic accounting terms and principles.

31PO104.2: Explain the purpose of financial statements and their interrelationships.

31PO104.3: Apply accounting principles to solve practical business problems.

31PO104.4: Analyze the impact of financial decisions on a company's overall performance.

31PO104.5: Assess the effectiveness of different accounting methods in specific business scenarios.

Scheme of Studies:

Code	Course	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			Cl	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
MCC	31PO104	Account for Managers	6	0	2	1	9	6

Legend:

CI: Classroom Instruction (Includes different instructional strategies i.e. Lecture (L) and Tutorial (T) and others),
LI: Laboratory Instruction (Includes Practical performances in laboratory workshop, field or other locations using different instructional strategies)
SW: Sessional Work (includes assignment, seminar, mini project etc.),
SL: Self Learning,
C: Credits.
Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory:

Code	Couse Code	Course Title	Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)						EndSemester Assessment (ESA)	Total Marks (PRA+ ESA)
			Class/Home Assignment 5number 3markseach (CA)	ClassTest2 (2bestout of3) 10markseach (CT)	Seminarone (SA)	Class Activity anyone (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+ CAT+AT)		
MCC	31PO104	Account for Manager	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO104.1: Define basic accounting terms and principles.

Approximate Hours

Item	App X Hrs.
Cl	19
LI	0
SW	1
SL	1
Total	21

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO1.1Define key accounting terms such as assets, liabilities, revenue, and expenses. SO1.2Interpret the significance of financial transactions and their impact on the accounting equation SO1.3Apply the accounting equation to analyze simple business transactions. SO1.4 Analyze how different accounting principles are applied in various business scenarios. SO1.5Assess the accuracy and reliability of financial information		**Unit-1.0: INTRODUCTION OF FINANCIAL ACCOUNTING (19 Hours)** 1.1 Basic Concept of Accounting 1.2 Principals of Double Entry System 1.3 Branches of Accounting 1.4 Rules of Accounting 1.5 Journal Entry 1.6 Journal Entry of tax 1.7 Discount Journal Entry of Bad Debt 1.8 Subsidiary Books: Cash Book, Petty Cash Book 1.9 Subsidiary Books: Purchase Book, 1.10 Purchase Return Book 1.11 Subsidiary Books: Sales Book, 1.12 Sales Return Book, B/R, B/R 1.13 Introduction of Trial Balance 1.14 Total method of Trial 1.15 Balance Balance method of Trial Balance 1.16 Introduction of Accounting for Depreciation (According to Accounting Standard-6) 1.17 Journal entries of depreciation Depreciation of Fixed Instalment method Depreciation of Diminishing Balance method 1.18 Introduction of Ledger 1.19 Numerical of Ledger	Types of Accounting Practice of Double Entry System Practice of Journal Entries Practice of Ledger Practice of Trial Balance Practice of Depreciation

SW-1 Suggested Sessional Work (SW):

Assignments: What is accounting? Outline the need, types and accounting rules of accounts.

Mini Project: Diagram of Types of Accounting.

Other Activities (Specify): Class presentation on different types of accounting.

31PO104.2: Explain the purpose of financial statements and their interrelationships

Approximate Hours

Item	App X Hrs.
Cl	24
LI	0
SW	1
SL	1
Total	26

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO2.1Define the basic accounting principles and concepts. SO2.2 Explain the double entry accounting system and how transactions impact the accounting equation SO2.3Apply the rules of debit and credit to record transactions in various accounts. SO2.4Evaluate the impact of accounting policies on financial statements. SO2.5Design and implement internal controls to ensure the accuracy of financial reporting.	.	**Unit-2.0: FINANCIAL ACCOUNTING (Hrs.24)** 2.1 Introduction of Indian Accounting Standard Define AS-1 to AS32 2.2. Final Accounts 2.3 Introduction Manufacturing A/c 2.4 Introduction of Trading A/c 2.5 Numerical of Trading A/c 2.6 Introduction of P&L A/c 2.7 Numerical of P&L A/c 2.8 Introduction of Balance Sheet 2.9 Numerical of Balance sheet 2.10 Introduction of Final Account with Adjustment 2.11 Numerical of Final Account with Adjustment 2.12 Introduction of Departmental A/c 2.13 Format of Departmental A/c 2.14 Important Points Regarding Departmental A/c 2.15 Numerical of allocation of expenses 2.16 Inter-departmental transactions 2.17 numerical Reserve of unrelished profit numerical 2.18 Introduction of Royalty Account 2.19 Important Definition of Royalty Account 2.20 Format of Royalty Account 2.21 Analytical Table 2.22 numerical Land lord A/c 2.23 numerical Royalty 2.24 Short working A/c numerical	Practice of manufacturing account Practice of trading account Practice of trading account Practice of balance sheet Practice of departmental accounts Practice of royalty accounts

SW-2 Suggested Sessional Work (SW):

Assignments: What is meant by Balance Sheet, Trading and Profit & Loss Account? Explain and give Trading account and Profit & Loss account proforma.

Mini Project: Trading account and Profit & Loss account proforma.

Other Activities (Specify): Class presentation

31PO104.3: Apply accounting principles to solve practical business problems

Approximate Hours

Item	App X Hrs.
Cl	14
LI	0
SW	1
SL	1
Total	16

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO3.1Memorize different costing methods, including job order costing and process costing SO3.2 Apply costing methods to allocate costs to products or services SO3.3Break down variances in budgeted versus actual performance SO3.4Evaluate the relevance of different performance measures in managerial decision-making SO3.5.Design a comprehensive budget for a specific business scenario.	.	**Unit-3.0: MANAGEMENT ACCOUNTING (14 Hours)** 3.1 Introduction of Management Accounting 3.2 Introduction of Ratio Analysis 3.3 Profitability Ratio: 3.4 GPR Profitability Ratio: 3.5 NPR Turnover Ratio, 3.6 Financial Ratio 3.7 Introduction Budget and Budgeting 3.8 Types of Budgets 3.9 Budgetary Control 3.10 Operating v/s Financial Budgets 3.11 Introduction of Sales Budgets 3.12 Numerical of Sales Budget Introduction and Numerical of Purchase Budgets 3.13 Introduction of Flexible Budgets 3.14Numerical of Flexible Budgets	Practice of ratio analysis Practice of budgeting Practice of operating v/s financial budgets Practice of preparation of sales, purchase and flexible budget.

SW-3 Suggested Sessional Work (SW):

Assignments:

What Ratios would you use to measure: (i) Profitability, (ii) Liquidity, and (iii) Solvency of a concern? Give formulate for computing these ratios.

Mini Project:

Preparation of Sales, Purchase and Flexible Budget proforma.

Other Activities (Specify):

Class presentation

31PO104.4: Analyze the impact of financial decisions on a company's overall performance

Approximate Hours

Item	App X Hrs.
Cl	15
LI	0
SW	1
SL	1
Total	17

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO4.1Define key cost accounting terminology, such as direct costs, indirect costs, variable costs, and fixed costs SO4.2 Interpret the significance of cost accounting in decision-making and financial reporting SO4.3Apply costing methods to allocate indirect costs to products or services SO4.4Analyze cost structures to identify cost drivers and understand cost behavior SO4.5Evaluate the relevance of different costing methods in specific business contexts	.	**Unit-4.0: COST ACCOUNTING** **(15 Hours)** 4.1 Basic Concept of Cost Accounting 4.2 Need for Cost information 4.3 Element of Cost 4.4 Classification of Cost 4.5 Standard Costing 4.6 Introduction Material Cost 4.7 Introduction Numerical of Volume Material Cost A/c 4.8 Numerical of Material usages Labour Cost (Variances only) 4.9 Introduction Labour cost numerical Overtime labour cost numerical 4.10 Introduction of Cost Volume Profit Analysis 4.11 Cost Volume Profit Analysis Numerical 4.12 Variable cost and Direct cost numerical 4.13 Cost Objectives 4.14 BEP Numerical 4.15 MOS Numerical	Concept of cost accounting Need for cost information Practice of standard costing Practice of material cost Practice of labor cost Practice of marginal costing Practice of volume profit analysis

SW-4 Suggested Sessional Work (SW):

Assignments: What do you understand by Marginal Costing? State some of the important applications of marginal costing for managerial decisions.

Mini Project: Volume profit analysis proforma.

Other Activities (Specify): Class presentation

31PO104.5: Assess the effectiveness of different accounting methods in specific business scenarios

Approximate Hours

Item	App X Hrs.
Cl	18
LI	0
SW	1
SL	1
Total	20

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO5.1Define basic terms related to computerized accounting, such as ledger, journal, and trial balance SO5.2Explain the fundamental principles of how computerized accounting systems operate SO5.3 Apply computerized tools to generate financial reports, such as income statements and balance sheets SO5.4 Analyze the impact of data entry errors on the accuracy of financial information in a computerized system SO5.5 Evaluate the security measures and controls in computerized accounting systems .		**Unit-5.0: COMPUTERIZED ACCOUNTING SYSTEM (CAS) (18 Hours)** 5.1 Introduction of Computerized Accounts 5.2 Introduction of Accounting Software's 5.3 Creating a Company in Tally 5.4 Creating Groups in Tally 5.5 Configure and Features of Tally Creating Accounting Ledgers in Tally 5.6 Creating Stock items in Tally 5.7 Creating Stock 5.8 through Discount, Batch No, Manufacturing date, Expiry date 5.9 Voucher Entry (With Maintenance of Vouchers 5.10 Voucher Entry with Inventory Voucher 5.11 Generating Report: Cash Book 5.12 Generating Report: Ledger 5.13 Accounts Format of Trial Balance 5.14 Journal Entry relating to Trial Balance 5.15 Format of P&L A/c 5.16 Journal Entry relating to P&L A/c 5.17 Format of Balance Sheet 5.18 Journal Entry relating to Balance Sheet	Practical of generating various reports Accounting and Inventory Vouchers Final Accounting Concept Computerized Accounting Concept Basic of accounting software's

SW-5 Suggested Sessional Work (SW):

a. Assignments:

- What is Computerized Accounting System? Explain the various versions of the Tally and also write the procedure of creation a new company in Tally ERP9.

b. Mini Project:

- Model of Tally using Final Accounts

c. Other Activities

- (Specify):PPT Presentation

Brief of Hours suggested for the Course Outcome:

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
32LSC112.1: Define basic accounting terms and principles	19	1	1	21
32LSC112.2: Explain the purpose of financial statements and their interrelationships	24	1	1	26
32LSC112.3: Apply accounting principles to solve practical business problems	14	1	1	16
32LSC112.4: Analyze the impact of financial decisions on a company's overall performance	15	1	1	17
32LSC112.5: Assess the effectiveness of different accounting methods in specific business scenarios	18	1	1	20
Total Hours	90	5	5	100

Suggestion for End Semester Assessment:

Suggested Specification Table (For ESA)

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Introduction of financial accounting					
CO-2	Financial accounting					
CO-3	Management accounting					
CO-4	Cost accounting					
CO-5	Computerized accounting system (CAM)					
Total						50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note: Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

Improved Lecture

Tutorial

Case Method

Group Discussion

Demonstration

ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook,Twitter, WhatsApp, Mobile, Online sources)

Brainstorming

Suggested Learning Resources:

(a) Books:

S. No.	Title	Author	Publisher	Edition &Year
1	Financial Accounting	Dr. S.K. Singh	SBPD Publication	Edition2021
2	Management Accounting	Dr. K.L. Gupta	Sahitya Bhawan Publication	
3	Cost Accounting	Dr. M.L. Agrawal	Sahitya Bhawan Publication	
4	Cost and Management Account	Satish Inamdar	Everest Publishing House	
5	Lecture notes provided by Dept. of Management, AKS University, Satna			

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Cos, POs and PSOs Mapping

Course Title: MBA (P&O) Course Code: 31PO104

Course Title: Account for Managers

	Program Outcomes								**Program Specific Outcome**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
Course Outcomes	Business environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International exposure and cross-cultural understanding	Social responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R & D Aptitude	Contemporary Issues	Theoretical as well as practical knowledge	Work in Various functional areas	Work in various industries	To set up business enterprise
CO1: Define basic accounting terms and principles	3	3	1	3	2	3	3	2	2	1	1	1
CO2: Explain the purpose of financial statements and	3	3	3	3	2	2	1	3	1	1	1	1

their interrelationships												
CO3: Apply accounting principles to solve practical business problems	3	3	3	3	0	1	2	3	1	2	1	1
CO4: Analyze the impact of financial decisions on a company's overall performance	3	3	3	3	1	1	2	3	2	1	1	2
CO5: Assess the effectiveness of different accounting methods in specific business scenarios	3	1	1	1	1	1	1	1	3	1	2	1

Legend:1–Low,2–Medium,3– High

Course Curriculum Map:

POs& PSOs No.	Cos No. &Titles	SOs No.	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
POs 1,2,3,4,5,6,7,8 PSOs 1,2,3,4	CO1: Define basic accounting terms and principles	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit-1.0 INTRODUCTION OF FINANCIAL ACCOUNTING 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19	Asmentioned in
POs 1,2,3,4,5,6,7,8 PSOs 1,2,3,4	CO2: Explain the purpose of financial statements and their interrelationships	SO2.1 SO2.2 SO2.3 SO2.4 SO2.5		Unit-2.0 FINANCIAL ACCOUNTING 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24	
POs 1,2,3,4,5,6,7,8 PSOs 1,2,3,4	CO3: Apply accounting principles to solve practical business problems	SO3.1 SO3.2 SO3.3 SO3.4 SO3.5		Unit-3.0 MANAGEMENT ACCOUNTING 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14	
POs 1,2,3,4,5,6,7,8 PSOs 1,2,3,4	CO4: Analyze the impact of financial decisions on a company's overall performance	SO4.1 SO4.2 SO4.3 SO4.4 SO4.5		Unit-4.0COST ACCOUNTING: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.15	
POs 1,2,3,4,5,6,7,8 PSOs 1,2,3,4	CO5: Assess the effectiveness of different accounting methods in specific business scenarios	SO5.1 SO5.2 SO5.3 SO5.4 SO5.5		Unit5.0 COMPUTERIZED ACCOUNTING SYSTEM (CAS): 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18	

Course Code: 31PO105

Course Title: Quality Management and Six Sigma

Pre-requisite: Students should have a basic understanding of operations management principles and statistical analysis.

Rationale: This course is designed to equip students with the methodologies and tools of quality management, emphasizing Six Sigma techniques. Understanding these principles is critical for enhancing product quality, operational efficiency, and customer satisfaction, which are pivotal for competitive advantage.

Course Outcomes:

31PO105.1: Discuss the principles and concepts of lean manufacturing.

31PO105.2: Apply lean tools and techniques to eliminate waste and improve process efficiency.

31PO105.3: Analyze the role of quality management in lean manufacturing systems.

31PO105.4: Develop strategies for implementing lean manufacturing and continuous improvement initiatives.

31PO105.5: Evaluate the impact of lean manufacturing and quality management practices on organizational performance.

Scheme of Studies:

Code	Course Code	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	31PO105	Quality Management and Six Sigma	3	0	2	1	6	3

Legend:

CI: Classroom Instruction

LI: Not Applicable

SW: Sessional Work

SL: Self Learning

C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

			Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)							
Code	Course	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ESA)
PO	**31PO105**	**Quality Management and Six Sigma**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO105.1: Discuss the principles and concepts of lean manufacturing.

Approximate Hours

Item	App X Hrs.
CI	4
LI	0
SW	2
SL	1
Total	7

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Understand the concept and importance of quality in various industries. SO1.2: Discuss the different dimensions of quality. SO1.3: Trace the evolution of quality management practices. SO1.4: Recognize the contributions of quality gurus. SO1.5: Explore quality management systems and standards such as ISO 9000 and TQM.		**Unit I - Introduction to Quality Management (Hrs.04)** 1.1. Defining Quality and its significance. 1.1 : Study of the historical evolution of quality management. 1.2 : Contributions of Deming, Juran, and other quality gurus. 1.3 : Overview of ISO 9000, TQM, and other quality systems.	Research on different quality management systems implemented in various organizations.

SW-1 Suggested Sessional Work (SW):

a. Analysis of a company's quality management approach.

b. Presentation on the biographies and philosophies of quality management pioneers.

31PO105.2: Apply lean tools and techniques to eliminate waste and improve process efficiency.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO2.1: Define Six Sigma and understand its historical context. SO2.2: Differentiate between DMAIC and DMADV methodologies. SO2.3: Outline the roles and responsibilities within a Six Sigma project. SO2.4: Evaluate the benefits and challenges of Six Sigma. SO2.5: Discuss the integration of Six Sigma with other quality initiatives.		**Unit II - Six Sigma Basics (Hrs.05)** 2.1 Introduction to Six Sigma principles. 2.2: Detailed examination of Six Sigma methodologies. 2.3: Discussion on Six Sigma in contemporary business practices. 2.4: Outline the roles and responsibilities within a Six Sigma project. 2.5: Case study discussion on Six Sigma.	Case studies analysis of successful Six Sigma implementations.

SW-2 Suggested Sessional Work (SW):

a. Simulating a Six Sigma project selection process.

b. Debating the merits and challenges of Six Sigma in current industries.

31PO105.3: Analyze the role of quality management in lean manufacturing systems.

Approximate Hours

Item	App X Hrs.
CI	05
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO3.1: Develop a project charter and articulate a problem statement. SO3.2: Capture the Voice of the Customer (VOC). SO3.3: Identify and measure Critical-to-Quality (CTQ) metrics. SO3.4: Construct process maps and SIPOC diagrams. SO3.5: Conduct project scope and stakeholder analysis.		**Unit III - Define Phase (Hrs.05)** 3.1 Essentials of starting a Six Sigma project. 3.2: Techniques for capturing VOC and understanding CTQ metrics. 3.3: Process mapping and identification of project scope. 3.4: Discussion on ways to identify and measure Critical-to-Quality (CTQ) metrics. 3.5: Case study discussion on role of quality management in lean manufacturing systems.	Development of a project charter for a hypothetical quality improvement project.

SW-3 Suggested Sessional Work (SW):

a. Creating SIPOC diagrams for a process in a chosen industry.

b. Developing a stakeholder analysis matrix for a Six Sigma project.

31PO105.4: Develop strategies for implementing lean manufacturing and continuous improvement initiatives.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO4.1: Master data collection techniques and tools. SO4.2: Analyze process capability. SO4.3: Perform measurement system analysis (MSA). SO4.4: Utilize descriptive statistics and data visualization. SO4.5: Apply basic probability and statistical distributions.		**Unit IV - Measure Phase (Hrs.05)** 4.1 Strategies for effective data collection. 4.2: Process capability and measurement system analysis. 4.3: Introduction to statistical analysis for Six Sigma. 4.4: Analyze process capability. 4.5: Case study on implementation of continuous improvement initiatives	Use of statistical software for data analysis and visualization.

SW-4 Suggested Sessional Work (SW):

a. Collecting and analyzing data from a simulated process.

b. Conducting an MSA on measurement tools used in an organization.

31PO105.5: Evaluate the impact of lean manufacturing and quality management practices on organizational performance.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO5.1: Identify and analyze root causes of process variations. SO5.2: Conduct hypothesis testing. SO5.3: Perform Analysis of Variance (ANOVA). SO5.4: Employ regression analysis for process improvement. SO5.5: Understand and apply non-parametric tests.		**Unit V - Analyze Phase (Hrs.05)** 5.1. Root cause analysis and hypothesis testing methodologies. 5.2: Analysis of Variance (ANOVA). 5.3: ANOVA and regression techniques for identifying relationships in data. 5.4: Application of non-parametric tests in Six Sigma projects. 5.5: Case study on impact of lean manufacturing and quality management practices on organizational performance.	Study of various statistical tests and their application in real-world scenarios.

SW-5 Suggested Sessional Work (SW):

a. Root cause analysis project on a given problem.

b. Statistical analysis exercises using real or simulated data sets.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Discuss the principles and philosophies of quality management	4	2	1	7
CO2: Apply various quality management tools and techniques to identify and solve problems	5	2	1	8
CO3: Analyze the role of the Six Sigma methodology in improving process performance	5	2	1	8
CO4: Develop a quality improvement plan using the DMAIC framework	5	2	1	8
CO5: Evaluate the effectiveness of quality management systems and Six Sigma projects	5	2	1	8
Total Hours	**24**	**10**	**6**	**39**

Suggestion for End Semester Assessment

Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Unit I - Introduction to Quality Management					
CO-2	Unit II - Six Sigma Basics					
CO-3	Unit III - Define Phase					
CO-4	Unit IV - Measure Phase					
CO-5	Unit V - Analyze Phase					
	Total					**50**

Legend: Ap: Apply, an: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT,

Blog, Facebook, Twitter, Whatsapp, Mobile, Online sources)

9. Brainstorming

Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition & Year
1	Six Sigma: Concepts, Tools, and Applications	K. Shridhara Bhat	PHI Learning	2020
2	The Six Sigma Handbook	Thomas Pyzdek and Paul A. Keller	Tata McGraw Hill	2010
3	Quality Management	Dr. K. Ravichandran	Tata McGraw Hill	2011
4	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Course Code: 31PO105
Course Title: Quality Management and Six Sigma
Cos, POs and PSOs Mapping

	Program Outcomes								**Program Specific Outcomes**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
Course Outcomes	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will discuss the principles and philosophies of quality management	2	3	1	1	1	1	2	3	2	2	3	1
CO2 Students will apply various quality management tools and techniques to identify and solve problems	1	3	1	1	2	3	3	3	3	3	3	2

CO3 Students will analyze the role of the Six Sigma methodology in improving process performance	1	3	1	1	1	2	3	3	3	2	3	1
CO4 Students will develop a quality improvement plan using the DMAIC framework	1	3	1	1	1	3	3	3	2	3	3	3
CO5 Students will evaluate the effectiveness of quality management systems and Six Sigma projects	2	3	1	1	2	2	3	3	3	3	3	1

Legend: 3=High, 2=Medium, 1=Low

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Quality Management 1.1, 1.2, 1.3, 1.4	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Six Sigma Basics 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Define Phase 3.1, 3.2, 3.3, 3.4, 3.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Measure Phase 4.1, 4.2, 4.3, 4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Analyze Phase 5.1, 5.2, 5.3, 5.4, 5.5	

Course Code: 31PO106

Course Title: Facility Location and Layout

Pre-requisite: A background in operations management or organizational design is recommended.

Rationale: Facility location and layout have a significant impact on operational efficiency and effectiveness. This course prepares students to make strategic decisions regarding facility placement and design, considering factors such as cost, logistics, and process flows.

Course Outcomes:

31PO106.1: Discuss the factors influencing facility location and layout decisions.
31PO106.2: Apply various facility location and layout models to optimize resource allocation.
31PO106.3: Analyze the relationship between facility location, layout, and overall supply chain performance.
31PO106.4: Develop strategies for selecting and designing efficient facility locations and layouts.
31PO106.5: Evaluate the effectiveness of facility location and layout decisions in different business scenarios.

Scheme of Studies:

Code	Course	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	**31PO106**	**Title: Facility Location and Layout**	3	0	2	1	6	3

Legend:

CI: Classroom Instruction

LI: Not Applicable

SW: Sessional Work

SL: Self Learning

C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

			Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)							
Code	Course	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ESA)
PO	**31 PO 106**	**Title: Facility Location and Layout**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO106.1: Discuss the factors influencing facility location and layout decisions.

Approximate Hours

Item	App X Hrs.
CI	4
LI	0
SW	2
SL	1
Total	7

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Understand the significance of facility location in operations management. SO1.2: Identify the types of facility location decisions and their impact on operations. SO1.3: Evaluate the factors influencing facility location decisions. SO1.4: Apply facility location models and techniques to real-world scenarios. SO1.5: Utilize multi-criteria decision analysis for facility location.		**Unit I - Introduction to Facility Location (Hrs.04)** 1.1 Core concepts and importance of facility location in supply chains. 1.2: Strategic factors in facility location decision-making. 1.3: Introduction to facility location models and their application. 1.4: Case study on multi-criteria decision analysis for facility location.	Research on how different industries approach facility location decisions.

SW-1 Suggested Sessional Work (SW):

a. Case study analysis of a company's facility location strategy.

b. Use of decision analysis tools to evaluate facility location options.

31PO106.2: Apply various facility location and layout models to optimize resource allocation.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO2.1: Understand the principles of median and centroid models. SO2.2: Apply the transportation model to facility location. SO2.3: Utilize the gravity model for location planning. SO2.4: Explore integer and mixed-integer programming models. SO2.5: Analyze network location models and their applications.		**Unit II - Quantitative Facility Location Models (Hrs.05)** 2.1 Quantitative models for facility location decision-making. 2.2 : Problem-solving using various mathematical models in facility location. 2.3 : Case study on gravity model for location planning. 2.4 : Problem statement discussion on transportation model to facility location. 2.5 : Comparison of various mathematical models in facility location.	Simulation exercises for applying quantitative models to facility location.

SW-2 Suggested Sessional Work (SW):

a. Practical exercises on transportation and centroid model calculations.

b. Projects on applying network models to determine optimal facility locations.

31PO106.3: Analyze the relationship between facility location, layout, and overall supply chain performance.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO3.1: Strategize global facility location decisions. SO3.2: Assess the factors affecting global facility location choices. SO3.3: Consider offshoring and nearshoring strategies. SO3.4: Manage risks associated with global facility locations. SO3.5: Integrate sustainability into facility location decisions.		**Unit III - Global Facility Location (Hrs.05)** 3.1 Globalization and its influence on facility location. 3.2 : Offshoring and nearshoring strategies. 3.3 : Risk assessment and management in an international context. 3.4 : Sustainability implementation in facility location decisions. 3.5 : Case study on risks associated with global facility locations.	Analysis of global facility location trends and sustainability practices.

SW-3 Suggested Sessional Work (SW):

a. Development of a global facility location plan for a hypothetical company.

b. Risk analysis project for international facility location.

31PO106.4: Develop strategies for selecting and designing efficient facility locations and layouts.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO4.1: Articulate the importance of facility layout in operations management. SO4.2: Distinguish between different types of facility layouts. SO4.3: Examine factors that influence facility layout decisions. SO4.4: Describe the facility layout design process. SO4.5: Evaluate facility layout for efficiency and improvement.		**Unit IV - Introduction to Facility Layout (Hrs.05)** 4.1 Fundamental principles of facility layout planning. 4.2 : Approaches to designing and evaluating facility layouts. 4.3 : Different types of facility layouts. 4.4 : Facility layout decisions. 4.5 : Facility layout for efficiency and improvement.	Study of various facility layout configurations and their operational impact.

SW-4 Suggested Sessional Work (SW):

a. Layout design exercise using a given set of operational requirements.

b. Assessment of an existing facility layout and recommendations for improvement.

31PO106.5: Evaluate the effectiveness of facility location and layout decisions in different business scenarios.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO5.1: Apply systematic layout planning (SLP). SO5.2: Utilize computer-aided layout design tools. SO5.3: Conduct material flow analysis using travel charts. SO5.4: Design line balancing and assembly lines for efficiency. SO5.5: Implement cellular manufacturing and group technology.		**Unit 5-Facility Layout Design Techniques (Hrs.05)** 5.1: Techniques and tools for effective facility layout design. 5.2: Best practices in line balancing and assembly line design. 5.3: Computer-aided layout design tools. 5.4: Material flow analysis using travel charts. 5.5: Cellular manufacturing and group technology.	Exploration of case studies on cellular manufacturing and group technology.

SW-5 Suggested Sessional Work (SW):

a. Simulation of line balancing for a production line.

b. Design project using computer-aided layout design software.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Discuss the factors influencing facility location and layout decisions	4	2	1	7
CO2: Apply various facility location and layout models to optimize resource allocation	5	2	1	8
CO3: Analyze the relationship between facility location, layout, and overall supply chain performance	5	2	1	8
CO4: Develop strategies for selecting and designing efficient facility locations and layouts	5	2	1	8
CO5: Evaluate the effectiveness of facility location and layout decisions in different business scenarios	5	2	1	8
Total Hours	24	10	5	39

Suggestion for End Semester Assessment

Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Unit I - Introduction to Facility Location					
CO-2	Unit II - Quantitative Facility Location Models					
CO-3	Unit III - Global Facility Location					
CO-4	Unit IV - Introduction to Facility Layout					
CO-5	Unit V - Facility Layout Design Techniques					
	Total					50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:
1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook, Twitter, Whatsapp, Mobile, Online sources)
9. Brainstorming

Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition & Year
1	Facility Location: Applications and Theory	Zvi Drezner and Horst W. Hamacher	Springer	2001
2	Facilities Planning	James A. Tompkins, John A. White, Yavuz A. Bozer, and J. M. A. Tanchoco	Wiley India	2010
3	Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse	Gwynne Richards	Kogan Page	2011
4	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Miss. KiranChhabariya, Assistant Professor, FMS, AKS University, Satna.

Mr.Anurag Singh Parihar, Teaching Associate, FMS, AKS University, Satna.

Cos, POs and PSOs Mapping

Course Outcomes	Program Outcomes								Program Specific Outcomes			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will discuss the principles and concepts of lean manufacturing	2	3	1	1	1	1	2	3	2	2	3	1
CO2 Students will apply lean tools and techniques to eliminate waste and improve process efficiency	1	3	1	1	2	3	3	3	3	3	3	2
CO3 Students will analyze the role of quality management in lean	1	3	1	1	1	2	3	3	3	2	3	1

manufacturing systems												
CO4 Students will develop strategies for implementing lean manufacturing and continuous improvement initiatives	1	3	1	1	1	3	3	3	2	3	3	3
CO5 Students will evaluate the impact of lean manufacturing and quality management practices on organizational performance	2	3	1	1	2	2	3	3	3	3	3	1

Legend: 3=High, 2=Medium, 1=Low

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Facility Location 1.1, 1.2, 1.3, 1.4, 1.5	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Quantitative Facility Location Models 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Global Facility Location 3.1, 3.2, 3.3, 3.4, 3.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Introduction to Facility Layout 4.1, 4.2, 4.3, 4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Facility Layout Design Techniques 5.1, 5.2, 5.3, 5.4, 5.5	

SEMESTER: - II

Course Code: **31PO201**

Course Title: **Managerial Economics**

Pre-requisite: **Student should have basic knowledge of Micro Economics, Macro Economics and Business Practices.**

Rationale: The course managerial economics is very important for management students because it encompasses the knowledge about Demand, Supply, Production Function, Cost Function, and Different types of markets, Pricing under different types of markets, Inflation, National Income, Business Cycle, Monetary Policy and Fiscal Policy etc. Knowledge of above-mentioned concepts and issues will help the management students to work effectively and efficiently in their jobs and take prompt and correct decisions.

Course Outcomes:

31PO201.1: The student will define the concepts of Managerial Economics, Demand and Elasticity of Demand and will list the factors affecting demand and will do demand forecasting.

31PO201.2: The student will demonstrate use of production function and cost function in short run as well as in long run and also the working of law of supply.

31PO201.3: The student will illustrate the price determination under different market conditions.

31PO201.4: Student will calculate GDP, GNP, NDP, NNP, Private Income, Personal Income and Per Capita Income by different methods.

31PO201.5: The student will critically evaluate the different theories of Business Cycle.

Scheme of Studies:

Code	Course	Course Title			Scheme of studies (Hours per Week)			Total Credits(C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
MCC	**31PO201**	Managerial Economics	6	0	1	1	8	6

Legend:

CI: Classroom Instruction (Includes different instructional strategies i.e. Lecture(L)and Tutorial (T) and others),

LI: Laboratory Instruction (Includes Practical performance sin laboratory workshop, field or other location suing different instructional strategies)

SW: Sessional Work (includes assignment, seminar, mini project etc.),

SL: Self Learning,

C: Credits.

Note: SW&SLhastobeplannedandperformedunderthecontinuousguidanceandfeedbackofteacherto ensure outcome of Learning.

Scheme of Assessment:

Theory

Code	Course	Course Title	Scheme of Assessment (Marks)						
			Progressive Assessment (PRA)					End Semester Assessment (ESA)	Total Marks (PRA+ESA)
			Class/Home Assignment 5Assignments 3 marks Each (CA)	2 Class Test (best 2 out of3) 10 marks each(CT)	One Seminar (SA)	Class Attendance (AT)	Total Marks (CA+CT+SA+AT)		
MCC	**31PO201**	Managerial Economics	15	20	10	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should show case the mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO201.1: The student will define the concepts of Managerial Economics, Demand and Elasticity of Demand and will list the factors affecting demand and Elasticity of Demand and will do demand forecasting.

Approximate Hours

Item	App X Hrs.
Cl	24
LI	0
SW	2
SL	2
Total	28

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO1.1 Student will define the managerial Economics and will understand the subject matter of managerial economics. SO1.2Student will explain about Demand, Determinants of Demand and Law of Demand. SO1.3Student will Calculate The value of elasticity of Demand. SO1.4Student will forecast the demand.		**Unit-1.0 Introduction to Managerial Economics (Hras.24)** 1.1 Meaning and Definition of Managerial Economics. 1.2 Nature of Managerial Economics. 1.3 Scope of Managerial Economics. 1.4 Concept of Demand 1.5 Determinants of Demand. 1.6 Types of Demand. 1.7 Individual and Market Demand 1.8 Curve and Schedule. 1.9 Demand Function and Changes in Demand. 1.10 Law of Demand. 1.11 Concept of Elasticity of Demand. 1.12 Percentage Method of Measuring Elasticity of Demand. 1.13 Point and Arc Method of Measuring Elasticity of Demand. 1.14 Total Expenditure Method of Measuring Elasticity of Demand. 1.15 Factors Affecting Elasticity of Demand. 1.16 Meaning of Demand forecasting, 1.17 Steps involved in Demand Forecasting and Factors 1.18 Affecting Demand Forecasting. 1.19 Opinion Polling Methods. 1.20 Statistical Methods: - 1.21 Graphical Method 1.22 Least Square Method. 1.23 Statistical Methods: - Overview of Barometric, 1.24 Regression and Econometric Method	1. Income and Cross Demand 2. Types of Elasticity of Demand

SW-1Suggested Sessional Work (SW):

a. Assignments:

i. Scope of Managerial Economics, Factors affecting Market Demand, Law of Demand, Price Demand. Methods of Demand Forecasting.

b. Mini Project:

i. Explain Income Demand for normal goods and Inferior goods with the help of demand curve and schedule.

31PO201.3: The student will illustrate the price determination under different market conditions.

Approximate Hours

Item	Appx Hrs.
Cl	19
LI	0
SW	2
SL	1
Total	22

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO3.1Student will be able to explain the price determination under perfect competition market. SO3.2Student will be able to explain the price determination under monopoly market. SO3.3Student will be able to explain the price determination under monopolistic market. O3.4Student will demonstrate the behaviour of demand curve under oligopoly	.	Unit-3 : MARKET STRUCTURE & PRICING AND INFLATION **(Hrs.19)** 3.1 Introduction to Market Structure 3.2 Concept of market and its characteristics. 3.3 Perfect competition market 3.4 Characteristics of perfect competition market 3.5 Price Determination under perfect competition market in short run and long run 3.6 Monopoly market and its characteristics. 3.7 Price Determination under monopoly market in short run and long run	i. Concept of Excess capacity in monopolistic Market ii. Difference among Perfect competition, Monopoly, Monopolistic and Oligopoly market

market (Sweezy kinked demand curve). SO3.5 Student will be able to explain the price determination under Oligopoly market.		3.8 Monopolistic market 3.9 Characteristics of Monopolistic market 3.10 Price Determination under monopolistic market in short run and long run 3.11 Oligopoly market 3.12 Characteristics of Oligopoly market 3.13 Sweezy kinked demand curve 3.14 Price determination in oligopoly market 3.15 Introduction to inflation, 3.16 Types of Inflation 3.17 Causes of Inflation. 3.18 Effects of Inflation 3.19 Measures to Check Inflation.	

SW-3 Suggested Sessional Work (SW):

a. Assignments:

i. Cartels, Price Determination under perfect competition market

ii. Measures to check inflation, Oligopoly Market

b. Mini Project:

Develop a new product or service and determine its price. (Subject teacher will detail)

c. Other Activities (Specify):

Make a list of major monopolists of India

31PO201.4: Student will calculate GDP, GNP, NDP, NNP, Private Income, Personal Income and Per Capita Income by different methods.

Approximate Hours

Item	Appx Hrs.
Cl	15
LI	0
SW	2
SL	1
Total	18

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO4.1Student will be able to define the national income SO4.2Student will explain the GDP, GNP, NDP, and NNP at market price and factor cost. SO4.3 Student will calculate the national income at factor cost and market price by product, income and expenditure methods. SO4.4Student will calculate the Domestic Income, Private Income, Personal Income, Disposable Income, Real Income and Per Capita Income. SO4.5Student will explain the difficulties of Product, Income and expenditure methods in the measurement of National Income.		Unit-4: National Income **(Hrs.15)** 4.1 Introduction 4.2 Definitions of national income 4.3 Gross domestic product at market price and factor cost 4.4 Net domestic product at market price and factor cost. 4.5 Gross national Product at market price and factor cost 4.6 Net national product at market price and factor cost. 4.7 Concept and calculation of Domestic Income, 4.8 Concept and calculation of Private Income, 4.9 Concept and calculation of Personal Income 4.10 Concept and calculation of Disposable Income, 4.11 Concept and calculation of Real Income 4.12 Concept and calculation of Per Capita Income. 4.13 Measurement of National Income by Product method and its difficulties 4.14 Measurement of National Income by Income method and its difficulties 4.15 Measurement of National Income by Expenditure method and its difficulties	i. Calculate GDP, GNP, NDP and NNP at market price and factor cost. ii. Value Added Approach to calculate GDP.

SW-4Suggested Sessional Work (SW):

a. Assignments:

i. Calculate GDP, GNP, NDP, NNP, Private Income and Personal Income (Data will be provided by subject teacher)

ii. Product method, Income method, and Expenditure method of measuring nation income

b. Mini Project:

- Make a comparative report about GDP of BRICS nations for last 5 years.

c. Other Activities (Specify):

- Write a report on India's contribution in world GDP.

31PO201.5: The student will critically evaluate the different theories of Business Cycle.

Approximate Hours

Item	Appx Hrs.
Cl	11
LI	0
SW	2
SL	1
Total	14

Session Outcomes (SOs)	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
SO5.1Student will explain the business cycle. SO5.2Student will critically evaluate the mentioned theories of Business Cycle SO5.3Student will Describe the Monetary Policy SO5.4Student will describe the Fiscal Policy		Unit5: BUSINESS CYCLE AND MONETARY & FISCAL POLICY: **(Hrs.11)** 5.1 Introduction of Business Cycle 5.2 Meaning Of business Cycle 5.3 Phases of Business Cycle 5.4 Features of business cycle. 5.5 Hawtrey's Monetary Theory of Business Cycle 5.6 Hayek's Monetary Overinvestment Theory of Business Cycle 5.7 Schumpeter's Innovation Theory of Business Cycle 5.8 Pigou's Psychological Theory of Business Cycle 5.9 Hicks's Theory of Business Cycle 5.10 Overview of Monetary Policy 5.11 Overview of Fiscal Policy	1.Instruments of fiscal policy and monetary policy

SW-5SuggestedSessionalWork (SW):

a. Assignments:

- Phases of Business Cycle, Schumpeter's Innovation Theory of Business Cycle and Hicks's theory of Business Cycle, Role of Fiscal Policy in checking the inflation

b. Mini Project:

- Make a report on current business cycle phase of Indian Economy and highlight the major macro-economic variables current position.

c. Other Activities (Specify):

- Write a note on current monetary policy of India.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
31PO201.1: The student will define the concepts of Managerial Economics, Demand and Elasticity of Demand and will list the factors affecting demand and Elasticity of Demand and will do demand forecasting.	24	2	2	28
31 PO201.2:The student will demonstrate use of production function and cost function in short run as well as in long run and also the working of law of supply.	21	2	1	24
31 PO201.3:The student will illustrate the price determination under different market conditions.	19	2	1	22
31 PO201.4 Student will calculate GDP, GNP, NDP, NNP, Private Income, Personal Income and Per Capita Income by different methods.	15	2	1	18
31 PO201.5: The student will critically evaluate the different theories of Business Cycle.	11	2	1	14
TotalHours	90	10	6	106

Suggestion for End Semester Assessment
Suggested Specification Table (For ESA)

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	INTRODUCTION TO MANAGERIAL ECONOMICS					
CO-2	PRODUCTION AND COST ANALYSIS					
CO-3	MARKET STRUCTURE & PRICING AND INFLATION					
CO-4	NATIONAL INCOME					
CO-5	BUSINESS CYCLE AND MONETARY & FISCAL POLICY					
Total						50

Legend: Ap:Apply, An:Analyze, Ev:Evaluate Cr: Create

The end of semester assessment for Managerial Economics will be held with written examination of 50 marks.

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Demonstration
7. ICT Based Teaching Learning (Video Demonstration/ Tutorials CBT, Blog, Facebook, Twitter, WhatsApp, Mobile, Online sources)
8. Brainstorming

Suggested Learning Resources:

(a)Books:

S. No.	Title	Author	Publisher	Edition &Year
1	Managerial Economics	Dr. H.L.Ahuja	S. Chand	Latest
2	Managerial Economics -- Theory and Application	D. M. Mithani		Latest
3	Managerial Economics	D. N. Dwivedi	Vikash Publications	Latest
4	Managerial Economics	M. L. Jhingan, J. K. Stephen	Vrinda Publisher	Latest

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Cos, Pos and PSOs Mapping
Programme Title: MBA
CourseCode:31PO201
Course Title: Managerial Economics

Course Outcomes	**Program Outcome**								**Program Specific Outcome**			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R& D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To Setup Business Enterprise
CO1:The student will define the concepts of Managerial Economics, Demand and Elasticity of Demand and will list the factors affecting demand and	-	2	-	1	1	-	3	2	1	1	1	1

Elasticity of Demand and will do demand forecasting.												
CO2: The student will demonstrate use of production function and cost function in short run as well as in long run and also the working of law of supply.	1	3	1	1	2	-	3	2	1	1	1	-
CO3The student will illustrate the price determination under different market conditions.	2	3	1	-	1	-	3	1	2	1	1	-
CO 4: Student will calculate GDP, GNP, NDP, NNP, Private Income, Personal Income and Per Capita Income by different methods.	1	3	1	1	1	-	3	1	2	2	1	-
CO5:The student will critically evaluate the different theories of Business Cycle.	1	3	-	1	2	1	3	1	2	2	1	-

Legend:1–Low,2–Medium,3–High

Course Curriculum Map:

Pos & PSOs No.	Cos No.& Titles	SOs No.	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
PO1,2,3,4,5,6, 7,8 PSO1,2,3,4	CO-1: The student will define the concepts of Managerial Economics, Demand and Elasticity of Demand and will list the factors affecting demand and Elasticity of Demand and will do demand forecasting.	SO1.1 SO1.2 SO1.3 SO1.4		Unit-1: INTRODUCTION TO MANAGERIAL ECONOMICS 1.1,1.2,1.3,1.4,1.5,1.6,1.7,1.8,1.9,1.10,1.11,1.12, 1.13,1.4,1.15,1.16,1.17,1.18,1.19,1.20,1.21,1.22, 1.23,1.24	As mentioned in Page number 2 to 6
PO1,2,3,4,5,6, 7,8 PSO1,2,3,4	CO 2 : The student will demonstrate use of production function and cost function in short run as well as in long run and also the working of law of supply.	SO2.1 SO2.2 SO2.3 SO2.4 SO2.5 SO2.6		Unit-2: PRODUCTION AND COST ANALYSIS 2.1,2.2,2.3,2.4,2.5,2.6,2.7,2.8, 2.9,2.10,2.11,2.12,2.13,2.14,2.15,2.16,2.17,2.18,2.19,2.20,2.21	
PO1,2,3,4,5,6, 7,8 PSO1,2,3,4	CO3 : The student will illustrate the price determination under different market conditions.	SO3.1 SO3.2 SO3.3 SO3.4 SO3.5		Unit-3 : MARKET STRUCTURE & PRICING AND INFLATION 3.1,3.2,3.3,3.4,3.5,3.6,3.7,3.8, 3.9, 3.10, 3.11, 3.12, 3.13,3.14,3.15,3.16	
PO1,2,3,4,5,6, 7,8 PSO1,2,3,4	CO 4: Student will calculate GDP, GNP, NDP, NNP, Private Income, Personal Income and Per Capita Income by different methods.	SO4.1 SO4.2 SO4.3 SO4.4 SO4.5		Unit-4: NATIONAL INCOME 4.1,4.2,4.3,4.4,4.5,4.6,4.7,4.8,4.9,4.10,4.11,4.12,4.13,4.14,4.15	
PO1,2,3,4,5,6, 7,8 PSO1,2,3,4	CO5: The student will critically evaluate the different theories of Business Cycle.	SO5.1 SO5.2 SO5.3 SO5.4		Unit 5: BUSINESS CYCLE AND MONETARY & FISCAL POLICY 5.1,5.2,5.3,5.4,5.5, 5.6, 5.7, 5.8,5.9,5.10,5.11	

Course Code:	**31PO202**
Course Title:	**Financial Management**
Pre- requisite:	Student should have basic knowledge of Financial Concepts, markets, instruments and regulations.
Rationale:	The course Financial Management is important for management studies because it addresses individuals' and businesses' diverse financial needs. In essence, Financial Management are the backbone of a functioning economic system. They provide the necessary tools and infrastructure for the allocation of resources, risk management, capital formation, and overall economic development. The sector's ability to adapt to technological advancements and changing economic conditions is key to its ongoing relevance and effectiveness.

Course Outcomes:

31PO202.1: The student will be able to understand the key concepts of Financial Management along with wealth and profit maximization.

31PO202.2: The student will be able to explain in depth understanding of different avenue of financial system i.e. Capital market and Money market.

31PO202.3: The student will be able to describe the importance of Financial Planning along with Capitalization.

31PO202.4: The students will be able to analyze different types of Financial Statements along with their techniques.

31P.O2025: The student will evaluate the concept of Working Capital along with its components and sources of financing working capital.

Scheme of Studies:

Code	**Course**	**Course Title**			**Scheme of studies (Hours per Week)**			**Total Credits (C)**
			CI	**LI**	**SW**	**SL**	**Total Study Hours (CI+LI+SW+SL)**	
MCC	**31PO202**	Financial Management	6	0	1	1	8	6

Legend:

CI: Classroom Instruction (Includes different instructional strategies i.e. Lecture (L) and Tutorial (T) and others),

LI: Laboratory Instruction (Includes Practical performances in laboratory workshop, field or other locations using different instructional strategies)

SW: Sessional Work (includes assignment, seminar, mini project etc.),

SL: Self Learning,

C: Credits.

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

Code	Course	Course Title	Scheme of Assessment (Marks)						
			Progressive Assessment (PRA)					End Semester Assessment (ESA)	Total Marks (PRA+ ESA)
			Class/Home Assignment 5 Assignments 3 marks Each (CA)	2 Class Test (best 2 out of 3) 10 marks each (CT)	One Seminar (SA)	Class Attendance (AT)	Total Marks (CA+CT+SA+AT)		
MCC	**31PO 202**	Financial Management	15	20	10	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO202.1: The student will be able to understand the key concepts of Financial Management along with wealth and profit maximization.

Approximate Hours

Item	App X Hrs.
Cl	12
LI	0
SW	1
SL	1
Total	14

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO1.1 Student will understand the concept of Financial Management. SO1.2 Student will analyze the scope of Financial Management. SO1.3 Student will evaluate the various decisions involved in financial management. SO1.4 Student will explain the concept of Profit and Wealth Maximization. SO1.5 Students will apply the knowledge of working of Organizational Hierarchy of Finance Department.	.	**Unit-1.0 Introduction to Financial Management (Hrs.12)** 1.1 Concept of Business Finance 1.2 Forms of business organization 1.3 Meaning and Definition of 1.4 Financial Management. 1.5 Nature and Scope of Financial Management. 1.6 Objectives 1.7 Finance function in business organization 1.8 Financing, Investment, Dividend decisions 1.9. Role of Finance in other functions in an organization 1.10. Role of Finance Manager 1.11 Profit Maximization, Wealth Maximization 1.12. Value Creation, VMO & CSR Organizational hierarchy of Finance department	Role of Finance Importance of Financial Management

SW-1 Suggested Sessional Work (SW):

a. Assignments:

- Discuss the executive and routine functions of Financial Management.

b. Mini Project:

- Write a detail note on growth of Financial Management in India.

c. Other Activities (Specify):

- Presentation

31PO202.2: The student will be able to explain in depth understanding of different avenue of financial system i.e. Capital market and Money market.

Approximate Hours

Item	Appx Hrs.
Cl	32
LI	0
SW	1
SL	1
Total	34

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO2.1 Student will explain the concept of Financial System SO2.2 Student will demonstrate the working of Financial Market SO2.3 Student will understand the types of Financial Instruments SO2.4 Student will explain the concepts of Financial Services SO2.5 Student will evaluate the functions of regulatory organization i.e.	.	**Unit-2 Introduction to Indian Financial System (Hrs.32)** 2.1. Meaning of Financial System Structure, constituents 2.2. Role of each constituent Financial Markets – nature, Objectives 2.3. Functions of Money and Capital market Primary & Secondary market 2.4. Organized Money Market Unorganized Money Market 2.6. Financial Instruments – types, nature 2.7. Advantages & disadvantages 2..8 Long term loans, equity, preference shares, 2.9. Bonds, Debentures, bonds, CPs, CDs 2.10 Retained earnings, reserves 2.12 Financial Institutions/intermediaries 2.13 Nature, banking & nonbanking financial institutions 2.14 Functions, role in economic development,	Foreign sources of Financing Internal sources of Finance

RBI and SEBI.		regulatory mechanism 2.15 Financial Services 2.16 Underwriting 217 Venture capital 2.18 Factoring, forfeiting 2.19 RBI Functions	
		2.20 SEBI Functions 2.21 call money 2.22CP, CD 2.23 TB, CB 2.24 MMMF, Repo market 2.25 Inter-corporate loans 2.26 ADR 2.27 GDR 2.28 Merchant banking 2.29 Investment banking 2.30 Lease 2.31 Hire purchase 2.32 Insurance Services	

SW-2Suggested Sessional Work (SW):

Assignments:

Describe the participating institutions in Financial Market along with classification of Financial Market

Mini Project:

Describe the role of Financial System in the country's economic development

Other Activities (Specify):

Group Discussion

31PO202.3: The student will describe the importance of Financial Planning along with Capitalization.

Approximate Hours

Item	Appx Hrs.
Cl	11
LI	0
SW	1
SL	1
Total	13

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO3.1 Student will be able to explain the concept of Financial Planning SO3.2 Student will understand the various factors in drafting Financial Plan SO3.3 Student will apply concept of Capitalization in practical aspects. SO3.4 Student will analyze the various stages of Capitalization SO3.5 Student will evaluate the impact of Over Capitalization and Under Capitalization	.	**Unit-3: Financial Planning Meaning, Definition Need (Hrs.11)** 3.1. Characteristics of 3.2. financial plan 3.3. Factors in drafting 3.4. financial plan 3.5. Limitations of 3.6. financial plan 3.7. Capitalization – meaning 3.8. Concept 3.9 Theories 3.10. Stages – Under and Over 3.11. Capitalization Impact 11 Remedies	Process of Financial Planning Importance of Financial Planning

SW-3 Suggested Sessional Work (SW):

Assignments:

i. Explain the role of Financial Planning for successful business operations

Mini Project:

Numerical on finding out Fair or optimum amount of Capitalization

Other Activities (Specify): Presentation

31PO202.4: Student will analyze different types of Financial Statements along with their techniques.

Approximate Hours

Item	Appx Hrs
Cl	17
LI	0
SW	1
SL	1
Total	19

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO4.1 Student will understand the concept of Financial Statements. SO4.2 Student will analyze the various tools of Financial Statements SO4.3 Student will calculate the various types of ratios. SO4.4 Student will evaluate the working of Fund Flow Statement SO4.5 Student will gain knowledge about Cash Flow Statement	.	**Unit- 4: Analysis & Interpretation of Financial Statement (Hrs.17)** 4.1. Meaning, significance Tools of financial statement analysis Ratio Analysis- Meaning, Classification Profitability ratios, turnover ratios, Leverage ratios, financial ratios, operating ratios Fund Flow Analysis – Meaning, definition Schedule of working capital changes Statement of sources & uses of finance uses/significance of FFS Limitations of FFS Distinction between FFS & Balance Sheet Distinction between FFS & receipt-payment statement Cash Flow Analysis – Meaning Uses/significance Limitations, presentation of CFS 4.16 Operating, investing & financing activities 4.17 Differences between FFS & CFS	i. Importance of Cash Flow Statement ii. Activities of Cash Flow as per AS - 3

SW-4 Suggested Sessional Work (SW):

a. Assignments:

i. Explain in detail the calculation of Cash Flow from three types of activities in cash flow statement

Mini Project:

Give major classification of Cash Flows as per AS-3

Other Activities (Specify):

Group Discussion

31PO202.5: The student will evaluate the concept of Working Capital along with its components and sources of financing working capital.

Approximate Hours

Item	Appx Hrs.
Cl	18
LI	0
SW	1
SL	1
Total	20

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO5.1 Student will understand the concept of Working Capital SO5.2 Student will gain knowledge about components of Working Capital SO5.3 Student will analyze the importance of Working Capital Management SO5.4 Student will evaluate the various sources of Financing Working Capital SO5.5 Student will evaluate the concept of Operating Cycle and Working Capital Policy.		**Unit 5: Working Capital Management (Hrs.18)** 5.1 Concept of Working Capital 5.2 Components of Working Capital 5.3 Factors affecting working capital requirement 5.4 Dimensions of working capital management 5.5 Importance of working capital management 5.6 Working Capital Policy 5.7 Operating Cycle 5.8 Estimating Working Capital Requirement 5.9 Sources of Financing 5.10 Working Capital Requirement 5.11 Long term sources 5.12 Short term 5.13 sources trade 5.14. credit 5.15. bank credit public deposit 5.16 inter-corporate deposit 5.17 internal sources 5.18 innovative sources	Short term Sources of Financing Long term sources of Financing

SW-5 Suggested Sessional Work (SW):

Assignments:

i. Explain the techniques used in making Working Capital Forecast.

Mini Project:

Write a detail note on Operating Cycle Concept and Projected Balance Sheet

Other Activities (Specify):

Presentation

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: The student will be able to understand the key concepts of Financial Management along with wealth and profit maximization.	12	1	1	14
CO2: The student will be able to explain in depth understanding of different avenue of financial system i.e. Capital market and Money market.	32	1	1	34
CO3: The student will describe the importance of Financial Planning along with Capitalization.	11	1	1	13
CO4: Student will analyze different types of Financial Statements along with their techniques	17	1	1	19
CO5: The student will evaluate the concept of Working Capital along with its components and sources of financing working capital.	18	1	1	20
Total Hours	90	5	5	100

Suggestion for End Semester Assessment
Suggested Specification Table (For ESA)

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	INTRODUCTION TO FINANCIAL MANAGEMENT					
CO-2	INTRODUCTION TO INDIAN FINANCIAL SYSTEM					
CO-3	FINANCIAL PLANNING					
CO-4	ANALYSIS & INTERPRETATION OF FINANCIAL STATEMENT					
CO-5	WORKING CAPITAL MANAGEMENT					
Total						50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

The end of semester assessment for Financial Management will be held with written examination of 50 marks.

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks.

Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

Improved Lecture
Tutorial
Case Method
Group Discussion
Role Play
Demonstration
ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook,Twitter, Whatsapp, Mobile, Online sources)
Brainstorming
Suggested Learning Resources:

(a) Books:

S. No.	Title	Author	Publisher	Edition & Year
1	Financial Management	Pandey I.M.	Vikas Publications	2008
2	Financial Management	Khan and Jain	Tata McGraw Hill	2007
3	Fundamentals of Financial Management	Prasanna Chandra	Tata McGraw Hill	2007
4	Financial Management	Gupta. S. P.	Sahitya Bhawan Publications	2015

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Cos, POs and PSOs Mapping
Programme Title: MBA
Course Code: 31PO202
Course Title: Financial Management

Course Outcomes	Program Outcome								Program Specific Outcome			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To Setup Business Enterprise
CO1: The student will be able to understand the key concepts of Financial Management along with wealth and profit maximization.	2	2	1	1	1	1	2	2	1	1	1	1

CO2: The student will be able to explain in depth understanding of different avenue of financial system i.e. Capital market and Money market.	1	3	1	1	2	1	3	2	1	1	1	1

CO3 The student will be able to describe the importance of Financial Planning along with Capitalization.	2	3	1	2	1	1	3	1	2	1	1	1
CO 4: Students will be able to analyze different types of Financial Statements along with their techniques.	2	3	1	1	1	1	2	1	2	2	1	1

CO 5: The student will evaluate the concept of Working Capital along with its components and sources of financing working capital.	1	3	2	1	2	1	3	1	2	2	1	1

Legend: 1 – Low, 2 – Medium, 3 – High

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6, 7,8 PSO 1,2, 3, 4	CO-1: The student will be able to understand the key concepts of Financial Management along with wealth and profit maximization.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit-1 INTRODUCTION TO FINANCIAL MANAGEMENT 1.1, 1.2, 1.3, 1.4, 1.5,1.6,1.7, 1.8, 1.9, 1.10, 1.11, 1.12	
PO 1,2,3,4,5,6, 7,8 PSO 1,2, 3, 4	CO 2 : The student will be able to explain in depth understanding of different avenue of financial system i.e. Capital market and Money market.	SO2.1 SO2.2 SO2.3 SO2.4 SO2.5		Unit-2 INTRODUCTION TO INDIAN FINANCIAL SYSTEM 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13,2.14,2.15,2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24,2.25, 2.26, 2.27, 2.28, 2.29, 2.30,2.31,2.32	
PO 1,2,3,4,5,6, 7,8 PSO 1,2, 3, 4	CO3 : The student will be able to describe the importance of Financial Planning along with Capitalization.	SO3.1 SO3.2 SO3.3 SO3.4 SO3.5		Unit-3 : FINANCIAL PLANNING 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11	
PO 1,2,3,4,5,6, 7,8 PSO 1,2, 3, 4	CO4: The students will be able to analyze different types of Financial Statements along with their techniques.	SO4.1 SO4.2 SO4.3 SO4.4 SO4.5		Unit-4 : ANALYSIS & INTERPRETATION OF FINANCIAL STATEMENT 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15,4.16,4.17	
PO 1,2,3,4,5,6, 7,8 PSO 1,2, 3, 4	CO5: The student will evaluate the concept of Working Capital along with its components and sources of financing working capital.	SO5.1 SO5.2 SO5.3 SO5.4		Unit 5: WORKING CAPITAL MANAGEMENT 5.1, 5.2, 5.3, 5.4, 5.5, 5.6,5.7,5.8,5.9,5.10,5.11,5.12,5.13, 5.14, 5.15, 5.16, 5.17,5.18	

Course Code: 31PO203

Course Title: Logistics and Supply Chain Management

Pre-requisite: Introductory coursework in supply chain management or business administration is recommended.

Rationale: Logistics is the backbone of a successful supply chain. This course offers insights into strategic and operational logistics and supply chain management, ensuring that students can design and manage systems that deliver value to stakeholders and customers.

Course Outcomes:

31PO203.1: Discuss the components and importance of logistics and supply chain management in business.
31PO203.2: Apply various supply chain planning and strategy frameworks to optimize network design and collaboration.
31PO203.3: Analyze the impact of procurement, sourcing, and inventory management practices on supply chain performance.
31PO203.4: Develop strategies for optimizing transportation and distribution networks.
31PO203.5: Evaluate the effectiveness of emerging trends and technologies in supply chain management.

Scheme of Studies:

Code	Course Code	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	31PO203	Logistics and Supply Chain Management	3	0	2	1	6	3

Legend:

CI: Classroom Instruction

LI: Not Applicable

SW: Sessional Work

SL: Self Learning

C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

			Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)							
Code	Couse	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ESA)
PO	**31PO203**	**Logistics and Supply Chain Management**	15	20	5	5	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO203.1: Discuss the components and importance of logistics and supply chain management in business.

Approximate Hours

Item	App X Hrs.
CI	4
LI	0
SW	2
SL	1
Total	7

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Describe the fundamental concepts of logistics and supply chain management. SO1.2: Trace the evolution of supply chain management practices. SO1.3: Identify the main components of supply chain management. SO1.4: Discuss the role of logistics within the supply chain. SO1.5: Define and measure key performance indicators in supply chain management.		**Unit I - Introduction to Logistics and Supply Chain Management (Hrs.04)** 1.1 Overview of logistics and supply chain management. 1.2: Historical development and current trends in supply chain management. 1.3: Critical role of logistics in optimizing supply chains. 1.4: Main components of supply chain management.	Examination of case studies illustrating the importance of logistics and supply chain management.

SW-1 Suggested Sessional Work (SW):

a. Research project on the evolution and future trends of supply chain management.

b. Analysis of KPIs used by leading companies in supply chain management.

31PO203.2: Apply various supply chain planning and strategy frameworks to optimize network design and collaboration.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO2.1: Develop strategies for supply chain design and network planning. SO2.2: Enhance supply chain integration and collaboration. SO2.3: Apply demand forecasting and planning methodologies. SO2.4: Execute sales and operations planning. SO2.5: Manage risks within the supply chain.		**Unit II - Supply Chain Planning and Strategy (Hrs.05)** 2.1 Strategic supply chain network design principles. 2.2 : Sales and operations planning (S&OP). 2.3 : Techniques for effective demand forecasting and S&OP. 2.4 : Demand forecasting and planning methodologies 2.5 : Best practices in supply chain risk management.	Exploration of innovative supply chain integration and collaboration strategies.

SW-2 Suggested Sessional Work (SW):

a. Simulation exercise for supply chain network design.

b. Group project on developing a comprehensive S&OP process for a product.

31PO203.3: Analyze the impact of procurement, sourcing, and inventory management practices on supply chain performance.

Approximate Hours

Item	App X Hrs
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO3.1: Understand procurement processes and functions. SO3.2: Evaluate criteria for supplier selection and management. SO3.3: Enhance supplier relationships and performance. SO3.4: Strategize for effective sourcing, including global sourcing. SO3.5: Assess the implications of outsourcing on supply chain dynamics.		**Unit III - Procurement and Sourcing (Hrs.05)** 3.1 Fundamental procurement and strategic sourcing concepts. 3.2 : Criteria for selecting and evaluating suppliers. 3.3 : Best practices for global sourcing and outsourcing. 3.4 : Supplier selection and management. 3.5 : Case study discussion on impact of procurement, sourcing, and inventory management practices on supply chain performance.	Study of successful strategic sourcing and supplier relationship management models.

SW-3 Suggested Sessional Work (SW):

a. Analysis of a company's procurement strategy.

b. Role-playing exercise on negotiation with suppliers.

31PO203.4: Develop strategies for optimizing transportation and distribution networks.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO4.1: Choose appropriate transportation modes based on criteria. SO4.2: Manage transportation costs and develop pricing strategies. SO4.3: Optimize transportation planning. SO4.4: Design an efficient distribution network. SO4.5: Implement last-mile delivery and understand reverse logistics.		**Unit IV - Transportation and Distribution (Hrs.05)** 4.1 Transportation options and their strategic selection. 4.2 : Cost structures and optimization in transportation. 4.3 : Design principles of distribution networks. 4.4 : Transportation costs. 4.5 : Last-mile delivery and reverse logistics.	Analysis of distribution network design and last-mile delivery solutions.

SW-4 Suggested Sessional Work (SW):

a. Project on transportation planning for a given set of goods.

b. Case study on reverse logistics in a retail or manufacturing company.

31PO203.5: Evaluate the effectiveness of emerging trends and technologies in supply chain management.

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO5.1: Understand the strategic role of warehousing in the supply chain. SO5.2: Manage in-bound and out-bound operations efficiently. SO5.3: Optimize order management and fulfillment. SO5.4: Implement pick and binning operations. SO5.5: Streamline pack and dispatch operations.		**Unit V - Warehousing Operations (Hrs.05)** 5.1 Key functions and operations of a warehouse. **(Hrs.05)** 5.2 : Order processing and inventory management in warehousing. 5.3 : Pick and binning operations. 5.4 : Pack and dispatch operations. 5.5 : Case study on emerging trends and technologies in supply chain management.	Engagement with simulation software for warehousing operations.

SW-5 Suggested Sessional Work (SW):

a. Designing a layout for warehouse operations to optimize flow.

b. Developing a case study on innovative warehousing technologies.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Discuss the components and importance of logistics and supply chain management in business	4	2	1	7
CO2: Apply various supply chain planning and strategy frameworks to optimize network design and collaboration	5	2	1	8
CO3: Analyze the impact of procurement, sourcing, and inventory management practices on supply chain performance	5	2	1	8
CO4: Develop strategies for optimizing transportation and distribution networks	5	2	1	8
CO5: Evaluate the effectiveness of emerging trends and technologies in supply chain management	5	2	1	8
Total Hours	24	10	5	39

Suggestion for End Semester Assessment

Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Introduction to Logistics and Supply Chain Management					
CO-2	Supply Chain Planning and Strategy					
CO-3	Procurement and Sourcing					
CO-4	Transportation and Distribution					
CO-5	Warehousing Operations					
	Total					50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks.

Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:
1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook, Twitter, Whatsapp, Mobile, Online sources)
9. Brainstorming

Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition &Year
1	Supply Chain Management: Strategy, Planning, and Operation	Sunil Chopra and Peter Meindl	Pearson	2015
2	Logistics and Supply Chain Management	Martin Christopher	Pearson	2016
3	Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies	David Simchi-Levi, Philip Kaminsky, and Edith Simchi-Levi	McGraw-Hill Education	2007
4	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Course Code: 31PO203
Course Title: Logistics and Supply Chain Management
Cos, POs and PSOs Mapping

Course Outcomes	**Program Outcomes**								**Program Specific Outcomes**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R& D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will discuss the components and importance of logistics and supply chain management in business	3	3	2	1	1	1	1	2	3	3	3	2
CO2 Students will apply various supply chain planning and strategy frameworks to optimize network design and collaboration	3	3	3	1	2	2	2	2	3	3	3	3
CO3	3	3	2	1	1	1	2	2	3	3	3	2

Students will analyze the impact of procurement, sourcing, and inventory management practices on supply chain performance												
CO4 Students will develop strategies for optimizing transportation and distribution networks	3	3	2	1	2	2	2	2	3	3	3	3
CO5 Students will evaluate the effectiveness of emerging trends and technologies in supply chain management	3	2	3	1	2	1	3	3	3	2	2	2

Legend: 3=High, 2=Medium, 1=Low

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Logistics and Supply Chain Management 1.1, 1.2, 1.3, 1.4	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Supply Chain Planning and Strategy 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Procurement and Sourcing 3.1, 3.2, 3.3, 3.4, 3.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Transportation and Distribution 4.1, 4.2, 4.3, 4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Warehousing Operations 5.1, 5.2, 5.3, 5.4, 5.5	

Course Code: 31PO204

Course Title: Operations Strategy

Pre-requisite: A prior course in basic operations management or equivalent practical experience is recommended.

Rationale: An effective operations strategy underpins the successful management of manufacturing and service operations. This course explores the intersection of strategic planning and operations, enabling students to craft strategies that enhance competitiveness and operational excellence.

Course Outcomes:

31PO204.1: Describe the role and importance of operations strategy in achieving competitive advantage.
31PO204.2: Apply various operations strategy frameworks and models to real-world business situations.
31PO204.3: Analyze the relationship between operations strategy and other functional strategies.
31PO204.4: Develop an operations strategy that aligns with the overall business strategy.
31PO204.5: Evaluate the effectiveness of operations strategies in achieving desired business outcomes.

Scheme of Studies:

Code	Course Code	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	**31PO204**	**Operations Strategy**	3	0	2	1	6	3

Legend:
CI: Classroom Instruction
LI: Not Applicable
SW: Sessional Work
SL: Self Learning
C: Credits
Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

			Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)							
Code	Course	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Senr one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT +SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ ESA)
PO	**31PO 204**	**Operations Strategy**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO204.1: Describe the role and importance of operations strategy in achieving competitive advantage

Approximate Hours

Item	App X Hrs.
CI	4
LI	0
SW	2
SL	1
Total	7

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Define operations strategy and its scope within an organization. SO1.2: Explain the relationship between business strategy and operations strategy. SO1.3: Explore the framework of operations strategy. SO1.4: Understand the process of formulating an operations strategy. SO1.5: Assess strategic alignment and fit within business operations.		**Unit I - Introduction to Operations Strategy (Hrs.04)** 1.1 Concepts and definitions related to **(Hrs.04)** operations strategy. 1.2 : Integration of operations strategy with corporate strategy. 1.3 : Operations strategy frameworks and processes. 1.4 : Case study on operations strategy in achieving competitive advantage.	Research on various organizations to understand how their operations strategy supports their business strategy.

SW-1 Suggested Sessional Work (SW):

a. Analysis of an organization's operations strategy framework.

b. Case studies on strategic alignment in successful companies.

31PO204.2: Apply various operations strategy frameworks and models to real-world business situations

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO2.1: Identify and articulate competitive priorities in operations. SO2.2: Develop strategies to enhance operations capabilities. SO2.3: Understand the concept of trade-offs and its impact on order winners/qualifiers. SO2.4: Implement performance measurement metrics. SO2.5: Apply benchmarking and best practices for operational excellence.		**Unit II - Competitive Priorities and Capabilities (Hrs.05)** 2.1 Determining competitive priorities for operational focus 2.2: Building and assessing operations capabilities. 2.3: Performance metrics 2.4: Role of Performance metrics in operations. 2.5: Case study on operations strategy frameworks.	Evaluation of various benchmarking methodologies and best practices in operations.

S**W-2 Suggested Sessional Work (SW):**

a. Development of a competitive priorities matrix for a specific industry.

b. Comparative analysis of benchmarking practices across different sectors.

31PO204.3: Analyze the relationship between operations strategy and other functional strategies

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO3.1: Formulate a capacity strategy considering scale, scope, and timing. SO3.2: Design a process technology strategy. SO3.3: Evaluate the implications of vertical integration and make-or-buy decisions. SO3.4: Strategize for facility location and layout. SO3.5: Develop a coherent supply chain and logistics strategy.		**Unit III - Operations Strategy Decisions (Hrs.05)** 3.1 Capacity strategy and its significance in operations. 3.2: Selection and implementation of process technologies. 3.3: Facility location and layout planning. 3.4: Integrating supply chain and logistics into operations strategy. 3.5: Case study on Facility location and layout planning.	Study on the impact of location and layout decisions on operational efficiency.

SW-3 Suggested Sessional Work (SW):

a. Capacity planning exercise for a growing business.

b. Analysis of supply chain strategies in a global context.

31PO204.4: Develop an operations strategy that aligns with the overall business strategy

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO4.1: Assess the role of innovation within operations strategy. SO4.2: Categorize different types of innovation. SO4.3: Develop a technology strategy and manage its adoption. SO4.4: Understand the technology life cycle and diffusion. SO4.5: Navigate technological changes and disruptions.		**Unit IV - Innovation and Technology Management (Hrs.05)** 4.1 Innovation as a key component of operations strategy. 4.2 : The intersection of technology strategy and operations. 4.3 : Managing technological advancements and their organizational impact. 4.4 : Technology life cycle and diffusion. 4.5 : Case study on Innovation as a key component of operations strategy.	Exploration of how companies manage technological change and its operational implications.

SW-4 Suggested Sessional Work (SW):

a. Project on developing a technology strategy for a manufacturing firm.

b. Case study analysis on managing innovation and technological disruptions.

31PO204.5: Evaluate the effectiveness of operations strategies in achieving desired business outcomes

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO5.1: Analyze global operations opportunities and challenges. SO5.2: Formulate strategies for global sourcing and offshoring. SO5.3: Design global manufacturing and service networks. SO5.4: Manage global supply chains effectively. SO5.5: Consider cultural, ethical, and environmental factors in global operations.		**Unit V - Global Operations Strategy (Hrs.05)** 5.1 Strategies for global operations and their complexities. 5.2: Best practices in global sourcing and international logistics. 5.3: Ethical and cultural considerations in global operations management. 5.4: Design global manufacturing and service networks. 5.5: Case study on designing global manufacturing and service networks.	Investigation of a multinational corporation's global operations strategy.

SW-5 Suggested Sessional Work (SW):

a. Development of a global operations strategy for a given business scenario.

b. Analysis of cultural and ethical considerations in international operations.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Describe the role and importance of operations strategy in achieving competitive advantage	4	2	1	7
CO2: Apply various operations strategy frameworks and models to real-world business situations	5	2	1	8
CO3: Analyze the relationship between operations strategy and other functional strategies	5	2	1	8
CO4: Develop an operations strategy that aligns with the overall business strategy	5	2	1	8
CO5: Evaluate the effectiveness of operations strategies in achieving desired business outcomes	5	2	1	8
Total Hours	24	10	5	39

Suggestion for End Semester Assessment

Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Introduction to Operations Strategy					
CO-2	Competitive Priorities and Capabilities					
CO-3	Operations Strategy Decisions					
CO-4	Innovation and Technology Management					
CO-5	Global Operations Strategy					
	Total					50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks.

Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook, Twitter, WhatsApp, Mobile, Online sources)
9. Brainstorming Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition & Year
1	Operations Strategy	Nigel Slack and Michael Lewis	Pearson India	2018
2	Strategic Operations Management	Robert H. Lowson	Routledge	2002
3	Manufacturing Strategy: Text and Cases	Terry Hill	Irwin/McGraw-Hill	1999
4	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Course Code: 31PO204
Course Title: Operations Strategy
Cos, POs and PSOs Mapping

Course Outcomes	Program Outcomes								Program Specific Outcomes			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will describe the role and importance of operations strategy in achieving competitive advantage	3	3	2	1	1	1	1	3	3	3	3	2
CO2 Students will apply various operations strategy frameworks and models to real-world business situations	3	3	2	1	1	2	2	3	3	3	3	2

CO3 Students will analyze the relationship between operations strategy and other functional strategies	3	3	1	1	1	2	1	3	3	3	3	2
CO4 Students will develop an operations strategy that aligns with the overall business strategy	3	3	1	1	2	3	2	3	3	3	3	3
CO5 Students will evaluate the effectiveness of operations strategies in achieving desired business outcomes	2	3	1	1	2	2	3	3	3	3	3	1

Legend: 1 – Low, 2 – Medium, 3 – High

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Operations Strategy 1.1, 1.2, 1.3, 1.4	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Competitive Priorities and Capabilities 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Operations Strategy Decisions 3.1, 3.2, 3.3, 3.4, 3.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Innovation and Technology Management 4.1, 4.2, 4.3,4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Global Operations Strategy 5.1, 5.2, 5.3, 5.4, 5.5	

Course Code: 31PO205

Course Title: Product Design and Development

Pre-requisite: Students should be familiar with the basics of marketing, operations, and project management.

Rationale: This course is centered on the creative and practical aspects of bringing new products to market. It combines design thinking with management strategies to prepare students for the challenges of product innovation and lifecycle management.

Course Outcomes:

31PO205.1: Describe the importance of product design and development in operations management.

31PO205.2: Apply various product design and development methodologies to create innovative products.

31PO205.3: Analyze the impact of design decisions on product functionality, manufacturability, and sustainability.

31PO205.4: Develop strategies for managing the product design and development process from concept to market launch.

31PO205.5: Evaluate the effectiveness of product design and development practices in achieving business goals.

Scheme of Studies:

Code	Course	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	**31PO205**	**Product Design and Development**	3	0	2	1	6	3

Legend:

CI: Classroom Instruction

LI: Not Applicable

SW: Sessional Work

SL: Self Learning

C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

			Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)							
Code	Course	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	End Semester Assessment (ESA)	Total Marks (PRA+ESA)
PO	**31PO205**	**Product Design and Development**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO205.1: Describe the importance of product design and development in operations management

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	7

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Recognize the role of product design and development within operations management. SO1.2: Understand the product life cycle stages. SO1.3: Identify factors that influence product design. SO1.4: Explore various product development processes. SO1.5: Discuss the importance of cross-functional teams in product development.		**Unit I - Introduction to Product Design and Development (Hrs.05)** 1.1 Core concepts of product design and development. 1.2 : Overview of the product life cycle and its impact on design. 1.3 : Factors that influence product design. 1.4 : Introduction to different product development methodologies.	Research on the role of cross-functional teams in successful product development.

SW-1 Suggested Sessional Work (SW):

a. Case study analysis on the influence of product life cycle on design strategy.

b. Group discussions on the factors influencing product design decisions.

31PO205.2: Apply various product design and development methodologies to create innovative products

Approximate Hours

Item	App X Hrs
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO2.1: Assess the importance of market research in product development. SO2.2: Execute market segmentation and targeting. SO2.3: Gather and analyze customer needs. SO2.4: Utilize various techniques for idea generation. SO2.5: Implement concept development and selection methods.		**Unit II - Market Research and Idea Generation (Hrs.05)** 2.1 Techniques for conducting market research. 2.2 : Strategies for identifying and analyzing customer needs. 2.3 : Creative methods for idea generation. 2.4 : Creative methods for concept selection. 2.5 : Case study discussion on Product design and development methodologies.	Study of successful product idea generation and market research methods.

SW-2 Suggested Sessional Work (SW):

a. Market research project on a selected product category.

b. Idea generation workshop using brainstorming and other creative techniques.

31PO205.3: Analyze the impact of design decisions on product functionality, manufacturability, and sustainability

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO3.1: Formulate detailed product specifications. SO3.2: Convert customer needs into engineering requirements. SO3.3: Apply principles of DFMA. SO3.4: Integrate environmental and sustainability considerations into design. SO3.5: Explore modular design and standardization benefits.		**Unit III - Product Specifications and Design (Hrs.05)** 3.1 The process of developing product specifications. (Hrs.05) 3.2 : Best practices in designing for manufacturability and sustainability. 3.3 : Principles of DFMA. 3.4 : Modular design and standardization 3.5 : The impact of modular design on product development.	Examination of case studies on sustainable product design.

SW-3 Suggested Sessional Work (SW):

a. Group project on translating customer needs into product specifications.

b. Design project emphasizing DFMA and sustainability.

31PO205.4: Develop strategies for managing the product design and development process from concept to market launch

Approximate Hours

Item	App X Hrs.
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO4.1: Implement Quality Function Deployment (QFD). SO4.2: Conduct value engineering and value analysis. SO4.3: Utilize Design of Experiments (DOE) in product development. SO4.4: Apply CAD and CAM tools. SO4.5: Explore the benefits of rapid prototyping and additive manufacturing.		**Unit IV - Product Development Techniques (Hrs.05)** 4.1 Advanced techniques and tools for product development. 4.2: Application of CAD/CAM and rapid prototyping in design and development. 4.3: Quality Function Deployment (QFD). 4.4: Design of Experiments (DOE). 4.5: Case study on Strategies for managing the product design.	Use of CAD software for designing a new product.

SW-4 Suggested Sessional Work (SW):

a. QFD exercise to align customer requirements with design specifications.

b. Prototype creation using additive manufacturing techniques.

31PO205.5: Evaluate the effectiveness of product design and development practices in achieving business goals

Approximate Hours

Item	App X Hrs
CI	5
LI	0
SW	2
SL	1
Total	8

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO5.1: Develop prototyping strategies. SO5.2: Execute testing and validation methods. SO5.3: Design for reliability and maintainability. SO5.4: Apply Failure Modes and Effects Analysis (FMEA). SO5.5: Understand product and process certification standards.		**Unit V - Product Testing and Validation (Hrs.05)** 5.1 Prototyping and its role in the product development cycle. 5.2: Reliable and maintainable design principles. 5.3: The importance of FMEA in mitigating product risks. 5.4: Failure Modes and Effects Analysis (FMEA). 5.5: Testing and validation methods.	Study of the process and importance of product certifications.

SW-5 Suggested Sessional Work (SW):

a. Development and testing of a prototype for a class project.

b. FMEA activity to identify potential failure modes of a product design.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Describe the importance of product design and development in operations management	4	2	1	7
CO2: Apply various product design and development methodologies to create innovative products	5	2	1	8
CO3: Analyze the impact of design decisions on product functionality, manufacturability, and sustainability	5	2	1	8
CO4: Develop strategies for managing the product design and development process from concept to market launch	5	2	1	8
CO5: Evaluate the effectiveness of product design and development practices in achieving business goals	5	2	1	8
Total Hours	24	10	5	39

Suggestion for End Semester Assessment
Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Introduction to Product Design and Development					
CO-2	Market Research and Idea Generation					
CO-3	Product Specifications and Design					
CO-4	Product Development Techniques					
CO-5	Product Testing and Validation					
	Total					50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks.

Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT, Blog, Facebook, Twitter, Whatsapp, Mobile, Online sources)
9. Brainstorming

Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition & Year
1	Product Design and Development	Karl T. Ulrich and Steven D. Eppinger	McGraw-Hill Education	2020
2	New Product Development: An Empirical Approach to Study of the Effects of Innovation Strategy, Organization Learning, and Market Conditions	Gary L. Lilien and Eunsang Yoon	Springer	2021
3	Innovative Product Design Practice	Carl Liu	CRC Press	2007
4	Design for Manufacturability: A Systems Approach to Concurrent Engineering in Ergonomics	Laerte Sznelwar	CRC Press	1992
5	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Course Code: 31PO205
Course Title: Product Design and Development
Cos, POs and PSOs Mapping

	Program Outcomes								**Program Specific Outcomes**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
Course Outcomes	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will discuss the factors influencing facility location and layout decisions	3	3	3	1	1	1	1	3	3	3	3	2
CO2 Students will apply various facility location and layout models to optimize resource allocation	3	3	2	1	1	2	2	3	3	3	3	3

CO3	3	3	3	1	1	2	2	3	3	3	3	2

Students will analyze the relationship between facility location, layout, and overall supply chain performance												
CO4 Students will develop strategies for selecting and designing efficient facility locations and layouts	3	3	2	1	2	3	2	3	3	3	3	3
CO5 Students will evaluate the effectiveness of facility location and layout decisions in different business scenarios	3	3	3	1	2	2	3	3	3	3	3	2

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Product Design and Development 1.1, 1.2, 1.3, 1.4	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Market Research and Idea Generation 2.1, 2.2, 2.3, 2.4, 2.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Product Specifications and Design 3.1, 3.2, 3.3, 3.4, 3.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Product Development Techniques 4.1, 4.2, 4.3, 4.4, 4.5	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - Product Testing and Validation 5.1, 5.2, 5.3, 5.4, 5.5	

Course Code: 31PO206

Course Title: Business Process Modelling and ERP

Pre-requisite: Understanding of information systems and basic knowledge of organizational processes is beneficial.

Rationale: In the age of digital transformation, the ability to model business processes and implement ERP systems is crucial. This course teaches students how to analyze and improve business processes using modern ERP solutions to support organizational integration and efficiency.

Course Outcomes:

31PO206.1: Discuss the fundamentals of business process modeling and enterprise resource planning.
31PO206.2: Apply various business process modeling techniques to map and improve organizational processes.
31PO206.3: Analyze the role of enterprise resource planning (ERP) systems in integrating business processes.
31PO206.4: Develop strategies for selecting and implementing ERP systems to support business process optimization.
31PO206.5: Evaluate the impact of business process modeling and ERP systems on organizational performance.

Scheme of Studies:

Code	Course	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			CI	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	31PO206	Business Process Modelling and ERP	2	0	1	1	4	2

Legend:

CI: Classroom Instruction

LI: Not Applicable

SW: Sessional Work

SL: Self Learning

C: Credits

Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning.

Scheme of Assessment:

Theory

Scheme of Assessment (Marks) Progressive Assessment (PRA)										
Code	Course	Course Title	Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+ AT)	End Semester Assessment (ESA)	Total Marks (PRA + ESA)
PO	**31PO206**	**Business Process Modelling and ERP**	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO206.1: Discuss the fundamentals of business process modeling and enterprise resource planning

Approximate Hours

Item	App X Hrs
CI	3
LI	0
SW	1
SL	1
Total	5

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO1.1: Define business process modeling and understand its significance. SO1.2: Categorize various types of business processes. SO1.3: Explore the business process management lifecycle. SO1.4: Discuss process improvement methodologies such as Six Sigma, Lean, and Kaizen. SO1.5: Identify process performance metrics and KPIs.		**Unit I - Introduction to Business Process Modeling (Hrs.03)** 1.1 Core concepts of business process modeling. 1.2 : Strategies for managing and improving business processes. 1.3 : Introduction to performance metrics for evaluating business processes.	Investigation of different process improvement methodologies used in various industries.

SW-1 Suggested Sessional Work (SW):

a. Analysis of a company's business processes and identification of potential improvements.

b. Development of KPIs for a business process within a selected organization.

31PO206.2: Apply various business process modeling techniques to map and improve organizational processes

Approximate Hours

Item	App X Hrs
CI	3
LI	0
SW	1
SL	1
Total	5

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO2.1: Utilize flowcharting to map business processes. SO2.2: Create Data Flow Diagrams (DFD) for process visualization. SO2.3: Apply Business Process Model and Notation (BPMN) in process modeling. SO2.4: Understand IDEF methods for process description. SO2.5: Use Unified Modeling Language (UML) for business process representation.		**Unit II - Process Modeling Techniques (Hrs.03)** 2.1 Techniques for visually modeling business processes. 2.2 : Advanced process modeling notations and their applications. 2.3 : Business Process Model and Notation (BPMN).	Practice with software tools for creating business process diagrams.

SW-2 Suggested Sessional Work (SW):

a. Project to model a business process using BPMN.

b. Workshop on converting a business scenario into a UML diagram.

31PO206.3: Analyze the role of enterprise resource planning (ERP) systems in integrating business processes

Approximate Hours

Item	App X Hrs
CI	3
LI	0
SW	1
SL	1
Total	5

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO3.1: Conduct process discovery and documentation. SO3.2: Identify and analyze process bottlenecks. SO3.3: Perform root cause analysis for process issues. SO3.4: Design process improvement initiatives. SO3.5: Manage change during process redesign and implementation.		**Unit III - Process Analysis and Improvement (Hrs.03)** 3.1 Methodologies for analyzing and improving business processes. 3.2 : Root cause analysis 3.3 : Change management techniques for implementing process improvements.	Case studies on successful process redesign and improvement.

SW-3 Suggested Sessional Work (SW):

a. Simulation exercise for process analysis and improvement.

b. Group activity on managing change in process redesign projects.

31PO206.4: Develop strategies for selecting and implementing ERP systems to support business process optimization

Approximate Hours

Item	App X Hrs
CI	3
LI	0
SW	1
SL	1
Total	5

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self-Learning (SL)
SO4.1: Describe ERP systems and their evolution. SO4.2: Discuss the benefits and challenges of ERP implementations. SO4.3: Understand the components and architecture of ERP systems. SO4.4: Learn about ERP system selection and implementation processes. SO4.5: Examine ERP system customization and integration.		**Unit IV - Introduction to Enterprise Resource Planning (ERP) (Hrs.03)** 4.1 Fundamental principles of ERP systems. 4.2: Critical factors in selecting and implementing ERP solutions. 4.3: ERP systems.	Research on the latest trends and best practices in ERP implementation.

SW-4 Suggested Sessional Work (SW):

a. Analysis project on the ROI of ERP implementation in an organization.

b. Role-playing exercise on selecting an ERP system for a hypothetical company.

31PO206.5: Evaluate the impact of business process modeling and ERP systems on organizational performance

Approximate Hours

Item	App X Hrs
CI	3
LI	0
SW	2
SL	1
Total	6

Session Outcomes (SOs)	Laboratory Instruction (LI)	Class room Instruction (CI)	Self Learning (SL)
SO5.1: Explore the finance and accounting ERP module. SO5.2: Examine the sales and distribution ERP module. SO5.3: Analyze materials management and inventory control ERP module. SO5.4: Study the production planning and control ERP module. SO5.5: Review the human resources and payroll ERP module.		**Unit V - ERP Functional Modules (Hrs.03)** 5.1 Overview of ERP modules and their functionalities. 5.2: Best practices for utilizing ERP modules to enhance business functions. 5.3: Case study on impact of business process modeling and ERP systems on organizational performance.	Engagement with ERP software to understand the functionality of different modules.

SW-5 Suggested Sessional Work (SW):

a. Project to integrate ERP modules for a seamless business operation.

b. Group discussion on the challenges of managing ERP modules.

Brief of Hours suggested for the Course Outcome

Course Outcomes	Class Lecture (Cl)	Sessional Work (SW)	Self Learning (Sl)	Total hour (Cl+SW+Sl)
CO1: Discuss the fundamentals of business process modeling and enterprise resource planning	3	2	1	5
CO2: Apply various business process modeling techniques to map and improve organizational processes	3	2	1	5
CO3: Analyze the role of enterprise resource planning (ERP) systems in integrating business processes	3	2	1	5
CO4: Develop strategies for selecting and implementing ERP systems to support business process optimization	3	2	1	5
CO5: Evaluate the impact of business process modeling and ERP systems on organizational performance	3	2	1	6
Total Hours	15	10	5	26

Suggestion for End Semester Assessment
Suggested Specification Table

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Introduction to Business Process Modeling					
CO-2	Process Modeling Techniques					
COO-3	Process Analysis and Improvement					
CCO-4	Introduction to Enterprise Resource Planning (ERP)					
CO-5	ERP Functional Modules					
	Total					50

Legend: Ap: Apply, An: Analyze, Ev: Evaluate Cr: Create

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks.
Teachers can also design different tasks as per requirement, for end semester assessment.
Suggested Instructional/Implementation Strategies:
1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Role Play
6. Industry Visit
7. Demonstration
8. ICT Based Teaching Learning (Video Demonstration/Tutorials CBT Blog, Facebook, Twitter, Whatsapp, Mobile, Online sources)
1. Brainstorming

Suggested Learning Resources:

Books:

S. No	Title	Author	Publisher	Edition & Year
1	Business Process Modeling, Simulation and Design	Manuel Laguna and Johan Marklund	CRC Press	2023
2	Fundamentals of Business Process Management	Marlon Dumas, Marcello La Rosa, Jan Mendling, and Hajo A. Reijers	Springer	2015
3	Enterprise Resource Planning (ERP): The Dynamics of Operations Management	Avraham Shtub	Springer	1999
4	Concepts in Enterprise Resource Planning	Ellen F. Monk and Bret J. Wagner	Cengage Learning	2012
5	Lecture note provided by Faculty of Management, AKS University, Satna.			

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Mr. Krishna Kumar Mishra, Assistant Professor, FMS, AKS University, Satna.
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Mr.Anurag Singh Parihar, Teaching Associate, FMS, AKS University, Satna.

Course Code: 31PO206
Course Title: Business Process Modelling and ERP
Cos, POs and PSOs Mapping

	Program Outcomes								**Program Specific Outcomes**			
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
Course Outcomes	Business Environment and Domain Knowledge	Critical & Analytical thinking, Business Analysis, Problem Solving and Logical Solutions	International Exposure and Cross-Cultural Understanding	Social Responsiveness and Ethos	Effective Business Communication	Leadership Development and Synergy	R&D Aptitude	Contemporary issues	Theoretical as well as practical knowledge	Work in various functional areas	Work in various industries	To set up business enterprise
CO1 Students will discuss the fundamentals of business process modeling and enterprise resource planning	3	3	2	1	1	1	1	3	3	3	3	2
CO2 Students will apply various business process modeling techniques to map and improve organizational processes	3	3	2	1	2	2	2	3	3	3	3	3

CO3 Students will analyze the role of enterprise resource planning	3	3	2	1	1	2	2	3	3	3	3	2

(ERP) systems in integrating business processes												
CO4 Students will develop strategies for selecting and implementing ERP systems to support business process optimization	3	3	3	1	3	3	2	3	3	3	3	3
CO5 Students will evaluate the impact of business process modeling and ERP systems on organizational performance	3	3	3	1	2	2	3	3	3	3	3	2

Legend: 3=High, 2=Medium, 1=Low

Course Curriculum Map:

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (L I)	Classroom Instruction (CI)	Self Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit I - Introduction to Business Process Modeling 1.1, 1.2, 1.3	As mentioned in page number
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit II - Process Modeling Techniques 2.1, 2.2, 2.3	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit III - Process Analysis and Improvement 3.1, 3.2, 3.3	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit IV - Introduction to Enterprise Resource Planning (ERP) 4.1, 4.2, 4.3	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4		SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit V - ERP Functional Modules 1.5, 5.2, 5.3	

Course Code:	**31PO207**
Course Title:	Personality Development and Analytical Skills
Pre- requisite:	Students must be keen to acquire skills and groom their personality
Rationale:	In order to compete in this fast-growing world, LSWR skills of the students should be well developed and enhanced. Besides, they must have effective communication skills as it plays a vital role in shaping individual's personality and career. It also boosts the confidence and prepares them to face the audience fearlessly.

Course Outcomes:
After completion of the course:

31PO207.1 Students will learn Business Communication Skill.
31PO207.2 Students will acquire Leadership and Problem-Solving Skill.
31PO207.3 Students will understand various self-management skills
31PO207.4 Students will learn to make professional resume and LinkedIn profile.
31PO207.5 Students will learn and understand social and corporate etiquettes.

Scheme of Studies:

Code	Course	Course Title	Scheme of studies (Hours/Week)					Total Credits (C)
			Cl	LI	SW	SL	Total Study Hours (CI+LI+SW+SL)	
PO	**31PO207**	Personality Development and Analytical Skills	2	0	1	1	4	2

Legend:

CI: Classroom Instruction (Includes different instructional strategies i.e. Lecture (L) and Tutorial (T) and others),
LI: Laboratory Instruction (Includes Practical performances in laboratory workshop, field or other locations using different instructional strategies)
SW: Sessional Work (includes assignment, seminar, mini project etc.),
SL: Self Learning,
C: Credits.
Note: SW & SL has to be planned and performed under the continuous guidance and feedback of teacher to ensure outcome of Learning

Scheme of Assessment:

Theory

Code	Course	Course Title	Scheme of Assessment (Marks)							
			Progressive Assessment (PRA)						End Semester Assessment	Total Marks
			Class/Home Assignment 5 number 3 marks each (CA)	Class Test 2 (2 best out of 3) 10 marks each (CT)	Seminar one (SA)	Class Activity any one (CAT)	Class Attendance (AT)	Total Marks (CA+CT+SA+CAT+AT)	(ESA)	(PRA+ESA)
PO	**31PO207**	Personality Development and Analytical Skills	15	20	10	0	5	50	50	100

Course-Curriculum Detailing:

This course syllabus illustrates the expected learning achievements, both at the course and session levels, which students are anticipated to accomplish through various modes of instruction including Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW), and Self Learning (SL). As the course progresses, students should showcase their mastery of Session Outcomes (SOs), culminating in the overall achievement of Course Outcomes (COs) upon the course's conclusion.

31PO207 .1: Students will learn Business Communication Skill.

Approximate Hours

Item	Appx Hrs.
Cl	6
LI	0
SW	1
SL	1
Total	8

	Session Outcomes (SOs)	(LI)	Class room Instruction (CI)	(SL)
	SO1.1Students will understand the need of listening n speaking cautiously. SO1.2 Significance of body language SO1.3: Students will learn the art of public speaking and presentation SO1.4: Students are able to learn effective email and report writing skills SO1.5 Students will be able tomaster negotiation skill		**Unit 1: Mastering Business Communication (Hrs.06)** 1.1 Techniques of effective listening and speaking 1.2 Importance of body language 1.3 Public speaking and presentation skills 1.4 Writing skills 1.5 Email and report writing 1.6 Skill of Negotiation	

31PO207.2. Students will acquire Leadership and Problem-Solving Skill

Approximate Hours

Item	Appx Hours
Cl	6
LI	0
SW	1
SL	1
Total	8

Session Outcomes (SOs)	(LI)	Class room Instruction (CI)	(SL)
SO2.1 Students will learn leadership traits and its types SO2.2: Students will learn varied self-management skills SO2.3 Understand the importance of being organised always SO2.4 Students will be able to communicate in a way a leader does. SO2.5 Students will learn about Persuasive Communication	.	UNIT 2 Leadership Skill Development (**Hrs.06)** 2.1Leadership traits and its types. 2.2 Developing leadership skill. 2.3 Techniques of development of management skills. 2.4 Techniques of development of organizational skill. 2.5 Leadership Communication 2.6 Persuasive Communication	Read English Newspapers and business magazines

31PO207.3. Students will understand various self-management skills

Approximate Hours

Item	Appx Hours
Cl	6
LI	0
SW	1
SL	1
Total	8

Session Outcomes (SOs)	(LI)	Class room Instruction (CI)	(SL)
SO3.1 Students will understand value of goal setting. **SO3.2** Students will be able to build growth mind set. **SO3.3** Students will be able to manage time effectively **SO3.4** Students will be able to learn skills of adaptability and responsibility **SO3.5** Students will learn effective networking and relationship management skill.	.	**Unit-3 : Management Skill Development (Hrs.06)** 3.1 Setting of Goals 3.2 Planning and building of Growth Mind-set 3.3 Management of Time 3.4 Building ability of adaptability, ownership and responsibility 3.5 Initiatives and confidence building activities. 3.6 Networking and Relationship management	

31PO207.4. Students will learn to make professional resume and LinkedIn profile.

Approximate Hours

Item	Appx Hours
Cl	6
LI	0
SW	1
SL	1
Total	8

Session Outcomes (SOs)	(LI)	Class room Instruction Building (CI)	(SL)
SO4.1 Understanding about the placement strategy SO4.2Students will be able to understand the basic career layout and explore their career options SO4.3 Students will be able to make professional resume SO4.4 students will be able to make LinkedIn profile SO4.5 Students will understand the concept of JD CV Fit	.	Unit-4: Professional Skill Development **Hrs.06)** 4.1 Preparation of Placements 4.2 Career Exploration. 4.3 Resume Writing 4.4 Making LinkedIn Profile 4.5 Company Research 4.6 Assessing JD CV Fit	

31PO207.5 Students will learn and understand social and corporate etiquettes.

Approximate Hours

Item	Appx Hours
Cl	6
LI	0
SW	1
SL	1
Total	8

Session Outcomes (SOs)	(LI)	Class room Instruction (CI)	(SL)
SO5.1Students will be able to understand the procedure of group discussion SO5.2 Students will be able learn personal grooming skills S05.3 Students will understand the role of social and corporate etiquettes SO5.4 Students become acquainted With team building skills and team spirit. SO5.5 Students will learn interview skills through mock interviews		**Unit 5: Corporate Skill Development (Hrs.06)** 5.1 Group Discussion Technique 5.2 Personal grooming 5.3 Social and Corporate etiquettes 5.4 Team Work and team development skill 5.5 Pre-Interview Preparations 5.6 Approach to Answering Questions	

Brief of Hours suggested for the Course Outcome

Course Outcome	Class Lecture (Cl)	Sessional Work (SW)	Self-Learning (Sl)	Total hour (Cl+SW+Sl)
Students will learn Business Communication Skill.se Outcomes	6	1	1	8
Students will acquire Leadership and Problem-Solving Skill	6	1	1	8
Students will learn to make professional resume and LinkedIn profile.	6	1	1	8
1. Students will learn to make professional resume and LinkedIn profile.	6	1	1	8
5. Students will learn and understand social and corporate etiquettes.	6	1	1	8
Total	**30**	**05**	**05**	**40**

Suggestion for End Semester Assessment

Suggested Specification Table (For ESA)

CO	Unit Titles	Marks Distribution				Total Marks
		Ap	An	Ev	Cr	
CO-1	Mastering Business Communication					
CO-2	Leadership Skill Development					
CO-3	Management Skill Development					
CO-4	Professional Skill Development					
CO-5	Corporate Skill Development					
Total						

Legend: Ap: Apply An: Analyze Ev: Evaluate Cr: Create

The end of semester assessment for communication skills will be held with written examination of 50 marks

Note. Detailed Assessment rubric need to be prepared by the course wise teachers for above tasks. Teachers can also design different tasks as per requirement, for end semester assessment.

Suggested Instructional/Implementation Strategies:

1. Improved Lecture
2. Tutorial
3. Case Method
4. Group Discussion
5. Brainstorming

Suggested Learning Resources:

(a) Books:

S. No	Title	Author	Publisher	Edition & Year
1	Basic Business Communication Skills for Empowering the Internet Generation	Lesikar, R.V. & Flatley, M. E	Tata McGraw Hill Publishing Company Ltd. New Delhi	2005
2	Bovee, and Thill	Business Communication Today	Pearson Education	2021
3	Shirley Taylor	Communication for Business	Pearson Education	2022
4	Locker and Kaczmarek	Business Communication Building Critical Skills	TMH	2013

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Course Code: 31PO207
Course: Personality Development & Analytical Skills
CO-PO and PSO Mapping:

Program Outcomes	**Program outcomes**									**Program Specific Outcome**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**POS1**	**POS2**	**POS3**	**POS4**
	Business Environment and Domain Knowledge											
CO1 1. Students will learn Business Communication Skill..	3	2	3	2	3	3	3	3	3	3	3	2
CO2: Students will acquire Leadership and Problem Solving Skill	3	2	2	2	3	3	3	2	3	3	3	2
CO3: 3. Students will learn to make professional resume and LinkedIn profile.	3	2	3	2	3	3	3	3	3	3	3	1
CO4: 4. Students will learn to make professional resume and LinkedIn profile.	3	2	2	2	2	3	3	2	2	2	2	1
CO5. Students will learn and understand social and corporate etiquettes	3	3	2	2	3	3	3	2	2	2	2	1

Legend: 1 – Low, 2 – Medium, 3 – High

Course Curriculum Map

POs & PSOs No.	COs No.& Titles	SOs No.	Laboratory Instruction (LI)	Classroom Instruction (CI)	Self-Learning (SL)
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO-1: Students will learn Business Communication Skill.	SO1.1 SO1.2 SO1.3 SO1.4 SO1.5		Unit-1.0 Mastering Business Communication 1.1,1.2,1.3,1.4,1.5,1.6	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO 2 : Students will acquire Leadership and Problem Solving Skill	SO2.1 SO2.2 SO2.3 SO2.4 SO2.5		Unit-2 Leadership Skill Development 2.1,2.2,2.3,2.4,2.5,2.6	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO3: Students will learn to make professional resume and LinkedIn profile	SO3.1 SO3.2 SO3.3 SO3.4 SO3.5		Unit-3 : Management Skill Development 3.1,3.2,3.3,3.4,3.5,3.6	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO 4: Students will learn to make professional resume and LinkedIn profile. 4:	SO4.1 SO4.2 SO4.3 SO4.4 SO4.5		Unit-4: Professional Skill Development 4.1,4.2,4.3,4.4,4.5,4.6.	
PO 1,2,3,4,5,6,7,8 PSO 1,2, 3, 4	CO 5: Students will learn and understand social and corporate etiquettes	SO5.1 SO5.2 SO5.3 SO5.4 SO5.5		Unit- 5: Corporate Skill Development 5.1,5.2,5.3,5.4,5.5,5.6.	

Semester – III

SN	Category	Code	Course Title	L	T	P	Total Hour	Credit
1	PJT	31PO351	On- Job Training (OJT)	0	0	10		
2	PJT	31PO352	Minor Project	0	0	12	50	25
3	PJT	31PO353	Viva	0	0	3		
Total				**0**	**0**		**50**	**25**

Semester – VI

SN	Category	Code	Course Title	L	T	P	Total Hour	Credit
1	PJT	31PO451	On- Job Training (OJT)	0	0	10		
2	PJT	31PO452	Major Project	0	0	15	54	27
3	PJT	31PO453	Viva	0	0	2		
Total				**0**	**0**		**54**	**27**