

CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

Nationally Accredited with 'A+' Grade by NAAC

TIRUCHIRAPPALLI

PG & RESEARCH DEPARTMENT OF COMMERCE



**LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK
(CBCS - LOCF)**

B.Com. Business Analytics

2025 -2026 and Onwards

DEPARTMENT VISION

Commitment to pursue excellence in commerce education, while equipping students with knowledge and skills in commerce stream, inculcate values, identify hidden talents, provide opportunities for students to realize their full potential and thus shape them into national assets, and to pursue a real holistic development, integrity moral and ethical uprightness.

DEPARTMENT MISSION

- To promote excellent education in the changing environment of information and communication technology and commerce sectors.
- Creating an urge in students to take up entrepreneurship in order to be successful by standing on their feet instead of being dependent on others.
- Grooming youth to become a truly global personality well equipped to deal with the modern world and its challenges.

PROGRAMME OUTCOMES (PO)

(Commerce and Business Administration)

PO NO.	Programme Outcome On completion of B.Com. / B.Com. CA / M.Com. / B.B.A. Programme, The students will be able to
PO 1	Acquire a strong foundation in the areas of Commerce and Management that needs to respond to the constantly changing Business and Legal environment.
PO 2	Propose and implement appropriate decision in all areas of Business Management specially Finance, Marketing, Human Resources and Operations.
PO 3	Students will be an empowered individual who will emerge an entrepreneur or be employed in various positions in Industry, Academia and Government.
PO 4	Imbibe professionalism to embrace new opportunities of emerging technologies, leadership and team work in a dynamic ethical business scenario.
PO 5	Internalize the learned concept of Business and Commerce that will enable them to become skilled professionals and to enhance the career prospects.

PROGRAMME SPECIFIC OUTCOMES FOR B.Com. BUSINESS ANALYTICS
B.Com. BUSINESS ANALYTICS
CURRICULUM [2025–2026 Onwards]

PSO NO	Programme Specific Outcomes Students of B.Com. BUSINESS ANALYTICS will be able to	POs Addressed
PSO1	Comprehend and demonstrate the concepts relating to business, accounting, finance, economics, management, taxation and analytics.	PO1, PO2
PSO2	Understand the digital business practices, processes, design, strategies and attain a high degree of knowledge and application skills in the domain of commerce.	PO2
PSO3	Exhibit the perfect blend of analytical skills and business knowledge to excel as entrepreneur and business analyst.	PO3
PSO4	Adopt emerging technologies, critical thinking and problem solving skills to effectively navigate complex challenges.	PO4, PO5
PSO5	Assess ethical values to appreciate and promote social harmony and environmental sustainability through holistic skills obtained.	PO5



CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS), TRICHY – 18
PG & RESEARCH DEPARTMENT OF COMMERCE
B.Com. Business Analytics – PROGRAMME STRUCTURE
LEARNING OUTCOME BASED CURRICULUM FRAMEWORK (CBCS - LOCF)
(For the candidates admitted from the academic year 2025 – 2026 onwards)

Semester	Part	Course	Title	Subject Code	Hours	Credit	Exam Hours	Marks		Total	
								Internal	External		
I	I	Language Course - I (LC)	Tamil Ilakkiya Varalaru - I	25ULT1	6	3	3	25	75	100	
			Hindi ka Samanya Gyan aur Nibandh	23ULH1							
			Poetry, Grammer and History of Sanskrit Literature	23ULS1							
			Foundation Course : Paper I – French - I	23ULF1							
	II	English Language Course - I (ELC)	General English - I	23UE1	6	3	3	25	75	100	
	III	Core Course - I (CC)	Financial Accounting - I	25UCB1CC1	6	5	3	25	75	100	
			Core Course - II (CC)	Fundamentals of Business Analytics	25UCB1CC2	6	5	3	25	75	100
			First Allied Course - I (AC)	Excel for Financial Decision (P)	25UCB1AC1P	4	3	3	40	60	100
	IV	Ability Enhancement Compulsory Course-I (AECC)	UGC Jeevan Kaushal - Universal Human Values	25UGVE	2	2	-	100	-	100	
			Total			30	21				600

Semester	Part	Course	Title	Subject Code	Hours	Credit	Exam Hours	Marks		Total	
								Internal	External		
II	I	Language Course - II (LC)	Tamil Ilakkiya Varalaru -II	25ULT2	6	3	3	25	75	100	
			Hindi Literature & Grammar - II	22ULH2							
			Prose, Grammar and History of Sanskrit literature	23ULS2							
			Basic French -II	22ULF2							
	II	English Language Course - II (ELC)	General English - II	23UE2	6	3	3	25	75	100	
	II	Core Course - III (CC)	Financial Accounting - II	25UCB2CC3	6	5	3	25	75	100	
			Core Course -IV (CC)	Principles of Marketing	25UCB2CC4	5	5	3	25	75	100
			First Allied Course - II (AC)	Statistics for Business Analytics	25UCB2AC2	5	3	3	25	75	100
	I	Ability Enhancement Compulsory Course –II(AECC)	Environmental Studies	22UGEVS	2	2	-	100	-	100	
			Extra Credit Course	SWAYAM Online Course	As per UGC Recommendations						
		Total			30	21				600	

Semester	Part	Course	Title	Subject Code	Hours	Credit	Exam Hours	Marks		Total	
III	I	Language Course - III (LC)	Pothutamil - III	23ULT3	6	3	3	25	75	100	
			Hindi Literature & Grammar - III	22ULH3							
			Drama, Grammar and History of Sanskrit literature	23ULS3							
			Intermediate French - I	22ULF3							
	II	English Language Course - III (ELC)	Learning Grammar through Literature - I	23UE3	6	3	3	25	75	100	
	III	Core Course - V (CC)	Cost and Management Accounting	25UCB3CC5	5	5	3	25	75	100	
			Core Course - VI (CC)	Python Programming	25UCB3CC6	5	5	3	25	75	100
			Second Allied Course – I (AC)	Goods and Services Tax	25UCB3AC3	4	3	3	25	75	100
	IV	Ability Enhancement Compulsory Course – III (AECC)	Innovation and Entrepreneurship	22UGIE	2	1	-	100	-	100	
			Generic Elective Course – I (GEC)	Office Management	25UCB3GEC1	2	2	3	25	75	100
				Basic Tamil - I	22ULC3BT1						
				Special Tamil - I	22ULC3ST1						
	Extra Credit Course		Swayam Online Course		As per UGC Recommendations						
Total				30	22				700		

Semester I	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATAGORY	Hrs/Week	CREDITS
25UCB1CC1	FINANCIAL ACCOUNTING – I	CORE	6	5

Course Objective

- To understand the basic accounting concepts and standards.
- To know the basis for calculating business profits.
- To familiarize with the accounting treatment of depreciation.
- To learn the methods of calculating profit for single entry system.
- To gain knowledge on the accounting treatment of insurance claims.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, students will be able to	
CO1	Define and outline the accounting concepts, rectification of errors and Bank Reconciliation Statement.	K1
CO2	Explain the purpose of financial accounting and Non-Profit Organisation	K2
CO3	Apply the accounting procedures for recording various financial transactions.	K3
CO4	Analyse the various methods of providing depreciation and Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.	K4, K5
CO5	Analyse and evaluate financial statements in any given context or situation	K4, K5

Mapping of CO with PO and PSO

COs / PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	2	2	3
CO2	3	3	3	3	3	3	3	2	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	2	2	3	3	2	2	2	2	2
CO5	3	3	3	3	3	3	3	3	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation
“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	CO'S	COGNITIVE LEVEL
I	<p>Fundamentals of Financial Accounting Financial Accounting – Meaning, Definition, Objectives, Basic Accounting Concepts and Conventions - Journal, Ledger Accounts– Subsidiary Books — Trial Balance - Classification of Errors – Rectification of Errors – Preparation of Suspense Account – Bank Reconciliation Statement - Need and Preparation.</p>	18	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	<p>Final Accounts Final Accounts of Sole Trading Concern-Capital and Revenue Expenditure and Receipts – Preparation of Trading, Profit and Loss Account and Balance Sheet with Adjustments. Accounts of Non-Profit Organisation Receipt & Payment Accounts – Income &Expenditure Accounts – Balance Sheet – Adjustments.</p>	21	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	<p>Depreciation and Bills of Exchange Depreciation - Meaning – Objectives – Accounting Treatments - Types - Straight Line Method – Diminishing Balance method – Conversion method. Units of Production Method – Cost Model vs. Revaluation Bills of Exchange – Definition – Specimens – Discounting of Bills – Endorsement of Bill – Collection – Noting – Renewal – Retirement of Bill under rebate</p>	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	<p>Accounting from Incomplete Records – Single Entry System Incomplete Records – Meaning and Features – Limitations – Difference between Incomplete Records and Double Entry System – Methods of Calculation of Profit – Statement of Affairs Method – Preparation of final statements by Conversion method.</p>	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	<p>Royalty and Insurance Claims Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment. Insurance Claims – Calculation of Claim Amount-Average clause (Loss of Stock only)</p>	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

VI	Self Study for Enrichment (Not to be included for External Examination) Difference between Balance Sheet and Trial Balance, Adjustment and Closing Entries – Negotiable Instrument, Difference between Promissory note and Bills of Exchange.	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
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Distribution of Marks: Theory 20% & Problem 80%

Text Books

1. S. P. Jain and K. L. Narang Financial Accounting- I, Kalyani Publishers, New Delhi.
2. S.N. Maheshwari, Financial Accounting, Vikas Publications, Noida.
3. ShuklaGrewal and Gupta, “Advanced Accounts”, volume 1, S.Chand and Sons, New Delhi.
4. Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand, New Delhi.
5. R.L. Gupta and V.K. Gupta, “Financial Accounting”, Sultan Chand, New Delhi.

Reference Books

1. Dr.Arulanandan and Raman: Advanced Accountancy, Himalaya Publications, Mumbai.
2. Tulsian , Advanced Accounting, Tata McGraw Hills, Noida.
3. Charumathi and Vinayagam, Financial Accounting, S.Chand and Sons, New Delhi.
4. Goyal and Tiwari, Financial Accounting, Taxmann Publications, New Delhi.
5. Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Textand Cases. McGraw-Hill Education, Noida.

Web References

1. <https://www.slideshare.net/mcsharma1/accounting-for-depreciation-1>
2. <https://www.slideshare.net/ramusakha/basics-of-financial-accounting>
3. <https://www.accountingtools.com/articles/what-is-a-single-entry-system.html>

Pedagogy

Chalk and Talk, PPT, Discussion, Assignment, Demo, Quiz and Seminar.

Course Designer

Dr. J. Lalithambigai

Semester I	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	HRS./ WEEK	CREDITS
25UCB1CC2	FUNDAMENTALS OF BUSINESS ANALYTICS	CORE	4	3

Course Objective

- To achieve and establish vital understanding of big data application in business intelligence
- To institute the concept of systematic transformation of process-oriented data into information of the underlying business process
- To exhibit knowledge of data analysis techniques and to apply principles of data sciences integrating enterprise reporting

Course Outcome with Cognitive Level

On the successful completion of the course, students will be able to

CO Number	CO Statement	Cognitive Level
CO1	Remember and Understand the importance of Analytics in Decision Making and Problem Solving	K1, K2
CO2	Identify business opportunities for data-driven solutions	K3
CO3	Apply the Knowledge of Business Intelligence	K3
CO4	Examine the Business view of Information technology applications	K4
CO5	Recommend data-driven solutions to support decision-making in real-world business situations.	K5

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	2	3	2	3	3	3	2	3	3
CO4	3	3	2	3	3	3	2	3	2	3
CO5	3	3	3	2	3	3	2	2	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation
“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	COs	COGNITIVE LEVEL
I	Introduction to Business Analytics: Analytics Landscape – Need for Analytics – Business Analytics: The Science of Data-Driven Decision Making – Descriptive Analytics – Predictive Analytics – Prescriptive Analytics – Big Data Analytics – Machine Learning Algorithms – Framework for Data Driven Decision Making – Analytics Capability Building – Roadmap for Analytics Capability Building – Challenges in Data Driven Decision making and Future – Business Analytics in Practice.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Business view of Information Technology Applications: Core business process – Baldrige Business Excellence framework - Key purpose of using IT in business – Characteristics - Enterprise Applications - Information users and their requirements – Foundation of Data Science: Descriptive Analytics: Introduction – Data Types and Scales of Variable Measurement – Types of Variable Measurement Scales – Population and Sample – Measures of Central Tendency – Percentile, Decile and Quartile – Measures of Variation – Measures of Shape.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Introduction to OLTP and OLAP: OLTP – OLAP – Different OLAP Architectures – OLTP and OLAP – Data models for OLTP and OLAP – Role of OLAP Tools in BI Architecture. Business Intelligence: Business Intelligence defined – Evolution of BI and Role of DSS, EIS, MIS and Digital Dashboards – Need for BI – BI value chain. BI Definitions and Concepts: BI Component Framework – BI Users – Business Intelligence applications – BI roles and responsibilities – BI tools.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Basics of Data Integration: Need for Data Warehouse – Goals – Data Mart – Extract, Transform and Load –Data Integration - Technologies – Data Quality– Data profiling. Data Modeling: Basics – Types – Techniques – Fact table – Dimension Table – Typical Dimensional Models – Dimensional modeling life cycle – Designing the Dimensional Model. BI in Real world: BI and mobility – BI and cloud computing – BI for ERP systems –Social CRM and BI.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Data Visualization: Overview – Tables – Charts – Advanced Data Visualization – Data Dashboards. Spreadsheet Models: Building Good Spreadsheet Models – If-Analysis – Some Useful Excel Functions for Modeling – Auditing Spreadsheet Models – Predictive and Prescriptive Spreadsheet Models	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self Study for Enrichment (Not to be included for External Examination) Probability Theory - Analysis of Variance – Forecasting Techniques – Skills required for Industry 4.0	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Text Books

1. U. Dinesh Kumar (2022). Business Analytics: The Science of Data Driven Decision Making, 2nd Edition, Wiley India Pvt. Ltd.
2. R.N.Prasad and Seema Acharya(2016). Fundamentals of Business Analytics, 2nd Edition, Wiley India Pvt. Ltd.
3. Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann (2020). Business Analytics, 3rd Edition, Cengage.

Reference Books

1. Haydn Thomas – Demonoid (2015). Business Analysis Fundamentals, Revised Edition, Pearson Education.
2. Sharada, R. Delen,D. & Turban, E (2017). Business Analytics: The Science of Data Driven Decision Making, 2nd Edition, Pearson Education.

Web References

1. https://books.google.co.in/books?id=dIvjDwAAQBAJ&printsec=frontcover&source=gbs_book_other_versions_r&edir_esc=y#v=onepage&q&f=false
2. <https://pearson.com/en-au/media/2628253/9781292339061-toc.pdf>
3. https://www.pearson.com/en-au/media/anafjomp/9781292339061.pdf?srsltid=AfmBOoqhOrZCJMkw0jIyLJp2tCChhCcFKbX6PJ91CFH7CNF_EkeioO

Pedagogy

Chalk and talk, Power point Presentation, Demonstration, E-content

Course Designer

Dr. K. Reka

Dr. P. Muthulakshmi

Semester I	Internal Mark: 40		External Mark: 60	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
25UCB1AC1P	EXCEL FOR FINANCIAL DECISION (P)	ALLIED (P)	4	3

Course Objectives

- To Understand and apply advanced formatting techniques, conditional formatting, and data validation to maintain data accuracy and visual appeal.
- To Explore the financial functions for performing calculations, analyzing data, and solving financial problems effectively
- To Create and implement macros to automate repetitive tasks, develop dynamic tools, and perform complex financial statement analysis.

Course Outcomes and Cognitive Level Mapping

CO Number	Course Outcome	Cognitive Level
CO1	Able to efficiently use Excel's sorting, filtering, conditional formatting, and data validation tools to organize and ensure data accuracy.	K1
CO2	Analyze and apply financial functions to solve financial problems in Excel.	K2, K3
CO3	Apply statistical techniques to interpret and analyze financial data.	K3
CO4	Integrate Excel functions and automation to streamline processes and enhance productivity.	K4
CO5	Evaluate financial data to make informed decisions regarding portfolio management and investment strategies.	K5

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3	3	2	2	2	3
CO2	3	3	3	2	3	3	3	3	2	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	2	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation
“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

Perform the following in Excel to explore and implement various financial functions, formulas, and macros

1. Formatting and Validation option for Excel
 - a. Sorting
 - b. Filtering
 - c. Conditional formatting
 - d. Data validation
2. Formulas and Functions
 - a. Arithmetic and Logical Operator
 - b. Math Function
 - c. Depreciation Functions
 - d. What-If the Analysis Tool
3. Financial Function
 - a. Loan Calculator (PMT, RATE, NPER)
 - b. Interest Calculator (IPMT, PPMT)
 - c. Explore Capital Budgeting Functions (NPV, XNPV, IRR, XIRR)
 - d. Implement Bond Pricing and Yield Analysis
4. Statistical Function
 - a. Compute Average and Standard Deviation
 - b. Perform Variance Analysis
 - c. Explore Correlation and Covariance
 - d. Conduct Trend Analysis and Forecasting
 - e. Construct a Simple Portfolio Analysis
5. Macros
 - a. Record and Write Macro
 - b. Develop a Dynamic Macro
 - c. Create a Financial statement Analyzer

Web References

1. <https://www.youtube.com/watch?v=SPF6r7M9BLQ>
2. <https://www.geeksforgeeks.org/basic-math-formulas/>
3. <https://indiafreenotes.com/financial-functions-npv-pmt-pv-fv-rate-irr-db-sln-syd/>
4. <https://www.youtube.com/watch?v=GkqQoMYPFxU>
5. <https://www.geeksforgeeks.org/macros-in-excel/>

Course Designer

Ms. R.Rita Jenifer, Associate Professor, Department of computer Science

Dr. R.Sangeetha, Assistant Professor, Department of computer Science

Ms.R.Ramya, Assistant Professor, Department of computer Science

Course Code	Course Name	Category	L	T	P	S	Credits	Inst. Hrs	Marks		
									CIA	External	Total
23UGVE	VALUE EDUCATION	Value Education	30	-	-	-	2	2	100	-	100
Year		I									
Semester		I									
Prerequisites		Basic Understanding of Values									
Learning Objectives											
1	To enrich the knowledge about ethics and values.										
2	To instill Moral and Social Values and Loyalty and to appreciate the rights of others.										
3	To explain the role of ethics in the operation of human conduct										
4	To promote an understanding and framework for students to achieve value based positive and purposeful lives for themselves and their communities.										
5	To build excellent citizens and leaders for the country										

Course Outcomes and Cognitive Level Mapping

On the successful completion of the course, the students will be able to

CO NUMBER	CO STATEMENT	COGNITIVE LEVEL
CO1	To understand the importance of values and ethical issues at micro, mezzo and macro level of the society and the workplace.	K1, K2
CO2	To apply values and ethics in the daily life.	K3
CO3	To exhibit Ethical Leadership in the workplace and in the society.	K4
CO4	To think logically and reasonably and to handle moral issues with greater clarity	K5
CO5	To Engage in ethical debate and formulate ethical justification.	K6

Syllabus

UNIT	CONTENT	HOURS
I	Value education: Meaning, Definition, purpose and significance in the present world. Human Values for Life: Truth, commitment, honesty and integrity, humility, forgiveness, love, empathy, ability to sacrifice, care, unity, inclusiveness, Self Esteem, self-confidence, punctuality – Time, task and resource management	6
II	Ethics: The Essence of Ethics, Determinants and Consequences of Ethics in Human Interaction. Dimensions of Ethics. Ethics in private and public relationships. Role of family, society and educational institutions in inculcating moral and ethical values	6
III	Theory & Approaches in Ethics: Kohlberg's theory, Gilligan's theory, Damon's View of Moral Identity, & Deontology. The Utilitarian Approach, The Rights Approach, The Fairness or Justice Approach, The Common-Good Approach, The Virtue Approach & Ethical Problem-Solving approach.	6

IV	Moral Thinkers & Philosophical Schools of Thought and their contribution: Socrates, Plato, Aristotle, Epicurus, Stoicism. Thomas Aquinas , Contractarianism, Thomas Hobbes, John Locke, Jean-Jacques Rousseau, John Rawls, John Stuart Mill, Emanuel Kant and Hegel, Mother Teresa, Chanakya, Kautilya, Sarojini Naidu, Thiruvalluvar, Rabindranath Tagore, Mahatma Gandhi and Dr. Ambedkar,	6
V	Values and Ethics in Public administration: ethical concerns and dilemmas in government and private institutions; laws, rules, regulations and conscience as sources of ethical guidance; accountability and ethical governance; ethical issues in international relations and funding; corporate governance. Information sharing and transparency in government, Codes of Ethics, Codes of Conduct, Citizen’s Charters, Quality of service delivery, Utilization of public funds, challenges of corruption.	6
VI	Self- Study for Enrichment Learners need to list ways of practicing human Values. Group Discussion needs to be conducted on strategies to promote human values at various levels – family, community, society, nation and global.	-

Text Books:

1. ETHICS, INTEGRITY & APTITUDE (Prabhat Prakashan). (2021). (n.p.): PrabhatPrakashan.
2. Political Parties and Administrative Reforms in India: At the Centre, in the States and in the Local Bodies. (2019). (n.p.): Notion Press.
3. Sharma, P. D. (2015). Ethics, Integrity and Aptitude: Foundational Values for Civil Service in India. India: Rawat Publications.
4. Vozzola, E. C. (2014). Moral Development: Theory and Applications. United Kingdom: Taylor & Francis.
5. Thinkers and Theories in Ethics. (2011). Ukraine: Britannica Educational Pub..

Reference Books:

1. Bandiste, D.D.: Humanist Values: A Source Book, B.R. Publishing Corporation, Delhi, 1999
2. Ethics in Governance. (2021). (n.p.): K.K. Publications.
3. Maheshwari, S. (2002). Administrative Reforms in India. Germany: Macmillan India.
4. Bandiste, D.D.: Humanist Values: A Source Book, B.R. Publishing Corporation, Delhi, 1999.
5. Saxena, N. C. (2019). What Ails the IAS and Why It Fails to Deliver: An Insider's View. India: SAGE Publications.
6. Xavier Alphonse S.J (2008) We Shall Overcome – A Textbook on life coping skills ICRDCE Publication, Chennai

Web References

1. <https://publicintegrity.org>
2. <https://www.ethicssage.com>
3. <https://darp.gov.in>
4. <https://www.ethics.org>
5. <https://ethicsunwrapped.utexas.edu/glossary/integrity>

Pedagogy

Chalk& Talk, Seminar, PPT Presentation, Group Discussion, Blended Method, and Case Study.

ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) I :VALUE EDUCATION (23UGVE)

Assessment Rubrics for 100 Marks

1. Designing Posters / video making / preparation of Album – **20 marks**
2. Case study presentation / Narration of stories / Writing stories – **20 Marks**
3. Writing essay based on the individual life experience following human values

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personal, family and society level (minimum 10 pages) – **20 Marks**

4. VIVA VOCE - 40 Marks

S.NO	RUBRICS FOR VIVA VOCE	MARKS
1.	Theoretical Knowledge	20
2.	Values Practiced	10
3.	Attitude & Commitment	10
Total		40

Pedagogy: Field study, Individual Conference and Report Writing

Course Designer: **Dr.G.Mettilda Buvaneswari**

Semester II	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	Hrs/Week	CREDITS
25UCB2CC3	FINANCIAL ACCOUNTING – II	CORE	6	5

Course Objectives

- To enable the students to apply the accounting concepts in the preparation of Branch, Departmental and Hire Purchase Accounts
- To develop the skills in the preparation of Partnership Accounts.
- To gain the knowledge on accounting standards for financial reporting.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement On the successful completion of the course, students will be able to	Cognitive Level
CO1	Define the accounting procedures relating to the Hire purchase and Instalment System.	K1
CO2	Outline the accounting aspects for recording Branch and Departmental Transactions.	K2
CO3	Identify the financial transaction of admission and retirement of a partner.	K3
CO4	Analyze the accounting treatment for Dissolution of Partnership.	K4
CO5	Classify and Determine the Accounting Standards to interpret the performance of business.	K4, K5

Mapping of CO with PO and PSO

COs/ PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	2	3	3	3	3	2	3	3
CO5	3	3	2	3	3	3	3	2	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation

“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	CO'S	COGNITIVE LEVEL
I	Hire Purchase and Instalment System Hire Purchase System – Accounting Treatment – Calculation of Interest - Default and Repossession - Hire Purchase Trading Account - Instalment System - Calculation of Profit.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Branch and Departmental Accounts Branch Accounts : Debtors system - Stock and Debtors system – Distinction between Wholesale Profit and Retail Profit – Independent Branches (Foreign Branches excluded) - Departmental Accounts: Basis of Allocation of Expenses – Inter- Departmental Transfer at Cost or Selling Price.	21	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Partnership Accounts - I Partnership Accounts: –Admission of a Partner – Treatment of Goodwill - Calculation of Hidden Goodwill –Retirement of a Partner – Death of a Partner.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Partnership Accounts - II Dissolution of Partnership - Methods – Settlement of Accounts Regarding Losses and Assets – Realization account – Treatment of Goodwill – Preparation of Balance Sheet - One or more Partners insolvent – All Partners insolvent – Application of Garner Vs Murray Theory – Accounting Treatment - Piecemeal Distribution – Surplus Capital Method – Maximum Loss Method.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Accounting Standards for financial reporting (Theory only) Objectives and Uses of Financial Statements for Users-Role of Accounting Standards - Development of Accounting Standards in India Role of IFRS- IFRS Adoption vs Convergence Implementation Plan in India- Ind AS- An Introduction - Difference between Ind AS and IFRS.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

VI	Self-Study for Enrichment (Not to be included for External Examination) Difference between Balance Sheet and Trial Balance - Types of Partners - Interest on Drawings - Partnership Deed - Difference between Promissory note and Bills of Exchange.	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
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Distribution of Marks: Theory 30% & Problem 70%

Text Books

1. Reddy. T.S, Murthy A. (2023). *Financial Accounting*. 9thRevised Edition, Margham Publication.
2. Jain S.P,&Narang K.L. (2020). *Business Accounting*. 6thEdition, Kalyani Publishers
3. Gupta R.L,& Radhaswamy M. (2022). *Financial Accounting*. 8thEdition (Reprint), Sultan Chand & Sons.

Reference Books

1. Dalston L, Cecil & Jenitra L, Merwin. (2015). *Business Accounting*. 4thEdition. Learn Tech Publishers.
2. Arulanandam M.A, Raman K.S. (2019). *Advanced Accountancy*. 8thEdition, Himalaya Publishing House.
3. Dr.Shukla.S.M. (2023). *Financial Accounting*. 52nd Revised Edition. Sultan Chand Publication.

Web References

1. <https://www.yourarticlelibrary.com/accounting/partnership-account/partnership-accounts-on-retirement-or-death-accounting-procedure/52380>
2. [https://mastermindsindia.com/13.%20BRANCH%20ACCOUNTS %20Assignment%20Solutions.pdf](https://mastermindsindia.com/13.%20BRANCH%20ACCOUNTS%20Assignment%20Solutions.pdf)
3. https://static.careers360.mobi/media/uploads/froala_editor/files/Hire-Purchase-and-Instalment-Sale-Transactions.pdf
4. <https://www.freshbooks.com/en-za/hub/accounting/departmental-accounting>

Pedagogy

Chalk and Talk, PPT, Discussion, Assignment, Demo, Quiz and Seminar.

Course Designer

Dr.R.Abirami

Semester II	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	Hrs/Week	CREDITS
25UCB2CC4	PRINCIPLES OF MARKETING	CORE	5	5

Course Objective

- To enable the students to understand the basic principles of Marketing concepts.
- To identify the factors and process essential for designing marketing strategy.
- To familiarize the recent development of marketing in the global scenario.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, students will be able to	
CO1	Define the fundamental concepts of Marketing.	K1
CO2	Explain the role of Market Segmentation and Consumer Behavior in marketing.	K2
CO3	Identify the various components of Marketing Mix.	K3
CO4	Examine the importance of product policy, pricing strategies, distribution channels and promotional programmes for effective marketing.	K4
CO5	Analyse the marketing environment, recent trends in marketing and marketing Strategies.	K4

Mapping of CO with PO and PSO

COs / PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation

“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	CO'S	COGNITIVE LEVEL
I	<p>Introduction to Marketing Market – Meaning – Definition - Classification of Markets. Marketing - Meaning – Definition – Need and Importance – Functions of Marketing – Difference between Marketing and Selling - Evolution of Marketing Concepts - Marketing Mix – 4 P's and 7 P's of Marketing - 7 O's Framework.</p>	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	<p>Market Segmentation & Consumer Behaviour Market Segmentation: Meaning – Definition – Benefits – Criteria for segmentation – Types of segmentation –, Targeting, Positioning & Repositioning. Consumer Buying Behaviour – Importance – Types of Buyers - Freudian theory in Consumer Behaviour - Buying Process and Post Purchase Behaviour.</p>	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	<p>Product and Price Product – Policy - Market Research – New Product Development – Product Failure - Product Life Cycle. Branding and Packaging. Pricing – Policies – Objectives – Factors Influencing Pricing– Kinds of Pricing – Pricing Strategies.</p>	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	<p>Distribution and Promotion Channels of Distribution – Importance – Functions - Channel Members –Types. Sales Promotion – Objectives – Advantages and Limitations - Elements of promotion– Effectiveness of Sales Promotion. Advertising – Objectives – Features – Functions – Benefits - Kinds – Traditional vs. Digital Media.</p>	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	<p>Competitive Analysis and Strategies Global Market Environment — Social Responsibility and Marketing Ethics – Market Information System - Marketing Regulation. Marketing Strategies: Niche Marketing - Relationship Marketing – Green Marketing – Guerrilla Marketing – Ambush Marketing - Digital Marketing. Innovations in Marketing.</p>	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	<p>Self-Study for Enrichment (Not to be included for External Examination) Consumer goods and Industrial Goods – Basic Service Marketing Concepts – Theories of Consumer Behaviour. - Cyber threats in online marketing.</p>	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Text Books

1. Pillai. R.S. N, Bagavathi.V(2017). *Marketing Management*. Revised Edition. S. Chand &Co.
2. Dr. Rajan Nair.N. Sanjith R Nair. (2019). *Marketing*. Revised Edition. Sultan Chand &Sons.
3. Dr. Gupta. C.B, Dr.N. Rajan Nair. (2019). *Marketing Management*. Revised Edition. Sultan Chand & Sons.

Reference Books

1. Chandrasekar. K.S. (2019). *Marketing Management*.Revised Edition.Vijay Nicole Imprints Private Ltd.
2. Dr.Varshney.R.L, Dr.Gupta.S.L.(2016). *MarketingManagement*.Revised Edition .Sultan Chand &Sons.
3. Philip Kotler, Gray Armstrong, Sridhar Balasubramanian, PrafullaAgnihotri. (2023). *Principles of Marketing*, Revised Edition. Pearson.

Web References

1. <https://www.techfunnel.com/martech/modern-marketing-concepts-marketing-management/>
2. <https://www.questionpro.com/blog/consumer-behavior-definition/>
3. <https://www.studysmarter.co.uk/explanations/marketing/pricing/>
4. <https://www.techtarget.com/searchitchannel/definition/distribution-channel>
5. <https://www.coursera.org/articles/marketing-trends>

Pedagogy

Chalk and Talk, PPT, Discussion, Assignment, Demo, Quiz and Seminar.

Course Designer

Dr. C. Subha

Semester II	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	Hrs/Week	CREDITS
25UCB2AC2	STATISTICS FOR BUSINESS ANALYTICS	ALLIED	5	3

Course Objectives

- Understand the basic concepts of statistics in relation to business environment.
- Identify and quantify potential risks to take proactive measures
- Analyze data to optimize production, manage inventory, and improve processes.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement On the successful completion of the course, students will be able to	Cognitive Level
CO1	Interpret and solve real life business problems using the concepts of Statistics.	K1
CO2	Apply the various sampling techniques in real life business problems.	K2, K3
CO3	Identity the business and economic data graphically and numerically and explain relationship between graphs and numerical data.	K3, K4
CO4	Organize and summarize Statistical data using descriptive Statistics. Also Predict relevant relationship between business variables using Correlation and Regression analysis,	K3, K2
CO5	Analyze the price and quantity index numbers.	K4

Mapping of CO with PO and PSO

COs/POs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3	3	3	2	2	2
CO2	3	3	2	3	3	3	3	2	2	2
CO3	3	3	2	3	3	3	3	2	2	2
CO4	3	3	2	3	3	3	3	2	2	2
CO5	3	3	2	3	3	3	3	2	2	2

“1” – Slight (Low) Correlation

“2” – Moderate (Medium) Correlation

“-” indicates there is no correlation

“3” – Substantial (High) Correlation

Syllabus

UNIT	CONTENT	HOURS	CO'S	COGNITIVE LEVEL
I	Meaning and Scope: Origin and growth-Meaning – Definitions- Scope and Uses - Limitations of Statistics. Collection of data: Methods of collection of Primary Data – Mailed Questionnaire Method – Characteristics of a Good Questionnaire. Sampling Techniques: Definition – Methods of Sampling – Systematic Random Sampling Stratified Random Sampling, Non- Random Sampling Methods.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
II	Classification and Tabulation: Classification: Geographical Classification - Discrete or Ungrouped Frequency Distribution – Continuous or Grouped Frequency Distribution. Tabulation: Object - Parts of a table – Format of a Table – General Rules of Preparing Tables - Kinds of Tables – Difference between Classification and Tabulation. Diagrams and Graphs: Types of Diagrams – One Dimensional Diagrams – Graphs of Frequency Distributions.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
III	Measures of Central Tendency: Arithmetic Mean, Median and Mode - Measures of Dispersion: Range-Quartile Deviation-Mean Deviation - Standard Deviation (Simple Problems Only).	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
IV	Simple Linear Correlation: Scatter Diagram -Karl Pearson's correlation coefficient - Spearman's Rank correlations coefficient. Simple Linear Regression: Uses – Difference between Correlation and Regression -Two Regression lines – Methods of Forming the Regression Equations - Properties of Regression lines and Coefficients (Simple Problems Only).	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
V	Index Numbers: Simple or Unweighted Aggregatives Method – Simple or Unweighted Averages of Relatives Method-Weighted Aggregatives Methods - Weighted Averages of Relatives Method -Test of consistency and Adequacy - Time Reversal test - Factor reversal test – Fixed Base – Chain Base – Cost of living index Number.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
	Self-Study for Enrichment (Not to be included for External Examination) Primary and Secondary data- Methods Collection of	-	-	-

VI	Primary data - Types of Classification - Less than Cumulative Frequencies – More than Cumulative Frequencies - Merits and Demerits of Mean Median and Mode- Merits and Demerits of Measures of Dispersion- Coefficient of Variation – Unit Test.			
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Text Books

Navanitham P A. (2022). Business Statistics. Reprint, Jai Publishers.

Chapters and Sections

Unit – I	Chapter 1	Page No.1-5, 9-19
	Chapter 3	Page No.29, 32-34
	Chapter 4	Page No.42-55
Unit -II	Chapter 5	Page No. 66-77, 83-91, 102-110, 114-121 & 131-146.
Unit -III	Chapter 7	Page No.159-194, 196-210, 212-249.
	Chapter 8	Page No.301-340
Unit -IV	Chapter 12	Page No.503-522
	Chapter 13	Page No.540-569
Unit -V	Chapter 10	Page No.444-456 & 458-471

Reference Books

1. Gupta S.P. (2022). Statistical Methods. 46th Edition, Sultan Chand & Sons.
2. Vittal P.R. (2020). Business Statistics. Reprint, Margham Publications.
3. Sharma J.K. (2018). Business Statistics. 5th Edition, Vikas Publishing House Pvt., Ltd.

Web References

1. <https://www.slideshare.net/slideshow/introduction-to-business-analytics-242918770/242918770>
2. <https://www.aalimec.ac.in/wp-content/uploads/Material/cse/3/CCW331%20-%20Business%20Analytics.pdf>
3. <https://rcub.ac.in/econtent/ug/bcom/sem4/Business%20Statistics%20Unit%204%20Correlation%20and%20Regression.pdf>
4. <https://www.youtube.com/watch?v=Rbxo1Eby3CA>
5. https://www.lpu.in/SLMs/Master%20of%20Computer%20Applications/Sem4/DEMGN801_BUSINESS_ANALYTICS.pdf
6. <https://www.youtube.com/watch?v=WtMauAbrIKg>

Pedagogy

Chalk and Talk, Power Point Presentation, Group discussion, Seminar and Assignment.

Course Designers

1. Ms. P. Sangeetha
2. Ms. A. Gowrishankari

Semester: II	Internal Marks:100			
COURSE CODE	COURSE TITLE	CATEGORY	HRS/ WEEK	CREDITS
22UGEVS	ENVIRONMENTAL STUDIES	ABILITY ENHANCEMENT COMPULSORY COURSE - II	2	2

Course Objective

- To train the students to get awareness about total environment and its related problems and to make them to participate in the improvement and protection of the environment.

Course Outcome and Cognitive Level Mapping

On the successful completion of the course, students will be able to

CO Number	CO Statement	Cognitive Level
CO1	Outline the nature and scope of environmental studies	K1, K2
CO2	Illustrate the various types of natural resources and its importance.	K2
CO3	Classify various types of eco system with its structure and function.	K2, K3
CO4	Develop an understanding of various types of pollution and biodiversity.	K3
CO5	List out the various types of social issues related with environment and explain protection acts	K4, K5

Mapping of CO with PO and PSO

Cos	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	3	2	2	3	2	3
CO2	3	3	2	3	3	3	2	3	3	3
CO3	2	3	3	2	3	3	3	3	3	2
CO4	2	3	3	3	2	3	2	3	3	3
CO5	3	3	2	3	3	3	3	2	3	3

“1”–Slight (Low) Correlation “2” – Moderate (Medium) Correlation

“3”–Substantial (High) Correlation “-“indicates there is no correlation

Syllabus

UNIT	CONTENT	HOURS	COS	COGNITIVEL EVEL
I	Introduction to environmental studies Definition, scope and importance. Need for public awareness	06	CO1,CO2, CO3,CO4	K1, K2, K3,
II	<p>Natural Resources: Renewable and non-renewable resources:</p> <p>Forest resources: use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.</p> <p>Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.</p> <p>Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.</p> <p>Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.</p> <p>Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.</p> <p>Land resources: Land as resources, land degradation, man induced Land slides, soil erosion and desertification.</p> <p>g. Role of an individual in conservation of natural resources.</p>	06	CO1, CO2, CO3, CO4	K1, K2, K3
III	<p>Ecosystems</p> <p>Concept, Structure and function of an eco system. Producers, consumers and decomposers</p> <p>Energy flow in the eco system and Ecological succession.</p> <p>Food chains, food webs and ecological pyramids</p> <p>Introduction, types, characteristic features, structure and function of the following ecosystem:- Forest ecosystem, Grassland ecosystem and Desert ecosystem, Aquatic ecosystems, (ponds, streams, lakes, rivers, oceans, estuaries)</p>	06	CO1, CO2, CO3,CO4	K1, K2, K3

IV	<p>Bio diversity and Environmental Pollution Introduction, types and value of biodiversity. India as a mega diversity nation. Hot-spots of biodiversity. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Definition, Causes, effects and control measures of:</p> <p>a. Air Pollution b. Water Pollution c. Soil Pollution d. Noise pollution e. Nuclear hazards</p> <p>Solid waste Management: Causes, effects and control measures of urban and industrial wastes. E Waste Management: Sources and Types of E-waste. Effect of E waste on environment and human body. Disposal of E-waste, Advantages of Recycling E -waste. Role of an individual in prevention of pollution. Disaster management: floods, earthquake, cyclone and landslides.</p>	06	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	<p>Social Issues and the Environment Water conservation, rain water harvesting, water shed management. Climate change, global warming, acid rain, ozone layer depletion, Wastel and reclamation.</p> <p>Environment Protection Act Wild life Protection Act. Forest Conservation Act. Population explosion–Family Welfare Programmes Human Rights-Value Education.HIV/ AIDS- Women and Child Welfare. Role of Information Technology in Environment and human health.</p>	06	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	<p>Self-Study for Enrichment (Not to be included for End Semester Examination)</p> <p>Global warming – climate change – importance of ozone – Effects of ozone depletion. Biogeography – history, ecology and conservation. International laws and policy</p>	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

References

1. Beard, J.M. 2013. Environmental Chemistry in Society (2nd edition). CRC Press.
2. Girard, J. 2013. Principles of Environmental Chemistry (3rd edition). Jones & Bartlett.
3. Brebbia, C.A. 2013. Water Resources Management VII. WIT Press.
4. Pandit, M.K. & Kumar, V. 2013. Land use and conservation challenges in Himalaya: Past, present and future. In: Sodhi, N.S., Gibson, L. & Raven, P.H. Conservation Biology: Voices from the Tropics. pp. 123-133. Wiley-Blackwell, Oxford, UK
(file:///Users/mkpanidit/Downloads/Raven%20et%20al.%202013.%20CB%20Voices%20from%20Tropics%20(2).pdf)
5. Hites, R.A. 2012. Elements of Environmental Chemistry (2nd edition). Wiley & Sons.
6. Harnung, S.E. & Johnson, M.S. 2012. Chemistry and the Environment. Cambridge University Press.
7. Boeker, E. & Grondelle, R. 2011. Environmental Physics: Sustainable Energy and Climate Change.
8. Wiley. Forinash, K. 2010. Foundation of Environmental Physics. Island Press.
9. Evans, G.G. & Furlong, J. 2010. Environmental Biotechnology: Theory and Application (2nd edition). Wiley-Blackwell Publications.
10. Williams, D. M., Ebach, M.C. 2008. Foundations of Systematic and Biogeography. Springer
11. Pani, B. 2007. Textbook of Environmental Chemistry. IK international Publishing House.
12. Agarwal, K.C. 2001 Environmental Biology, Nidi Public Ltd Bikaner.

Pedagogy

Chalk and talk, PPT, Discussion, Assignment, Quiz, Seminar

Course Designer

Dr. B. Thamilmalai Selvi

Ability Enhancement Compulsory Course II (AECC) : Environmental Studies (22UGEVS) Assessment Rubrics for
100 Marks

1. Documentary (or) Poster Presentation (or) Elocution-25 Marks
2. Quiz (or) MCQ Test-25 Marks
3. Album Making (or) Case study on a topic (or) Field Visit -25 Marks
4. Essay Writing (or) Assignment (Minimum 10 pages) -25 Marks

There will be no End Semester Examination for this course. However, the subject teacher will evaluate the above mentioned components based on the performance of the students and submit the marks out of 100 (in the format to be supplied by the COE) with the approval of the concerned Head of the Department to the COE along with CIA marks of other courses.

Semester III	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATEGORY	HRS / WEEK	CREDIT S
25UCB3CC5	COST AND MANAGEMENT ACCOUNTING	CORE	5	5

Course Objectives

- To acquire an in depth understanding in Cost and Management Accounting.
- To identify the use cost accounting techniques to analyze and interpret material and employee cost accounting techniques.
- Impart Knowledge on the preparation of Funds Flow and Cash Flow Statement.
- Comprehend the techniques of Budgetary Control and Marginal Costing.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement On the successful completion of the course, students will be able to	Cognitive Level
CO1	Define and Explain cost accounting and management accounting concepts, classify costs, and apply cost accounting methods.	K1,K2
CO2	Identify and Explain material control techniques, calculate material and employee costs, and describe methods of remuneration and incentive schemes.	K2,K3
CO3	Apply specific methods of costing, including absorption costing, marginal costing, and activity-based costing.	K3
CO4	Prepare and Analyze funds flow and cash flow statements, and Determine their significance and uses.	K4, K5
CO5	Explain the significance and applications of budgeting and marginal costing in organizational decision-making.	K5

Mapping of CO with PO and PSO

COs/ PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	2	3	3	3	3
CO3	2	3	2	2	2	2	2	2	2	2
CO4	3	3	3	3	3	2	3	2	3	3
CO5	2	3	3	2	2	3	3	3	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation

“3”–Substantial (High) Correlation“-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	CO's	COGNITIVE LEVEL
I	Cost Accounting & Management Accounting Cost Accounting - Evolution - Concepts – Classification - Methods of Costing Elements of Cost - Cost Statement - Unit Costing. Management Accounting - Meaning - Nature and Scope - Objectives - Significance of Management Accounting.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Materials and Employee Cost Material Control – Meaning - Need - Techniques of Material Control - Methods of Valuing Material Cost. Employee Cost - Accounting for Overtime, Idle Time, and Labour Turnover - Methods of Remuneration - Incentive and Bonus Schemes.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Overhead Accounting and Specific Methods of Costing Overhead Classification - Accounting and Control of Overheads - Overhead Allocation, Apportionment and Absorption - Machine Hour Rate. Operating Costing - Contract Costing- Process Costing- Normal and Abnormal Losses.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Funds Flow and Cash Flow Statements Funds Flow Statement - Concepts- Schedule of Changes in Working Capital - Preparation of Funds Flow Statement. Cash Flow Statement- Uses- Significance- Preparation of Cash Flow Statements (As per AS 3)	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Budgeting and Budgetary Control, Marginal Costing: Budgeting and Budgetary Control – Concepts - Budget Preparation - Fixed and Flexible Budgets - Functional Budgets - Zero Based Budgeting (ZBB). Marginal Costing- Basic Concepts - Contribution- P/V Ratio – Break Even Point - Margin of Safety – Applications of Marginal Costing (Theory Only).	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self-Study for Enrichment (Not to be included for External Examination). Activity based Costing, Life Cycle Costing, Target Costing Lean Costing and Six Sigma.		CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4

Distribution of Marks: Theory 40% and Problem 60%

Text Books

1. Jain S.P. & Narang K.L., "Cost Accounting", 8th Edition, Kalyani Publishers, New Delhi, 2014.
2. Sharma R.K. & Gupta S.K., "Management Accounting", 13th Edition, Kalyani Publishers, New Delhi, 2014.

Reference Books

1. Iyengar S.P., "Cost Accounting - Principles and Practice", 14th Edition, Sultan Chand & Sons, New Delhi, 2009.
2. Maheshwari S.N., "Cost and Management Accounting", 14th Edition, Sultan Chand & Sons, New Delhi, 2013.
3. Pillai R.S.N. & Bagavathi V., "Cost Accounting", 4th Edition, S.Chand Publishing Company, New Delhi, 2010.
4. Khan M.Y. and Jain P.K., "Management Accounting", 5th Edition, Tata McGraw- Hill Education (India) Private Limited, New Delhi, 2010.

Web References

1. <https://study.com/learn/lesson/cost-accounting-principles-examples-what-is-cost-accounting.html>
2. <https://www.accountingtools.com/articles/what-is-material-costing.html>
3. <https://www.freshbooks.com/hub/accounting/overhead-cost>
4. <https://www.accountingnotes.net/companies/fund-flow-analysis/fund-flow-analysis-accounting/13300>
5. <https://accountingshare.com/budgetary-control/>
6. <https://www.investopedia.com/terms/m/marginalcostofproduction.asp>

Pedagogy

Lecture, Power Point Presentations, Group Discussion, Seminar, Quiz, Assignment, Experience Discussion and Activity.

Course Designer

Dr.S.J.Sureya

Semester III	Internal Marks: 25		External Marks:75	
COURSE CODE	COURSETITLE	CATEGORY	HOURS/ WEEK	CREDITS
25UCB3CC6	PYTHON PROGRAMMING	CORE	5	5

Course Objective

- To Understand the basics of Python
- To learn about various operators and its control structures
- To learn about NumPy and pandas

S. No.	Course Features	Relevance Status
1	Course emphasis on Employability/Entrepreneurship/Skill Development	Employability / Skill Development
2	Course integrates cross cutting issues relevant to Professional Ethics/Gender Sensitization/Environment and Sustainability/Human Values	Professional Ethics/ Sustainability
3	Course relevant to Local/Regional/National/Global need	Global
4	Course focus on Sustainable Development Goal	SDG 4, 9, 8

Course Outcome and Cognitive Level Mapping

On the successful completion of the course, students will be able to

CO Number	CO Statement	Cognitive Level
CO1	Identify and describe the fundamental concepts of Python programming language	K1, K2
CO2	Summarize and apply functional programming paradigms to manipulate the data	K2, K3
CO3	Examine the methods and its functionalities of Python Constructs	K4
CO4	Analyze and Assess the logical understanding skills in Python	K4, K5
CO5	Recommend Python programming concepts in there allworld applications	K5

Mapping of CO with PO and PSO

Cos	PSO 1	PSO2	PSO 3	PSO 4	PSO 5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	2
CO3	3	3	3	2	2	3	3	3	3	3
CO4	3	2	3	3	3	3	3	2	3	3
CO5	3	3	3	3	3	2	3	3	3	3

“1” – Slight (Low) Correlation
“3” – Substantial (High) Correlation

“2” – Moderate (Medium) Correlation
“-” – indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	COs	COGNITIVE LEVEL
I	Computer systems – Python Programming Language Computational Thinking – Python Data Types: Expressions, Operator, Variables, and Assignments – Strings – Lists – Objects & Classes – Python standard library.	15	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5
II	Imperative programming: Python modules – Built-in-function: print() function –eval() function – user-defined function & assignments -parameter passing.	15	CO1 CO2 CO3 CO4 CO5	K1,K2, K3, K4, K5
III	Text Data, Files & Exceptions: Strings, revisited – formatted output – files – errors & Exceptions – Execution control Structures: decision control & the IF statement. For LOOP & Iteration Patterns – two-dimensional list- while loop – more loop patterns – Dictionaries – other built-in container types – character encodings & strings – module random. Namespaces.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	NumPy Basics: Array and Vectorized Computation – A Multidimensional Array Object – Data Processing using Arrays	15	CO, CO2 CO3 CO4 CO5	K1,K2, K3, K4, K5
V	Pandas – Data Structure – Essential Functionality – Handling Missing Data – Hierarchical Indexing - Plotting and Visualization - Financial and Economic Data applications.	15	CO, CO2 CO3 CO4 CO5	K1,K2, K3, K4, K5
VI	Self Study for Enrichment: (Not included for End Semester Examination) Object-Oriented Programming: Class Definition - Creating Objects - Built-in Attribute Methods - Built-in Class AttributesDestructors in Python – Encapsulation - Data Hiding – Inheritance - Method Overriding- Polymorphism	-	CO1 CO2 CO3 CO4 CO5	K1, K2, K3, K4, K5

TEXT BOOKS

1. Wes McKinney, Python for Data Analysis, O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol.
2. Kenneth A. Lambert – Fundamentals of Python First Programs - Cengage, New Delhi
3. Ch Satyanarayana, M Radhika Mani, BN Jagadesh - Python Programming- Cengage, New Delhi.

REFERENCE BOOKS

1. Jake Vander Plas, “Python Data Science Handbook: Essential Tools for Working with Data”, O'Reilly Media, 2016.
2. Allen B. Downey, “Think Python: How to Think Like a Computer Scientist, 2nd edition, Updated for Python 3, Shroff/O Reilly Publishers, 2016

WEB REFERENCES

1. <https://www.youtube.com/watch?v=rfscVS0vtbw>
2. <https://www.youtube.com/watch?v=jcQnTwjttXM>
3. <https://www.youtube.com/watch?v=DmHSwTiD5Tk>
4. https://www.youtube.com/watch?v=-_uNayxaQoU

PEDAGOGY

Chalk and Talk, Power Point Presentation, Discussion, Assignment, Demo, Quiz and Seminar.

COURSE DESIGNER

Dr.S.Suguna Devi, Associate Professor, Department of Information Technology

Semester - III	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATEGORY	Hrs / Week	Credits
25UCB3AC3	GOODS AND SERVICES TAX	ALLIED	4	3

Course Objective

- To provide students with a working knowledge of principles and provisions of GST to understand the relevance of GST in the present Indian Tax Scenario and its contribution for economic development
- To develop the practical skill in the area of registration and filing of return under GST.
- To prepare the students for choosing a career as a GST practitioner as they are being made aware of all the practical scenarios along with GST billing and invoice format.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, students will be able to	
CO1	Define the concepts, Evaluation and Implementation of GST	K1
CO2	Demonstrate the registration procedures for GST	K2
CO3	Identify the provision for levy and collection of GST	K3
CO4	Analyse the powers and specific functions of GST officers	K4
CO5	Define the concepts, Evaluation and Implementation of GST	K1

Mapping of CO with PO and PSO

COs/ PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	2	2	3
CO2	3	3	3	3	3	3	3	2	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	2	2	3	3	2	2	2	2	2
CO5	3	3	3	3	3	3	3	3	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation
“3” – Substantial (High) Correlation “-” Indicates there is no Correlation

Syllabus

UNIT	CONTENT	HOURS	CO'S	COGNITIVE LEVEL
I	<p>Goods and Services Tax (GST) Introduction - Constitutional Amendment- Evaluation and Implementation of GST in India- Need for GST- Objectives- Characteristics- Advantages and disadvantages of GST- Composition of GST Law in India - Taxes subsumed by GST- Important definitions in CGST Act 2017.</p>	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	<p>Supply under GST Meaning and Definition- Nature of supply- Types of supply- Classification of supply of Goods and Services for determining the place of supply –Need of Time and value of supply- Time of supply of Goods and Services – Value of Taxable supply- CGST Rules governing value of supply –Liability to pay Tax in case of Online Information and database Access or Retrieval Services.</p>	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	<p>GST Registration Meaning- Basic concepts- Aggregate Turnover- Threshold Limit-Types of registration- Conditions and Procedure for Registration – Process of Registration – Process of making the application Online – Documents to be uploaded along with the application- Suspension of registration - Cancellation of registration- Revocation of cancellation of registration.</p>	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	<p>E-Register and Ledgers in GST Act Levy and collection of GSTs- Exemption from the levy of CGST – Levy of CGST on Reverse Charge basis – Composition of Levy scheme - E-Way bill – features and contents of E-way bill – Part of E-way bill – Advantages - Furnishing information and generating the E-way bill – Cancellation of the E-Way bill – Input Tax – Composition of Input tax - Input Tax credit.</p>	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	<p>Types of GST Assessments Meaning of board- Class of officers in the administration of GST in India- Major powers of the GST officers in India- Specific functions and powers of the GST officers under CGST- GST Council- GSTN – Maintenance of Accounts and records and audit.</p>	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

VI	Self-Study for Enrichment (Not to be included for External Examination) Important definitions in CGST Act 2017 – Need of Time and Value of supply Maintenance of Accounts and records and audit.		CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4,K5
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Text Books

1. Dr. H.C. Mehrotra, Prof. V.P. Agarwal (2020), *Goods and Services Tax*, Sahitya Bhawan Publications.
2. L.J Charles (2022), *Essential of Goods and Services Tax (GST)*, Vijay Nicole Imprints Private Limited.
3. CA.Raj K. Agarwal (2023), *Hand Book on GST (Goods and Services Tax)*, Bharath Law Book House.

Reference Books

1. T.S. Reddy & Y. Hari Prasad Reddy (2023), *Business Taxation (Good and Services Tax)*, Margham Publications.
2. Rakesh Kumar (2017), *GST : Goods and Services Tax*, Kindle Edition.
3. Shivakumar Basaveneppe Upavasi (2021), *Basics of GST*, Notion Press.

Web Reference

1. <https://icmai.in/upload/Students/Supplemenatry/SM-GST.pdf>
2. <https://www.bajajfinsery.in/supply-under-gst>
3. <https://rajdhanicollege.ac.in/admin/ckeditor/ckfinder/userfiles/files/GST%20Registration.pdf>
4. <http://blog.ipleaders.in/procedure- registration-gst/>

Pedagogy

Lecture , Power Point Presentation, Group Discussion, Seminar and Assignment

Course Designer

Prof.Dr.N.Savithri

Semester III	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATEGORY	Hrs. / Week	CREDITS
25UCB3GEC1	OFFICE MANAGEMENTT	ELECTIVE	2	2

Course Objective

- To enable the students to gain knowledge on office maintenance and management.
- To give knowledge about modern structure and environment of Office.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement Upon completing the course, students will be	Cognitive Level
CO 1	List out the concepts of modern office management	K1, K2
CO 2	Explain how to maintain the office independently and effectively.	K2
CO 3	Identify and apply office manager's skills and competencies	K3
CO 4	Develop the practice of record management system.	K3
CO 5	Analyze the skills require for control over the office and adapt to the contemporary work atmosphere.	K4, K5

Mapping of CO with PO and PSO

COs / PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3	3	3	2	2	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

“1” – Slight (Low) Correlation – “2” – Moderate (Medium) Correlation –
“3” – Substantial (High) Correlation – “-” indicates there is no correlation.

Syllabus

UNIT	CONTENTS	HOURS	CO's	COGNITIVE LEVEL
I	Modern Office and Its Function: Meaning- Functions of Office - Importance of Office - the Paperless Office - Office management- e Elements-Duties and Qualities of Office Manager – Planning and Scheduling of Office Work - Success Rules for Office Managers.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Office Systems and Procedures: The Systems Concept – Definitions - Systems Analysis - Flow of Work - Analysis of Flow of Work - Role of Office Manager in Systems and Procedures - Systems Illustrated - Office Machines and Equipment. Office forms – Design, Management and Control	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Records Management: Importance of Records- Filing - Essentials and Characteristics of a Good Filing System - Classification and Arrangement of Files - Filing Equipment - Methods of Filing - Modern Filing Devices - Centralised vs. Decentralised Filing - Indexing - Types of Indexing - Selection of Suitable Indexing System - The Filing Routine - The Filing Manual - Records Retention - Evaluating the Records Management Programme - Modern Tendencies in Records Making.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Office Maintenance Management: Cost Control - Methods of cost reduction and savings – Organisation and methods - Need and objectives – Office Work - Work Simplification-Budgetary Control- organization for budgetary control – office budget –Store Management and Housekeeping.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Modern Technology and Office Communication: Email- Voice Mail- Internet-Multimedia- Scanner- Video-Conferencing- Web-Casting. Agenda and Minutes of Meeting- Drafting- Fax-Messages- Maintenance of Appointment Diary.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self-Study for Enrichment (Not to be included for End Semester Examination). Office Accommodation and Layouts –Location of Office, steps in office layout, principles of office layout, Office Environment.		CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Text Book

1. R.K. Chopra(2022), Office Management, Himalaya Publishing House, Mumbai
2. R S N Pillai & Bagavathi(2014), Office Management, S Chand Publications, New Delhi,
3. P.K. Ghosh(2015), Office Management, Sultan Chand & Sons, New Delhi.

Reference Books

1. Chhabra, T.N(2002)., Modern Business Organisation, Dhanpat Rai & Sons New Delhi,.
2. T Ramaswamy(2010), Principles of Office Management, Himalaya Publishers, Mumbai.
3. Bhatia,R.C.(2007), *Principles of Office Management*, Lotus Press, New Delhi, online edition also.

Web References

1. <https://accountlearning.com/basic-functions-modern-office/>
2. <https://records.princeton.edu/records-management-manual/records-management-concepts-definitions>
3. http://books.google.co.in/books/about/Principles_of_Office_Management.

Pedagogy

Chalk and Talk, PPT, Demo, Assignment and Seminar

Course Designer

Dr.P.Banu