M.COM., CA

Syllabus

Program Code: PCC

2023-2024 onwards

GUIDLINESS FOR OUTCOME BASED EDUCATION WITH CHOICE BASED CREDIT SYSTEM

(FOR PG PROGRAM FROM 2023 -2024 ONWARDS)

ELIGIBILITY CONDITION FOR ADMISSION

For admission to Post Graduate Programmers (P.G) a candidate should have passed the 3years degree course (under 10 + 2 + 3 pattern) recognized by the university as equivalent there to.

DURATION

Two years. Each year consists of 2 semesters. The duration of a semester is 90 working days.

ATTENDANCE

75% of the classes in each semester shortage of attendance can be condoned as per existing university rules.

EVALUATION PROCEDURE:

A mark Statement with

$$CGPA = \frac{\sum(Marks X credits)}{\sum(Credits)}$$

Where the summations are over all paper appeared up to the current semester.

Examinations: 3 hours duration.

Total marks 100 for all papers

External Internal ratio 75:25 with 2 Internal tests.

Subjects of Study

The courses offered under the PG programs belong to the following categories:

1. Core Subjects
2. Electives
3. Non Major Electives (NME)
4. Skill Enhancement course

CBCS COURSE STRUCTURE - PG COURSES

M.A. (Tamil) - M.A. (English) – M.Com. – M.Com (CA) – M.S.W. M.Sc. (Mathematics) - M.Sc. (CS) - M.Sc. (CS&IT)

Semester–I	Credit	Semester-II	Credit	Semester-III	Credit	Semester–IV	Credit
1.1. Core-I	4	2.1. Core-IV	4	3.1. Core-VII	4	4.1. Core-X	4
1.2 Core-II	4	2.2 Core-V	4	3.2 Core-VII	4	4.2 Core-XI	4
1.3 Core – III	4	2.3 Core – VI	4	3.3 Core – IX	4	4.3 Core – XII	4
1.4 Elective (Generic / Discipline Centric)- I	3	2.4 Elective (Generic / Discipline Centric) – III	3	3.4 Elective (Generic / Discipline Centric) – V	3	4.4 Elective (Generic / Discipline Centric) – VI	3
1.5 Elective (Generic / Discipline Centric)-II	3	2.5 Elective (Generic / Discipline Centric)-IV	3	3.5 Core Industry Module	3	4.5 Project with Viva-Voce	3
1.6Ability Enhancement Course- Soft Skill -1	2	2.6 Ability Enhancement Course - Soft Skill -2	2	3.6 Ability Enhancement Course- Soft Skill -3	2	4.6 Ability Enhancement Course- Soft Skill -4	2
Skill Enhancement Course SEC 1	2	2.7 Skill Enhancement Course SEC 2	2	3.7 Skill Enhancement Course – Term Paper and Seminar Presentation SEC 3	2	4.7 Skill Enhancement Course - Professional Competency Skill	2
				3.8 Internship/ Industrial Activity	2	4.8 Extension Activity	1
	22		22		24		23
						Total Credit Points	91

QUESTION PAPER PATTERN FOR THE CONTINUOUS INTERNAL ASSESSMENT

Note: Duration – 1 hour 30 minutes

The components for continuous internal assessment are:

Part –A

Four multiple choice questions (answer all)   4 x01= 04 Marks

Part –B

Two questions ('either …. or 'type)   2 x 05=10 Marks

Part –C

Two questions ('either …. or 'type)   2 x 08=16 Marks

                            Total   40 Marks

The components for continuous internal assessment are:

(40 Marks of two continuous internal assessments will be converted to 15 marks)

Two   tests and their average   --15 marks

Seminar /Group discussion   --5 marks

Assignment   --5 marks

        Total   25 Marks

OUTCOME BASED EDUCATION

1. Course is defined as a theory, practical or theory cum practical subject studied in a semester. For e.g. Computer Applications Management

2. Course Outcome (CO) Course outcomes are statements that describe significant and essential learning that learners have achieved, and can reliably demonstrate at the end of a course. Outcomes may be specified for each course based on its weightage.

3. Program is defined as the specialization or discipline of a Degree. It is the interconnected arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree.

4. Program Outcomes (POs) Program outcomes are narrower statements that describe what students are expected to be able to do by the time of graduation. POs are expected to be Guidelines for Outcome Based Education System 4 aligned closely with Graduate Attributes.

5. Program Educational Objectives (PEOs) of a program are the statements that describe the expected achievements of graduates in their career, and also in particular, what the graduates are expected to perform and achieve during the first few years after graduation.

6. Program Specific Outcomes (PSO) are what the students should be able to do at the time of graduation with reference to a specific discipline. Usually there are two to four PSOs for a Program.

7. Graduate Attributes (GA): The graduation attributes, are exemplars of the attributes expected of a graduate from a Program
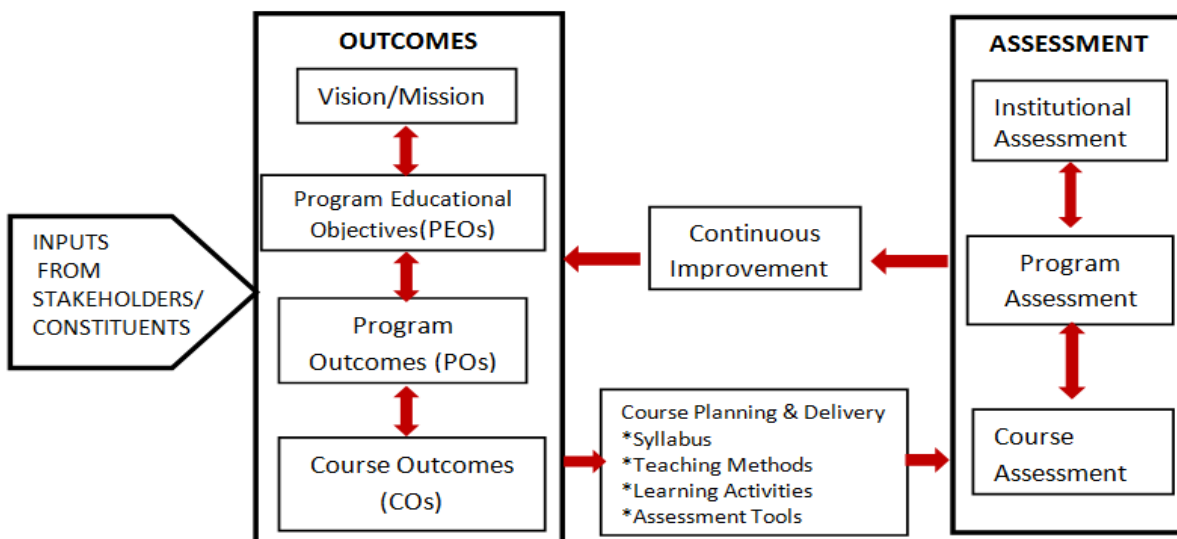
INSTITUTIONAL VISION

To Mould the learners into accomplished individuals by providing them with a stimulus for social change through character, confidence and competence.

INSTITUTIONAL MISSION

1. Enlightening the learners on the ethical and environmental issues.

2. Extending holistic training to shape the learners in to committed and competent citizens.

3. Equipping them with soft skills for facing the competitive world.

4. Enriching their employability through career oriented courses.

5. Ensuring accessibility and opportunity to make education affordable to the underprivileged.

Highlights of the Revamped Curriculum:

➢ Student-centric, meeting the demands of industry & society, incorporating industrial components, hands-on training, skill enhancement modules, industrial project, project with viva-voce, exposure to entrepreneurial skills, training for competitive examinations, sustaining the quality of the core components and incorporating application oriented content wherever required.

➢ The Core subjects include latest developments in the education and scientific front, advanced programming packages allied with the discipline topics, practical training, devising statistical models and algorithms for providing solutions to industry / real life situations. The curriculum also facilitates peer learning with advanced statistical topics in the final semester, catering to the needs of stakeholders with research aptitude.

➢ The General Studies and Statistics based problem solving skills are included as mandatory components in the 'Training for Competitive Examinations' course at the final semester, a first of its kind.

➢ The curriculum is designed so as to strengthen the Industry-Academia interface and provide more job opportunities for the students.

➢ The Statistical Quality Control course is included to expose the students to real life problems and train the students on designing a mathematical model to provide solutions to the industrial problems.

➢ The Internship during the second year vacation will help the students gain valuable work experience that connects classroom knowledge to real world experience and to narrow down and focus on the career path.

➢ Project with viva-voce component in the fifth semester enables the student, application of conceptual knowledge to practical situations. The state of art technologies in conducting a Explain in a scientific and systematic way and arriving at a precise solution is ensured. Such innovative provisions of the industrial training, project and internships will give students an edge over the counterparts in the job market.

➢ State-of Art techniques from the streams of multi-disciplinary, cross disciplinary and inter disciplinary nature are incorporated as Elective courses, covering conventional topics to the latest DBMS and Computer software for Analytics.

MANNAR THIRUMALAI NAICKER COLLEGE (AUTONOMOUS), MADURAI – 625 004
M. COM CURRICULUM
(For the student admitted during the academic year 2023-2024 onwards)

Course Code	Title of the Course	Hrs	Credits	Maximum Marks		
				Int	Ext	Total
FIRST SEMESTER						
Part – III	**Core Courses**					
23PCCCC11	BUSINESS FINANCE	6	4	25	75	100
23PCCCC12	DIGITAL MARKETING	6	4	25	75	100
23PCCCC13	BANKING AND INSURANCE	6	4	25	75	100
Part – III	**Elective Courses**					
23PCCEC11	INTRODUCTION TO INDUSTRY 4.0	6	5	25	75	100
23PCCEC12	DATABASE MANAGEMENT SYSTEM	6	5	25	75	100
	Total	**30**	**22**	**125**	**375**	**500**
SECOND SEMESTER						
Part – III	**Core Courses**					
23PCCCC21	STRATEGIC COST MANAGEMENT	6	4	25	75	100
23PCCCC22	CORPORATE ACCOUNTING	6	4	25	75	100
23PCCCC23	SETTING UP OF BUSINESS ENTITIES	6	4	25	75	100
Part – III	**Elective Courses**					
23PCCEC21	DATA MINING AND DATA INTERPRETATION	6	5	25	75	100
23PCCEC22	MANAGEMENT INFORMATION SYSTEM	6	5	25	75	100
	Total	**30**	**22**	**125**	**375**	**500**

23PCCIN31	Internship* Industrial Activity	-	-	-	-	-

* At the end of the semester, all the students should complete their internship during the summer vacation (April - May) for which the marks with due credits will be awarded in the third semester.

FIRST SEMESTER

Course Name	BUSINESS FINANCE			
Course Code	23PCCCC11	**L**	**P**	**C**
Category	CORE	6	-	4

COURSE OBJECTIVES:

➤ To outline the fundamental concepts in finance
➤ To estimate and evaluate risk in investment proposals
➤ To evaluate leasing as a source of finance and determine the sources of startup financing
➤ To examine cash and inventory management techniques
➤ To appraise capital budgeting techniques for MNCs

UNIT - I	Introduction to Business Finance and Time vale of money	18

Business Finance: Meaning, Objectives, Scope -Time Value of money: Meaning, Causes – Compounding – Discounting – Sinking Fund Deposit Factor – Capital Recovery Factor – Multiple Compounding– Effective rate of interest – Doubling period (Rule of 69 and Rule of 72) – Practical problems.

UNIT - II	Risk Management	18

Risk and Uncertainty: Meaning – Sources of Risk – Measures of Risk – Measurement of Return – General pattern of Risk and Return – Criteria for evaluating proposals to minimize Risk (Single Asset and Portfolio) – Methods of Risk Management–Hedging currency risk.

UNIT - III	Startup Financing and Leasing	18

   Startup Financing: Meaning, Sources, Modes (Bootstrapping, Angel investors, Venture capital fund) - Leasing: Meaning – Types of Lease Agreements – Advantages and Disadvantages of Leasing – Financial evaluation from the perspective of Lessor and Lessee.

UNIT - IV	Cash, Receivable and Inventory Management	18

Cash Management: Meaning, Objectives and Importance – Cash Cycle – Minimum Operating Cash – Safety level of cash – Optimum cash balance - Receivable Management: Meaning – Credit policy – Controlling receivables: Debt collection period, Ageing schedule, Factoring – Evaluating investment in accounts receivable - Inventory Management: Meaning and Objectives – EOQ with price breaks – ABC Analysis

UNIT - V	Multi National Capital Budgeting	18

Multi National Capital Budgeting: Meaning, Steps involved, Complexities, Factors to be considered– International sources of finance – Techniques to evaluate multi-national capital expenditure proposals: Discounted Pay Back Period, NPV, Profitability Index, Net Profitability Index and Internal Rate of Return – Capital rationing -Techniques of Risk analysis in Capital Budgeting.

	Total Lecture Hours	90

BOOKS FOR STUDY:

- Maheshwari S.N., (2019), "Financial Management Principles and Practices", 15th Edition, Sultan Chand &Sons, New Delhi.
- Khan M.Y &Jain P.K, (2011), "Financial Management: Text, Problems and Cases", 8th Edition, McGraw Hill Education, New Delhi.
- Prasanna Chandra, (2019), "Financial Management, Theory and Practice", 10thEdition, McGraw Hill Education, New Delhi.

- Apte P.G, (2020), "International Financial Management" 8th Edition, Tata McGraw Hill, New Delhi.

BOOKS FOR REFERENCES:

- Pandey I. M., (2021), "Financial Management", 12thEdition, Pearson IndiaEducation Services Pvt. Ltd, Noida.
- Kulkarni P. V. &Satyaprasad B. G., (2015), "Financial Management", 14thEdition, Himalaya Publishing House Pvt Ltd, Mumbai.
- RustagiR. P., (2022), "Financial Management, Theory, Concept, Problems", 6thEdition, TaxmanPublications Pvt. Ltd, New Delhi.
- ArokiamaryGeetha Rufus, Ramani N. & Others, (2017), "Financial Management", 1st Edition, Himalaya Publishing House Pvt Ltd, Mumbai.

WEB RESOURCES:

- **https://resource.cdn.icai.org/66674bos53808-cp8.pdf**
- **https://resource.cdn.icai.org/66677bos53808-cp10u2.pdf**
- **https://resource.cdn.icai.org/66592bos53773-cp4u5.pdf**
- **https://resource.cdn.icai.org/65599bos52876parta-cp16.pdf**

Nature of Course	EMPLOYABILITY		✔	SKILL ORIENTED			ENTREPRENEURSHIP		
Curriculum Relevance	LOCAL		REGIONAL			NATIONAL	✔	GLOBAL	
Changes Made in the Course	Percentage of Change			No Changes Made			New Course		✔

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Explain the important finance concepts	K1 to K5
CO2	Estimate risk and determine its impact on return	K1 to K5
CO3	Examine leasing and other sources of finance for startups	K1 to K5
CO4	Summaries cash receivable and inventory management techniques	K1 to K5
CO5	Evaluate techniques of long term investment decision incorporating risk factor	K1 to K5

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	1	3	3	3				
CO2	3	3	2	3	3	3				
CO3	2	2	1	2	2	2				
CO4	2	2	1	2	2	2				
CO5	3	3	2	3	3	3				

S -STRONG   **M – MEDIUM**   **L – LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	15	15	15	15	15
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS	3.0	3.0	3.0	3.0	3.0

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Introduction to Business Finance and Time vale of money	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
II	Risk Management	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
III	Startup Financing and Leasing	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
IV	Cash, Receivable and Inventory Management	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
V	Multi National Capital Budgeting	**18**	**Chalk and talk, Power Point Presentation, Video Lectures, seminar and assignment**

Learning Outcome Based Education & Assessment (LOBE) Formative Examination - Blue Print Articulation Mapping – K Levels with Course Outcomes (COs)

Internal	Cos	K Level	Section A MCQs No. of. Questions	Section A MCQs K - Level	Section B Either or Choice	Section C Either or Choice
CI AI	CO1	K1 – K5	2	K1	2(K2, K2)	2(K4, K4)
CI AI	CO2	K1 – K5	2	K2	2(K3, K3)	2(K5, K5)
CI AII	CO3	K1 – K5	2	K1	2(K2, K2)	2(K4, K4)
CI AII	CO4	K1 – K5	2	K2	2(K3, K3)	2(K5, K5)
Question Pattern CIA I & II	No. of Questions to be asked		4		4	4
Question Pattern CIA I & II	No. of Questions to be answered		4		2	2
Question Pattern CIA I & II	Marks for each question		1		5	8
Question Pattern CIA I & II	Total Marks for each section		4		10	16

Distribution of Marks with K Level CIA I & CIA II							
	K Level	Section A (Multiple Choice Questions)	Section B (Either / Or Choice)	Section C (Either / Or Choice)	Total Marks	% of (Marks without choice)	Consolidate of %
CIA I	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100.00	100
CIA II	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100	100

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 –Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	COs	K - Level	Section A (MCQs)		Section B (Either / or Choice) With K - LEVEL	Section C (Either / or Choice) With K - LEVEL
			No. of Questions	K – Level		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	Section A (Multiple Choice Questions)	Section B (Either or Choice	Section C (Either/ or Choice)	Total Marks	% of (Marks without choice)	Consolidated %
K1	5			5	3.57	4
K2	5	10		15	10.71	11
K3		20	32	52	37.14	37
K4		20	16	36	25.71	26
K5			32	32	22.86	23
Marks	10	50	80	140	100	100
NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.						

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions				**PART – A** (10 x 1 = 10 Marks)	
1.	Unit - I	CO1	K1		
				a)	b)
				c)	d)
2.	Unit - I	CO1	K2		
				a)	b)
				c)	d)
3.	Unit - II	CO2	K1		
				a)	b)
				c)	d)
4.	Unit - II	CO2	K2		
				a)	b)
				c)	d)
5.	Unit - III	CO3	K1		
				a)	b)
				c)	d)
6.	Unit - III	CO3	K2		
				a)	b)
				c)	d)
7.	Unit - IV	CO4	K1		
				a)	b)
				c)	d)
8.	Unit - IV	CO4	K2		
				a)	b)
				c)	d)
9.	Unit - V	CO5	K1		
				a)	b)
				c)	d)
10.	Unit - V	CO5	K2		
				a)	b)
				c)	d)

Answer **ALL** the questions				PART – B	(5 x 5 = 25 Marks)
11. a)	**Unit - I**	**CO1**	**K3**		
				OR	
11. b)	**Unit - I**	**CO1**	**K3**		
12. a)	**Unit - II**	**CO2**	**K2**		
				OR	
12. b)	**Unit - II**	**CO2**	**K2**		
13. a)	**Unit - III**	**CO3**	**K4**		
				OR	
13. b)	**Unit - III**	**CO3**	**K4**		
14. a)	**Unit - IV**	**CO4**	**K3**		
				OR	
14. b)	**Unit - IV**	**CO4**	**K3**		
15. a)	**Unit - V**	**CO5**	**K4**		
				OR	
15. b)	**Unit - V**	**CO5**	**K4**		

Answer **ALL** the questions				PART – C	(5 x 8 = 40 Marks)
16. a)	**Unit - I**	**CO1**	**K5**		
				OR	
16. b)	**Unit - I**	**CO1**	**K5**		
17. a)	**Unit - II**	**CO2**	**K3**		
				OR	
17. b)	**Unit - II**	**CO2**	**K3**		
18. a)	**Unit - III**	**CO3**	**K4**		
				OR	
18. b)	**Unit - III**	**CO3**	**K4**		
19. a)	**Unit - IV**	**CO4**	**K5**		
				OR	
19. b)	**Unit - IV**	**CO4**	**K5**		
20. a)	**Unit - V**	**CO5**	**K3**		
				OR	
20. b)	**Unit - V**	**CO5**	**K3**		

Course Name	DIGITAL MARKETING			
Course Code	23PCCCC12	**L**	**P**	**C**
Category	CORE	6	-	4

COURSE OBJECTIVES:

➢ To assess the evolution of digital marketing
➢ To appraise the dimensions of online marketing mix
➢ To infer the techniques of digital marketing
➢ To analyse online consumer behaviour
➢ To interpret data from social media and to evaluate game based marketing

UNIT - I INTRODUCTION TO DIGITAL MARKETING	18

Digital Marketing – Transition from traditional to digital marketing – Rise of internet – Growth of e-concepts – Growth of e-business to advanced e-commerce – Emergence of digital marketing as a tool – Digital marketing channels – Digital marketing applications, benefits and challenges – Factors for success of digital marketing – Emerging trends and concepts, Big Data and IOT, Segments based digital marketing, Hyperlocal marketing - Opportunities for digital marketing professionals.

UNIT - II ONLINE MARKETING MIX	18

Online marketing mix – E-product – E-promotion – E-price – E-place – Consumer segmentation – Targeting – Positioning – Consumers and online shopping issues – Website characteristics affecting online purchase decisions – Distribution andimplication on online marketing mix decisions – Digitization and implication on online marketing mix decisions.

UNIT - III DIGITAL MEDIA CHANNELS	18

Digital media channels – Search engine marketing – ePR – Affiliate marketing – Interactive display advertising – Opt-in-email marketing and mobile text messaging, Social media and viral marketing – Online campaign management using – Facebook, Twitter, Instagram, Snapchat, Pinterest – Metaverse marketing - Advantages and disadvantages of digital media channels – Metaverse marketing.

UNIT - IV ONLINE CONSUMER BEHAVIOR	18

Online consumer behavior – Cultural implications of key website characteristics – Dynamics of online consumer visit – Models of website visits – Web and consumer decision making process – Data base marketing – Electronic consumer relationship management – Goals – Process – Benefits – Role – Next generation CRM.

UNIT - V ANALYTICS AND GAMIFICATION	18

Digital Analytics – Concept – Measurement framework – Demystifying web data - Owned social metrics – Measurement metrics for Facebook, Twitter, YouTube, Slide Share, Pinterest, Instagram, Snapchat and LinkedIn – Earned social media metrics - Digital brand analysis – Meaning – Benefits – Components – Brand share dimensions – Brand audience dimensions – Market influence analytics – Consumer generated media and opinion leaders – Peer review – Word of mouth – Influence analytics – Mining consumer generated media – Gamification and game based marketing – Benefits – Consumer motivation for playing online games.

	Total Lecture Hours	90

BOOKS FOR STUDY:

➢ Puneet Singh Bhatia, (2019) "Fundamentals of Digital Marketing", 2ndEdition,Pearson Education Pvt Ltd, Noida.

➢ Dave Chaffey, Fiona Ellis-Chadwick(2019) "Digital Marketing", Pearson Education Pvt Ltd, Noida.

➢ Chuck Hemann& Ken Burbary(2019) "Digital Marketing Analytics", Pearson Education Pvt Ltd, Noida.

➢ Seema Gupta, (2022) "Digital Marketing" 3rdEdition, McGraw Hill Publications Noida.

➢ Kailash Chandra Upadhyay,(2021) "Digital Marketing: Complete Digital MarketingTutorial", Notion Press, Chennai.

➢ Michael Branding, (2021) "Digital Marketing", Empire Publications India Private Ltd, New Delhi.

BOOKS FOR REFERENCES:

➢ VandanaAhuja, (2016) "Digital Marketing", Oxford University Press. London.

➢ Ryan Deiss& Russ Henneberry, (2017) "Digital Marketing", John Wiley and Sons Inc. Hoboken.

➢ Alan Charlesworth,(2014), "Digital Marketing - A Practical Approach", Routledge, London.

➢ Simon Kingsnorth, Digital Marketing Strategy,(2022) "An Integrated approach to Online Marketing", Kogan Page Ltd. United Kingdom.

➢ MaityMoutusy,(2022) "Digital Marketing" 2ndEdition, Oxford University Press, London.

WEB RESOURCES:

❖ https://www.digitalmarketer.com/digital-marketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf

❖ https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/gamification-and-game-based-learning

❖ https://journals.ala.org/index.php/ltr/article/download/6143/7938

Nature of Course	EMPLOYABILITY		SKILL ORIENTED	✓	ENTREPRENEURSHIP	
Curriculum Relevance	LOCAL		REGIONAL	NATIONAL		GLOBAL	✓
Changes Made in the Course	Percentage of Change		No Changes Made		New Course	✓

*Treat 20% as each unit (20*5=100%) and calculate the percen5age of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Explain the dynamics of digital marketing	K1 to K5
CO2	Examine online marketing mix	K1 to K5
CO3	Compare digital media channels	K1 to K5
CO4	Explain online consumer behavior	K1 to K5
CO5	Analyse social media data	K1 to K5

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	3	3	3				
CO2	3	3	2	3	3	3				
CO3	3	3	2	2	3	2				
CO4	3	3	2	2	3	3				
CO5	3	3	1	3	3	2				

S- STRONG   **M – MEDIUM**   **L - LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	15	15	15	15	15
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS	3.0	3.0	3.0	3.0	3.0

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Introduction to Business Finance and Time vale of money	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
II	Risk Management	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
III	Startup Financing and Leasing	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
IV	Cash, Receivable and Inventory Management	**18**	**Chalk and talk, Power Point Presentation, Video Lectures**
V	Multi National Capital Budgeting	**18**	**Seminar, Assignment, Chalk and talk, Power Point Presentation, Video Lectures**

Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)

Internal	Cos	K Level	Section A MCQs No. of. Questions	Section A MCQs K - Level	Section B Either or Choice	Section C Either or Choice
CI **AI**	CO1	**K1 – K5**	2	K1	2(K2, K2)	2(K4, K4)
	CO2	**K1 – K5**	2	K2	2(K3, K3)	2(K5, K5)
CI **AII**	CO3	**K1 – K5**	2	K1	2(K2, K2)	2(K4, K4)
	CO4	**K1 – K5**	2	K2	2(K3, K3)	2(K5, K5)
Question Pattern CIA I & II	**No. of Questions to be asked**	4		4	4
	No. of Questions to be answered	4		2	2
	Marks for each question	1		5	8
	Total Marks for each section	4		10	16

Distribution of Marks with K Level CIA I & CIA II							
	K Level	Section A (Multiple Choice Questions)	Section B (Either / Or Choice)	Section C (Either / Or Choice)	Total Marks	% of (Marks without choice)	Consolidate of %
CIA I	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100.00	100
CIA II	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100	100

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 –Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	**COs**	**K - Level**	**Section A (MCQs)**		**Section B (Either / or Choice) With K - LEVEL**	**Section C (Either / or Choice) With K - LEVEL**
			No. of Questions	**K – Level**		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	**Section A (Multiple Choice Questions)**	**Section B (Either or Choice**	**Section C (Either/ or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidated %**
K1	5			5	3.57	4
K2	5	10		15	10.71	11
K3		20	32	52	37.14	37
K4		20	16	36	25.71	26
K5			32	32	22.86	23
Marks	**10**	**50**	**80**	**140**	**100**	**100**
NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.						

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions			**PART – A**		**(10 x 1 = 10 Marks)**
1.	**Unit - I**	**CO1**	**K1**		
				a)	b)
				c)	d)
2.	**Unit - I**	**CO1**	**K2**		
				a)	b)
				c)	d)
3.	**Unit - II**	**CO2**	**K1**		
				a)	b)
				c)	d)
4.	**Unit - II**	**CO2**	**K2**		
				a)	b)
				c)	d)
5.	**Unit - III**	**CO3**	**K1**		
				a)	b)
				c)	d)
6.	**Unit - III**	**CO3**	**K2**		
				a)	b)
				c)	d)
7.	**Unit - IV**	**CO4**	**K1**		
				a)	b)
				c)	d)
8.	**Unit - IV**	**CO4**	**K2**		
				a)	b)
				c)	d)
9.	**Unit - V**	**CO5**	**K1**		
				a)	b)
				c)	d)
10.	**Unit - V**	**CO5**	**K2**		
				a)	b)
				c)	d)

Answer **ALL** the questions		**PART – B**		(5 x 5 = 25 Marks)
11. a)	**Unit - I**	**CO1**	**K3**	
		OR		
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
		OR		
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
		OR		
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
		OR		
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
		OR		
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions		**PART – C**		(5 x 8 = 40 Marks)
16. a)	**Unit - I**	**CO1**	**K5**	
		OR		
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
		OR		
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
		OR		
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
		OR		
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
		OR		
20. b)	**Unit - V**	**CO5**	**K3**	

Course Name	BANKING AND INSURANCE			
Course Code	23PCCCC13	**L**	**P**	**C**
Category	CORE	6	-	4

COURSE OBJECTIVES:

➢ To understand the evolution of new era banking
➢ To explore the digital banking techniques
➢ To analyse the role of insurance sector
➢ To evaluate the mechanism of customer service in insurance and the relevant regulations
➢ To analsye risk and its impact in banking and insurance industry

UNIT - I	Introduction to Banking	18

Banking: Brief History of Banking - Rapid Transformation in Banking: Customer Shift - Fintech Overview - Fintech Outlook - The Financial Disruptors - Digital Financial Revolution - New Era of Banking.Digital Banking – Electronic Payment Systems–Electronic Fund Transfer System – Electronic Credit and Debit Clearing – NEFT – RTGS –VSAT–SFMS–SWIFT.

UNIT - II	Contemporary Developments in Banking	18

Distributed Ledger Technology –Blockchain: Meaning - Structure of BlockChain - Types of Block Chain - Differences between DLT and Blockchain - Benefits of Blockchain and DLT - Unlocking the potential of Blockchain–Crypto currencies, Central Bank Digital Currency (CBDC) - Role of DLT in financial services - AI in Banking: Future of AI in Banking - Applications of AI in Banking - Importance of AI in banking - Banking reimagined with AI. Cloud banking - Meaning - Benefits in switching to Cloud Banking..

UNIT - III	Indian Insurance Market	18

HistoryofInsuranceinIndia – DefinitionandFunctionsofInsurance–InsuranceContract – IndianInsuranceMarket – ReformsinInsuranceSector – InsuranceOrganisationInsurance organization
structure.InsuranceIntermediaries:InsuranceBroker – InsuranceAgent-SurveyorsandLossAssessors-ThirdPartyAdministrators(HealthServices) – Procedures-CodeofConduct.

UNIT - IV	Customer Services in Insurance	18

Customer Service in Insurance – Quality of Service-Roleof Insurance Agents in Customer Service-Agent's Communication and Customer Service –Ethical BehaviourinInsurance – GrievanceRedressalSysteminInsuranceSector –IntegratedGrievanceManagementSystem-InsuranceOmbudsman - Insurance Regulatory and Development Authority of India Act (IRDA) – Regulations and Guidelines.

UNIT - V	Risk Management	18

Risk Management and Control in banking and insurance industries – Methods of Risk Management – Risk Management by Individuals and Corporations – Tools for Controlling Risk.

	Total Lecture Hours	90

BOOKS FOR STUDY:

- Puneet Singh Bhatia, (2019) "Fundamentals of Digital Marketing", 2nd Edition, Pearson Education Pvt Ltd, Noida.
- Dave Chaffey, Fiona Ellis-Chadwick(2019) "Digital Marketing", Pearson Education Pvt Ltd, Noida.
- Chuck Hemann& Ken Burbary(2019) "Digital Marketing Analytics", Pearson Education Pvt Ltd, Noida.
- Seema Gupta,(2022) "Digital Marketing" 3rd Edition, McGraw Hill Publications Noida.
- Kailash Chandra Upadhyay,(2021) "Digital Marketing: Complete Digital Marketing Tutorial", Notion Press, Chennai.
- Michael Branding, (2021) "Digital Marketing", Empire Publications India Private Ltd, New Delhi.

BOOKS FOR REFERENCES:

- VandanaAhuja, (2016) "Digital Marketing", Oxford University Press. London.
- Ryan Deiss& Russ Henneberry, (2017) "Digital Marketing", John Wiley and Sons Inc. Hoboken.
- Alan Charlesworth,(2014), "Digital Marketing - A Practical Approach", Routledge, London.
- Simon Kingsnorth, Digital Marketing Strategy,(2022) "An Integrated approach to Online Marketing", Kogan Page Ltd. United Kingdom.
- MaityMoutusy,(2022) "Digital Marketing" 2nd Edition, Oxford University Press, London.

WEB RESOURCES:

- ❖ **https://www.digitalmarketer.com/digital-marketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf**
- ❖ **https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/gamification-and-game-based-learning**
- ❖ **https://journals.ala.org/index.php/ltr/article/download/6143/7938**

Nature of Course	EMPLOYABILITY	✔	SKILL ORIENTED		ENTREPRENEURSHIP	
Curriculum Relevance	LOCAL		REGIONAL	NATIONAL	GLOBAL	✔
Changes Made in the Course	Percentage of Change		No Changes Made		New Course	✔
*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.						

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Relate the transformation in banking from traditional to new age	K1 to K5
CO2	Apply modern techniques of digital banking	K1 to K5
CO3	Evaluate the role of insurance sector	K1 to K5
CO4	Examine the regulatory mechanism	K1 to K5
CO5	Assess risk mitigation strategies	K1 to K5

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	1	3	3	3				
CO2	3	3	3	3	3	3				
CO3	2	2	1	2	2	2				
CO4	3	2	2	1	2	2				
CO5	3	3	1	3	3	3				

S- STRONG   M – MEDIUM   L - LOW

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	15	15	15	15	15
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS	3.0	3.0	3.0	3.0	3.0

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Introduction to Banking	18	Chalk and talk, Power Point Presentation, Video Lectures
II	Contemporary Developments in Banking	18	Chalk and talk, Power Point Presentation, Video Lectures

III	Indian Insurance Market	18	**Chalk and talk, Power Point Presentation, Video Lectures**
IV	Customer Services in Insurance	18	**Chalk and talk, Power Point Presentation, Video Lectures**
V	Risk Management	18	**Chalk and talk, Power Point Presentation, Video Lectures, seminar and assignment**

Learning Outcome Based Education & Assessment (LOBE) Formative Examination - Blue Print Articulation Mapping – K Levels with Course Outcomes (COs)						
Internal	**Cos**	**K Level**	**Section A**		**Section B Either or Choice**	**Section C Either or Choice**
			MCQs			
			No. of. Questions	**K - Level**		
CI AI	**CO1**	**K1 – K5**	2	K1	2(K2, K2)	2(K4, K4)
	CO2	**K1 – K5**	2	K2	2(K3, K3)	2(K5, K5)
CI AII	**CO3**	**K1 – K5**	2	K1	2(K2, K2)	2(K4, K4)
	CO4	**K1 – K5**	2	K2	2(K3, K3)	2(K5, K5)
Question Pattern CIA I & II		**No. of Questions to be asked**	4		4	4
		No. of Questions to be answered	4		2	2
		Marks for each question	1		5	8
		Total Marks for each section	4		10	16

Distribution of Marks with K Level CIA I & CIA II							
	K Level	**Section A (Multiple Choice Questions)**	**Section B (Either / Or Choice)**	**Section C (Either / Or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidate of %**
CIA I	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	**4**	**20**	**32**	**56**	**100.00**	**100**
CIA II	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	**4**	**20**	**32**	**56**	**100**	**100**

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 –Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	**COs**	**K - Level**	Section A (MCQs)		**Section B (Either / or Choice) With K - LEVEL**	**Section C (Either / or Choice) With K - LEVEL**
			No. of Questions	**K – Level**		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	**Section A (Multiple Choice Questions)**	**Section B (Either or Choice**	**Section C (Either/ or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidated %**
K1	5			5	**3.57**	4
K2	5	10		15	**10.71**	11
K3		20	32	52	**37.14**	37
K4		20	16	36	**25.71**	26
K5			32	32	**22.86**	23
Marks	**10**	**50**	**80**	**140**	**100**	**100**
NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.						

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions				**PART – A**	**(10 x 1 = 10 Marks)**
1.	Unit - I	CO1	K1		
				a)	b)
				c)	d)
2.	Unit - I	CO1	K2		
				a)	b)
				c)	d)
3.	Unit - II	CO2	K1		
				a)	b)
				c)	d)
4.	Unit - II	CO2	K2		
				a)	b)
				c)	d)
5.	Unit - III	CO3	K1		
				a)	b)
				c)	d)
6.	Unit - III	CO3	K2		
				a)	b)
				c)	d)
7.	Unit - IV	CO4	K1		
				a)	b)
				c)	d)
8.	Unit - IV	CO4	K2		
				a)	b)
				c)	d)
9.	Unit - V	CO5	K1		
				a)	b)
				c)	d)
10.	Unit - V	CO5	K2		
				a)	b)
				c)	d)

Answer **ALL** the questions		**PART – B**		**(5 x 5 = 25 Marks)**
11. a)	**Unit - I**	**CO1**	**K3**	
		OR		
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
		OR		
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
		OR		
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
		OR		
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
		OR		
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions		**PART – C**		**(5 x 8 = 40 Marks)**
16. a)	**Unit - I**	**CO1**	**K5**	
		OR		
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
		OR		
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
		OR		
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
		OR		
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
		OR		
20. b)	**Unit - V**	**CO5**	**K3**	

Course Name	INTRODUCTION TO INDUSTRY 4.0			
Course Code	23PCCEC11	**L**	**P**	**C**
Category	ELECTIVE - I	6	-	5

COURSE OBJECTIVES:

➢ To enable the students to comprehend the change from industry 1.0 to 4.0
➢ To gain knowledge on the challenges and future prospects of applying artificial intelligence
➢ To learn the applications of big data for industrial growth and development
➢ To understand the applications of IoT in various sectors
➢ To understand why education has to be aligned with industry 4.0

UNIT - I	Introduction	18

Industry: Meaning, Types - Industrial Revolution: Industrial Revolution 1.0 to 4.0: Meaning, Goals and Design Principles - Technologies of Industry 4.0 - Big Data – Artificial Intelligence (AI) – Industrial Internet of Things - Cyber Security – Cloud – Augmented Reality

UNIT - II	Artificial Intelligence	18

Artificial Intelligence (AI): Need, History and Foundations -The AI - environment - Societal Influences of AI – Application Domains and Tools - Associated Technologies of AI - Future prospects of AI – Challenges of AI.

UNIT - III	Big Data	18

Evolution - Data Evolution - Data : Terminologies - Essential of Big Data in Industry 4.0 - Big Data Merits and Limitations - Big Data Components : Big Data Characteristics - Big Data Processing Frameworks - Big Data Tools - Big Data Applications - Big Data Domain Stack : Big Data in Data Science – Big Data in IoT - Big Data in Machine Learning - Big Data in Databases - Big Data Use cases: Big Data in Social Causes - Big Data for Industry - Big Data Roles - Learning Platforms; Internet of Things (IoT) : Introduction to IoT – Architecture of IoT Technologies for IoT - Developing IoT Applications - Applications of IoT - Security in IoT.

UNIT - IV	Applications of IoT	18

IoT in Manufacturing – Healthcare – Education – Aerospace and Defence – Agriculture – Transportation and Logistics – Impact of Industry 4.0 on Society: Impact on Business, Government, People – Tools for Artificial Intelligence - Big Data and Data Analytics - Virtual Reality - Augmented Reality – IoT - Robotics.

UNIT - V	Industry 4.0	18

Education 4.0 – Curriculum 4.0 – Faculty 4.0 – Skills required for Future - Tools for Education – Artificial Intelligence Jobs in 2030 – Jobs 2030 - Framework for aligning Education with Industry 4.0.

	Total Lecture Hours	90

BOOKS FOR STUDY:

➢ Seema Acharya J, Subhashini Chellappan, (2019) "Big Data and Analytics", 2nd Edition, Wiley Publication, New Delhi.

➢ Russel S, Norvig P (2010), "Artificial Intelligence: A Modern approach", 3rd Edition, Prentice Hall, New York.

➢ Pethuru Raj and Anupama C. Raman, (2017), "The Internet of Things: Enabling Technologies, Platforms, and Use Cases", Auerbach Publications

BOOKS FOR REFERENCES:

➢ Judith Hurwitz, Alan Nugent, Fern Halper, Marcia Kaufman, "Big Data for Dummies", John Wiley & Sons, Inc.

➢ Nilsson (2000), Artificial Intelligence: A new synthesis, Nils J Harcourt Asia PTE Ltd

WEB RESOURCES:

❖ **https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SEEA1403.pdf**

❖ **https://library.oapen.org/bitstream/handle/20.500.12657/43836/external_content.pdf? sequence=1**

❖ **https://www.vssut.ac.in/lecture_notes/lecture1428643004.pdf**

Nature of Course	EMPLOYABILITY	✔	SKILL ORIENTED		ENTREPRENEURSHIP	
Curriculum Relevance	LOCAL		REGIONAL		NATIONAL	GLOBAL	✔
Changes Made in the Course	Percentage of Change		No Changes Made		New Course	✔
*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.						

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Discuss on the change from industry 1.0 to 4.0	**K1 to K5**
CO2	Discover the challenges and future prospects of applying artificial intelligence	**K1 to K5**
CO3	Apply big data for industrial growth and development	**K1 to K5**
CO4	Apply IoT in various sectors like Manufacturing, Healthcare, Education, Aerospace and Défense	**K1 to K5**
CO5	Appraise why education has to be aligned with industry 4.0	**K1 to K5**

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	2	3	3	3	3	3		
CO2	2	3	2	3	3	3	3	3		
CO3	2	3	2	3	3	3	3	3		
CO4	2	3	2	3	3	3	3	3		
CO5	2	3	2	3	3	3	3	3		
S- STRONG				**M – MEDIUM**					**L - LOW**	

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	**15**	**15**	**15**	**15**	**15**
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS	3.0	3.0	3.0	3.0	3.0

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Industry: Meaning, Types - Industrial Revolution: Industrial Revolution 1.0 to 4.0: Meaning, Goals and Design Principles - Technologies of Industry 4.0 - Big Data – Artificial Intelligence (AI) – Industrial Internet of Things - Cyber Security – Cloud – Augmented Reality.	**18**	**THEORY**
II	Artificial Intelligence (AI): Need, History and Foundations -The AI - environment - Societal	**18**	**THEORY**

	Influences of AI – Application Domains and Tools - Associated Technologies of AI - Future prospects of AI – Challenges of AI.		
III	Evolution - Data Evolution - Data : Terminologies - Essential of Big Data in Industry 4.0 - Big Data Merits and Limitations - Big Data Components : Big Data Characteristics - Big Data Processing Frameworks - Big Data Tools - Big Data Applications - Big Data Domain Stack : Big Data in Data Science – Big Data in IoT - Big Data in Machine Learning - Big Data in Databases - Big Data Usecases: Big Data in Social Causes - Big Data for Industry - Big Data Roles - Learning Platforms; Internet of Things (IoT) : Introduction to IoT – Architecture of IoT Technologies for IoT - Developing IoT Applications - Applications of IoT Security in IoT.	**18**	**THEORY**
IV	IoT in Manufacturing – Healthcare – Education – Aerospace and Defence – Agriculture – Transportation and Logistics – Impact of Industry 4.0 on Society: Impact on Business, Government, People - Tools for Artificial Intelligence - Big Data and Data Analytics - Virtual Reality - Augmented Reality – IoT - Robotics.	**18**	**THEORY**
V	Education 4.0 – Curriculum 4.0 – Faculty 4.0 – Skills required for Future - Tools for Education – Artificial Intelligence Jobs in 2030 – Jobs 2030 - Framework for aligning Education with Industry 4.0.	**18**	**THEORY**

Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)

Internal	Cos	K Level	Section A MCQs		Section B Either or Choice	Section C Either or Choice
			No. of. Questions	K - Level		
CI AI	CO1	K1 – K5	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO2	K1 – K5	2	K2,K2	2(K3, K3)	2(K4, K4)
CI AII	CO3	K1 – K5	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO4	K1 – K5	2	K2,K2	2(K3, K3)	2(K4, K4)
Question Pattern CIA I & II	No. of Questions to be asked		4		4	4
	No. of Questions to be answered		4		2	2
	Marks for each question		1		5	8
	Total Marks for each section		4		10	16

Distribution of Marks with K Level CIA I & CIA II

	K Level	Section A (Multiple Choice Questions)	Section B (Either / Or Choice)	Section C (Either / Or Choice)	Total Marks	% of (Marks without choice)	Consolidate of %
CIA I	K1	2			2	3.6	7.2
	K2	2			2	3.6	
	K3		20		20	35.7	35.7
	K4			32	32	57.1	57.1
	K5						
	Marks	4	20	32	56	100	100
CIA II	K1	2			2	3.6	7.2
	K2	2			2	3.6	
	K3		20		20	35.7	35.7
	K4			32	32	57.1	57.1
	K5						
	Marks	4	20	32	56	100	100

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 – Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	**COs**	**K - Level**	**Section A (MCQs)**		**Section B (Either / or Choice) With K - LEVEL**	**Section C (Either / or Choice) With K - LEVEL**
			No. of Questions	**K – Level**		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	**Section A (Multiple Choice Questions)**	**Section B (Either or Choice**	**Section C (Either/ or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidated %**
K1	5			5	**3.57**	**14.28**
K2	5	10		15	**10.71**	
K3		20	32	52	**37.14**	37.14
K4		20	16	36	**25.71**	25.17
K5			32	32	**22.85**	22.85
Marks	**10**	**50**	**80**	**140**	**100**	**100**
NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.						

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions				**PART – A**	**(10 x 1 = 10 Marks)**
	Unit - I	**CO1**	**K1**		
1.				a)	b)
				c)	d)
	Unit - I	**CO1**	**K2**		
2.				a)	b)
				c)	d)
	Unit - II	**CO2**	**K1**		
3.				a)	b)
				c)	d)
	Unit - II	**CO2**	**K2**		
4.				a)	b)
				c)	d)
	Unit - III	**CO3**	**K1**		
5.				a)	b)
				c)	d)
	Unit - III	**CO3**	**K2**		
6.				a)	b)
				c)	d)
	Unit - IV	**CO4**	**K1**		
7.				a)	b)
				c)	d)
	Unit - IV	**CO4**	**K2**		
8.				a)	b)
				c)	d)
	Unit - V	**CO5**	**K1**		
9.				a)	b)
				c)	d)
	Unit - V	**CO5**	**K2**		
10.				a)	b)
				c)	d)

Answer **ALL** the questions		PART – B			(5 x 5 = 25 Marks)
11. a)	**Unit - I**	**CO1**	**K3**	
		OR			
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
		OR			
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
		OR			
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
		OR			
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
		OR			
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions **PART – C(5 x 8 = 40 Marks)**				
16. a)	**Unit - I**	**CO1**	**K5**	
		OR		
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
		OR		
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
		OR		
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
		OR		
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
		OR		
20. b)	**Unit - V**	**CO5**	**K3**	

Course Name	DATABASE MANAGEMENT SYSTEM			
Course Code	23PCCEC12	**L**	**P**	**C**
Category	ELECTIVE	6	-	5

COURSE OBJECTIVES:

➢ To introduce the basic concepts of Relational Database Management System and the working knowledge of Linux environment
➢ To understand designing databases and queries in SQL
➢ To learn RDBMS
➢ To up skill the functions and operators
➢ To understand the constraints, locks and MySQL

UNIT - I	Introduction to Database Systems and Linux	18

Introduction to File and Database systems Database System Structure - Data Models Introduction to Network Models: ER Model, Relational Model - Introduction to Linux Operating System - Properties of Linux - Desktop Environment - Linux basics commands - Working with Files - Text Editors - I/O Redirections - Pipes, Filters, and Wildcards - Changing Access Rights.

UNIT - II	SQL Definition and Normalization	18

SQL – Data Definition - Queries in SQL - Updates - Views - Integrity and Security. Relational Database design – Functional dependences and Normalization for relational databases (up to BCNF) - Query Forms.

UNIT - III	Files and RDBMs	18

Record Storage and Primary File Organization - Secondary Storage Devices - Operations on Files - Heap File - Sorted Files - Hashing Techniques - Index Structure for Files - Different Types of Indexes - B-Tree - B+Tree - Query Processing - Multimedia Databases - Basic Concepts and Applications - Indexing and Hashing - Text Databases - Overview of RDBMs - Advantages of RDBMs over DBMs – Introduction to Data Mining.

UNIT - IV	Data Definition and Manipulation Language	18

Data Definition Language - Data Manipulation Language - Transaction Control - Data Control Language Grant - Revoke Privilege Command - Set Operators - Joins- Kinds of Joins - Table Aliases - Sub queries - Multiple and Correlated Sub Queries - Functions - Single Row - Date, Character, Numeric, Conversion and Group Functions

UNIT - V	Constraints and MYSQL	18

Constraints - Domain, Equity, Referential Integrity Constraints - Locks - Types of Locks, Table Partitions - Synonym - Introduction to PL/SQL - Introduction - MySQL as an RDBMS Tool - Data types and Commands.

	Total Lecture Hours	**90**

BOOKS FOR STUDY:

➢ Ramakrishnan Raghu and Gehrke Johannes, "Database Management Systems", McGraw–Hill, USA.

➢ Rajendra Prasad Mahapatra and Govind Verma, "Database Management System", Khanna Publications, New Delhi.

BOOKS FOR REFERENCES:

➢ Ramon A Mata-Toledo and Pauline K Cushman, "Database Management System", Schaun's Outlines, New York.

➢ Abraham Silberschatz, Henry F Korth and S. Sudarshan, "Database System Concepts" McGraw–Hill, USA.

WEB RESOURCES:

❖ http://education-portal.com/academy/lesson/what-is-a-database-management-systempurpose-and-function.html.
❖ http://www.comptechdoc.org/os/linux/usersguide/linux_ugbasics.html.
❖ http://www.dummies.com/how-to/content/common-linux-commands.html.

Nature of Course	EMPLOYABILITY	✔	SKILL ORIENTED		ENTREPRENEURSHIP	
Curriculum Relevance	LOCAL		REGIONAL	NATIONAL	GLOBAL	✔
Changes Made in the Course	Percentage of Change	**50%**	No Changes Made		New Course	

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Identify models and schemas in DBMS and LINUX	K1 to K5
CO2	Demonstrate Queries in SQL	K1 to K5
CO3	Discuss handling files and databases	K1 to K5
CO4	Apply skills on functions and operators in RDBMS	K1 to K5
CO5	Apply constraints and locks in SQL	K1 to K5

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	3	3	3	2	2	2	3	2	
CO2	3	3	2	3	3	3	2	2	3	
CO3	1	2	2	2	1	2	1	2	2	
CO4	3	3	3	3	3	3	3	3	3	
CO5	3	3	3	3	1	2	1	3	2	

S- STRONG   **M – MEDIUM**   **L - LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	2	3	3	3	2
CO 2	3	3	2	3	3
CO 3	1	2	2	2	1
CO 4	3	3	3	3	3
CO 5	3	3	3	3	1
WEITAGE	12	14	13	14	10
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS					

LESSON PLAN:

UNIT	Database Management System	HRS	PEDAGOGY
I	Introduction to File and Database systems Database System Structure - Data Models Introduction to Network Models: ER Model, Relational Model - Introduction to Linux Operating System - Properties of Linux - Desktop Environment - Linux basics commands - Working with Files - Text Editors - I/O Redirections - Pipes, Filters, and Wildcards - Changing Access Rights.	18	THEORY

II	SQL – Data Definition - Queries in SQL - Updates - Views - Integrity and Security. Relational Database design – Functional dependences and Normalization for relational databases (up to BCNF) - Query Forms.	**18**	**THEORY**
III	Record Storage and Primary File Organization - Secondary Storage Devices - Operations on Files - Heap File - Sorted Files - Hashing Techniques - Index Structure for Files - Different Types of Indexes - B-Tree - B+Tree - Query Processing - Multimedia Databases - Basic Concepts and Applications - Indexing and Hashing - Text Databases - Overview of RDBMs - Advantages of RDBMs over DBMs – Introduction to Data Mining.	**18**	**THEORY**
IV	Data Definition Language - Data Manipulation Language - Transaction Control - Data Control Language Grant - Revoke Privilege Command - Set Operators - Joins- Kinds of Joins - Table Aliases - Sub queries - Multiple and Correlated Sub Queries - Functions - Single Row - Date, Character, Numeric, Conversion and Group Functions	**18**	**THEORY**
V	Constraints - Domain, Equity, Referential Integrity Constraints - Locks - Types of Locks, Table Partitions - Synonym - Introduction to PL/SQL - Introduction - MySQL as an RDBMS Tool - Data types and Commands.	**18**	**THEORY**

			Section A		Section B	Section C
Internal	**Cos**	**K Level**	**MCQs**		**Either or Choice**	**Either or Choice**
			No. of. Questions	**K - Level**		
CI AI	**CO1**	**K1 – K5**	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO2	**K1 – K5**	2	K2,K2	2(K3, K3)	2(K4, K4)
CI AII	**CO3**	**K1 – K5**	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO4	**K1 – K5**	2	K2,K2	2(K3, K3)	2(K4, K4)
Question Pattern CIA I & II		**No. of Questions to be asked**	4		4	4
		No. of Questions to be answered	4		2	2
		Marks for each question	1		5	8
		Total Marks for each section	4		10	16

Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)

	K Level	**Section A (Multiple Choice Questions)**	**Section B (Either / Or Choice)**	**Section C (Either / Or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidate of %**
CIA I	**K1**	2			2	3.6	7.2
	K2	2			2	3.6	
	K3		20		20	35.7	35.7
	K4			32	32	57.1	57.1
	K5						
	Marks	4	20	32	56	100	100
CIA II	**K1**	2			2	3.6	7.2
	K2	2			2	3.6	
	K3		20		20	35.7	35.7
	K4			32	32	57.1	57.1
	K5						
	Marks	4	20	32	56	100	100

Distribution of Marks with K Level CIA I & CIA II

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 – Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	COs	K - Level	Section A (MCQs)		Section B (Either / or Choice) With K - LEVEL	Section C (Either / or Choice) With K - LEVEL
			No. of Questions	K – Level		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	Section A (Multiple Choice Questions)	Section B (Either or Choice	Section C (Either/ or Choice)	Total Marks	% of (Marks without choice)	Consolidated %
K1	5			5	3.57	14.28
K2	5	10		15	10.71	
K3		20	32	52	37.14	37.14
K4		20	16	36	25.71	25.17
K5			32	32	22.85	22.85
Marks	10	50	80	140	100	100
NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.						

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions			**PART – A**		**(10 x 1 = 10 Marks)**
1.	**Unit - I**	**CO1**	**K1**		
				a)	b)
				c)	d)
2.	**Unit - I**	**CO1**	**K2**		
				a)	b)
				c)	d)
3.	**Unit - II**	**CO2**	**K1**		
				a)	b)
				c)	d)
4.	**Unit - II**	**CO2**	**K2**		
				a)	b)
				c)	d)
5.	**Unit - III**	**CO3**	**K1**		
				a)	b)
				c)	d)
6.	**Unit - III**	**CO3**	**K2**		
				a)	b)
				c)	d)
7.	**Unit - IV**	**CO4**	**K1**		
				a)	b)
				c)	d)
8.	**Unit - IV**	**CO4**	**K2**		
				a)	b)
				c)	d)
9.	**Unit - V**	**CO5**	**K1**		
				a)	b)
				c)	d)
10.	**Unit - V**	**CO5**	**K2**		
				a)	b)
				c)	d)

Answer **ALL** the questions		PART – B		(5 x 5 = 25 Marks)	
11. a)	**Unit - I**	**CO1**	**K3**	
			OR	
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
			OR	
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
			OR	
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
			OR	
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
			OR	
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions **PART – C(5 x 8 = 40 Marks)**				
16. a)	**Unit - I**	**CO1**	**K5**	
			OR	
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
			OR	
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
			OR	
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
			OR	
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
			OR	
20. b)	**Unit - V**	**CO5**	**K3**	

SECOND SEMESTER

Course Name	STRATEGIC COST MANAGEMENT			
Course Code	23PCCCC21	**L**	**P**	**C**
Category	CORE	6	-	4

COURSE OBJECTIVES:

➢ To analyse the aspects of strategic and quality control management
➢ To analyse and select cost control techniques
➢ To apply activity based costing for decision making
➢ To utilise transfer pricing methods in cost determination
➢ To apply cost management techniques in various sectors

UNIT - I	Introduction to Strategic Cost Management	18

Introduction to Strategic Cost Management (SCM) – Need for SCM – Differences between SCM and Traditional Cost Management - Value Chain Analysis: Meaning and steps - Quality Cost Management: Meaning of Quality and Quality Management – Cost of Quality –Indian Cost Accounting Standard 21 on Quality Control - Introduction to Lean System – Benefits of Lean System – Just in Time (JIT) – Kaizen Costing.

UNIT - II	Cost Control and Reduction	18

Cost Management Techniques: Cost Control: Meaning and Prerequisites - Cost Reduction: Meaning and Scope – Differences between Cost control and cost reduction - Pareto Analysis: Meaning, importance and applications - Target Costing: Meaning, steps and Principles – Life Cycle Costing: Meaning, Strategies for each stage of product life cycle, Benefits – Learning Curve: Meaning, Learning curve ratio and applications.

UNIT - III	Activity Based Cost Management	18

Activity Based Cost Management: Concept, Purpose, Stages, BenefitsRelevance in Decisionmaking and its Application in Budgeting – Practical problems.

UNIT - IV	Transfer Pricing	18

Transfer Pricing: Meaning, Benefits, Methods: Pricing based on cost, Market price on transfer price, Negotiated pricing and Pricing based on opportunity costs – Practical Problems.

UNIT - V	Cost Management in Agriculture and IT sector	18

Agriculture Sector: Features, Cost Structure, Cost Management, Tools to measure the performance, Minimum Support Price and International Perspective –Information Technology Sector: Features, Cost Structure, Cost Management and International Perspective.

	Total Lecture Hours	90

BOOKS FOR STUDY:

➢ Ravi M Kishore (2018), "Strategic Cost Management", 5thEdition, TaxmannPublications Pvt. Ltd, New Delhi.
➢ Bandgar P. K., (2017), "Strategic Cost Management", 1stEdition, HimalayaPublishing House Pvt Ltd, Mumbai.
➢ Sexena V. K., (2020), "Strategic Cost Management and PerformanceEvaluation", 1stEdition, Sultan Chand & Sons, New Delhi.

BOOKS FOR REFERENCES:

➢ John K Shank and Vijay Govindarajan(2008), Strategic Cost Management, Simon & Schuster; Latest edition, UK
➢ JawaharLal, (2015), "Strategic Cost Management", 1st Edition, Himalaya Publishing House Pvt Ltd, Mumbai.)
➢ Arora M. N., (2021), "A Text Book of Cost and Management Accounting", 11thEdition, Vikas Publishing House Pvt. Ltd., New Delhi.

WEB RESOURCES:

❖ https://www.accountingtools.com/articles/strategic-cost-management.html#:~:text= Strategic%20cost%20management%20is%20the,it%20or%20have%20no%20impact.
❖ https://ca-final.in/wp-content/uploads/2018/09/Chapter-4-Cost-Management-Techniques.pdf
❖ https://resource.cdn.icai.org/66530bos53753-cp5.pdf

Nature of Course	EMPLOYABILITY	✓	SKILL ORIENTED		ENTREPRENEURSHIP	
Curriculum Relevance	LOCAL		REGIONAL		NATIONAL	✓	GLOBAL	
Changes Made in the Course	Percentage of Change		No Changes Made		New Course	✓

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Explain strategic cost management and QC	K1 to K5
CO2	Choose the appropriate technique for cost control	K1 to K5
CO3	Make use of activity based costing in practice	K1 to K5
CO4	Choose transfer pricing methods to solve problems	K1 to K5
CO5	Construct cost structure for Agriculture and IT sector	K1 to K5

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	3	3				
CO2	3	3	2	3	3	3				
CO3	3	3	2	3	3	3				
CO4	3	3	2	3	3	3				
CO5	3	3	1	3	3	3				

S- STRONG   **M – MEDIUM**   **L - LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	15	15	15	15	15
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS	3.0	3.0	3.0	3.0	3.0

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Introduction to Strategic Cost Management	12	Chalk and talk, Power Point Presentation, Video Lectures
II	Cost Control and Reduction	12	Chalk and talk, Power Point Presentation, Video Lectures
III	Activity Based Cost Management	12	Chalk and talk, Power Point Presentation, Video Lectures
IV	Transfer Pricing	12	Chalk and talk, Power Point Presentation, Video Lectures
V	Cost Management in Agriculture and IT sector	12	Chalk and talk, Power Point Presentation, Video Lectures, seminar and assignment

<table>
<tr><td colspan="7" align="center">Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)</td></tr>
<tr><td rowspan="2">Internal</td><td rowspan="2">Cos</td><td rowspan="2">K Level</td><td colspan="2" align="center">Section A
MCQs</td><td rowspan="2" align="center">Section B
Either or
Choice</td><td rowspan="2" align="center">Section C
Either or Choice</td></tr>
<tr><td>No. of. Questions</td><td>K - Level</td></tr>
<tr><td rowspan="2">CI
AI</td><td>CO1</td><td>K1 – K5</td><td>2</td><td>K1</td><td>2(K2, K2)</td><td>2(K4, K4)</td></tr>
<tr><td>CO2</td><td>K1 – K5</td><td>2</td><td>K2</td><td>2(K3, K3)</td><td>2(K5, K5)</td></tr>
<tr><td rowspan="2">CI
AII</td><td>CO3</td><td>K1 – K5</td><td>2</td><td>K1</td><td>2(K2, K2)</td><td>2(K4, K4)</td></tr>
<tr><td>CO4</td><td>K1 – K5</td><td>2</td><td>K2</td><td>2(K3, K3)</td><td>2(K5, K5)</td></tr>
<tr><td rowspan="4">Question Pattern CIA I & II</td><td colspan="2">No. of Questions to be asked</td><td>4</td><td></td><td>4</td><td>4</td></tr>
<tr><td colspan="2">No. of Questions to be answered</td><td>4</td><td></td><td>2</td><td>2</td></tr>
<tr><td colspan="2">Marks for each question</td><td>1</td><td></td><td>5</td><td>8</td></tr>
<tr><td colspan="2">Total Marks for each section</td><td>4</td><td></td><td>10</td><td>16</td></tr>
</table>

Distribution of Marks with K Level CIA I & CIA II							
	K Level	Section A (Multiple Choice Questions)	Section B (Either / Or Choice)	Section C (Either / Or Choice)	Total Marks	% of (Marks without choice)	Consolidate of %
CIA I	K1	2			2	3.57	
	K2	2	10		12	21.43	25
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100.00	100
CIA II	K1	2			2	3.57	
	K2	2	10		12	21.43	25
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100	100

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 –Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	**COs**	**K - Level**	**Section A (MCQs)**		**Section B (Either / or Choice) With K - LEVEL**	**Section C (Either / or Choice) With K - LEVEL**
			No. of Questions	**K – Level**		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	**Section A** **(Multiple Choice Questions)**	**Section B (Either or Choice**	**Section C (Either/ or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidated %**
K1	5			5	3.57	4
K2	5	10		15	10.71	11
K3		20	32	52	37.14	37
K4		20	16	36	25.71	26
K5			32	32	22.86	23
Marks	**10**	**50**	**80**	**140**	**100**	**100**

NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions				**PART – A** (10 x 1 = 10 Marks)	
	Unit - I	**CO1**	**K1**		
1.				a)	b)
				c)	d)
	Unit - I	**CO1**	**K2**		
2.				a)	b)
				c)	d)
	Unit - II	**CO2**	**K1**		
3.				a)	b)
				c)	d)
	Unit - II	**CO2**	**K2**		
4.				a)	b)
				c)	d)
	Unit - III	**CO3**	**K1**		
5.				a)	b)
				c)	d)
	Unit - III	**CO3**	**K2**		
6.				a)	b)
				c)	d)
	Unit - IV	**CO4**	**K1**		
7.				a)	b)
				c)	d)
	Unit - IV	**CO4**	**K2**		
8.				a)	b)
				c)	d)
	Unit - V	**CO5**	**K1**		
9.				a)	b)
				c)	d)
	Unit - V	**CO5**	**K2**		
10.				a)	b)
				c)	d)

Answer **ALL** the questions		PART – B		(5 x 5 = 25 Marks)
11. a)	**Unit - I**	**CO1**	**K3**	
		OR		
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
		OR		
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
		OR		
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
		OR		
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
		OR		
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions		PART – C		(5 x 8 = 40 Marks)
16. a)	**Unit - I**	**CO1**	**K5**	
		OR		
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
		OR		
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
		OR		
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
		OR		
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
		OR		
20. b)	**Unit - V**	**CO5**	**K3**	

Course Name	CORPORATE ACCOUNTING			
Course Code	23PCCCC22	**L**	**P**	**C**
Category	CORE	6	-	4

COURSE OBJECTIVES:

➢ To understand the accounting treatment for issue of shares
➢ To determine profits for fire and marine insurance
➢ To prepare consolidated financial statements
➢ To account for price level changes
➢ To adopt financial reporting standards

UNIT - I	Issue of Shares and Final Accounts of Companies	18

Issue of Shares: ESOPs - ESPS - Sweat Equity Shares - Book Building- Buy-back of Shares - Conversion of debentures into shares - Final accounts of Companies as per Schedule III of the Companies Act, 2013 – Managerial remuneration.

UNIT - II	Insurance Company Accounts	18

Insurance Company Accounts: Types of Insurance - Final accounts of life assurance Companies- Ascertainment of profit- Valuation Balance Sheet-Final accounts of Fire, Marine and miscellaneous Insurance Companies.

UNIT - III	Consolidated financial statements	18

Consolidated financial statements as per AS 21: Consolidated Profit and Loss Account– Minority interest – Cost of control – Capitalreserve – Inter-company holdings –Preparation of consolidated Balance Sheet.

UNIT - IV	Contemporary Accounting Methods	18

Accounting for price level changes – Social responsibility accounting – Human resource accounting - Forensic Accounting

UNIT - V	Financial reporting	18

Financial reporting: Meaning, Objectives, Characteristics – Indian Accounting Standards (AS 5, AS 10, AS 19, AS 20) – Corporate Social Responsibility: Meaning, Key provisions of Companies Act, 2013, Accounting for CSR expenditure, Reporting of CSR, Presentation and disclosure in the financial statements.

	Total Lecture Hours	90

BOOKS FOR STUDY:

➢ Gupta R. L. &Radhaswamy M. (2021), "Corporate Accounting – Volume I & II", 14[th]Edition, Sultan Chand &Sons, New Delhi.

➢ Maheshwari S. N., Sharad K. Maheshwari&Suneel K. Maheshwari, (2022),"Advanced Accountancy - Volume I &II", 11[th]Edition, Vikas PublishingHouse Pvt. Ltd., New Delhi.

➢ Jain S. P., Narang K. L., SimmiAgrawal and Monika Sehgal (2019), "AdvancedAccountancy - Corporate Accounting – Volume - II", 22[nd]Edition, KalyaniPublishers, New Delhi.

➢ Reddy T. S. &Murthy A., (2022), "Corporate Accounting – Volume I &II", 17th Edition, Margham Publications, Chennai.

BOOKS FOR REFERENCES:

➢ ArulanandamM.A&Raman K.S., (2021), "Advanced Accounting (Corporate Accounting – II)", 8[th]Edition, Himalaya Publishing House Pvt Ltd, Mumbai.

➢ Shukla M C, Grewal T S and Gupta S C, (2022), "Advanced Accounts Volume II",19[th]Edition, Sultan Chand &Sons, New Delhi.

➢ Gupta R. L., (2022), "Problems and Solutions in Company Accounts", 2[nd]Edition,Sultan Chand &Sons, New Delhi.

WEB RESOURCES:

❖ **https://resource.cdn.icai.org/66550bos53754-p1-cp9.pdf**
❖ **https://resource.cdn.icai.org/66545bos53754-p1-cp4.pdf**
❖ **https://resource.cdn.icai.org/66638bos53803-cp1.pdf**
❖ **http://ppup.ac.in/download/econtent/pdf/MBA%201st%20sem%20Lecture %20note%20on%20forensic%20accounting%20by%20Anjali.pdf**

Nature of Course	EMPLOYABILITY		✓	SKILL ORIENTED		ENTREPRENEURSHIP		
Curriculum Relevance	LOCAL		REGIONAL		NATIONAL	✓	GLOBAL	
Changes Made in the Course	Percentage of Change		**100**	No Changes Made		New Course		

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Determine profit and financial position by preparing financial statements of companies as per schedule III of Companies Act, 2013	K1 to K5
CO2	Apply the provisions of IRDA Regulations in the preparation of final accounts of Life Insurance and General Insurance Companies.	K1 to K5
CO3	Determine the overall profitability and financial position by preparing consolidated financial statements of holding companies in accordancewithAS21.	K1 to K5
CO4	Analyse contemporary accounting methods	K1 to K5
CO5	Examine Financial Reporting based on appropriate AccountingStandardsandprovisionsofCompaniesAct2013withrespecttoCorporateSocialResponsibility	K1 to K5

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	3	3	3				
CO2	3	3	3	3	2	3				
CO3	3	3	2	3	3	3				
CO4	3	3	3	3	3	3				
CO5	3	3	3	3	3	3				

S- STRONG	M – MEDIUM	L - LOW

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	15	15	15	15	15
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS	3.0	3.0	3.0	3.0	3.0

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Issue of Shares and Final Accounts of Companies	12	Chalk and talk, Power Point Presentation, Video Lectures
II	Insurance Company Accounts	12	Chalk and talk, Power Point Presentation, Video Lectures
III	Consolidated financial statements	12	Chalk and talk, Power Point Presentation, Video Lectures
IV	Contemporary Accounting Methods	12	Chalk and talk, Power Point Presentation, Video Lectures
V	Financial reporting	12	Chalk and talk, Power Point Presentation, Video Lectures, seminar and assignment

<table>
<tr><td colspan="7">Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)</td></tr>
<tr><td rowspan="3">Internal</td><td rowspan="3">Cos</td><td rowspan="3">K Level</td><td colspan="2">Section A</td><td rowspan="3">Section B
Either or
Choice</td><td rowspan="3">Section C
Either or Choice</td></tr>
<tr><td colspan="2">MCQs</td></tr>
<tr><td>No. of.
Questions</td><td>K -
Level</td></tr>
<tr><td>CI
AI</td><td>CO1</td><td>K1 – K5</td><td>2</td><td>K1</td><td>2(K2, K2)</td><td>2(K4, K4)</td></tr>
<tr><td>CO2</td><td>K1 – K5</td><td>2</td><td>K2</td><td>2(K3, K3)</td><td>2(K5, K5)</td></tr>
<tr><td>CI
AII</td><td>CO3</td><td>K1 – K5</td><td>2</td><td>K1</td><td>2(K2, K2)</td><td>2(K4, K4)</td></tr>
<tr><td>CO4</td><td>K1 – K5</td><td>2</td><td>K2</td><td>2(K3, K3)</td><td>2(K5, K5)</td></tr>
<tr><td rowspan="4">Question
Pattern
CIA I & II</td><td colspan="2">No. of Questions to
be asked</td><td>4</td><td></td><td>4</td><td>4</td></tr>
<tr><td colspan="2">No. of Questions to
be answered</td><td>4</td><td></td><td>2</td><td>2</td></tr>
<tr><td colspan="2">Marks for each
question</td><td>1</td><td></td><td>5</td><td>8</td></tr>
<tr><td colspan="2">Total Marks for
each section</td><td>4</td><td></td><td>10</td><td>16</td></tr>
</table>

Distribution of Marks with K Level CIA I & CIA II							
	K Level	**Section A (Multiple Choice Questions)**	**Section B (Either / Or Choice)**	**Section C (Either / Or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidate of %**
CIA I	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	**4**	**20**	**32**	**56**	**100.00**	**100**
CIA II	K1	2			2	3.57	25
	K2	2	10		12	21.43	
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	**4**	**20**	**32**	**56**	**100**	**100**

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 –Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

			Section A (MCQs)		Section B (Either / or Choice) With K - LEVEL	Section C (Either / or Choice) With K - LEVEL
S. No	COs	K - Level	No. of Questions	K – Level		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)

(Figures in parenthesis denotes, questions should be asked with the given K level)

Distribution of Marks with K Level

K Level	Section A (Multiple Choice Questions)	Section B (Either or Choice	Section C (Either/ or Choice)	Total Marks	% of (Marks without choice)	Consolidated %
K1	5			5	3.57	4
K2	5	10		15	10.71	11
K3		20	32	52	37.14	37
K4		20	16	36	25.71	26
K5			32	32	22.86	23
Marks	10	50	80	140	100	100

NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions				**PART – A**	**(10 x 1 = 10 Marks)**
1.	**Unit - I**	**CO1**	**K1**		
				a)	b)
				c)	d)
2.	**Unit - I**	**CO1**	**K2**		
				a)	b)
				c)	d)
3.	**Unit - II**	**CO2**	**K1**		
				a)	b)
				c)	d)
4.	**Unit - II**	**CO2**	**K2**		
				a)	b)
				c)	d)
5.	**Unit - III**	**CO3**	**K1**		
				a)	b)
				c)	d)
6.	**Unit - III**	**CO3**	**K2**		
				a)	b)
				c)	d)
7.	**Unit - IV**	**CO4**	**K1**		
				a)	b)
				c)	d)
8.	**Unit - IV**	**CO4**	**K2**		
				a)	b)
				c)	d)
9.	**Unit - V**	**CO5**	**K1**		
				a)	b)
				c)	d)
10.	**Unit - V**	**CO5**	**K2**		
				a)	b)
				c)	d)

Answer **ALL** the questions		**PART – B**		**(5 x 5 = 25 Marks)**
11. a)	**Unit - I**	**CO1**	**K3**	
		OR		
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
		OR		
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
		OR		
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
		OR		
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
		OR		
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions		**PART – C**		**(5 x 8 = 40 Marks)**
16. a)	**Unit - I**	**CO1**	**K5**	
		OR		
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
		OR		
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
		OR		
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
		OR		
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
		OR		
20. b)	**Unit - V**	**CO5**	**K3**	

Course Name	SETTING UP OF BUSINESS ENTITIES			
Course Code	23PCCCC23	L	P	C
Category	CORE	6	-	4

COURSE OBJECTIVES:

➢ To understand the startup landscape and its financing
➢ To analyse the formation and registration of Section 8 company
➢ To outline the concept of LLP and business collaboration
➢ To understand the procedure for obtaining registration and license
➢ To create awareness about the legal compliances governing business entities

UNIT - I Startups in India	18

Types of business organisations –Factors governing selection of an organisation - Startups – Evolution – Definition of a Startup – Startup landscape in India – Startup India policy – Funding support and incentives – Indian states with Startup policies – Exemptions forstartups – Life cycle of a Startup – Important points for Startups – Financing options available for Startups – Equity financing – Debt financing – Venture capital financing – IPO – Crowd funding – Incubators - Mudra banks –Successful Startups in India.

UNIT - II Insurance Company Accounts	18

Formation and registration of NGOs – Section 8 Company – Definition – Features – Exemptions – Requirements of Section 8 Company – Application for incorporation – Trust: Objectives of a trust – Persons who can create a trust – Differences between a public and private trust – Exemptions available to trusts – Formation of a trust - Trust deed –Society – Advantages – Disadvantages – Formation of a society – Tax exemption to NGOs.

UNIT - III Limited Liability Partnership and Joint Venture	18

Limited Liability Partnership: Definition – Nature and characteristics – Advantages and disadvantages – Procedure for incorporation – LLP agreement – Annual compliances of LLP-Business collaboration: Definition – Types –Joint venture: Advantages and disadvantages – Types – Joint venture agreement - Successful joint ventures in India– Special Purpose Vehicle – Meaning – Benefits – Formation.

UNIT - IV Registration and Licenses	18

Registration and Licenses: Introduction – Business entity registration – Mandatory registration – PAN – Significance – Application and registration of PAN – Linking of PAN with Aadhar –TAN – Persons liable to apply for TAN – Relevance of TAN – Procedure to apply for TAN –GST: Procedure for registration – Registration under Shops and Establishment Act –MSME registration – Clearance from Pollution Control Board – FSSAI registration and license – Trade mark, Patent and Design registration.

UNIT - V Environmental Legislations in India	18

Geographical Indication of Goods (Registration and Protection) Act, 1999: Objectives, Salient Features - The Environmental Protection Act, 1986: Prevention, control and abatement of environmental pollution - The Water (Prevention And Control of Pollution) Act, 1974: The Central and State Boards for Prevention and Control of Water Pollution - Powers and Functions of Boards - Prevention and Control of Water Pollution - Penalties and Procedure- The Air (Prevention and Control of Pollution) Act, 1981: Central and State Boards for The Prevention and Control of Air Pollution - Powers And Functions - Prevention and Control of Air Pollution - Penalties and Procedure.

	Total Lecture Hours	90

BOOKS FOR STUDY:

➢ Kailash Thakur, (2007) "Environment Protection Law and Policy in India", 2nd Edition, Deep & Deep Publication Pvt. Ltd., New Delhi.

➢ Avtar Singh, (2015), "Intellectual Property Law", Eastern Book Company, Bangalore

➢ Zad N.S and DivyaBajpai, (2022) "Setting up of Business Entities and Closure" (SUBEC), Taxmann, Chennai

➢ AmitVohra&RachitDhingra (2022) "Setting Up Of Business Entities & Closure", 6th Edition, Bharath Law House, New Delhi

BOOKS FOR REFERENCES:

➢ Setting up of Business Entities and Closure (2021), Module 1, Paper 3, The Institute of Company Secretaries of India, MP Printers, Noida

➢ The Air (Prevention and Control of Pollution) Act, 1981, Bare Act, 2022 Edition, Universal/LexisNexis, Noida

➢ The Water (Prevention and Control of Pollution) Act, 1974, Bare Act, 2022 Edition, Universal/LexisNexis, Noida

➢ Cliff Ennico, (2005) "Small Business Survival Guide Starting Protecting and Securing your Business for Long-Term Success", Adams Media, USA

➢ Daniel Sitarz,(2011) "Sole Proprietorship: Small Business Start-up Kit", 3rdEdition, Nova Publishing, USA

WEB RESOURCES:

❖ https://www.icsi.edu/media/webmodules/FINAL_FULL_BOOK_of_EP_SBEC_2018.pdf

❖ https://www.mca.gov.in/MinistryV2/incorporation_company.html 3)

❖ https://legislative.gov.in/sites/default/files/The%20Limited%20Liability%20 Partnership%20 Act,%202008.pdf

❖ https://legislative.gov.in/sites/default/files/A1999-48.pdf

❖ https://www.indiacode.nic.in/bitstream/123456789/6196/1/the_environment_protection_act%2C1986.pdf

Nature of Course	EMPLOYABILITY		SKILL ORIENTED		ENTREPRENEURSHIP		✓
Curriculum Relevance	LOCAL	REGIONAL		NATIONAL		GLOBAL	✓
Changes Made in the Course	Percentage of Change		No Changes Made		New Course		✓

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Determine profit and financial position by preparing financialstatementsofcompaniesasperscheduleIIIofCompaniesAct,2013	**K1 to K5**
CO2	Apply the provisions of IRDA Regulations in the preparation of final accounts of Life Insurance and General Insurance Companies.	**K1 to K5**
CO3	Determine the overall profitability and financial position by preparingconsolidatedfinancialstatementsofholdingcompaniesin accordancewithAS21.	**K1 to K5**
CO4	Analyse contemporary accounting methods	**K1 to K5**
CO5	Examine FinancialReporting based on appropriate AccountingStandardsandprovisionsofCompaniesAct2013withrespecttoCorporateSocialResponsibility	**K1 to K5**

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	3	3				
CO2	3	2	2	3	2	3				
CO3	3	3	2	3	3	3				
CO4	3	3	3	3	3	3				
CO5	3	3	3	3	3	3				

S- STRONG   **M – MEDIUM**   **L - LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	3	3	3	3	3
CO 2	3	3	3	3	3
CO 3	3	3	3	3	3
CO 4	3	3	3	3	3
CO 5	3	3	3	3	3
WEITAGE	**15**	**15**	**15**	**15**	**15**
WEIGHTED PERCENTAGE OF COURSE	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**

	CONTRIBUTION TO POS				

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Startups in India	**12**	**Chalk and talk, Power Point Presentation, Video Lectures**
II	Not-for-Profit Organisations	**12**	**Chalk and talk, Power Point Presentation, Video Lectures**
III	Limited Liability Partnership and Joint Venture	**12**	**Chalk and talk, Power Point Presentation, Video Lectures**
IV	Registration and Licenses	**12**	**Chalk and talk, Power Point Presentation, Video Lectures**
V	Environmental Legislations in India	**12**	**Chalk and talk, Power Point Presentation, Video Lectures, seminar and assignment**

Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)

Internal	Cos	K Level	Section A MCQs		Section B Either or Choice	Section C Either or Choice
			No. of. Questions	K - Level		
CI AI	CO1	K1 – K5	2	K1	2(K2, K2)	2(K4, K4)
	CO2	K1 – K5	2	K2	2(K3, K3)	2(K5, K5)
CI AII	CO3	K1 – K5	2	K1	2(K2, K2)	2(K4, K4)
	CO4	K1 – K5	2	K2	2(K3, K3)	2(K5, K5)
Question Pattern CIA I & II	No. of Questions to be asked		4		4	4
	No. of Questions to be answered		4		2	2
	Marks for each question		1		5	8
	Total Marks for each section		4		10	16

Distribution of Marks with K Level CIA I & CIA II							
	K Level	Section A (Multiple Choice Questions)	Section B (Either / Or Choice)	Section C (Either / Or Choice)	Total Marks	% of (Marks without choice)	Consolidate of %
CIA I	K1	2			2	3.57	
	K2	2	10		12	21.43	25
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100.00	100
CIA II	K1	2			2	3.57	
	K2	2	10		12	21.43	25
	K3		10		10	17.86	18
	K4			16	16	28.57	29
	K5			16	16	28.57	29
	Marks	4	20	32	56	100	100

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 –Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	COs	K - Level	Section A (MCQs)		Section B (Either / or Choice) With K - LEVEL	Section C (Either / or Choice) With K - LEVEL
			No. of Questions	K – Level		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	Section A (Multiple Choice Questions)	Section B (Either or Choice	Section C (Either/ or Choice)	Total Marks	% of (Marks without choice)	Consolidated %
K1	5			5	3.57	4
K2	5	10		15	10.71	11
K3		20	32	52	37.14	37
K4		20	16	36	25.71	26
K5			32	32	22.86	23
Marks	10	50	80	140	100	100
NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.						

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions			**PART – A**		**(10 x 1 = 10 Marks)**
1.	Unit - I	CO1	K1		
				a)	b)
				c)	d)
2.	Unit - I	CO1	K2		
				a)	b)
				c)	d)
3.	Unit - II	CO2	K1		
				a)	b)
				c)	d)
4.	Unit - II	CO2	K2		
				a)	b)
				c)	d)
5.	Unit - III	CO3	K1		
				a)	b)
				c)	d)
6.	Unit - III	CO3	K2		
				a)	b)
				c)	d)
7.	Unit - IV	CO4	K1		
				a)	b)
				c)	d)
8.	Unit - IV	CO4	K2		
				a)	b)
				c)	d)
9.	Unit - V	CO5	K1		
				a)	b)
				c)	d)
10.	Unit - V	CO5	K2		
				a)	b)
				c)	d)

				PART – B	
Answer **ALL** the questions				**PART – B**	**(5 x 5 = 25 Marks)**
11. a)	**Unit - I**	**CO1**	**K3**		
				OR	
11. b)	**Unit - I**	**CO1**	**K3**		
12. a)	**Unit - II**	**CO2**	**K2**		
				OR	
12. b)	**Unit - II**	**CO2**	**K2**		
13. a)	**Unit - III**	**CO3**	**K4**		
				OR	
13. b)	**Unit - III**	**CO3**	**K4**		
14. a)	**Unit - IV**	**CO4**	**K3**		
				OR	
14. b)	**Unit - IV**	**CO4**	**K3**		
15. a)	**Unit - V**	**CO5**	**K4**		
				OR	
15. b)	**Unit - V**	**CO5**	**K4**		

				PART – C	
Answer **ALL** the questions				**PART – C**	**(5 x 8 = 40 Marks)**
16. a)	**Unit - I**	**CO1**	**K5**		
				OR	
16. b)	**Unit - I**	**CO1**	**K5**		
17. a)	**Unit - II**	**CO2**	**K3**		
				OR	
17. b)	**Unit - II**	**CO2**	**K3**		
18. a)	**Unit - III**	**CO3**	**K4**		
				OR	
18. b)	**Unit - III**	**CO3**	**K4**		
19. a)	**Unit - IV**	**CO4**	**K5**		
				OR	
19. b)	**Unit - IV**	**CO4**	**K5**		
20. a)	**Unit - V**	**CO5**	**K3**		
				OR	
20. b)	**Unit - V**	**CO5**	**K3**		

Course Name	DATA MINING AND DATA INTERPRETATION			
Course Code	23PCCEC21	**L**	**P**	**C**
Category	ELECTIVE - III	6	-	5

COURSE OBJECTIVES:

➢ To understand the basic concepts, principles and need of data warehousing
➢ To gain knowledge on the data warehouse architecture, modelling and its implementation.
➢ To understand steps in implementing data mart and its various dimensions
➢ To learn the features, types and challenges of data mining
➢ To aid the students to understand the various data mining tools and techniques

UNIT - I Data Warehouse	18

Definition - history of data warehouse - features of data warehouses - characteristics of data warehouse - goals of data warehousing- principles of data warehousing - need for data warehouse - benefits of data warehouse - need for separate data warehouse - difference between database and data warehouse - applications of data warehouses - components of data warehouse- data staging omponent.

UNIT - II Data Warehouse Architecture	18

Data warehouse architecture - properties of data warehouse architectures - types of data warehouse architectures- three-tier data warehouse architecture - ETL (extract, transform, and load) process - selecting an ELT tool- Difference between ETL and ELT types of data warehouses - data warehouse modelling - data modelling life cycle - types of data warehouse models- data warehouse design - data warehouse implementation- implementation guidelines - meta data - necessary of metadata in data warehouses - types of metadata- metadata repository - benefits of metadata repository.

UNIT - III Data Mart	18

Data Mart- Reasons for creating a data mart- Types of Data Marts- Steps in Implementing a Data Mart- Difference between Data Warehouse and Data Mart. - Dimensional Modeling-Objectives of Dimensional Modeling- Advantages of Dimensional Modeling - Elements of Dimensional Modeling - Dimension Table- Multidimensional Data Model-Data Cube.

UNIT - IV Data Mining	18

Definition - History of Data Mining- Features of Data Mining - Types of Data Mining - Data Mining Vs Data Warehousing- Advantages and Disadvantages of Data Mining - Data Mining Applications - Challenges of Implementation in Data mining - Steps involved in Data Mining - Classification of Data Mining Systems.

UNIT - V Data Mining Tools & Techniques	18

Data Mining Implementation Process - Data Mining Architecture - Clustering in Data Mining - Different types of Clustering - Text Data Mining - Bitcoin Data Mining - Data Mining Vs Big Data - Data Mining Models - Trends in Data Mining.

	Total Lecture Hours	90

BOOKS FOR STUDY:

- ➢ Jiawei Han, MichelineKamber (2011), Data Mining, Concepts and Techniques, Morgan Kauffman Publishers, California.

- ➢ Pang Ning Tan, Michael Steinbach, Vipin Kumar (2005), Introduction to Data Mining, Addison Wesley, USA.

- ➢ K. P. Soman, ShyamDiwakar, V. Ajay (2006), Insight into Data Mining: Theory & Practice, Prentice Hall of India, New Delhi.

BOOKS FOR REFERENCES:

- ➢ BPB Editorial Board (2004), "Data Mining", BPB publications, Noida.

- ➢ Ian H. Witten &Eibe Frank (2011), "Data Mining, Practical Machine Learning Tools and Techniques", Morgan Kaufmann series.

- ➢ Ramesh Sharda, Dursun Delen, Efraim Turban (2018), "Business Intelligence", Pearson Education Services Pvt Ltd, Noida.

WEB RESOURCES:

- ❖ **https://mrcet.com/downloads/digital_notes/ME/III%20 year/ERP%20 Complete%20Digital%20notes.pdf**

- ❖ **https://mrcet.com/pdf/Lab%20Manuals/IT/DATA%20WAREHOUSING%20AND% 020DATA%20MINING%20(R18A0524).pdf00**

Nature of Course	EMPLOYABILITY		SKILL ORIENTED		ENTREPRENEURSHIP		✓
Curriculum Relevance	LOCAL	REGIONAL		NATIONAL		GLOBAL	✓
Changes Made in the Course	Percentage of Change		No Changes Made		New Course		✓

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Explain the basic concepts, principles and need of data warehousing	**K1 to K5**
CO2	Appraise data warehouse architecture, modeling and its implementation.	**K1 to K5**
CO3	Choose various steps in implementing data mart and its dimensions	**K1 to K5**
CO4	Recall the features and types of data mining	**K1 to K5**
CO5	Apply various data mining tools and techniques	**K1 to K5**
MAPPING WITH PROGRAM OUTCOMES:		

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	1	1	1	1	2	3	2	2	3	
CO2	2	3	2	2	2	3	2	2	3	

CO3	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
CO4	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
CO5	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**

S- STRONG   **M – MEDIUM**   **L - LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	**1**	**1**	**1**	**1**	**2**
CO 2	**2**	**3**	**2**	**2**	**2**
CO 3	**3**	**3**	**3**	**3**	**3**
CO 4	**3**	**3**	**3**	**3**	**3**
CO 5	**3**	**3**	**3**	**3**	**3**
WEITAGE	**12**	**13**	**12**	**12**	**13**
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS					

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Definition - history of data warehouse - features of data warehouses - characteristics of data warehouse - goals of data warehousing- principles of data warehousing - need for data warehouse - benefits of data warehouse - need for separate data warehouse - difference between database and data warehouse - applications of data warehouses - components of data warehouse- data staging component.	**18**	**THEORY**
II	Data warehouse architecture - properties of data warehouse architectures - types of data warehouse architectures- three-tier data warehouse architecture - ETL (extract, transform, and load) process - selecting an ELT tool- Difference between ETL and ELT types of data warehouses - data warehouse modelling - data modelling life cycle - types of data warehouse models- data warehouse design - data warehouse implementation- implementation guidelines - meta data - necessary of metadata in data warehouses - types of metadata- metadata repository - benefits of metadata repository.	**18**	**THEORY**
III	Data Mart- Reasons for creating a data mart- Types of Data Marts- Steps in Implementing a Data Mart- Difference between Data Warehouse and Data Mart. -	**18**	**THEORY**

	Dimensional Modeling-Objectives of Dimensional Modeling- Advantages of Dimensional Modeling - Elements of Dimensional Modeling - Dimension Table-Multidimensional Data Model-Data Cube.					
IV	Definition - History of Data Mining- Features of Data Mining - Types of Data Mining - Data Mining Vs Data Warehousing- Advantages and Disadvantages of Data Mining - Data Mining Applications - Challenges of Implementation in Data mining - Steps involved in Data Mining - Classification of Data Mining Systems.		**18**		**THEORY**	
V	Data Mining Implementation Process - Data Mining Architecture - Clustering in Data Mining - Different types of Clustering - Text Data Mining - Bitcoin Data Mining - Data Mining Vs Big Data - Data Mining Models - Trends in Data Mining.		**18**		**THEORY**	

Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)

Internal	Cos	K Level	Section A		Section B Either or Choice	Section C Either or Choice
			MCQs			
			No. of. Questions	K - Level		
CI AI	CO1	K1 – K5	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO2	K1 – K5	2	K2,K2	2(K3, K3)	2(K4, K4)
CI AII	CO3	K1 – K5	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO4	K1 – K5	2	K2,K2	2(K3, K3)	2(K4, K4)
Question Pattern CIA I & II	No. of Questions to be asked		4		4	4
	No. of Questions to be answered		4		2	2
	Marks for each question		1		5	8
	Total Marks for each section		4		10	16

			Distribution of Marks with K Level CIA I & CIA II				
	K Level	**Section A (Multiple Choice Questions)**	**Section B (Either / Or Choice)**	**Section C (Either / Or Choice)**	**Total Marks**	**% of (Marks without choice)**	**Consolidate of %**
CIA I	**K1**	2			2	**3.6**	**7.2**
	K2	2			2	**3.6**	
	K3		20		20	**35.7**	35.7
	K4			32	32	**57.1**	57.1
	K5						
	Marks	**4**	**20**	**32**	**56**	**100**	**100**
CIA II	**K1**	2			2	**3.6**	**7.2**
	K2	2			2	**3.6**	
	K3		20		20	**35.7**	35.7
	K4			32	32	**57.1**	57.1
	K5						
	Marks	**4**	**20**	**32**	**56**	**100**	**100**

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 – Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	**COs**	**K - Level**	**Section A (MCQs)**		**Section B (Either / or Choice) With K - LEVEL**	**Section C (Either / or Choice) With K - LEVEL**
			No. of Questions	**K – Level**		
1	**CO1**	**K1 – K5**	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	**CO2**	**K1 – K5**	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	**CO3**	**K1 – K5**	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	**CO4**	**K1 – K5**	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	**CO5**	**K1 – K5**	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	Section A (Multiple Choice Questions)	Section B (Either or Choice	Section C (Either/ or Choice)	Total Marks	% of (Marks without choice)	Consolidated %
K1	5			5	3.57	14.28
K2	5	10		15	10.71	
K3		20	32	52	37.14	37.14
K4		20	16	36	25.71	25.17
K5			32	32	22.85	22.85
Marks	10	50	80	140	100	100

NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions			PART – A		(10 x 1 = 10 Marks)
1.	Unit - I	CO1	K1		
				a)	b)
				c)	d)
2.	Unit - I	CO1	K2		
				a)	b)
				c)	d)
3.	Unit - II	CO2	K1		
				a)	b)
				c)	d)
4.	Unit - II	CO2	K2		
				a)	b)
				c)	d)
5.	Unit - III	CO3	K1		
				a)	b)
				c)	d)
6.	Unit - III	CO3	K2		
				a)	b)
				c)	d)
7.	Unit - IV	CO4	K1		
				a)	b)
				c)	d)
8.	Unit - IV	CO4	K2		
				a)	b)
				c)	d)
9.	Unit - V	CO5	K1		
				a)	b)
				c)	d)
10.	Unit - V	CO5	K2		
				a)	b)
				c)	d)

Answer **ALL** the questions		**PART – B**		**(5 x 5 = 25 Marks)**	
11. a)	**Unit - I**	**CO1**	**K3**		
			OR		
11. b)	**Unit - I**	**CO1**	**K3**		
12. a)	**Unit - II**	**CO2**	**K2**		
			OR		
12. b)	**Unit - II**	**CO2**	**K2**		
13. a)	**Unit - III**	**CO3**	**K4**		
			OR		
13. b)	**Unit - III**	**CO3**	**K4**		
14. a)	**Unit - IV**	**CO4**	**K3**		
			OR		
14. b)	**Unit - IV**	**CO4**	**K3**		
15. a)	**Unit - V**	**CO5**	**K4**		
			OR		
15. b)	**Unit - V**	**CO5**	**K4**		

Answer **ALL** the questions		**PART – C**		**(5 x 8 = 40 Marks)**	
16. a)	**Unit - I**	**CO1**	**K5**		
			OR		
16. b)	**Unit - I**	**CO1**	**K5**		
17. a)	**Unit - II**	**CO2**	**K3**		
			OR		
17. b)	**Unit - II**	**CO2**	**K3**		
18. a)	**Unit - III**	**CO3**	**K4**		
			OR		
18. b)	**Unit - III**	**CO3**	**K4**		
19. a)	**Unit - IV**	**CO4**	**K5**		
			OR		
19. b)	**Unit - IV**	**CO4**	**K5**		
20. a)	**Unit - V**	**CO5**	**K3**		
			OR		
20. b)	**Unit - V**	**CO5**	**K3**		

Course Name	MANAGEMENT INFORMATION SYSTEM			
Course Code	23PCCEC22	**L**	**P**	**C**
Category	ELECTIVE - IV	6	-	5

COURSE OBJECTIVES:

➢ To understand the basic concept of Information system
➢ To identify the importance of MIS
➢ To understand the Functional Management Information System
➢ To learn the role of system analyst
➢ To apply the concept of Enterprise Resource Planning

UNIT - I	Information System	18

Introduction to information system - Management - Structure and Activities - Information needs and sources - Types of management decisions and information need - System classification - Elements of system, input, output, process and feedback.

UNIT - II	Types of Management Information Systems	18

Transaction Processing Information System - Information system for managers - Intelligence information system – Decision support system - Executive information systems.

UNIT - III	Functional Management Information Systems	18

Functional Management Information System: Production Information system - Marketing Information Systems - Accounting Information System - Financial Information System - Human Resource Information System.

UNIT - IV	System design and Database	18

System Analysis and Design: The work of a system analyst - SDLC- System design – Requirement analysis - Data flow diagram - Relationship diagram - Design -Implementation - Evaluation and maintenance of MIS - Database System: Overview of Database - Components - Advantages and disadvantages of database.

UNIT - V	Enterprise Resource Planning	18

Enterprise Resource Planning (ERP) System - Benefits of the ERP - How ERP is different from conventional packages - Need for ERP - ERP components - Selection of ERP Package - ERP implementation - Customer Relationship management - Organisation & Types - Decision Making - Data & information - Characteristics & Classification of information - Cost & value of information - Various channels of information and MIS

	Total Lecture Hours	90

BOOKS FOR STUDY:

- Azam, M (2012), "Management Information System", McGrawHill Education, Noida.
- Laudon, K., Laudon, J. and Dass, R. (2010), "Management Information Systems – Managing the Digital Firm", 11th Edition, Pearson, Noida.
- Murdick, R.G., Ross, J.E. and Claggett, J.R. (2011), "Information Systems for Modern Management", 3rd Edition, PHI, New Delhi.Bharath Law House, New Delhi

BOOKS FOR REFERENCES:

- O'Brien, J.A., Morakas, G.M. and Behl, R. (2009), "Management Information Systems", 9th Edition, Tata McGraw-Hill Education, Noida.
- Saunders, C.S. and Pearson, K.E. (2009), "Managing and Using Information Systems", 3rd Edition, Wiley India Pvt. Ltd., New Delhi.
- Stair, R. and Reynolds, G. (2012), "Information Systems", 10th Edition, Cengage Learning, Noida.

WEB RESOURCES:

- ❖ **https://cleartax.in/g/terms/mis-meaning-mis-full-form-marketing-information-system/amp**
- ❖ **https://www.techtarget.com/searchitoperations/definition/MIS-management-information-systems**

Nature of Course	EMPLOYABILITY	✓	SKILL ORIENTED		ENTREPRENEURSHIP		
Curriculum Relevance	LOCAL		REGIONAL		NATIONAL	GLOBAL	✓
Changes Made in the Course	Percentage of Change		No Changes Made		New Course		✓

*Treat 20% as each unit (20*5=100%) and calculate the percentage of change for the course.

COURSE OUTCOMES:		K LEVEL
After studying this course, the students will be able to:		
CO1	Identify the basic concept of Information system	**K1 to K5**
CO2	Discuss the importance of MIS	**K1 to K5**
CO3	Explain the functional MIS	**K1 to K5**
CO4	Describe the role of system analyst	**K1 to K5**
CO5	Apply the concept of Enterprise resource planning	**K1 to K5**

MAPPING WITH PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	1	1	2	2	1	2	1	2	2	
CO2	2	2	2	2	1	2	1	2	2	
CO3	3	3	3	3	1	2	1	2	3	

CO4	3	3	3	3	2	3	2	3	3
CO5	3	3	3	3	2	3	2	3	3

S- STRONG	**M – MEDIUM**	**L - LOW**

CO / PO MAPPING:

COS	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1	1	1	2	2	1
CO 2	2	2	2	2	1
CO 3	3	3	3	3	1
CO 4	3	3	3	3	2
CO 5	3	3	3	3	2
WEITAGE	**12**	**12**	**13**	**13**	**7**
WEIGHTED PERCENTAGE OF COURSE CONTRIBUTION TO POS					

LESSON PLAN:

UNIT	COURSE NAME	HRS	PEDAGOGY
I	Introduction to information system - Management - Structure and Activities - Information needs and sources - Types of management decisions and information need - System classification - Elements of system, input, output, process and feedback.	**18**	**THEORY**
II	Transaction Processing Information System - Information system for managers - Intelligence information system – Decision support system - Executive information systems.	**18**	**THEORY**
III	Functional Management Information System: Production Information system - Marketing Information Systems - Accounting Information System - Financial Information System - Human Resource Information System.	**18**	**THEORY**
IV	System Analysis and Design: The work of a system analyst SDLC- System design – Requirement analysis - Data flow diagram - Relationship diagram - Design -Implementation - Evaluation and maintenance of MIS - Database System: Overview of Database - Components - Advantages and disadvantages of database.	**18**	**THEORY**
V	Enterprise Resource Planning (ERP) System - Benefits of the ERP - How ERP is different from conventional package - Need for ERP - ERP components - Selection of ERP	**18**	**THEORY**

Package - ERP implementation - Customer Relationship management - Organisation & Types - Decision Making - Data & information - Characteristics & Classification of information - Cost & value of information - Various channels of information and MIS

Learning Outcome Based Education & Assessment (LOBE)
Formative Examination - Blue Print
Articulation Mapping – K Levels with Course Outcomes (COs)

Internal	Cos	K Level	Section A MCQs		Section B Either or Choice	Section C Either or Choice
			No. of. Questions	K - Level		
CI AI	CO1	K1 – K5	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO2	K1 – K5	2	K2,K2	2(K3, K3)	2(K4, K4)
CI AII	CO3	K1 – K5	2	K1,K1	2(K3, K3)	2(K4, K4)
	CO4	K1 – K5	2	K2,K2	2(K3, K3)	2(K4, K4)
Question Pattern CIA I & II		No. of Questions to be asked	4		4	4
		No. of Questions to be answered	4		2	2
		Marks for each question	1		5	8
		Total Marks for each section	4		10	16

Distribution of Marks with K Level CIA I & CIA II

	K Level	Section A (Multiple Choice Questions)	Section B (Either / Or Choice)	Section C (Either / Or Choice)	Total Marks	% of (Marks without choice)	Consolidate of %
CIA I	K1	2			2	3.6	7.2
	K2	2			2	3.6	
	K3		20		20	35.7	35.7
	K4			32	32	57.1	57.1
	K5						
	Marks	4	20	32	56	100	100
CIA II	K1	2			2	3.6	7.2
	K2	2			2	3.6	
	K3		20		20	35.7	35.7
	K4			32	32	57.1	57.1
	K5						
	Marks	4	20	32	56	100	100

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented- Solving Problems

K4- Examining, analyzing, presentation and make inferences with evidences

K5 – Evaluate, combine, Criticize, Predict, Convince.

CO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Summative Examination – Blue Print Articulation Mapping – K Level with Course Outcomes (COs)						
S. No	**COs**	**K - Level**	**Section A (MCQs)**		**Section B (Either / or Choice) With K - LEVEL**	**Section C (Either / or Choice) With K - LEVEL**
			No. of Questions	**K – Level**		
1	CO1	K1 – K5	2	K1, K2	2 (K3, K3)	2 (K5, K5)
2	CO2	K1 – K5	2	K1, K2	2 (K2,K2)	2 (K3,K3)
3	CO3	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K4,K4)
4	CO4	K1 – K5	2	K1, K2	2 (K3,K3)	2 (K5,K5)
5	CO5	K1 – K5	2	K1, K2	2 (K4,K4)	2 (K3,K3)
No. of Questions to be Asked			10		10	10
No. of Questions to be answered			10		5	5
Marks for each question			1		5	8
Total Marks for each section			10		25	40
(Figures in parenthesis denotes, questions should be asked with the given K level)						

Distribution of Marks with K Level						
K Level	Section A (Multiple Choice Questions)	Section B (Either or Choice	Section C (Either/ or Choice)	Total Marks	% of (Marks without choice)	Consolidated %
K1	5			5	3.57	14.28
K2	5	10		15	10.71	
K3		20	32	52	37.14	37.14
K4		20	16	36	25.71	25.17
K5			32	32	22.85	22.85
Marks	10	50	80	140	100	100

NB: Higher level of performance of the students is to be assessed by attempting higher level of K levels.

Summative Examinations - Question Paper – Format

Q. No.	Unit	CO	K-level		
Answer **ALL** the questions			PART – A		(10 x 1 = 10 Marks)
	Unit - I	CO1	K1		
1.				a)	b)
				c)	d)
	Unit - I	CO1	K2		
2.				a)	b)
				c)	d)
	Unit - II	CO2	K1		
3.				a)	b)
				c)	d)
	Unit - II	CO2	K2		
4.				a)	b)
				c)	d)
	Unit - III	CO3	K1		
5.				a)	b)
				c)	d)
	Unit - III	CO3	K2		
6.				a)	b)
				c)	d)
	Unit - IV	CO4	K1		
7.				a)	b)
				c)	d)
	Unit - IV	CO4	K2		
8.				a)	b)
				c)	d)
	Unit - V	CO5	K1		
9.				a)	b)
				c)	d)
	Unit - V	CO5	K2		
10.				a)	b)
				c)	d)

Answer **ALL** the questions		**PART – B**		**(5 x 5 = 25 Marks)**
11. a)	**Unit - I**	**CO1**	**K3**	
		OR		
11. b)	**Unit - I**	**CO1**	**K3**	
12. a)	**Unit - II**	**CO2**	**K2**	
		OR		
12. b)	**Unit - II**	**CO2**	**K2**	
13. a)	**Unit - III**	**CO3**	**K4**	
		OR		
13. b)	**Unit - III**	**CO3**	**K4**	
14. a)	**Unit - IV**	**CO4**	**K3**	
		OR		
14. b)	**Unit - IV**	**CO4**	**K3**	
15. a)	**Unit - V**	**CO5**	**K4**	
		OR		
15. b)	**Unit - V**	**CO5**	**K4**	

Answer **ALL** the questions		**PART – C**		**(5 x 8 = 40 Marks)**
16. a)	**Unit - I**	**CO1**	**K5**	
		OR		
16. b)	**Unit - I**	**CO1**	**K5**	
17. a)	**Unit - II**	**CO2**	**K3**	
		OR		
17. b)	**Unit - II**	**CO2**	**K3**	
18. a)	**Unit - III**	**CO3**	**K4**	
		OR		
18. b)	**Unit - III**	**CO3**	**K4**	
19. a)	**Unit - IV**	**CO4**	**K5**	
		OR		
19. b)	**Unit - IV**	**CO4**	**K5**	
20. a)	**Unit - V**	**CO5**	**K3**	
		OR		
20. b)	**Unit - V**	**CO5**	**K3**	