M.Com. CA LOCF SYLLABUS 2023



Department of Commerce Computer Applications
School of Management Studies
St. Joseph's College (Autonomous)
Tiruchirappalli - 620 002, Tamil Nadu, India

Vision

Forming globally competent, committed, compassionate and holistic persons, to be men and women for others, promoting a just society.

Mission

- Fostering learning environment to students of diverse background, developing their inherent skills and competencies through reflection, creation of knowledge and service.
- Nurturing comprehensive learning and best practices through innovative and value-driven pedagogy.
- Contributing significantly to Higher Education through Teaching, Learning, Research and Extension

Programme Educational Objectives (PEOs)

- Graduates will be able to accomplish professional standards in the global environment.
- Graduates will be able to uphold integrity and human values.
- Graduates will be able to appreciate and promote pluralism and multiculturalism in working environment.

Programme Outcomes (POs)

- 1. Graduates will be able to apply assimilated knowledge to evolve tangible solution to emerging problems.
- 2. Graduates will be able to analyze and interpret data to create and design new knowledge.
- 3. Graduates will be able to engage in innovative and socially relevant research and effectively communicate the findings.
- 4. Graduates will become ethically committed professional and entrepreneurs upholding human values.
- 5. Graduates imbibed with ethical values and social concern will be able to understand and appreciate cultural diversity, social harmony and ensure sustainable environment.

Programme Specific Objectives (PSOs)

- 1. Graduates will obtain the knowledge and ability in computer applications by gaining and training in Data base systems, RDBMS, web designing, OOP with C++ and JAVA, Object-Oriented Programming, Financial Accounting Package-Tally ERP-9 and have inter-twining competence in the field of Commerce and Computer Application
- 2. Graduates are trained with managerial skills, human resource management, and management information system to get employment and leadership in global level.
- 3. Graduates are trained with the application oriented research through research for business decisions.
- 4. Graduates become proficient in using information technology and accounting tools in decision making process, get acquainted with the knowledge to pursue higher education through research
- 5. Graduates will acquire the ability of entrepreneurship sills in business and techniques of managing the business with special focus on cost Accounting, labour laws, operation research and Business taxation

CONTINUOUS INTERNAL ASSESSMENT Categorizing Outcome Assessment Levels Using Bloom's Taxonomy

Level	Cognitive Domain	Description
K1	Remember	It is the ability to remember the previously learned concepts or ideas.
K2	K2 Understand The learner explains concepts or ideas.	
К3	K3 Apply The learner uses existing knowledge in new contexts.	
K4	Analyse	The learner is expected to draw relations among ideas and to compare and contrast.
K5	Evaluate	The learner makes judgements based on sound analysis.
K6	Create	The learner creates something unique or original.

Question Paper Blueprint for Mid and End Semester Tests

Duration: 2	2 Hours					Maximum Marks: 60			
	6. 4	K level*							
Section		K1	K2	К3	K4	K5	K6	Marks	
A (no choice)		7						$7 \times 1 = 7$	
B (no choice)			5					$5 \times 3 = 15$	
C (either or	type)			3				$3 \times 6 = 18$	
	Courses with K4 as the highest cognitive level				2				
	Courses with K5 as the highest cognitive level wherein one question each on K4 and K5 is compulsory. (Note:K4 has two questions whereas, K5 has no choice.)				1	1			
D (2 out of 3)	Company with WC and the high set or within				Mid	Sem		$2 \times 10 = 20$	
	Courses with K6 as the highest cognitive level wherein one question each on K5 and					End	Sem		
	K6 is compulsory. (Note: Mid Sem: K4 has two questions whereas, K5 has no choice; End sem: K5 has two questions whereas, K6 has no choice)				1	1	1		
				-		-	Total	60	

^{*} K4 and K5 levels will be assessed in the Mid semester test whereas K5 and K6 levels will be assessed in the End semester test.

Question Paper Blueprint for Mid and End Semester Tests (For quantitative courses only)

Duration: 2 Hours Maximu							um Marks: 60
S. A. S.		15.1					
Section	K1	K2	КЗ	K4	K5	К6	Marks
A (no choice)	5	4					9 × 1 = 9
B (either or type)			2	1			$3\times 5=15$
C (2 out of 3)					1	1*	2 × 18 = 36
					•	Total	60

NOTE: K4 and K5 will be assessed in the Mid semester test whereas K5 and K6 will be assessed in the End semester test.

SEMESTER EXAMINATION Question Paper Blueprint for Semester Examination

Duration: 3				Maximum Marks: 100					
	G	K level							
	Section	K1	K2	К3	K4	K5	K6	Marks	
A (no choice,	two questions from each unit)	10						$10 \times 1 = 10$	
B (no choice,	two questions from each unit)		10					$10 \times 3 = 30$	
C (either or	type, one question from each unit)			5				$5 \times 6 = 30$	
	Courses with K4 as the highest cognitive level				3				
D (3 out of 5, one question from each	Courses with K5 as the highest cognitive level wherein two K4 questions and one K5 question are compulsory. (Note: Three questions on K4 and two questions on K5)				2	1		3 × 10 = 30	
unit)	Courses with K6 as the highest cognitive level wherein one question each on K4, K5, and K6 is compulsory. (Note: Two questions each on K4 and K5 and one question on K6)				1	1	1		
			-		-	-	Total	100	

^{*} K6 compulsory

Question Paper Blueprint for Semester Examination (For quantitative courses only)

Section	Marks	K level				
A	$10 \times 1 = 10$	K1				
В	$5 \times 6 = 30$ (eitheror)	K2 (Q. No. 11 & 12) K3 (Q. No. 13, 14 & 15)				
С	4 × 15 = 60 (4 out of 5)	K4 (Q. No. 16 & 17) K5 (Q. No. 18 & 19) K6 (Q. No. 20 compulsory)				
Total Marks: 100						

Evaluation Pattern for Part IV One/Two Credit Courses

Title of the Course	CIA	Semester Examination	Total Marks
Internship	100		100
UG Skill Enhancement Course (Non Major Elective) Foundation Course PG Ability Enhancement Course	20 + 10 + 20 = 50	50 (External member from the Department)	100
Value Education	50	50 (CoE)	100

	PROGRAMME PATTERN								
	Semester 1								
Course Code	Title of the Course	Hours	Credits						
23PCC1CC01	Core Course - 1: Business Finance	6	5						
23PCC1CC02	Core Course - 2: Digital Marketing	4	2						
23PCC1CC03	Core Course - 3: Banking and Insurance	5	5						
23PCC1CP01	Core Practical - 1: Digital Marketing	3	2						
23PCC1ES01	Elective - 1: Industry 4.0	5	3						
23PCC1ES02	Elective - 2: Enterprise Resource Planning	5	3						
23PCC1AE01	Ability Enhancement Course: Advanced Excel	2	1						
	Total	30	21						

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1CC01	Core Course - 1: Business Finance	6	5

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 start-up 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 hours)

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 hours)

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

UNIT III: Start-up Financing and Leasing

(18 hours)

Start-up 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 hours)

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 hours)

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.

Teaching Methodology	Black Board, PPT and Case Study

Books for Study

- 1. Maheshwari, S. N. (2019). Financial management: Principles and practices (15th ed.). Sultan Chand & Sons.
- 2. Khan, M. Y., & Jain, P. K. (2011). *Financial management: Text, problems and cases* (8th ed.). McGraw Hill Education.
- 3. Chandra, P. (2019). *Financial management: Theory and practice* (10th ed.). McGraw Hill Education.
- 4. Apte, P. G. (2020). International financial management (8th ed.). Tata McGraw Hill.

Books for Reference

- 1. Pandey, I. M. (2021). *Financial management* (12th ed.). Pearson India Education Services Pvt. Ltd.
- 2. Kulkarni, P. V. & Satyaprasad, B. G. (2015). *Financial management* (14th ed.). Himalaya Publishing House Pvt Ltd.
- 3. Rustagi, R. P. (2022). *Financial management: Theory, concept, problems* (6th ed.). Taxmann Publications Pvt. Ltd.
- 4. Rufus, A. G. et al., (2017). *Financial management* (1st ed.). Himalaya Publishing House Pvt Ltd.

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

	Course Outcomes						
CO No.	CO-Statements On Successful completion of this course the students will be able to	Cognitive Levels (K - Level)					
CO1	enlighten the basic concepts of Business Finance	K1					
CO2	extract and determine Time value of money and Capital budgeting tools	K2					
CO3	discover lease finance and other sources of finance for start-ups	К3					
CO4	illustrate cash receivable and inventory management techniques	K4					
CO5	evaluate techniques of long term investment decision incorporating risk factor	K5					
CO6	develop the tools for business finance decision	K6					

	Relationship Matrix										
Semester	Cours	se code			Title	of the Co	ourse			Hours	Credits
1	23PCC	C1CC01		Core	Course	- 1: Bu	siness	Finance		6	5
Course Outcomes		Programi	me Outco	e Outcomes (POs) Programme Specific Outcomes (P					PSOs)	Mean Score of	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos
CO1	3	3	2	2	1	3	3	2	1	2	2.2
CO2	2	2	3	1	3	2	3	2	2	2	2.2
CO3	2	2	3	2	3	2	3	2	3	2	2.4
CO4	1	2	3	2	1	2	3	2	2	2	2.0
CO5	3	3	2	2	1	2	3	3	1	2	2.2
CO6	2	3	3	2	3	2	3	2	2	2	2.4
Mean overall Score						2.23 (High)					

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1CC02	Core Course - 2: Digital Marketing	6	5

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

(9 Hours)

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 limitations – Factors for success of digital marketing – Emerging opportunities for digital marketing professionals.

UNIT II: Online marketing mix

(9 Hours)

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 and implication on online marketing mix decisions.

UNIT III: Digital media channels

(9 Hours)

Digital media channels – Search engine marketing – ePR – Affiliate marketing – Interactive display advertising – Opt-in-email marketing and mobile text messaging, Invasive marketing – Campaign management using – Facebook, Twitter, Corporate Blogs – Advantages and disadvantages of digital media channels – Metaverse marketing.

UNIT IV: Online consumer behavior

(9 Hours)

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

(9 Hours)

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.

Teaching Methodology

PPT, Videos and Demonstration models

Books for Study

- 1. Bhatia, P. S. (2019). *Fundamentals of digital marketing* (2nd ed.). Pearson Education Pvt Ltd.
- 2. Chaffey, D & Ellis-Chadwick, F. (2019). *Digital marketing*. Pearson Education Pvt Ltd
- 3. Hemann, C. & Burbary, K. (2019). *Digital marketing analytics*. Pearson Education Pvt Ltd.
- 4. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw Hill Publications.
- 5. Upadhyay, K. C. (2021). *Digital marketing: Complete digital marketing tutorial*. Notion Press.
- 6. Branding, M. (2021). Digital marketing. Empire Publications India Private Ltd.

Books for Reference

- 1. Ahuja, V. (2016). Digital marketing. Oxford University Press.
- 2. Deiss, R. & Henneberry, R. (2017). *Digital marketing*. John Wiley & Sons Inc. Hoboken.
- 3. Charlesworth, A. (2014). Digital marketing A practical approach. Routledge.
- 4. Kingsnorth, S. (2022). *Digital marketing strategy: An integrated approach to online marketing*. Kogan Page Ltd.
- 5. Moutusy, M. (2022). Digital marketing (2nd ed.). Oxford University Press.

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

Course Outcomes								
CO	CO-Statements	Cognitive						
No.	On Successful completion of this course the students will be	Levels						
	able to	(K - Level)						
CO1	explain the dynamics of digital marketing	K 1						
CO2	examine online marketing mix	K2						
CO3	compare digital media channels	К3						
CO4	interpret online consumer behavior	K4						
CO5	analyse social media data	K5						
CO6	design the Digital Branding and Marketing	K6						

	Relationship Matrix													
Semester	Course code Title of the Course								Hours	Credits				
1	23PCC1CC02 Core Course - 2: Dig						23PCC1CC02 Core Course - 2: Digital Marketing						6	5
Course Outcomes	Programme Outcomes (POs) Programme Specific Outcomes (P								PSOs)	Mean Score of				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos			
CO1	3	3	3	2	1	3	2	3	2	3	2.5			
CO2	2	3	3	2	2	2	3	2	1	3	2.3			
CO3	3	2	3	2	2	3	2	2	2	2	2.3			
CO4	3	3	2	2	2	3	3	3	2	3	2.6			
CO5	2	3	3	2	1	3	3	2	2	3	2.4			
CO6	2	3	3	2	1	3	3	2	2	3	2.4			
Mean overall Score										2.4 (High)				

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1CP01	Core Practical - 1: Digital Marketing	3	2

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

Course Units

- 1. Digital Marketing Channels
- 2. Applications in Digital Marketing
- 3. SEO Marketing
- 4. Email Advertising
- 5. Online Marketing:

E-Product, E-Promotion-Price, E-Place

- 6. Websites, online Shopping
- 7. Digital Media Channels:

Facebook, Twitter, Corporate blogs

8. Mobile / Web Marketing

YouTube, Slide share, Pinterest, Instagram, Snapchat, LinkedIn

Teaching Methodology	Practical Lab

Books for Study

- 7. Bhatia, P. S. (2019). *Fundamentals of digital marketing* (2nd ed.). Pearson Education Pvt Ltd.
- 8. Chaffey, D & Ellis-Chadwick, F. (2019). *Digital marketing*. Pearson Education Pvt Ltd.

- 9. Hemann, C. & Burbary, K. (2019). *Digital marketing analytics*. Pearson Education Pvt Ltd.
- 10. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw Hill Publications.
- 11. Upadhyay, K. C. (2021). Digital marketing: Complete digital marketing tutorial. Notion Press.
- 12. Branding, M. (2021). Digital marketing. Empire Publications India Private Ltd.

Books for Reference

- 6. Ahuja, V. (2016). *Digital marketing*. Oxford University Press.
- 7. Deiss, R. & Henneberry, R. (2017). *Digital marketing*. John Wiley & Sons Inc. Hoboken.
- 8. Charlesworth, A. (2014). Digital marketing A practical approach. Routledge.
- 9. Kingsnorth, S. (2022). *Digital marketing strategy: An integrated approach to online marketing*. Kogan Page Ltd.
- 10. Moutusy, M. (2022). Digital marketing (2nd ed.). Oxford University Press.

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

Course Outcomes								
	CO-Statements	Cognitive						
CO No.	On Successful completion of this course the students will be able	Levels						
	to	(K - Level)						
CO1	explain the dynamics of digital marketing	K1						
CO2	examine online marketing mix	K2						
CO3	compare digital media channels	K3						
CO4	interpret online consumer behavior	K4						
CO5	analyse social media data	K5						
CO6	design the Digital Branding and Marketing	K6						

Relationship Matrix											
Semester	Cours	rse code Title of the Course								Hours	Credits
1	23PCC	C1CP01		Cor	e Practic	al - 1: Dig	gital Mark	eting		3	2
Course Outcomes		Programi	ramme Outcomes (POs) Programme Specific Outcomes (P							PSOs)	Mean Score of
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos
CO1	3	3	3	2	1	3	2	3	2	3	2.5
CO2	2	3	3	2	2	2	3	2	1	3	2.3
CO3	3	2	3	2	2	3	2	2	2	2	2.3
CO4	3	3	2	2	2	3	3	3	2	3	2.6
CO5	2	3	3	2	1	3	3	2	2	3	2.4
CO6	2	3	3	2	1	3	3	2	2	3	2.4
Mean overall Score									2.4 (High)		

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1CC03	Core Course - 3: Banking and Insurance	3	2

Course Objectives

To understand the evolution of new banking era

To explore the digital banking techniques

To analyse the role of insurance sectors

To evaluate the mechanism of customer service in insurance and the relevant regulations

To examine the risk and its impact on banking and insurance industry

UNIT I: Introduction to Banking

(18 hours)

Banking: Brief History of Banking - Rapid Transformation in Banking: Customer Shift – Fin tech Overview – Fin tech 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 hours)

Distributed Ledger Technology – Block chain: Meaning - Structure of Block Chain - Types of Block Chain - Differences between DLT and Block chain - Benefits of Block chain and DLT - Unlocking the potential of Block chain – 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 hours)

History of Insurance in India – Definition and Functions of Insurance–Insurance Contract – Indian Insurance Market – Reforms in Insurance Sector – Insurance Organization – Insurance organization structure. Insurance Intermediaries: Insurance Broker – InsuranceAgent–SurveyorsandLossAssessors-ThirdPartyAdministrators(HealthServices) – Procedures-Code of Conduct.

UNIT IV: Customer Services in Insurance

(18 hours)

Customer Service in Insurance – Quality of Service-Role of Insurance Agents in Customer Service-Agent's Communication and Customer Service –Ethical Behavior in Insurance – Grievance Redressal System in Insurance Sector –Integrated Grievance Management System-Insurance Ombudsman - Insurance Regulatory and Development Authority of India Act (IRDA) – Regulations and Guidelines.

UNIT V: Risk Management

(18 hours)

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

Teaching	Videos, PPT and Creation of Models
Methodology	

Books for Study

- 1. Indian Institute of Banking and Finance (2021) *Principles & practices of banking* (5th ed.). Macmillan Education India Pvt. Ltd.
- 2. Mishra, M. N., & Mishra, S. B. (2016). *Insurance principles and practice* (22nd ed.). S. Chand & Company Ltd.
- 3. Vaughan, E., & Vaughan, T. M. (2013). Fundamentals of risk and insurance (11th ed.). Wiley & Sons
- 4. <u>Lynn</u>, T. et al., (2018). *Disrupting fFinance: FinTech and strategy in the 21st century* (Palgrave Studies in Digital Business & Enabling Technologies), Macmillan Publishers.

Books for Reference

- 1. Sundharam, K. P. M., & Varshney, P. N. (2020). *Banking theory, law and practice* (20th ed.). Sultan Chand & Sons.
- 2. Gordon. & Natarajan. (2022). *Banking theory, law and practice* (9th ed.). Himalaya Publishing House Pvt Ltd.
- 3. Gupta, P. K. (2021). *Insurance and risk management* (6th ed.). Himalaya Publishing House Pvt Ltd.
- 4. Chishti, C., & Barberis, J.(2016). *The fintech book: The financial technology handbook for investors, entrepreneurs and visionaries*. John Wiley & Sons.

- 1. https://corporatefinanceinstitute.com/resources/knowledge/finance/fintech-financial-technology
- 2. https://mrcet.com/downloads/digital_notes/CSE/IV%20Year/CSE%20B.TECH% 20IV%20YEAR%20II%20SEM%20BCT%20(R18A0534)%20NOTES%20Final%20 PDF.pdf
- 3. https://www.irdai.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=Page No108&flag=1

	Course Outcomes								
CO	CO-Statements	Cognitive							
No.	Understand the transformations in the new banking era.	Levels (K - Level)							
CO1	acquire knowledge on the modern techniques of digital banking	K1							
CO2	apply the reforms and grievance redressel in insurance sectors	K2							
CO3	examine the regulatory mechanism	К3							
CO4	assess risk mitigation strategies	K4							
CO5	formulate the tools for controlling risks	K5							
CO6		K6							

	Relationship Matrix										
Semester	Cour	Course code Title of the Course							Hours	Credits	
1	23PCC	C1CC03	C	ore Co	urse - 3	: Banki	ng and	Insuran	ce	3	2
Course Outcomes		Programme Outcomes (POs) Programme Specific Outcomes (PS							PSOs)	Mean Score of	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos
CO1	3	3	2	2	1	3	3	2	1	2	2.2
CO2	2	2	3	1	3	2	3	2	2	2	2.2
CO3	2	2	3	2	3	2	3	2	3	2	2.4
CO4	1	2	3	2	1	2	3	2	2	2	2.0
CO5	3	3	2	2	1	2	3	3	1	2	2.2
CO6	2	3	3	2	3	2	3	2	2	2	2.4
Mean overall Score									2.23 (High)		

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1ES01	Elective - 1: Industry 4.0	5	3

Course Objectives
To impart basic idea in Industry 4.0
To Introduce the basic principles, techniques, Applications and tools of Artificial
Intelligence
To understand the essential of Big Data in Industry 4.0
To understand the various Application areas of IOT
To understand Framework for aligning Education with Industry 4.0

UNIT I: Introduction (15 Hours)

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

(15 Hours)

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 (15 Hours)

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

(15 Hours)

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

(15 Hours)

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.

Teaching Methodology	PPT and E-Videos
1 0000000000000000000000000000000000000	111 414 2 11466

Books for Study

- 1. Acharya, S. J., & Chellappan, S. (2019). *Big Data and analytics* (2nd ed.). Wiley Publication.
- 2. Russel, S., & Norvig, P. (2010). *Artificial intelligence: A modern approach* (3rd ed.). Prentice Hall.
- 3. Raj, P., & Raman, A. C. (2017). The internet of things: Enabling technologies, platforms, and use cases. Auerbach Publications.

Books for Reference

- 1. Hurwitz, J., et al., (n.d). Big Data for dummies. John Wiley & Sons, Inc.
- 2. Nilsson. (2000). Artificial intelligence: A new synthesis. Nils J Harcourt Asia PTE Ltd.

- 1. https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SEEA1403.pdf
- 2. https://library.oapen.org/bitstream/handle/20.500.12657/43836/external_content.pdf? sequence=1
- 3. https://www.vssut.ac.in/lecture notes/lecture1428643004.pdf

	Course Outcomes				
CO No.					
CO1	identify the changes from industry 1.0 to 4.0	(K - Level) K1			
CO2	understand the challenges and future prospects of applying artificial intelligence	K2			
CO3	apply big data for industrial growth and development	К3			
CO4	analyze the implementation of IoT in various sectors like Manufacturing, Healthcare, Education, Aerospace and Defence	K4			
CO5	evaluate why education has to be aligned with industry 4.0	K5			
CO6	combine the various technologies of Industry 4.0	K6			

					Relation	onship	Matrix					
Semester	Cours	se code		Title of the Course					Hours	Credits		
1	23PCC	C1ES01	Elective - 1: Industry 4.0					5	3			
Course Outcomes		Programi	me Outco	mes (POs)	Prog	Programme Specific Outcomes (PSOs)			PSOs)	Mean Score of	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos	
CO1	3	3	2	1	2	3	3	2	1	2	2.2	
CO2	2	3	3	2	1	3	3	3	2	2	2.4	
CO3	2	3	3	2	2	2	3	3	2	2	2.4	
CO4	3	3	3	1	2	3	3	3	2	3	2.6	
CO5	2	3	3	1	2	2	3	3	2	1	2.3	
CO6	2	3	3	2	2	2	3	3	2	2	2.4	
	•	,		•	•		•	M	ean over	all Score	2.38 (High)	

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1ES02	Elective - 2: Enterprise Resource Planning	5	3

Course Objectives
To learn the history and growth of ERP
To understand the risks involved while using ERP
To gain knowledge on the various ERP technologies
To learn the dynamics of ERP marketplace
To choose appropriate ERP solutions or packages

UNIT I: Enterprise an Overview

(15 Hours)

Business Functions and Business Processes - Integrated Management Information - Business Modeling - Integrated Data Model. Business Processes: Major Business Processes. Introduction to ERP: Common ERP Myths - A Brief History of ERP - Reasons for the Growth of ERP Market - Advantages of ERP.

UNIT II: Risk of ERP (15 Hours)

People Issues - Process Risks - Technological Risks - Implementation Issues-Operation and Maintenance Issues - Unique Risks of ERP Projects - Managing Risks on ERP Projects. Benefits of ERP: Information Integration - Reduction of Lead Time - On-Time Shipment - Reduction in Cycle Time - Improved Resource Utilization - Better Customer Satisfaction-Improved Supplier Performance - Increased Flexibility - Reduced Quality Costs - Better Analysis and Planning Capabilities - Improved Information Accuracy and Decision Making Capability - Use of Latest Technology.

UNIT III: ERP and related Technologies

(15 Hours)

Business Process Reengineering (BPR) - Business Intelligence (BI) - Business Analytics (BA) - Data Warehousing- Data Mining - On - Line Analytical Processing (OLAP) - Product Life Cycle Management (PLM) - Supply Chain Management (SCM) - Customer Relationship Management (CRM) - Geographic Information Systems (GIS) - Intranets and Extranets. Advanced Technology and ERP Security: Technological Advancements - Computer Crimes - ERP and Security - Computer Security - Crime and Security.

UNIT IV: ERP Market Place and Market place dynamics

(15 Hours)

Market Overview - ERP Market Tiers. Market Place Dynamics - Industry - Wise ERP Market Share - ERP: The Indian Scenario. Business Modules of an ERP Package: Functional Modules of ERP Software: Integration of ERP, Supply Chain, and Customer Relationship Applications.

UNIT V: ERP Implementation

(15 Hours)

Benefits of Implementing ERP - Implementation Challenges. ERP Implementation Life Cycle: Objectives of ERP Implementation - Different Phases of ERP Implementation-Reasons for ERP Implementation Failure. ERP Package Selection: ERP Package Evaluation and Selection - The Selection Process - ERP Packages: Make or Buy

Teaching	Video, PPT, LCD demonstration
Methodology	

Books for Study

- 1. Leon, A. (2019). Enterprise resource planning (4th ed.). Tata McGraw-Hill.
- 2. Vaman, J. N. (2008). ERP in practice. Tata McGraw Hill.
- 3. Jaiswal, M., & Vanapalli, G. (2009). ERP. McMillan India.

Books for Reference

- 1. Magal, S. P., & Word, J. (2012). Essentials of business process and information System. Wiley India.
- 2. Summer. (2008). ERP. Pearson Education.
- 3. Grag, V. K., & Venkitakrishnan, K. N.(2006). *ERP- Concepts and practice*. Prentice Hall of India.

- 1. https://mrcet.com/downloads/digital_notes/CSE/III%20Year/ERP%20Digital%20notes.pdf
- 2. https://mrcet.com/downloads/digital_notes/ME/III%20 year/ERP%20Complete%20Digital%20notes.pdf
- 3. https://www.vssut.ac.in/lecture_notes/lecture1428643004.pdf

	Course Outcomes	
CO	CO-Statements	Cognitive
No.	On Successful completion of this course the students will be able	Levels (K - Level)
	to	, ,
CO1	recall the history and growth of ERP	K1
CO2	appraise the risks involved while using ERP	K2
CO3	select from among various ERP technologies	K3
CO4	analyze the dynamics of ERP marketplace	K4
CO5	distinguish and choose appropriate ERP solutions or packages	K5
CO6	evaluate ERP package selection and Implementation	K6

Relationship Matrix											
Semester	Cours	se code			Title	of the Co	ourse			Hours	Credits
1	23PCC	C1ES02	Ele	ective -	2: Ente	erprise I	Resourc	e Plann	ing	5	3
Course Outcomes		Programi	ne Outco	mes (POs)	Prog	ramme S	pecific Ou	itcomes (l	PSOs)	Mean Score of
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos
CO1	2	1	1	2	3	2	2	2	3	3	2.1
CO2	2	3	1	2	2	2	3	3	2	2	2.2
CO3	1	2	3	2	3	2	3	3	2	2	2.3
CO4	2	2	2	3	3	3	3	3	2	2	2.5
CO5	2	2	3	2	2	2	3	3	3	2	2.4
CO6	2	3	3	3	2	3	3	3	3	2	2.7
Mean overall Score							2.3 (High)				

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	23PCC1AE01	Ability Enhancement	2	1
1	231 CCIAE01	Course: Advanced Excel		1

Course Objectives
To know the Statistical concepts using functions
To learn how to compute large amount of data quickly using data analysis tools
To gain knowledge on data visualization in problem solving
To understand the concept of Macros
To acquire knowledge and skills on VBA

Exercises

- 1. Text and Statistical Functions
- 2. Nested Control Structures
- 3. Data consolidation
- 4. Sorting and Advanced Filters
- 5. VLOOKUP function
- 6. Data Tables What -IF analysis
- 7. PIVOT Table creation and Report generation
- 8. Creation and manipulation of Gantt Chart
- 9. Macros
- 10. VBA

Teaching Methodology	Lab demonstration

Books for Study

1. Mehta, M. S. (2021). Microsoft Excel professional 2021 guide. BPB Publications.

Books for Reference

- 4. Alexander, M., & Walkenbach, J. (2022). *Microsoft Excel dashboards and reports* (2nd ed.). Wiley India Pvt. Ltd.
- 5. McFedries, P. ., & Harvey, G. (2021). *Excel all-in-one for dummies* (2nd ed.). Wiley India Pvt. Ltd.
- 6. Nigam, M. (2019). Data analysis with Excel (2nd ed.). BPB Publications.

- 1. https://www.goskills.com/Excel
- 2. https://www.udemy.com/course/microsoft-excel-2013-from-beginner-to-advanced-and-beyond
- 3. https://www.coursera.org/learn/excel-basics-data-analysis-ibm?

Course Outcomes								
CO No.	CO-Statements	Cognitive						
	On Successful completion of this course the students will be able to	Levels (K - Level)						
CO1	identify different Statistical methods for solving problems	K1						
CO2	understand the Data analysis methods for extracting data	K2						
CO3	apply advanced filters in table, and present it in visual form	K3						
CO4	analyse the problem through Data Consolidation and Grouping	K4						
CO5	evaluate the problem by applying Data tools	K5						
CO6	create and run VBA codes	K6						

	Relationship Matrix											
Semester	Cours	Course code Title of the Course									Credits	
1	23PCC	C1AE01		Ability E	nhancem	ent Cour	se: Advai	nced Excel		2	1	
Course Outcomes		Programme Outcomes (POs) Programme Specific Outcomes (PS								PSOs)	Mean Score of	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Cos	
CO1	2	1	1	2	3	2	2	2	3	3	2.1	
CO2	2	3	1	2	2	2	3	3	2	2	2.2	
CO3	1	2	3	2	3	2	3	3	2	2	2.3	
CO4	2	2	2	3	3	3	3	3	2	2	2.5	
CO5	2	2	3	2	2	2	3	3	3	2	2.4	
CO6	2	3	3	3	2	3	3	3	3	2	2.7	
Mean overall Score											2.3 (High)	

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2CC04	Core Course - 5: Managerial Skills	5	4

Course Objectives
To understand the concept of managerial personnel
To analyze the managerial problems in an organization
To develop the various skills required for the managerial personnel
To negotiate the socio and psychological problems in an organization
To live a balanced life between work and life

UNIT I: Strategic thinking

(15 Hours)

Concepts- Need - Process - Meaning -competencies - importance- Lateral Thinking - Concepts - Need - Applications- Benefits- Techniques used in Lateral Thinking -Conventional Vs Lateral Leaders.

UNIT II: Conflict Resolution

(15 Hours)

Concepts - sources of conflict - role of perception in conflict - steps of Conflict Resolution - Conflict handling matrix - Functional and Dysfunctional outcome of conflict. Negotiation skills - process - styles - outcome - principles - negotiation model - being a negotiator - qualities of a negotiator. Level V leader-Becoming a level V leader - attributes of level V leader - the level V hierarchy.

UNIT III: Change (15 Hours)

Concepts - Facing changes - meaning - characteristics -why changes - impact of resistance -Reasons for resistance - types of people in facing changes - introducing change. Facing challenges - meaning - importance - path to facing challenges - benefits of facing challenges.

UNIT IV: Risk taking (15 Hours)

meaning - factors determining Risk Taking - Risk management - users of Risk Management - Steps in Risk Management. Effective decision making - meaning - approaches - methods - steps - Decision making at the work place. Corporate Mentoring - from mentors perspective - from mentees perspective - mentoring Vs Coaching - mentoring techniques - types of mentoring - mentoring traits - mentoring programme.

UNIT V: Motivation and staying motivated

(15 Hours)

Meaning - finding reason for being motivated - staying motivated at work place - staying motivated in negative work environment - staying motivated during crisis. Work life Balancing - meaning - work satisfaction - gender differences - responsibility of the employers and employees - ways of balancing work and life - handling professional and personal demands - organizing your desk.

Teaching Methodology	Black Board, PPT
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Books for Study

- 1. Covey, S. (2009). The Seven Habits of Highly Effective people. (Unit I and II)
- 2. Alex, K. (2013). *Managerial Skills*. Person Publication. (Unit III, IV and V)

- 1. Goleman, D. (2009). Emotional Ouotient.
- 2. Peale, N.V. (2018). Power of the Plus factor.

Course Outcomes								
CO No.	CO-Statements	Cognitive						
	On successful completion of this course, students will be able to	Levels (K- Level)						
CO1	recognize the skills and enable to use the skills in organizations.	K1						
CO2	infer in strengthening the bond between people.	K2						
CO3	articulate in accelerating the decision-making process.	К3						
CO4	correlate the position of potentially losing something to achieve a goal.	K4						
CO5	reframe the willingness to execute duties in an organization.	K5						
CO6	develop interpersonal skills and balance between work and life.	К6						

	Relationship Matrix										
Semester	Cou	rse Code		Title of the Course					Hour	Credits	
2	23PC	CC2CC04		Core	Course -	- 5: Manage	erial Skills		5		4
Course	Pr	ogramme	Outcon	nes (POs	s)	Progi	ramme Spo	ecific Out	comes (PS	SOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	3	2	2	2	2	3	3	2	2	3	2.4
CO2	2	3	2	2	2	3	3	2	2	3	2.4
CO3	2	2	3	2	3	2	3	2	3	3	2.5
CO4	2	2	2	3	2	2	3	2	2	3	2.3
CO5	2	2	2	2	3	2	3	2	2	3	2.3
CO6	2	3	3	2	3	2	3	2	2	2	2.4
	Mean Overall Score										

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2CC05	Core Course - 5: Cost Accounting Techniques	6	5

Course Objectives

To enlighten the concepts of cost accounting and various material control techniques.

To compute the labour cost under different methods of wage

payment systems and the rate of labour turnover

To allocate the overheads to various departments under primary and secondary distribution systems and to compute the machine hour rate

To have through knowledge on the practical application of process costing.

To apply the contract Costing, Service and Operating costing in the respective industries.

UNIT I: Material costing

(18 Hours)

Cost Accounting - Functions -Differences between financial, cost accounting and Management accounting--Methods of costing- Elements of costing-cost concept- Preparation of cost sheet. Material Costing - Stock Levels - level-Economic order quantity (EOQ)-ABC Analysis - purchase procedure-storing of materials - Issue and pricing of materials--Inventory control-Stores Ledger: FIFO ,LIFO, Specific price, Base stock, Highest In- First-out, Average price methods and Notional price methods.

UNIT II: Labour Costing

(18 Hours)

Classifications of labour - Time keeping-Preparation of pay roll-Wage payment and incentive systems-idle time-over time-accounting of labour cost - -merit rating-Time and motion study.

UNIT III: Overhead Costing

(18 Hours)

Classifications of overheads-Primary distribution of overhead- overhead-over absorption and under absorption- Job costing - Contract costing.

UNIT IV: Standard Costing and Variance analysis

(18 Hours)

Standard Costing - Advantage and Limitations of standard costing - Standard Hour - Standard cost card - Variance analysis - Relevance of standard cost for variance analysis - Significance of variance analysis - Computation of Material Variances - Labour Variances - Overhead Variances - Sales Variances

UNIT V: Marginal Costing

(18 Hours)

Equation - Break-even Point - Profit Volume Ratio - Advantages and Limitations of Marginal Costing - Cost volume profit analysis - Computation of PV Ratio and Break Even Point - Make or Buy Decision - Margin of Safety - Effect of Change of sale price on overall BEP - Effect of change in product mix on BEP and PV Ratio.

Teaching Methodology	Black Board, PPT
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Books for Study

1. Jain, S.P. & Narang, K.L. (2021). Cost accounting. Kalyani Publication.

- 1. Alex, K. (2015). *Cost Accounting*. Pearson Publication.
- 2. Moorthy, A. & Gurusamy, S. (2018). *Cost accounting*. Vijay Nicole Imprints.

Course Outcomes							
CO No	CO-Statements	Cognitive Levels					
CO No.	On successful completion of this course, students will be able to						
CO1	Gain knowledge on cost accounting techniques	K1					
CO2	understand cost accounting techniques and process.	K2					
CO3	apply Cost accounting techniques in real time situation	К3					
CO4	analyse the various cost accounting tools in relation to material, labour, overheads, marginal costing and standard costing	K4					
CO5	evaluate the material, labour and overheads cost under different methods and marginal costing and standard costing	К5					
CO6	create the cost accounting techniques to the industries	K6					

Relationship Matrix											
Semester	Cou	rse Code		Title of the Course Core Course - 5: Cost Accounting Techniques							Credits
2	23PC	CC2CC0	5								5
Course	Programme Outcomes (POs)					Progra	amme Sp	ecific O	utcomes	(PSOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	3	3	3	2	3	3	2	3	3	2	2.7
CO2	3	3	3	2	2	3	3	3	2	2	2.6
CO3	3	3	3	3	2	3	3	2	3	3	2.8
CO4	3	3	2	3	2	3	3	2	3	2	2.6
CO5	3	3	3	2	2	3	3	3	2	3	2.7
CO6	3	3	3	3	3	3	3	2	3	2	2.8
Mean Overall Score										2.7 (Medium)	

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2CC06	Core Course - 6: Python Programming	3	3

Course Objectives
To learn different operators, expressions and data types available in Python
To understand the purpose of operations, strings, lists, tuples to solve Problems
To apply functions to solve problems using procedure oriented approach
To analyze the problems and solve it by applying appropriate logic
To implement Expressions, Variables, Quotes, Basic Math operations, Strings: List, Tuples,
Dictionaries, Arrays

UNIT I: Introduction (9 Hours)

Features of Python - How to Run Python - Identifiers- Reserved Keywords - Variables - Comments in Python - Indentation in Python - Multi-Line Statements - Multiple Statement Group (Suite)

UNIT II: Input, Output and Import Functions

(9 Hours)

Displaying the output -Reading the input-import function - Operators- Data Types and Operations: Numbers - Strings - List - Tuple - Set - Dictionary - Data type conversion.

UNIT III: Flow Control (9 Hours)

Decision Making - Loops - Nested Loops - Types of Loops. Functions: Function Definition - Function Calling - Function Arguments - Recursive Functions - Function with more than one return value.

UNIT IV: Modules (9 Hours)

Built-in Modules - Creating Modules - import Statement - Locating Modules - Namespaces and Scope - The dir() function- The reload() function-Packages in Python-Date and Time Modules.

UNIT V: File Handling (9 Hours)

Opening a File - Closing a File - Writing to a File - Reading from a File - File Methods - Renaming a File - Deleting a File - Directories in Python.

Teaching Methodology	Black Board, PPT, E-materials
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Books for Study

1. Jeeva, J., & Sojan Lal, P. (2016). *Introduction to Computing and Problem Solving with PYTHON*. Khanna Book Publishing Co. (P) Ltd.,

- 1. Chun, J. W. (2006). Core Python Programming, (2nd Ed.).
- 2. Hetland, M.L. (2008). Beginning Python, (2nd Ed.). Apress Publication.
- 3. Lambert, A. K. (2011). The Fundamentals of Python: First Programs. Cengage Learning.

Course Outcomes					
CO No.	CO-Statements	Cognitive Levels			
	On successful completion of this course, students will be able to	(K - Level			
CO1	recall the Fundamentals of Python Syntax and Semantics	K1			
CO2	classify the Operators and various Operations	К2			
CO3	make use of the Data Types	К3			
CO4	analyze different Decision Making statements and Functions	K4			
CO5	explain the Modules and Packages	K5			
CO6	develop the Scripts using Files and Directories	К6			

				R	elationsh	ip Matrix					
Semester	Semester Course Code		e	Title of the Course			Hours		Credits		
2	2 23PCC2CC06			Core (Course - (6: Python l	Programm	ing	3		3
Course	P	rogramı	ne Outco	omes (PC	Os)	Progr	amme Sp	ecific Ou	tcomes (F	PSOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	3	3	2	1	2	3	3	2	1	2	2.2
CO2	2	3	3	2	1	3	3	3	2	2	2.4
CO3	2	3	3	2	2	2	3	3	2	2	2.4
CO4	3	3	3	1	2	3	3	3	2	3	2.6
CO5	2	3	3	1	2	2	3	3	2	1	2.3
CO6	3	3	2	1	2	3	2	2	2	3	2.3
	Mean Overall Score					2.36 (High)					

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2CP02	Core Practical - 2: Python Programming	3	3

Course Objectives

To learn the syntax and semantics of the Python programming language.

To acquire programming skills in core Python.

To understand different data structures of python

To demonstrate the use of built-in functions, modules and packages.

To develop Python programs for solving problems.

EXERCISES

- 1. Operators
 - Arithmetic operators
 - Assignment operators
 - Comparison operators
 - Logical operators
 - Identity operators
 - Membership operators
 - Bitwise operators
- 2. Built in Data Structure
 - List
 - Dictionary
 - Tuple
 - Set

3. Control Structures

- If
- If else
- Nested if
- if-elif-else
- 4. Functions
 - String
 - List
 - Tuples
 - Dictionary
 - Set
- 5. Matrix
- 6. Built in Modules
- 7. Packages

Teaching Methodology	Lab practical
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	Course Outcomes				
CON	CO-Statements	Cognitive			
CO No.	On successful completion of this course, students will be able to	Levels (K- Level)			
CO1	recall the Fundamentals of Python	K1			
CO2	illustrate the Control Structures	K2			
CO3	make use of Data Types	К3			
CO4	analyze the Functions	K4			
CO5	explain the Modules	К5			
CO6	develop the Packages	K 6			

					Relation	ship Matr	ix				
Semester	Cou	rse Code	se Code Title of the Course				Hours		Credits		
2	23PC	CC2CP02	!	Core Pra	actical - 2	2: Python l	Programmi	ng	3		3
Course	P	rogramn	ne Outco	mes (PC	Os)	Prog	ramme Sp	ecific Out	comes (PS	SOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	2	3	2	1	2	3	3	2	2	2	2.2
CO2	3	2	3	2	3	3	3	3	2	2	2.6
CO3	2	3	3	2	2	2	3	3	2	2	2.4
CO4	3	3	3	1	2	3	3	3	1	2	2.4
CO5	2	3	3	1	2	1	3	3	2	1	2.2
CO6	2	3	2	2	3	2	2	3	2	1	2.2
	Mean Overall Score				2.3 (High)						

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2SP01A	Self-paced Learning: Fundamentals of Insurance		2

Course Objectives				
To understand and Gain knowledge on the concept of insurance and the risk involved.				
To assess the various principles of insurance market.				
To analyze the terms plans offered by life insurance.				
To evaluate the constituents of insurance market in the society				
To synthesis the constituents of insurance to the society				

UNIT I: Introduction

The basics and nature of insurance-evolution -importance of insurance - Risk Management: different types of risks - actual and consequential losses-management of risks-loss minimization techniques.

UNIT II: Fixing of premiums

Reinsurance and its importance for insurers - role of insurance in economic development and social security - contribution of insurance to the society - Business interruption insurance - Types of coverage - Groups of insurance professionals.

UNIT III: Insurance Market

The various constituents of the insurance market-operations of insurance companies - operations of intermediaries-specialist insurance companies-insurance specialists - the role of regulators-Insurance Customers: Customer needs - Importance - Customer satisfaction - customer behavior - The future of insurance

UNIT IV: Insurance Contract

Terms of an insurance contract - principles which form the foundation of insurance - significance of the principle of insurable interest-the principle of indemnity - the principle of subrogation - the principle of contribution disclosure of all relevant information - principle of utmost good faith.

UNIT V: Life Insurance products

Products offered by life insurers - term plans - pure endowment plans - combinations of plans - traditional products - linked policies - features of annuities and group policies. General Insurance Products: Risks faced by the owner of assets-exposure to perils- Features of products covering fire and allied perils.

Teaching Methodology	E-Material
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Book for Study

1. Srinivasan, M.N. (2017). Principles of Insurance Law, (10th Ed.). Wadhwa & Co.

- 1. Gupta, P.K. (2016). Insurance and Risk Management, (1st Ed.). Himalaya Years of Publishing.
- 2. Chaudhary, R.N. (2018). *General Principles of Law of Insurance*, (3rd Ed.). Central Law Publications.
- 3. Mishra, M.N., & Mishra, S.B. Insurance *Principles and Practice*, (1st Ed.). S.Chand & Company.

	Course Outcomes							
CON	CO-Statements	Cognitive						
CO No.	On successful completion of this course, students will be able to	Levels (K- Level)						
CO1	recognize the ways to manage risk.	K1						
CO2	extract the ways of transferring risk to another insurance company.	K2						
CO3	articulate the buying and selling transactions to protect policy holders.	К3						
CO4	correlate the risk covered, premium charged and value of insurance cover.	K4						
CO5	reframe the risk management tools which ensures a secure future.	K5						
CO6	collaborate the beneficiary features of the policy holders.	К6						

	Relationship Matrix										
Semester	Cou	rse Code		Title of the Course							Credits
2	23PC	C2SP01	4	Self-Pac	nce	-	2				
Course	P	rogramn	ne Outcor	nes (POs)	Progra	amme Sp	ecific Out	comes (I	PSOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	3	3	2	2	2	3	3	2	2	2	2.4
CO2	2	2	3	2	3	2	3	2	2	2	2.3
CO3	2	2	3	2	3	2	3	2	3	2	2.4
CO4	2	2	3	2	2	2	3	2	2	2	2.2
CO5	3	3	2	2	2	2	3	3	2	2	2.4
CO6	2	3	3	2	3	2	3	2	2	2	2.4
	Mean Overall Score										2.35 (High)

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2SP01B	Self-paced Learning: Cloud Computing	-	2

Course Objectives					
To recall the fundamental principles of Cloud Computing.					
To learn the Concept of Cloud architecture and management.					
To understand the cloud deployment models.					
To analyze the services of Cloud Computing.					
To describe the concept of cloud security.					

UNITI: Cloud Computing Fundamentals

Motivation for Cloud Computing - Defining Cloud Computing: NIST Definition - Cloud Computing is Service - Cloud Computing is a Platform - principles of Cloud Computing: Five Essential Characteristics - Four Cloud Deployment Models - Three Service Offering Models - Cloud Ecosystem - Requirements - Application-Benefits and Drawbacks.

UNIT II: Cloud Architecture and Management

Introduction - Cloud Architecture - Anatomy of Cloud - Network Connectivity in Cloud - Applications on the cloud - Managing the Cloud Migrating Application to the Cloud.

UNIT III: Cloud Deployment Models

Private Cloud- Public Cloud- Community Cloud- Hybrid Cloud.

UNIT IV: Cloud Service Models

Introduction - Infrastructure as a Service - Platform as a Service Software as a Service - Other Cloud Service Models.

UNIT V: Data Security in Cloud

An introduction to the idea of the Data Security-Current State of the Data Security - Data Security Risk-Content Level Security - Pros and Cons.

Teaching Methodology	E-Material
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Books for Study

- 1. Chandrasekaran, (2015). Essentials of Cloud Computing, Taylor & Francis Group
- 2. Rajkumar, B, Broberg, J. & Goscinski, A. (2011). *Cloud Computing Principles and Paradigms*, John Wiley & Sons.

- 1. Miller, M. (2008). Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online. Que Publishing.
- 2. Beard, H. (2008). Cloud Computing Best Practices for Managing and Measuring Processes for On-demand Computing, Applications and Data Centers in the Cloud with SLA. Emereo pvt. Ltd.

	Course Outcomes							
CON	CO-Statements	Cognitive						
CO No.	On successful completion of this course, students will be able to	Levels (K- Level)						
CO1	recall the Cloud Fundamentals	K1						
CO2	summarize the Requirements, Benefits and Drawbacks of Cloud	K2						
CO3	utilize the Cloud Architecture and Management	К3						
CO4	analyze the Cloud Deployment Models	K4						
CO5	explain the Cloud Services	К5						
CO6	discuss the Data Security Issues	K6						

	Relationship Matrix											
Semester	Cou	ırse Cod	e	Title of the Course					Hours		Credits	
2	23PC	CC2SP01	В	Self-pa	ced Leari	ning: Clou	d Computi	ng	-		2	
Course	F	Program	me Outc	omes (P	Os)	Prog	ramme Sp	ecific Out	comes (PS	SOs)	Mean	
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs	
CO1	3	2	2	1	2	3	3	2	1	2	2.1	
CO2	3	3	2	2	1	3	3	3	2	2	2.4	
CO3	2	3	3	2	2	2	3	3	2	2	2.4	
CO4	3	3	3	1	2	3	3	3	2	2	2.5	
CO5	2	3	3	2	2	2	3	3	2	2	2.4	
CO6	3	3	2	3	2	3	2	3	2	2	2.5	
Mean Overall Score											2.36 (High)	

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2ES03A	Elective - 3: Operations Research	5	4

Course Objectives
To understand the concepts of operations research
To acquire knowledge on Queuing methods and Game theory
To analyse the solution for the Decision problems
To evaluate the problems of Assignment and Transportation
To frame the networks based on CPM and PERT

UNIT I: OR Concepts and Linear Programming Problem

(15 Hours)

Operation research: Origin and nature- OR as a tool for decision-making; OR and management; features-phases -models - methods of deriving solution -Applications: Linear programming formulation of LPP; graphic solutions;

UNIT II: Assignment and Transportation

(15 Hours)

Formulation. Hungarian method for optimal solution, Solving unbalanced problem, Traveling salesman problem and assignment problem Transportation: Formulation, solution, unbalanced Transportation problem. Finding basic feasible solutions - Northwest corner rule, least cost method and Vogel's approximation method.

UNIT III: Decision theory

(15 Hours)

Basic concepts: quantitative approach to managerial decision-making; Decision-making under certainty-decision making under uncertainty-maximax- minimax - maximin- Laplace- Hurwicz. Decision-making under risk-EMV- EOL- EVPI- Decision making under competition- Decision tree analysis

UNIT IV: Network analysis

(15 Hours)

CPM and PERT: construction of network diagrams; network calculation; concept of float; probability consideration in PERT; calculation of float under PERT; distinction Between CPM and PERT; limitations of PERT

UNIT V: Simulation (15 Hours)

Basic concepts - Monte Carlo simulation - Game Theory: Competitive games, rectangular game, saddle point, minimax (maximin) method of optimal strategies, value of the game. Solution of games with saddle points, dominance principle.

Teaching Methodology	Black Board, PPT
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Book for Study

1. Kapoor, V.K., & Kapoor, S. (2008). *OR Techniques for Management*. (1st Ed.). Sultan Chand & Sons

- 1. Sharma S.D., (2016). Operations Research, (1st Ed.). Kedar Nath Ram Nath & Co.
- 2. Hira, D.S. & Gupta, P. K. (2012). *Introduction to Operations Research*. S. Chand publishers.
- 3. Taha, H. A. (2009). Operations Research An Introduction. Prentice Hall.

Course Outcomes							
CO N-	CO-Statements	Cognitive					
CO No.	On successful completion of this course, students will be able to	Levels (K- Level)					
CO1	know and understand the concepts of operations research, LPP, Assignment and Transportation Decision problems, Network analysis and Game theory	K1					
CO2	acquire knowledge on LPP, Assignment and Transportation Decision problems, Network analysis and Game theory	K2					
CO3	solve the problems as per mathematical models	К3					
CO4	analyse the solution for the Assignment and Transportation Decision problems, Network analysis and Game theory	K4					
CO5	evaluate the problems of Assignment and Transportation CPM, PERT and Game theory	K5					
CO6	frame the networks based on CPM and PERT	K6					

					Relation	ship Matr	rix				
Semester	Course Code			Title of the Course					Hours		Credits
2	23P	CC2ES0	3A	El	lective	3: Operation	ons Researc	ch	5		4
Course	Pi	rogramn	ne Outco	omes (PC	Os)	Prog	Programme Specific Ou			SOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	3	3	3	2	1	3	2	3	2	3	2.5
CO2	2	3	3	2	2	2	3	2	1	3	2.3
CO3	3	2	3	2	2	3	2	2	2	2	2.3
CO4	3	3	2	2	2	3	3	3	2	3	2.6
CO5	2	3	3	2	1	3	3	2	2	3	2.4
CO6	2	3	3	2	1	3	3	2	2	3	2.4
Mean Overall Score										2.4 (High)	

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2ES03B	Elective - 3: Knowledge Management	5	4

Course Objectives

To comprehend the fundamentals of how knowledge is formed and its implications in organizational contexts.

To grasp the processes involved in abstracting knowledge from diverse sources for organizational benefit.

To apply social network analysis to understand knowledge flow within organizations.

To understand the role of the balance scorecard in evaluating the overall effectiveness of knowledge management.

To develop a forward-thinking approach towards the evolution of knowledge management in different industries.

UNIT I: Transition from Industrial Economy to Knowledge Economy

(15 Hours)

Introduction - History - Importance - Strategy - Prioritizing knowledge strategies - Knowledge Economy - Technology and Knowledge Management - Knowledge Management Cycle - Industrial Economy to Knowledge Economy.

UNIT II: Fundamentals of Knowledge Formation

(15 Hours)

Knowledge Attributes - Fundamentals of knowledge formation - Tacit and Explicit knowledge - Knowledge sourcing, abstraction, conversion and diffusion.

UNIT III: Social Nature of Knowledge

(15 Hours)

Social Nature of Knowledge, Social Network Analysis, Obstacles to knowledge sharing, Organizational learning & Social Capital. Knowledge Application - Individual level, Group level & Organization Level.

UNIT IV: Knowledge Management Strategy and Tools

(15 Hours)

KM Strategy, Knowledge audit, GAP Analysis, Road Map, KM Metrics, Balance ScoreCard.KM Tools - Knowledge Capture & Creation tools, Knowledge sharing & Dissemination Tools, Knowledge Acquisition & Application tools.

UNIT V: Challenges and Future Trends in Knowledge Management

(15 Hours)

Km Team-Roles & Responsibilities, Political issues in KM, Ethics in KM, Strategies issues in Knowledge Management, Future of Knowledge Management.

Teaching Methodology	Black Board, PPT and videos
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Book for Study

1. Kimiz, D. (2017). *Knowledge Management in Theory and Practice*. published by The MIT Press Cambridge, Massachusetts.

- 1. Warier, S. (2022). Knowledge Management. (3rd Ed.). Vikas Publishing House Private Limited.
- 2. Mertins, K., Heisig, P., & Vorbeck, J. (2020). *Knowledge Management: Concepts and Best Practices*, (2nd Ed.). Springer Nature Publications.
- 3. Awad, E.M. (2021). *Knowledge Management*, (2nd Ed.). published by Prentice Hall India Learning Private Limited.

	Course Outcomes				
CO No.	CO-Statements	Cognitive Levels			
CO No.	On successful completion of this course, students will be able to	(K - Level)			
CO1	recall the historical evolution of economies, recognizing the shift from an industrial economy to a knowledge economy.	K1			
CO2	the importance of knowledge management in the context of contemporary business strategies and the role of technology in facilitating knowledge processes.	К2			
CO3	apply knowledge management strategies to real-world scenarios, demonstrating an understanding of how organizations prioritize and implement knowledge management.	К3			
CO4	analyze the fundamental attributes of knowledge, differentiating between tacit and explicit knowledge, and evaluate the processes of knowledge sourcing, abstraction, conversion, and diffusion.	K4			
CO5	evaluate the impact of knowledge formation processes on organizational effectiveness, considering the interplay between tacit and explicit knowledge.	K5			
CO6	design strategies to enhance knowledge sharing within organizations, taking into account social network analysis, identifying and overcoming obstacles, and leveraging social capital.	К6			

					Relation	ship Matr	rix				
Semester	Cou	rse Cod	e		Title	of the Co	urse		Hour	:s	Credits
2	23PC	CC2ES03	ВВ	Elective - 3: Knowledge Management				ent	5		4
Course	Pi	rogramn	ne Outc	omes (PC	Os)	Prog	ramme Sp	ecific Out	comes (PSOs)		Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	2	3	3	2	2	3	3	3	2	2	2.5
CO2	3	3	2	3	2	3	3	2	2	3	2.6
CO3	3	3	3	2	3	2	3	2	3	2	2.6
CO4	2	3	2	3	2	2	3	2	2	3	2.4
CO5	2	3	3	2	3	2	3	2	2	2	2.4
CO6	3	2	3	2	2	3	2	3	2	3	2.5
		II.	ı		I	ı	1	Me	ean Overa	ll Score	2.5 (High)

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PSS2SE01	Skill Enhancement Course: Soft Skills	4	3

Course Objectives
To provide a focused training on soft skills for students in colleges for better job

To communicate effectively and professionally

To help the students take active part in group dynamics

To familiarize students with numeracy skills for quick problem solving

To make the students appraise themselves and assess others

Unit I: Effective Communication & Professional Communication

(12 Hours)

prospects

Definition of communication, Barriers of Communication, Non-verbal Communication; Effective Communication - Conversation Techniques, Good manners and Etiquettes; Speech Preparations & Presentations; Professional Communication.

Unit II: Resume Writing & Interview Skills

(12 Hours)

Resume Writing: What is a résumé? Types of résumés, - Chronological, Functional and Mixed Resume, Purpose and Structure of a Resume, Model Resume.

Interview Skills: Types of Interviews, Preparation for an interview, Attire, Body Language, Common interview questions, Mock interviews & Practicum

Unit III: Group Discussion & Personal effectiveness

(12 Hours)

Basics of Group Discussion, Parameters of GD, Topics for Practice, Mock GD & Practicum & Team Building.

Personal Effectiveness: Self Discovery; Goal Setting with questionnaires & Exercises

Unit IV: Numerical Ability

(12 Hours)

Introducing concepts Average, Percentage; Profit and Loss, Simple Interest, Compound Interest; Time and Work, Pipes and Cisterns.

Unit V: Test of Reasoning

(12 Hours)

Introducing Verbal Reasoning: Series Completion, Analogy; Data Sufficiency, Assertion and Reasoning; and Logical Deduction. Non-Verbal Reasoning: Series; and Classification

Teaching Methodology	Chalk and talk, Lectures, Demonstrations, PPT.
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Book for study

1. Melchias G., Balaiah, J. & Joy, J. L. (Eds). (2018). Winner in the Making: A Primer on soft Skills. Trichy, India: St. Joseph's College.

- 1. Aggarwal, R. S. (2010). A Modern Approach to Verbal and Non-Verbal Reasoning. S. Chand.
- 2. Covey, S. (2004). 7 Habits of Highly effective people. Free Press.
- 3. Gerard, E. (1994). The Skilled Helper (5th Ed.). Brooks/Cole.
- 4. Khera, S. (2003). You Can Win. Macmillan Books.
- 5. Murphy, R. (1998). Essential English Grammar, (2nd Ed.). Cambridge University Press.
- 6. Sankaran, K., & Kumar, M. (2010). *Group Discussion and Public Speaking* (5th Ed.). M.I. Publications.
- 7. Trishna, K. S. (2012). How to do well in GDs & Interviews? (3rd Ed.). Pearson Education.
- 8. Yate, M. (2005). Hiring the Best: A Manager's Guide to Effective Interviewing and Recruiting

	Course Outcomes				
	CO-Statements	Cognitive			
CO No.	On successful completion of this course, students will be able to	Levels (K - Level)			
CO1	recall various soft skill sets	K1			
CO2	understand personal effectiveness in any managerial positions	K2			
CO3	apply verbal and non-verbal reasoning skills to solve problems	К3			
CO4	differentiate problems at work and home; and design solutions to maintain work-life balance	K4			
CO5	assess growth and sustainability and infuse creativity in employment that increases professional productivity	K5			
CO6	construct plans and strategies to work for better human society	K6			

					Relation	ship Matr	rix				
Semester	Course Code			Title of the Course				Н	ours	Credits	
2	23	3PSS2SE	201	Sk	cill Enha	ncement (Course: So	ft Skills		4	3
Course	P	rogramn	ne Outco	omes (PC	Os)	Progr	amme Spo	ecific Outo	comes (P	SOs)	Mean
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs
CO1	3	3	3	3	2	3	2	3	2	3	2.7
CO2	3	3	3	2	3	3	3	3	3	3	2.9
CO3	3	2	2	3	3	3	3	3	3	3	2.8
CO4	3	3	2	2	3	3	3	3	3	3	2.8
CO5	3	3	3	2	2	3	3	3	3	3	2.8
CO6	3	3	3	2	2	3	3	3	3	3	2.8
Mean Overall Score						2.8 (High)					

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	23PCC2EG01	Generic Elective - 1(WS):	4	2
2	23FCC2EG01	Stress Management	4	3

Course Objectives				
To gain and Understanding of human stress.				
To focus on presenting a broad background of stress research.				
To identify the crisis management.				
To developing a sense of humour in work place.				
To improve their personality in self-development.				

UNIT I: Introduction (12 Hours)

Stress meaning - Symptoms - Works Related Stress - Individual Stress - Reducing Stress - Burnout. Setting to Stress- Stress: Meaning - Approaches to stress, Good Stress Vs Bad Stress, The individual and work

UNIT II: Time Management

(12 Hours)

Techniques - Importance of planning the day - Time management schedule -Developing concentration - Organizing the Work Area - Prioritizing - Beginning at the start - Techniques for conquering procrastination - Sensible delegation - Taking the right breaks -Learning to say 'No'.

UNIT III: Stress Implications

(12 Hours)

People issues - Environmental issues -Psychological fall outs - Learning to keep calm - Preventing interruptions - Controlling crisis - Importance of good communication - Taking advantage of crisis - Pushing new ideas -Empowerment. General sources of Stress - Stress and Health - Physiological and psychological illness.

UNIT IV: Reduction of stress

(12 Hours)

Developing a sense of Humour - Learning to laugh -Role of group cohesion and team spirit - Using humour at work - Reducing conflicts with humour.

UNIT V: Personality (12 Hours)

Improving personality - Leading with Integrity - Enhancing Creativity - Effective decision Making - Sensible Communication - The Listening Game - Managing Self - Meditation for peace - Yoga for Life. Organization and Stress Management - Recognize the signs, Approaches to the problem, Providers Assistance.

Teaching Methodology	Black Board, PPT and videos
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Book for Study

1. Sapolsky, M. R. (2004). Why Zebras Don't Get Ulcers, (3rd Ed.). Stanford University, California.

- 1. Waltschafer. (2009). Stress Management, (4th Ed.). Cengage Learning.
- 2. Davidson, J. (2012). Managing Stress, (2nd Ed.). Prentice Hall.
- 3. Cartwright, S. & Cooper, L. C. (2012). Managing Workplace Stress, (4th Ed.). SAGE.

	Course Outcomes								
CO No.	CO-Statements	Cognitive Levels (K- Level)							
	On successful completion of this course, students will be able to								
CO1	gain and Understanding of human stress.	K1							
CO2	focus on presenting a broad background of stress research.	K2							
CO3	identify the crisis management.	К3							
CO4	developing a sense of humour in work place.	K4							
CO5	improve their personality in self-development.	K5							
CO6	developing sensible communication skills	К6							

Relationship Matrix												
Semester	C	ourse Co	de	Title of the Course Generic Elective-1(WS): Stress Management						Hours 4	Credits 3	
2	23]	PCC2EC	G01						ent			
Course Outcomes	Programme Outcomes (POs)					Programme Specific Outcomes (PSOs)				(PSOs)	Mean	
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	Scores of COs	
CO1	3	1	3	1	2	3	2	3	3	2	2.3	
CO2	2	3	2	3	3	3	3	3	1	2	2.5	
CO3	2	1	2	3	3	3	2	2	2	1	2.1	
CO4	3	1	2	1	3	3	2	3	3	1	2.2	
CO5	2	3	3	2	3	2	1	3	3	3	2.5	
CO6	2	2	3	3	2	2	2	3	2	3	2.4	
Mean Overall Score												