

**CAUVERY COLLEGE FOR WOMEN
(AUTONOMOUS)**

Nationally Accredited with 'A' Grade by NAAC

ISO 9001:2015 Certified

TIRUCHIRAPPALLI

**PG & RESEARCH DEPARTMENT OF
COMMERCE**



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

B.Com. CA

2023 -2024 and Onwards

CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

PG & RESEARCH DEPARTMENT OF COMMERCE

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.

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 online 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 EDUCATIONAL OBJECTIVES (PEOs)

PEOs	Statements
PEO1	LEARNING ENVIRONMENT To facilitate value-based holistic and comprehensive learning by integrating innovative learning practices to match the highest quality standards and train the students to be effective leaders in their chosen fields.
PEO2	ACADEMIC EXCELLENCE To provide a conducive environment to unleash their hidden talents and to nurture the spirit of critical thinking and encourage them to achieve their goal.
PEO3	EMPLOYABILITY To equip students with the required skills in order to adapt to the changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
PEO4	PROFESSIONAL ETHICS AND SOCIAL RESPONSIBILITY To develop a sense of social responsibility by formulating ethics and equity to transform students into committed professionals with a strong attitude towards the development of the nation.
PEO5	GREEN SUSTAINABILITY To understand the impact of professional solutions in societal and environmental contexts and demonstrate the knowledge for an overall sustainable development.

PROGRAMME OUTCOMES FOR B.Com., B.Com. CA,

B.B.A. PROGRAMME

PO NO.	On completion of B.Com. /B.Com. CA / B.B.A. Programme, The students will be able to
PO 1	PROGRAMME KNOWLEDGE AND ENVIRONMENT SUSTAINABILITY Acquire a strong foundation in the areas of Commerce, Management and Information Technology that needs to respond to the constantly changing Business and Legal environment.
PO 2	CRITICAL THINKING AND DECISION MAKING SKILLS Analyse and develop solutions through various computational techniques for real time problems in all areas of Business Management specially Finance, Marketing, Human Resources and Operations.
PO 3	ENTREPRENEURSHIP SKILLS AND COMPETENCY DEVELOPMENT Apply the competencies and creativity required to undertake entrepreneurship as a desirable and feasible career option or be employed in various positions in industry, academia and Government.
PO 4	TEAM WORK AND PROFICIENCY DEVELOPMENT Imbibe professionalism to embrace new opportunities of emerging technologies, leadership and team work in a dynamic ethical business scenario.
PO 5	PROFESSIONAL SKILLS AND EMPLOYABILITY 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. CA

PSO NO	The Students of B.Com. CA will be able to	POs Addressed
PSO1	Understand the various concepts related to Commerce and Computer Applications.	PO1 PO2
PSO2	Inculcate critical thinking and problem-solving skills to excel in technologies and its services used ethically in various sector.	PO2
PSO3	Adopt frameworks for sustainable development in their career with virtuous to become a successful entrepreneur and application developer.	PO3
PSO4	Become acquainted with commercial knowledge and professional skills to react the most appropriate way when faced with challenges.	PO4 PO5
PSO5	Exhibit proficiency in globally relevant multidisciplinary areas of computing with environmental considerations.	PO5



CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS), TRICHY – 18
PG & RESEARCH DEPARTMENT OF COMMERCE
B.Com. CA – PROGRAMME STRUCTURE

LEARNING OUTCOME BASED CURRICULUM FRAMEWORK (CBCS - LOCF)

(For the candidates admitted from the academic year 2023 – 2024 onwards)

Semester	Part	Course	Title	Subject Code	Hours	Credit	Exam Hours	Marks		Total
								Internal	External	
I	I	Language Course - I (LC)	Pothutamil - I	23ULT1	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	23UCC1CC1	6	5	3	25	75	100
		Core Course - II (CC)	Principles of Management	23UCC1CC2	6	5	3	25	75	100
		First Allied Course- I (AC)	Python Programming and Lab	23UCC1AC1	4	3	3	50	50	100
	IV	Ability Enhancement Compulsory Course-I (AECC)	UGC Jeevan Kaushal - Universal Human Values	23UGVE	2	2	-	100	-	100
		Total			30	21				600

II	I	Language Course - II (LC)	Pothutamil - II	23ULT2	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
	III	Core Course - III (CC)	Modern Marketing	23UCC2CC3	6	5	3	25	75	100
		Core Course -IV (CC)	Web Design	23UCC2CC4	6	5	3	25	75	100
		First Allied Course - II (AP)	HTML (P)	23UCC2AC2 P	4	3	3	40	60	100
	IV	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

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)	Business Accounting	23UCC3CC5	5	5	3	25	75	100	
		Core Course - VI (CC)	Database Management Systems	22UCC3CC6	5	5	3	25	75	100	
		Second Allied Course – I (AC)	Business Law	22UCC3AC3	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	22UCC3GEC1	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	

***15 Days INTERNSHIP during Semester Holidays.**

IV	I	Language Course - IV (LC)	Pothutamil - IV	23ULT4	6	3	3	25	75	100	
			Hindi Literature & Functional Hindi	22ULH4							
			Alankara, Didactic and Modern Literatures and Transalation	23ULS4							
			Intermediate French -II	22ULF4							
	II	English Language Course-IV (ELC)	Learning Grammar through Literature - II	23UE4	6	3	3	25	75	100	
	III	Core Course - VII (CC)	Cost Accounting	22UCC4CC7	5	5	3	25	75	100	
		Core Practical - I (CP)	Database Management Systems (P)	22UCC4CC1P	5	5	3	40	60	100	
		Second Allied Course – II (AC)	Business Tools for Decision Making	22UCC4AC4	4	3	3	25	75	100	
	Internship			22UCC4INT	-	2	-	-	-	100	
	IV	Generic Elective Course– II (GEC)	E-Business	22UCC4GEC2	2	2	3	25	75	100	
			Basic Tamil - II	22ULC4BT2							
			Special Tamil - II	22ULC4ST2							
		Skill Enhancement Course– I (SEC)	Accounting Package (P)	22UCC4SEC1P	2	2	3	40	60	100	
	Extra Credit Course			Swayam Online Course	As per UGC Recommendations						
		Total				30	25				800

V	III	Core Course – VIII (CC)	Accounting for Managerial Decisions	23UCC5CC8	6	5	3	25	75	100
		Core Course - IX (CC)	R Programming	22UCC5CC9	5	5	3	25	75	100
		Core Course - X (CC)	Digital Marketing	22UCC5CC10	5	5	3	25	75	100
		Core Practical - II (CP)	R Programming (P)	22UCC5CC2P	5	5	3	40	60	100
		Discipline Specific Elective– I (DSE)	A. Business Correspondence and Reporting	23UCC5DSE1A	5	3	3	25	75	100
			B. E-Retailing	23UCC5DSE1B						
			C. Mobile Applications	23UCC5DSE1C						
	IV	Ability Enhancement Compulsory Course-IV (AECC)	UGC Jeevan Kaushal - Professional Skills	22UGPS	2	2	-	100	-	100
		Skill Enhancement Course– II (SEC)	Skills for Competitive Examination	22UCC5SEC2	2	2	3	-	100	100
		Extra Credit Course	Swayam Online Course	As per UGC Recommendations						
		Total			30	27				700

VI	III	Core Course – XI (CC)	Corporate Accounting	23UCC6CC11	5	4	3	25	75	100
		Core Course - XII (CC)	Direct Taxation	23UCC6CC12	5	3	3	25	75	100
		Core Course – XIII (CC)	Entrepreneurial Development	22UCC6CC13	4	4	3	25	75	100
		Core Course - XIV (CC)	Cyber Security	22UGCS	5	4	3	25	75	100
		Discipline Specific Elective– II (DSE)	A. Management Information System	23UCC6DSE2A	5	3	3	25	75	100
			B. Auditing	23UCC6DSE2B						
			C. Corporate Social Responsibility	23UCC6DSE2C						
		Project	Project Work	23UCC6PW	5	4	-	-	100	100
V	Ability Enhancement Compulsory Course-V (AECC)	Gender Studies	22UGGS	1	1	-	100	-	100	
	Extension Activity		22UGEA	-	1	-	-	-	-	
	Total			30	24				700	
Grand Total				180	140				4100	

Courses & Credits for B.Com. CA

Part	Course	No. of Courses	Credits	Total
I	Tamil/ Other Language	4	3	12
II	English	4	3	12
III	Core (Theory& Practical)	16	74	99
	Project Work	1	4	
	Internship	1	2	
	First Allied	2	6	
	Second Allied	2	6	
	DSE	2	7	
IV	GEC	2	4	15
	SEC	2	4	
	AECC-I Universal Human Values	1	2	
	AECC-II-Environmental Studies	1	2	
	AECC-III-Innovation and Entrepreneurship	1	1	
	AECC-IV-Professional Skills	1	2	
V	Gender Studies	1	1	02
	Extension Activities	--	1	
		4100		140

Semester I	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATAGORY	Hrs/Week	CREDITS
23UCC1CC1	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 On the successful completion of the course, students will be able to	Cognitive Level
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	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.	18	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	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.	21	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	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	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	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.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Royalty and Insurance Claims Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment.	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

	Insurance Claims – Calculation of Claim Amount-Average clause (Loss of Stock only)			
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

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. Shukla Grewal 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: Text and 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

Ms. J. Lalithambigai.

Semester I	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATAGORY	Hrs/ Week	CREDITS
23UCC1CC2	PRINCIPLES OF MANAGEMENT	CORE	6	5

Course Objective

- To understand the basic management concepts and functions
- To know the various techniques of planning and decision making
- To familiarize with the concepts of organisation structure
- To gain knowledge about the various components of staffing
- To enable the students in understanding the control techniques of management

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 basic principles and concepts of management and summarize the various authorization and responsibilities of an organization.	K1
CO2	Explain the importance of planning and decision making in an organization	K2
CO3	Apply and integrate planning, organizing, decision-making, staffing and directing processes in an organization.	K3
CO4	Analyze the various methods of performance appraisal	K4
CO5	Explain the notions of directing, co-ordination and control in management.	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	2	2	3	3	3	3	3
CO3	3	3	3	2	2	3	3	3	2	2
CO4	3	3	3	3	3	3	3	2	2	2
CO5	3	3	3	2	2	3	3	3	3	2

“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	Introduction to Management Meaning – Definitions – Nature and Scope – Levels of Management – Importance – Management Vs. Administration – Management: Science or Art – Evolution	18	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

	of Management Thoughts – F. W. Taylor, Henry Fayol, Peter F. Drucker, Elton Mayo - Functions of Management – Trends and Challenges of Management. Managers – Qualification – Duties & Responsibilities.			
II	Planning Planning – Meaning – Definitions – Nature – Scope and Functions – Importance and Elements of Planning – Types – Planning Process – Tools and Techniques of Planning – Management by Objective (MBO). Decision Making: Meaning – Characteristics – Types – Steps in Decision Making – Forecasting – Rational Decision Making – Process – Decision Making Under Different Conditions.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Organizing Meaning – Definitions – Nature and Scope – Characteristics – Importance – Types – Formal and Informal Organization – Organization Chart – Organization Structure: Meaning and Types – Departmentalization – Authority and Responsibility – Centralization and Decentralization – Span of Management.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Staffing Introduction – Concept of Staffing-Staffing Process – Recruitment – Sources of Recruitment – Modern Recruitment Methods – Selection Procedure – Test – Interview– Training: Need – Types–Promotion – Management Games – Performance Appraisal – Meaning and Methods – 360 degree Performance Appraisal – Work from Home – Managing Work from Home [WFH].	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Directing Motivation – Meaning – Theories – Communication – Types - Barriers to Communications – Measures to Overcome the Barriers. Leadership – Nature – Types and Theories of Leadership – Styles of Leadership – Qualities of a Good Leader – Successful Women Leaders – Challenges faced by women in workforce – Supervision. Co-ordination and Control	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

	Co-ordination – Meaning - Techniques of Co-ordination. Control - Characteristics - Importance – Stages in the Control Process - Requisites of Effective Control and Controlling Techniques – Management by Exception [MBE].			
VI	Self Study for Enrichment (Not to be included for End Semester Examination). Departmentalisation – Basis – Meaning and Importance – Policies – Meaning and Types –Procedure – Requisites for excellent co-ordination.	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Text Books

1. Gupta. C. B, -Principles of Management-L.M. Prasad, S. Chand& Sons Co. Ltd, New Delhi.
2. Dinkar Pagare, Principles of Management, Sultan Chand & Sons Publications, New Delhi.
3. P. C. Tripathi& P.N Reddy, Principles of Management. Tata McGraw, Hill, Noida.
4. L.M. Prasad, Principles of Management, S.Chand&Sons Co. Ltd, New Delhi.
5. R.K. Sharma, Shashi K. Gupta, Rahul Sharma, Business Management, Kalyani Publications, New Delhi.

Reference Books

1. K Sundhar, Principles Of Management, Vijay Nichole Imprints Limited, Chennai
2. Harold Koontz, Heinz Weirich, Essentials of Management, McGraw Hill, Sultan Chand and Sons, New Delhi.
3. Griffffin, Management principles and applications, Cengage learning, India.
4. Eccles, R. G. & Nohria, N. Beyond the Hype: Rediscovering the Essence of Management. Boston The Harvard Business School Press, India.

Web References

- <http://www.universityofcalicut.info/syl/management>
- <https://www.managementstudyguide.com/manpower-planning.htm>
- <https://www.businessmanagementideas.com/notes/managementnotes/coordination/coordination/21392>

Pedagogy

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

Course Designer

Ms. Shilpa A. Talreja.

PYTHON PROGRAMMING AND LAB

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
23UCC1AC1	2		2		3	4	50	50	100

Learning Objectives

LO1	Describe the core syntax and semantics of Python programming language.
LO2	Discover the need for working with the strings and functions.
LO3	Illustrate the process of structuring the data using lists, dictionaries, tuples and sets.
LO4	Understand the usage of packages and Dictionaries

Prerequisites: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	Introduction: Computer algorithms-Computer Hardware-Computer Software-Python programming language - Literals - Variables and Identifiers - Operators - Expressions and Data types, Input / output	12
II	Control Structures: Boolean Expressions - Selection Control - If Statement- Indentation in Python- Multi-Way Selection -- Iterative Control- While Statement- Infinite loops- Definite vs. Indefinite Loops- Boolean Flag. String, List and Dictionary, Manipulations Building blocks of python programs, Understanding and using ranges.	12
III	Functions: Program Routines- Defining Functions- More on Functions: Calling Value-Returning Functions- Calling Non-Value-Returning Functions- Parameter Passing - Keyword Arguments in Python - Default Arguments in Python-Variable Scope. Recursion: Recursive Functions	12
IV	Objects and their use: Software Objects - Turtle Graphics – Turtle attributes-Modular Design: Modules - Top-Down Design - Python Modules -	12
V	Dictionaries and Sets: Dictionary type in Python - Set Data type. Text Files: Opening, reading and writing text files – Exception Handling	12
	Total	60

Course Outcomes

C01	Develop and execute simple Python programs
C02	Write simple Python programs using conditionals and looping for solving problems
C03	Decompose a Python program into functions
C04	Represent compound data using Python lists, tuples, dictionaries etc.

Textbooks

1	Charles Dierbach, “Introduction to Computer Science using Python - A computational Problem-solving Focus”, Wiley India Edition, 2015.
2	Wesley J. Chun, “Core Python Applications Programming”, 3rd Edition , Pearson Education, 2016

3	Mark Lutz, “Learning Python Powerful Object Oriented Programming”, O’reilly Media 2018, 5th Edition.
Reference Books	
1	Timothy A. Budd, “Exploring Python”, Tata MCGraw Hill Education Private Limited 2011, 1 st Edition.
2	John Zelle, “Python Programming: An Introduction to Computer Science”, Second edition, Course Technology Cengage Learning Publications, 2013, ISBN 978- 1590282410
3	Michel Dawson, “Python Programming for Absolute Beginners” , Third Edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1435455009
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://onlinecourses.swayam2.ac.in/cec22_cs20/preview

Python Programming Lab	
Learning Objectives: (for teachers: what they have to do in the class/lab/field) <ul style="list-style-type: none"> • Acquire programming skills in core Python. • Acquire Object-oriented programming skills in Python. • Develop the skill of designing graphical-user interfaces (GUI) in Python. • Develop the ability to write database applications in Python. • Acquire Python programming skills to move into specific branches 	
Course Outcomes: (for students: To know what they are going to learn) CO1: To understand the problem solving approaches CO2: To learn the basic programming constructs in Python CO3: To practice various computing strategies for Python-based solutions to real world problems CO4: To use Python data structures - lists, tuples, dictionaries.	

List of Programs
<ol style="list-style-type: none"> 1. Program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon user’s choice. 2. Write a Python program to construct the following pattern, using a nested loop <pre> * ** *** **** ***** ***** **** *** ** *</pre> 3. Program to calculate total marks, percentage and grade of a student. Marks obtained in each of the five subjects are to be input by user. Assign grades according to the following criteria: Grade A: Percentage >=80 Grade B: Percentage >=70 and <80 Grade C: Percentage >=60 and <70 Grade D: Percentage >=40 and <60 Grade E: Percentage < 40

4. Program, to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user.
5. Write a Python script that prints prime numbers less than 20.
6. Program to find factorial of the given number using recursive function.
7. Write a Python program to count the number of even and odd numbers from array of N numbers.
8. Write a Python class to reverse a string word by word.
9. Read a file content and copy only the contents at odd lines into a new file.
10. Create a Turtle graphics window with specific size.

Extended Professional Component	Questions related to the above topics, from various competitive examinations UPSC / TRB / NET / UGC –CSIR / GATE / TNPSC / others to be solved (To be discussed during the Tutorial hour)
Skills acquired from the course	Knowledge, Problem Solving, Analytical ability, Professional Competency, Professional Communication and Transferrable Skill

Learning Resources:

- **Recommended Texts**

1. Charles Dierbach, “Introduction to Computer Science using Python - A computational Problem-solving Focus”, Wiley India Edition, 2015.
2. Wesley J. Chun, “Core Python Applications Programming”, 3rd Edition , Pearson Education, 2016

- **Reference Books**

1. Mark Lutz, “Learning Python Powerful Object Oriented Programming”, O’reilly Media 2018, 5th Edition.
2. Timothy A. Budd, “Exploring Python”, Tata McGraw Hill Education Private Limited 2011, 1 st Edition.
3. John Zelle, “Python Programming: An Introduction to Computer Science”, Second edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1590282410
4. Michel Dawson, “Python Programming for Absolute Beginners” , Third Edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1435455009

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	HOURS/ WEEK	CREDITS
23UCC2CC3	MODERN MARKETING	CORE	6	5

Course Objectives

- To familiarize the students with basic knowledge of various concepts, dimensions and trends in modern marketing practices.
- To understand the moralities of sales distribution and control.

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 various terms used in marketing and list out channels of distribution in marketing.	K1
CO2	Outline the role and importance of marketing and explain the factors and theories of buyer behavior.	K2
CO3	Apply different pricing strategies of a firm and identify various promotional programmes.	K3
CO4	Analyze the recent developments in marketing and strategies opted for market segmentation.	K4
CO5	Examine the factors influencing buyer behaviour and Categories the customers and their wants and needs.	K4

Mapping of CO with PO and PSO

COs/ PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	2	3	2	2	2	2
CO2	3	3	2	3	3	3	3	3	2	2
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	COs	COGNITIVE LEVEL
I	Marketing – Definition, Concepts– Significance & Functions of Marketing – Approaches to the study of Marketing – Relevance of Marketing in a developing economy – Role & functions of Marketing Manager.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
II	Consumer Behavior: Nature and Importance – Factors influencing Consumer buying behavior. Market Segmentation: Concept – Importance and bases – Product differentiation vs. Market Segmentation.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
III	Product: Meaning – Product Planning – Policies – Positioning – New Product Development – Product Life Cycle – Branding, Packing, Labeling. Pricing: Pricing Objectives – Factors, Methods and Procedure.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
IV	Promotion: Promotion Mix – Advertisement – Message – Copywriting - Budgeting – Measuring Advertisement Effectiveness – Media Strategy – Sales Promotion – Personal Selling and Publicity.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
V	Marketing Strategies – Tools for competitive differentiation of product – Strategies for competitors – Leaders, challenges, follower and niches – Marketing of services – Consumerism.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
VI	Self Study for Enrichment (Not to be included for External Examination) Various environment affecting the marketing functions – Market targeting – Distribution logistics: importance and decisions factors to be considered in channel selection.		CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4

Text Books

1. R. S. N. Pillai & V. Bagavathi (2010). Modern Marketing. S. Chand & Co.
2. N Rajan Nair, Sanjith R Nair.(2015). Marketing, Sultan Chand & Sons.

Reference Books

1. Dhruv Grewal. (2018).Marketing. Tata McGraw Hill India.
2. Philip Kotler. (2015).Marketing Management. Sultan Chand & Sons.
3. S. A. Sherlekar, R. Krishnamoorthy, (2010). Marketing Management. Himalaya Publishing House.

Web References

1. <http://gundasrinivas.com/wp-content/uploads/2020/11/Fundamentals-of-Marketing.pdf>
2. http://eprints.stiperdharmawacana.ac.id/24/1/%5BPhillip_Kotler%5D_Marketing_Management_14th_Edition%28BookFi%29.pdf
3. <https://library.wbi.ac.id/repository/212.pdf>
4. [http://www.mdudde.net/books/mcom/mcom-f/marketing-management-final\(crc\).pdf](http://www.mdudde.net/books/mcom/mcom-f/marketing-management-final(crc).pdf)

Pedagogy

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

Course Designer

Ms. Shilpa A. Talreja.

Semester II	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
23UCC2CC4	Web Design	CORE	6	5

Course Objectives

- To introduce the realm of web design
- To impart theoretical knowledge in designing web page using HTML5 and CSS

Course Outcomes and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, the students will be able to	
CO1	Define the basic concepts of web design	K1
CO2	Illustrate the components of web design	K2
CO3	Identify the different type of tags to create web pages	K3
CO4	Apply the theoretical knowledge to develop websites	K4
CO5	Construct basic websites using HTML5 and Cascading Style Sheets	K5

Mapping of CO with PO and PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	1	1	2	2	2	3	2
CO2	3	2	3	1	1	3	3	2	3	2
CO3	3	3	3	2	2	3	3	2	3	3
CO4	3	2	3	2	2	2	2	2	3	3
CO5	3	3	3	2	2	3	3	2	2	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	Getting Started with HTML5: Introduction to HTML5 – Defining HTML Markup – Basic Structure of an HTML – Modifying the Background of an HTML Web Page – Specifying Metadata about an HTML Web Page - Introduction to New Elements in HTML5: The Markup Elements – The Media Elements – The Canva Element – The Form Element – The Input Type Attribute Values – The New Attributes – The New Event Attributes – The Window Event Attributes – The Form Events – The Mouse Events – The Media Events	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Working with Text: Adding Plain Text to an HTML Web Page – Adding Text in New Line – Creating Headings on a Web Page – Creating Paragraph – Creating Horizontal Rule – Creating Subscript and Superscript – Aligning the Text – Grouping the Text – Indenting Quotations – Working with Character Entities. Lists: Working with Lists – Nested Lists	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Tables: Creating a Table – Table caption – Adding a Table Heading – Table Border – Aligning Table and Cell Content – Table width and Column Width - Changing Background – Cell Padding – Cell Spacing – Spanning Rows and Columns – Nesting Tables Frames: Creating a Frame – Defining a new Element with Specific Attributes – Height and Width of Frame – Hyperlinks to Frames	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Hyperlinks, Images and Multimedia: Working with Hyperlinks – Working with Images – Creating Image Maps – Working with Multimedia. Forms and Controls: Creating an HTML Form – Specifying the Action URL and The Method to Send the Form – Adding Controls to an HTML Form – Understanding New Form Elements – Grouping the Controls of HTML Forms – Specifying a Label for a Control	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Working with Cascading Style Sheets: Understanding Style Sheets – Working with Styles – Working with Background Properties – Working with Text Properties – Working with List Properties – Working with HTML Element Box Properties – Working with Positioning and Block Properties	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

VI	UNIT VI -Self Study for Enrichment (Not to be included for External Examination) Introduction to Internet –World Wide Web (WWW) – Web Page – Hyper Text – Net Surfing – Internet/Web Browsing – Browser – Internet Addressing – IP Address – Domain Name – Electronic Mail – Uniform Resource Locator (URL) – Internet Protocols – TCP/IP – FTP – HTTP.	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
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Textbook

1. DT Editorial Services. (2015). HTML 5 in Simple Steps, 2nd Edition, Dreamtech Press New Delhi.

References

1. Mike McGrath. (2017). HTML 5 in Easy Steps, 2nd Edition, In Easy Steps Limited.
2. Ben Frain. (2020) Responsive Web Design with HTML5 and CSS, 3rd Edition, Packt Publishing Ltd. UK.

Web References

1. <https://www.tutorialspoint.com/html5/index.htm>
2. <https://www.javatpoint.com/html5-tutorial>
3. <https://www.w3schools.com/html/>

Pedagogy

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

Course Designer

Ms. V. Infine Sinduja, Assistant Professor, Department of Computer Applications.

Semester II	Internal Mark: 40			External Mark: 60
COURSE CODE	COURSE TITLE	CATEGORY	Hrs/Week	CREDITS
23UCC2AC2P	HTML (P)	ALLIED	4	3

Course Objective

- To impart practical knowledge in designing web page using HTML5 and CSS

Course Outcomes and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, the students will be able to	
CO1	Define the basic concepts of web design	K1
CO2	Illustrate the components of web design	K2
CO3	Identify the different type of tags to create web pages	K3
CO4	Apply the practical knowledge to develop websites	K4
CO5	Construct basic websites using HTML5 and Cascading Style Sheets	K5

Mapping of CO with PO and PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	1	1	2	2	3	3	2
CO2	3	2	3	1	1	3	3	3	3	2
CO3	3	3	3	2	2	3	3	3	3	3
CO4	3	2	3	2	2	2	2	3	3	3
CO5	3	3	3	2	2	3	3	3	2	3

“1” – Slight (Low) Correlation

“2” – Moderate (Medium) Correlation

“3” – Substantial (High) Correlation

“-” indicates there is no correlation.

List of Practical

1. Creating a Webpage Layout using Semantic elements
2. Example for Audio element
3. Example for Video element
4. Creating a Registration form with validation
5. Drawing 2D graphics using Canvas
6. Example for LocalStorage
7. Example for Drag and Drop
8. Rose bud using Canvas
9. Animation using Canvas
10. Creating a Webpage using CSS

Web References

1. <https://tutorial.techaltum.com/html5.html>
2. http://www.makeitsimple.co.in/HTML5_programs.php
3. <https://www.tutorialspoint.com/html5/index.htm>
4. <https://www.javatpoint.com/html5-tutorial>

Pedagogy

PowerPoint Presentation, Demonstration, Discussion and Practical Session.

Course Designer

Ms. V. Infine Sinduja, Assistant Professor, Department of Computer Applications.

Semester: II	Internal Marks:100			
COURSE CODE	COURSE TITLE	CATEGORY	HRS/ WEEK	CREDITS
22UGEVS	ENVIRONMENTAL STUDIES	ABILITY ENHANCEMENT COMPULSORY COURSE	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 ecosystem 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>a. Forest resources: use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.</p> <p>b. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.</p> <p>c. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.</p> <p>d. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.</p> <p>e. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.</p> <p>f. 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 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> <ol style="list-style-type: none"> Air Pollution Water Pollution Soil Pollution Noise pollution Nuclear hazards <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/mkpandit/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

(22UGEV5)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	Credits
23UCC3CC5	BUSINESS ACCOUNTING	CORE	5	5

Course Objective

- To develop skills to prepare the financial statements in Partnership Firms.
- To understand different types of branch and departmental accounts.
- To enable the students to maintain books of recording under Hire Purchase and Instalment method

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 methods for the various partnership related transactions.	K1, K2
CO2	Explain the purpose and use of business accounting.	K3
CO3	Apply the accounting procedures for recording various financial transactions.	K3
CO4	Analysis the accounting concepts to interpret the performance of partnership firm and Business enterprises.	K4
CO5	Evaluate and solve the accounting problems in Partnership firm and Business organization.	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	2	3
CO3	3	2	3	2	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	2	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	Partnership – Meaning – Partnership Deed- Admission of a Partner –Sacrificing and new ratio - Treatment of Goodwill – Revaluation Account - Adjustment in Partners Capital and Current Account - Balance sheet.	15	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
II	Retirement of a Partner - Gaining ratio – Adjustment of Goodwill and Capital Account – Death of a Partner – Joint life Policy.	15	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
III	Dissolution of Firm – Preparation of Realization Accounts - Partners Capital account and Bank Account. Insolvency of Partner – Insolvency of all partners – Piecemeal Distribution – Proportionate Capital method – Maximum Loss method	15	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
IV	Branch Accounts – Dependent Branch – Debtors System – Stock and Debtors System – Independent Branches (Excluding Foreign Branches) – Departmental Accounts – Inter Departmental Transfers – Stock Reserve.	15	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
V	Hire Purchase Accounts – Default and Repossessions – Complete Repossession – Partial Repossession – Hire Purchase Trading Accounts – Debtors Method – Stock and Debtors Method.	15	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
VI	Self-Study for Enrichment (Not to be included for External Examination) Distinguish Between Departments and Branches – Difference Between Hire Purchase and Installment systems. Need for Valuation of Goodwill – Methods of Goodwill – Treatment of unrecorded Assets and Liabilities		CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5

Distribution of Marks: Theory 20% & Problem 80%

Text Books

1. S.P.Jain and K.L.Narang (2020). *Financial Accounting – II*. Latest Edition. Kalyani Publishers.
2. T.S. Reddy & Murthy (2012). *Financial Accounting*. Revised Edition. Margham Publications.
3. Dalston L.Cecil & Jenitra L Merwin (2015). *Business Accounting*. 4th Edition. Learn - tech Publication.

Reference Books

1. Shukla MC, Grewal TS & Gupta CS (2017). *Advanced Accounts*. Revised Edition. S.Chand Company Ltd.
2. R.L. Gupta & Radhaswamy M. (2018). *Financial Accounting*. 8th Edition. Sultan Chand Sons.
3. Arulanandam M.A & Raman K.S. (2018). *Advanced Accountancy*. 7th Edition. Himalaya Publishing House.

Web Reference

1. <https://www.icai.org/post/icai-publications-accounting-standards-board>
2. <https://cleartax.in/g/terms/hire-purchase-agreements>
3. www.accountingcoach.com
4. www.accountingstudyguide.com
5. www.futureaccountant.com

Pedagogy

Lecture, PowerPoint Presentation, Assignment, Quiz, Seminar & Group Discussion

Course Designer

Ms. S. Praveena

Semester III	Internal Marks:25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	HRS./ WEEK	CREDITS
22UCC3CC6	DATABASE MANAGEMENT SYSTEMS	CORE	5	5

Course Objective

- To understand the basic concepts and the applications of database systems
- To provide the basics of SQL and construct queries using SQL
- To inculcate the knowledge of join operations, views, transactions and E-R model in database management systems

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	Define the basic concepts of database design, architecture and its data model	K1
CO2	Illustrate the structure of Relational database	K2
CO3	Apply the various queries in the database	K3
CO4	Examine the Join operations, Views and Transactions	K4
CO5	Select the appropriate E-R model for the real time enterprises	K5

Mapping of CO with PSO and PO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	3	2	1	1	3	3	2	3	2
CO2	3	2	3	1	1	3	2	2	3	3
CO3	3	3	3	2	2	3	3	2	3	2
CO4	3	2	3	2	2	3	3	2	3	2
CO5	3	3	3	2	2	3	3	2	2	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	Introduction to Database System Concepts: Introduction – Database-System Applications – Purpose of Database Systems – View of Data : Data Abstraction – Instances and Schemas – Data Models – Database Languages – Relational Databases : Tables – Data-Manipulation Language – Data - Definition Language – Database Design : Design Process – The Entity – Relationship Model – Normalization – Data Storage and Querying : Storage Manager – The Query Processor – Transaction Management – Database Architecture–Database Users and Administrators : Database Users and User Interfaces – Database Administrator.	15	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Introduction to Relational Model and SQL: Structure of Relational Databases – Database Schema – Keys – Schema Diagrams –Relational Query Languages – Relational Operations- Introduction to SQL: Overview of the SQL Query Language – SQL Data Definition: Basic Types – Basic Schema Definition – Basic Structure of SQL Queries: Queries on Single Relation – Queries on Multiple Relations - The Natural Join.	15	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Introduction to SQL: Additional Basic Operations: The Rename Operation – String Operations – Attributes Specification in Select Clause –Ordering the Display of Tuples – Where clause Predicates–Set Operations : The Union Operation– The Intersect	15	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

	Operation - Except Operation – Null Values – Aggregate Functions : Basic Aggregation – Aggregation with Grouping - The Having Clause - Nested Subqueries : Set Membership – Set Comparison – Modification of the Database.			
IV	Intermediate SQL Join Expressions: Join Conditions – Outer Joins – Join Types and Conditions –Views : View Definition – Using Views in SQL Queries – Materialized Views – Update of a View – Transactions –Integrity Constraints – Constraints on a Single Relation – Not Null Constraint – Unique Constraint – The Check Clause – Referential Integrity - SQL Data Types and Schemas – Authorization.	15	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Database Design and the E-R Model The Entity – Relational Model: Entity Sets – Relationship Sets – Attributes – Constraints: Mapping Cardinalities–Keys – Entity-Relationship Diagrams : Basic Structure – Mapping Cardinality- Complex Attributes - Weak Entity Sets – E-R diagram for the University Enterprise.	15	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self Study for Enrichment (Not to be included for End Semester Examination) History of Database Systems – Aggregation with Null and Boolean Values – Test for Empty Relations – Test for the Absence of Duplicate Tuples – Subqueries in the From Clause – Overview of the Design Process– Participation Constraints – Removing Redundant Attributes in Entity Sets – Nonbinary Relationship Sets.	-	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Textbook

Abraham Silberschatz, Henry F Korth & Sudarshan (2013), Database System Concepts, 6th Edition, McGraw Hill Education India Private Limited.

Reference Books

1. Peter Rob, Carlos Coronel (2009), Database System Concepts, Lengage Learning.
2. Alexis Leon, Mathews Leon (2009), Essential of Database Management Systems, Tata
McGraw Hill Education India Private Limited.

Web References

<https://www.geeksforgeeks.org/introduction-of-dbms>
<https://www.javatpoint.com/dbms-tutorial>
<https://www.w3schools.in/dbms>
<https://www.bmc.com/blogs/dbms-database-management-systems>

Pedagogy

Chalk & Talk, PowerPoint Presentation, Discussion, Assignment, Demo, Quiz and Seminar

Course Designer

Ms. A. Anandhavalli, Assistant Professor, Department of Computer Applications.

Semester III	Internal Marks: 25	External Marks:75		
COURSECODE	COURSE TITLE	CATEGORY	Hrs. /Week	CREDITS
22UCC3AC3	BUSINESS LAW	ALLIED	4	3

Course Objective

- To make the students to learn the elements of general contract and special contracts.
- To enable the students to understand and deal with various contracts in day – to – day life, be it for his business or profession.

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	Recall and summarize consequences of applicability of various laws on business situation.	K1, K2
CO2	Outline and Examine the rights and duties under various legal acts.	K2, K4
CO3	Explain and analyze the legal framework governing business trade and commerce in India.	K2, K4
CO4	Identify the fundamental legal principles behind contractual agreement	K3
CO5	Explain important laws that have a bearing on the conduct of business in India.	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	2	3	2	3	3	3	3	3	3
CO4	3	3	2	3	3	2	3	3	2	3
CO5	2	2	3	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	COGNITIVE LEVEL
I	Meaning & Definition of Contract – Nature of Contract – Classification of Contract – Essentials of a valid Contract – Offer and Acceptance – Consideration – Contractual Capacity – Free Consent – Legality of Objects – Void Agreements.	12	CO1,CO2, CO3,CO4, CO5	K1, K2, K3, K4, K5
II	Performance of Contract – Different Modes of discharge of Contract – Remedies of Breach – Quasi Contracts – Contract of Indemnity and Guarantee – Contract of Bailment and Pledge – Law of Agency.	12	CO1,CO2, CO3,CO4, CO5	K1, K2, K3, K4, K5
III	Introduction of Sale of Goods Act 1930 - Formalities of the Contract of Sale – Distinction between Sale & Agreement to Sell – Distinction between sale and Hire Purchase agreement – Conditions and Warranties – Transfer of Property as between the seller and the buyer – Principle of “Caveat Emptor” and its limitations – Rights of an unpaid seller	12	CO1,CO2, CO3,CO4, CO5	K1, K2, K3, K4, K5
IV	Indian Partnership Act 1932 - definition – Essentials of Partnership – Kinds of Partners – rights and duties of partners – reconstitution of firms – Dissolution of a firm – Limited Liability Partnership, 2008 – Nature of LLP – Distinction between LLP and Partnership – Conversion to LLP – Extent and Limitation of liability of LLP and its partners.	12	CO1,CO2, CO3,CO4, CO5	K1, K2, K3, K4, K5

V	Introduction of Competition Act 2002 – Objectives – Salient features – Anti Competitive Agreements–Prevention of abuse of dominant position– Combination– Competition advocacy– Competition Commission of India.	12	CO1,CO2, CO3,CO4, CO5	K1, K2, K3, K4, K5
IV	Self-Study for Enrichment (Not to be included for End Semester Examination) Contingent Contract – Winding up and Dissolution of the LLP – Intellectual Property Rights – Indian Companies Act 2013	-	CO1,CO2, CO3,CO4, CO5	K1, K2, K3, K4, K5

Text Books

1. N. D. Kapoor, *Element of Mercantile Law*, Sultan Chand & Sons Private Limited, New Delhi, 2001.
2. R.S.N. Pillai & Bagavathi, *Business Law*, S. Chand & Co. Ltd, New Delhi, 2006.
3. N. D. Kapoor, *Elements of Company Law*, Sultan Chand & Sons Private Limited, New Delhi, 2020.

Reference Books

1. Srinivasan, *Business Law*, Margham Publishers, Chennai, 2004.
2. Kuchcal, *Mercantile Law*, Vikas Publishing house, New Delhi, 2003.

Web References

1. <https://www.legalserviceindia.com/legal/article-2190-essential-elements-of-a-contract.html><https://www.simplynotes.in/e-notes/mcomb-com/business-regulatory-framework/special-contracts-indemnity-guarantee-bailment-and-pledge-agency/>
2. <https://blog.ipleaders.in/the-sale-of-goods-act-1930/>
3. <http://student.manupatra.com/Academic/Abk/Indian-Partnership-Act/Toc.htm>
4. https://www.srcc.edu/sites/default/files/B.com%20H_sem%20vi_Consumer%20affairs%20and%20Customer%20Care_Ms.%20Kavita%20Kamboj.pdf

Pedagogy

Seminar, PPT Presentation, Assignment and Group Discussion and Case Study.

Course Designer

Dr. J. Praba

INNOVATION & ENTREPRENEURSHIP

Semester III	Internal marks:40		External marks: 60	
COURSE CODE	COURSE TITLE	CATEGORY	Hrs/week	CREDITS
22UGIE	INNOVATION & ENTREPRENEURSHIP	Ability Enhancement Compulsory Course -III	2	1

Course Objective

- The course is designed to motivate the students in Entrepreneurship with innovative ideas and build interest in Venture Creation.

Course Outcome and Cognitive Level Mapping

The students will be able to

CO	CO Statement	Knowledge Level
CO 1	Identify Self-Entrepreneurial traits and passion leads.	K3
CO 2	Discover problem solving opportunities and generate ideas	K3
CO 3	Analyse the process of design thinking	K4
CO 4	Develop Business Model canvas for the idea generated	K5
CO 5	Validate the business idea by creating Capstone project	K6

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3	2	3	2	2	2
CO2	2	2	3	3	3	2	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	2	3	3	2	3	3	2	3	3
CO5	2	3	3	2	3	3	2	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 LEVELS
I	<p><u>Entrepreneurship & Intrapreneurship</u></p> <p>Importance of Entrepreneurship Development-The entrepreneurial mind set – Attributes and Characteristics of a successful entrepreneur.</p> <p>Intrapreneurship-Importance-Attributes, Contribution and Characteristics of a successful Intrapreneur- Types of Intrapreneurs.</p> <p>Self-Discovery- Learnings from famous company cases that promote entrepreneurship and Intrapreneurship. (Activity)</p>	6	CO1CO2 CO3CO4 CO5	K3K4K5
II	<p><u>Entrepreneurial Skill Sets</u></p> <p>Significance of Entrepreneurship skills-Business Management Skill- Decision making skills- Principles of Effectuation- Analytical & Problem-solving skill- Critical thinking skill-Lateral thinking skill-Factors associated with lateral thinking along with examples.</p> <p>Opportunity Discovery- Identify problems worth solving through JTBD method (Activity)</p>	6	CO1CO2 CO3CO4 CO5	K3K4K5
III	<p><u>Design Thinking & Innovation</u></p> <p>Innovation & Creativity- Role in Industry and Organizations- Dynamics of Creative Thinking-Process of Design Thinking-Implementing the Process in Driving Innovation through scientific technologies and Non technology process.</p> <p>Business Idea Generation – Build your own Idea Bank with Innovative Approaches (Activity)</p>	6	CO1CO2 CO3CO4 CO5	K3K4K5

IV	Crystallising the business Idea Customer Discovery- Identification of customer segments-Drafting of Value Proposition Canvas with a venture creation Idea. Basics of Business Model and LEAN Approach, Blue Ocean Strategy Approach. Crafting business model for a venture using the Lean Canvas – (Activity)	6	CO1CO2 CO3CO4 CO5	K3K4K5
V	Start -up Business Plan Presentation of Capstone project; Validation Analysis; Pre-incubation and Incubation stages to develop a start-up ecosystem.	6	CO1CO2 CO3CO4 CO5	K3K4K5
VI	Self study for enrichment: (Not to be included for External examination) Case study analysis on Entrepreneurship	-	CO1CO2 CO3CO4 CO5	K3K4K5

Textbooks:

1. Elias G.Carayannis, Elbida.D.Samra (2015), Innovation and Entrepreneurship,
2. Peter.F. Drucker (2006), Innovation and Entrepreneurship, Harper Publications

Reference books:

1. John R.Bessant, Joe Tidd (2015), Innovation and Entrepreneurship, Wiley Publications
2. Mike Kennard (2021), Innovation and Entrepreneurship, Routledge, Taylor and Francis

Web References:

1. <https://innovation-entrepreneurship.springeropen.com/>
2. <https://www.worldcat.org/title/innovation-and-entrepreneurship-practice-and-principles/oclc/11549089/lists>

Pedagogy:

e- Content modules, Activity worksheet, Case Studies

Course Designer:

Dr.R.Subha, Assistant Professor, Innovation ambassador, Department of Chemistry

Dr.S.Sowmya, Assistant Professor, Innovation ambassador, Department of Commerce

ABILITY ENHANCEMENT COMPULSORY COURSE - III
INNOVATION AND ENTREPRENEURSHIP

Assessment Rubrics for 100 marks

S. No	Particulars	Marks
1	Self Analysis / Preparation of Self Identification Report / Case study presentation	20
2	Identification of Problem / Innovative practice/ Business plan report	20
3	Lean Canvas / Value Proposition Model / Prototype	20
4	VIVA VOCE	
	a. Novelty of Business Idea	20
	b. Commercial Scalability	10
	c. Pitching Presentation	10
	TOTAL	100

There will be no End Semester Examination for this Course. The subject teacher will make the assessment of students performance based on the above mentioned components and an internal VIVA VOCE will be conducted by the Institution Innovation Ambassadors of Institution Innovation Council, Ministry of Education. Marks will be awarded and submitted to CoE in the prescribed format specified by the Controller of the examination approved by the Head of respective Departments.

Semester III	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATEGORY	Hrs. / Week	CREDITS
22UCC3GEC1	OFFICE MANAGEMENT	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	Cognitive Level
CO1	List out the concepts of modern office management	K1, K2
CO 2	Explain how to maintain the office independently and effectively.	K2
CO3	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

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.	6	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 Equipments. Office forms – Design, Management and Control	6	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.	6	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 (O&M) – Need and objectives – Office Work – Work Simplification – Budgetary Control – organization for budgetary control – office budget – Store Management and Housekeeping.	6	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.	6	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
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Text Book

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

Reference Books

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

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.

Semester IV	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
22UCC4CC7	COST ACCOUNTING	CORE	5	5

Course Objectives

- To familiarize the students with the basic concepts of cost and various methods of cost Accounting.
- To make aware about cost structure and cost elements.
- To understand the classification of overheads and methods of absorption.

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 fundamentals of concept and elements of cost.	K1
CO2	Explain the cost control in the Manufacturing Sector.	K2
CO3	Identify the cost techniques and apply to the production of a company.	K3
CO4	Analyze the methods of costing for various Industries.	K4
CO5	Examine to prepare a statement of cost and estimate the profit of the company.	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	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	3	3	3	3	3	3	2

“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 – Evolution - Objectives – Elements of Cost Accounting – Financial Accounting Vs Cost Accounting - Cost Concepts – Classifications – Advantages – Demerits of cost accounting – Methods and techniques – Cost unit – Cost centre – Cost sheet – Tender and Quotation.	15	CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4
II	Material Cost – Techniques of Material Control – Level Setting - Purchase Procedures – Stores Procedure – Receipts and Issue of Materials – Stores organization and layout – Inventory Control – Levels of Stock, Perpetual Inventory, ABC Analysis, VED Analysis, EOQ – JIT Inventory System - Stores Ledger – Material Purchase and Storage Methods of Valuing Material issues: FIFO, LIFO, HIFO, Simple and Weighted average.	15	CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4
III	Methods and Measurement of Labour Turnover - Labour Cost – Time recording and Time Booking – Methods of Remuneration and Incentive Scheme – Overtime and Idle time – Causes and Remedies.	15	CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4
IV	Overheads - Concept – Collection and Classification of Overheads, Allocation, Apportionment of factory overheads – Primary – Secondary distribution – Repeated and Simultaneous Equation Method – Absorption – Machine Hour Rate - Recovery Rates – Over and Under Absorption – Activity Based Costing – Reconciliation of Cost and Financial Accounts.	15	CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4
V	Methods of Costing - Job Costing, Contract Costing – Cost Plus – Contracts – Process Costing (Normal Loss, Abnormal Loss and Gains) – Operating Costing – Service Costing – Transport Costing.	15	CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4
VI	Self-Study for Enrichment (Not to be included for External Examination) Steps in installing a Cost Accounting System Activity based Costing, Life Cycle Costing,		CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4

	Target Costing Lean Costing and Six Sigma.			
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Distribution of Marks: Theory 25% & Problem 75%

Text Books

1. Jain, Narang. (2018). *Cost Accounting*, Revised Edition. Kalyani Publications.
2. Reddy T.S, Hari Prasad Reddy. Y. (2020). *Cost Accounting*. Revised Edition. Margham Publications.
3. Arora.M.N. (2021). *Text book Cost Accounting: Principles and Practice*. Revised Edition. Vikas Publishing House.

Reference Books

1. Maheswari.S.N. (2017). *Cost Accounting*. Revised Edition. Sultan Chand & Sons.
2. Pillai, Bhagavathi. (2016). *Cost Accounting*. Revised Edition. Sultan Chand & Sons.
3. Khan.M.Y , Jain.P.K. (2017). *Cost Accounting*. Revised Edition. McGraw Hill Education.

Web Reference

1. <https://www.godigit.com/business-insurance/business-terms/life-cycle-costing> 3.
2. <https://www.goskills.com/Lean-Six-Sigma>
3. https://www.academia.edu/4265381/Cost_Accounting
4. https://www.icaai.org/post.html?post_id=17759
5. <https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-8-New.pdf>

Pedagogy

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

Course Designer

Dr. G.Kanagavalli

Semester IV	Internal Marks: 40		External Marks: 60	
COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
22UCC4CC1P	Database Management Systems (P)	CORE	5	5

Course Objective

- To provide in depth programming knowledge in MySQL

Course Outcomes and Cognitive Level Mapping

CO Number	CO Statements on the successful completion of the course, students will be able to	Cognitive Level
CO1	Recall DDL and DML Commands	K1
CO2	Apply Consistency Constrains on the table	K3
CO3	Compute Aggregate Functions	K2
CO4	Implement Logical and String Operations	K3
CO5	Execute Join Operations in SQL Queries	K5

Mapping of CO with PO and PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	3	2	1	1	3	3	2	3	2
CO2	3	2	3	2	1	3	2	2	3	3
CO3	3	3	3	2	2	3	3	2	3	2
CO4	3	2	3	2	2	3	3	2	3	2
CO5	3	3	3	2	2	3	3	2	2	3

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

List of Practical

1. Create a table and perform the following DDL operations
 - a) Set the primary key
 - b) Alter the structure of the table
 - c) Drop the table
2. Create a table and perform the following DML operations
 - a) Insert values
 - b) Update and Delete records based on constraints
 - c) Display values using various forms of select clause
3. Develop MySQL queries to implement the following Constraints on the table
 - a) Primary Key
 - b) Foreign Key
 - c) NOT NULL
4. Develop MySQL queries to implement the following Logical Operations
 - a) AND
 - b) OR
 - c) NOT
5. Develop MySQL queries to implement the Aggregate Functions
6. Develop MySQL queries to implement the String Operations using % and “_”
7. Develop MySQL queries to implement the SET Operations
8. Develop mysql queries to implement following join operations
 - a) Natural join
 - b) Inner join
 - c) Outer join
9. Develop MySQL queries to implement the following View Operations
 - a) Create View
 - b) Update View
 - c) Drop View

Web References

1. <https://dev.mysql.com/doc/mysql-tutorial-excerpt/8.0/en/examples.html>
2. <https://www.geeksforgeeks.org/mysql-common-mysql-queries/>

Pedagogy

Power Point Presentation, Demonstration, Discussion and Practical Sessions.

Course Designer

Dr. R. Brendha, Associate Professor, Department of Computer Applications.

Semester IV	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
22UCC4AC4	BUSINESS TOOLS FOR DECISION MAKING	ALLIED	4	3

Course Objectives

- To understand the basic concepts of statistics in relation to business environment.
- To compute measures of location of variation and its relative measures.
- To construct and interpret the index numbers.

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 basic concepts of business tools.	K1
CO2	Explain and apply the logic and methodology for calculation of various index numbers, time series, measure of central tendency and dispersion.	K2, K3
CO3	Examine the cause accruing when price level changes.	K3
CO4	Identify and analyze the linear relationship between the variables through correlation and regression.	K3, K4
CO5	Analyze the time series, price and quantity index numbers.	K4

Mapping of CO with PO and PSO

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

“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	Statistics: Meaning, Definition, Importance, Scope, Limitations and Distrust of statistics – Sampling – Meaning – Definition – Methods of Sampling – Collection of Data – Tabulation of Data – Diagrammatic And Graphic Representation Of Data	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
II	Measures of Central Tendency and Dispersion: Mean, Median, Mode, Quartiles. Standard Deviation and Co-efficient of variation - Skewness and Kurtosis.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
III	Correlation – Karl Pearson's Co-efficient of Correlation – Spearman's Rank Correlation of co-efficient – Regression – Properties of Regression co-efficient, Co-efficient of determination. \	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
IV	Index Numbers – Definition, Simple Index Number and Weighted Index Number: Laspeyres's, Paasche's, Fisher's, Marshal Edge-worth, Bowley's and Kelly's formula. Mathematical test of consistency: Time reversal test, Factor reversal test – Fixed index number – Chain index number – Cost of living index.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
V	Elements of Time Series – Secular trend: Method of Graphic, Semi-Averages, moving averages, least squares. Seasonal Fluctuations: Method of simple averages and moving averages	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
VI	Self-Study for Enrichment (Not to be included for External Examination) Sampling – Methods – Collection of data – Tabulation of data – Diagrammatic representation of Data.		CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4

Distribution of Marks: Theory 25% & Problem 75%

Text Books

1. Gupta S.P. (2022). *Statistical Methods*. 46th Edition, Sultan Chand & Sons.
2. Navanitham P A. (2022). *Business Statistics*. Reprint, Jai Publishers.
3. Vittal P.R. (2020). *Business Statistics*. Reprint, Margham Publications.

Reference Books

1. Gupta S.C. (2018). *Fundamentals of Statistics*. 7th Edition, Himalaya Publishing House.
2. Jani P.N. (2017). *Business Statistics Theory and Applications*, Reprint, PHI Pvt., Ltd.
3. Sharma J.K. (2018). *Business Statistics*. 5th Edition, Vikas Publishing House Pvt., Ltd.

Web Reference

1. <https://www.geeksforgeeks.org/introduction-of-statistics-and-its-types/>
2. <https://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one/11-correlation-and-regression>
3. <https://www.cuemath.com/data/probability/>
4. <https://www.tableau.com/learn/articles/time-series-analysis>
5. <https://www.geeksforgeeks.org/index-number-meaning-characteristics-uses-and-limitations/>

Pedagogy

Chalk and Talk, Powerpoint Presentation, Discussion, Assignment, Quiz and Seminar.

Course Designer

Ms. D. Indumathi.

Semester IV	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
22UCC4GEC2	E - BUSINESS	GENERIC ELECTIVE	2	2

Course Objectives

- To familiarize the students with digital platform and how e -business differs from traditional business in terms of business process and activities.
- To enable the students to learn online business strategy by adopting innovative information and communications.
- To ensure that the students get hands on experience to set up and promote a business online.

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 basic concept of E-business and their different element.	K1
CO2	Summarize the process of developing and implementing E – payments.	K2
CO3	Select appropriate business strategies for buyer or vendor.	K3
CO4	Analyze and apply different marketing technologies required for the successful management and administration of e- business in a global environment.	K3, K4
CO5	Analyze the issues surrounding privacy, security, taxation in the conduct of e- business activities.	K4

Mapping of CO with PO and PSO

COs/ PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	2	3	3	3	3	2	2
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	COs	COGNITIVE LEVEL
I	E - Commerce – Definition, history of E-commerce, types of E-commerce B to B. Comparison of traditional commerce and e-commerce, E-commerce business models – Major B to B, B to C model - Consumer-to-consumer (C2C), Consumer – to - Business (C2B) model, peer to-peer (P2P) model – Emerging trends – Advantages and Disadvantages of e-commerce - Web auctions - virtual communities - portals, e-business revenue models.	6	CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4
II	Security threats - An area view – Implementing E-commerce security – encryption – decryption, protecting client computers - E-Commerce communication channels and web server's encryption- SSL protocol – firewalls - Cryptography methods - VPNs, protecting - network policies and procedures.	6	CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4
III	E - Payment systems – An overview- B to C payments- B to B payments- Types of E - payments systems - digital cash - digital cash - digital wallets - smart cards and digital cheques - secure electronic transaction (SET) protocol.	6	CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4
IV	E - Commerce and marketing - B to B and B to C marketing and branding strategies in E-Marketing. Web transaction logs – cookies - shopping cart database - DBMS, SQL - data mining.	6	CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4
V	Legal aspects of E-Business - internet frauds – cyber laws. IT Act 2000 salient features.	6	CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4
VI	Self-Study for Enrichment (Not to be included for External Examination) Startups Meaning, definition and nature of E- start up. Challenges and steps of launching online business benefits limitations of online business. Meaning and benefits of		CO1, CO2, CO3,CO4, CO5	K1, K2, K3,K4

	E- procurement. Types and drivers of E-procurement. Components of e-procurement system - Implementation of e- procurement system - Reason behind the success of e- commerce companies.			
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Text Books

1. SIA Publishers. (2022). *E-Business*. Latest Edition. SIA Publishers & Distributors Pvt Ltd
2. Goldink. (2021). *E-Commerce Business through Social Media Marketing*. Latest Edition. Goldink Publishers LLC
3. Joseph.P.T.(2019). *E-Commerce: An Indian Perspective*. 6th edition. PHI Learning Pvt. Ltd.;

Reference Books

1. Dr. Krishna Gupta, Dr. Ruchir Saxena, Mahendra Singh Panwar. (2023). *E-Commerce Technologies (BCA-51T-108)*. Revised Edition. Neelkanth Publishers Private Limited
2. Datta.D.L, Dr Debnath. S. K. (2020). *E-Commerce & Business Communication*. Revised Edition. Tee Dee Publications
3. Matthew Scott. (2019). *Ecommerce*. Revised Edition. Platinum Press LLC.

Web Reference

- 1 [https://www.techtarget.com/searchcio/definition/e-commerce#:~:text=E%2Dcommerce%20\(electronic%20commerce\),or%20consumer%2Do%2Dbusiness.](https://www.techtarget.com/searchcio/definition/e-commerce#:~:text=E%2Dcommerce%20(electronic%20commerce),or%20consumer%2Do%2Dbusiness.)
- 2 <https://www.slideshare.net/dattatreyareddyperam/security-threats-in-ecommerce>
- 3 <https://www.slideshare.net/RiteshGoyal/electronic-payment-system>
- 4 <https://www.slideshare.net/sanamNayak/ecommerce-marketing-103851815>
- 5 <https://www.slideshare.net/ImmoBhm/legal-aspects-of-e-commerce-37347149>

Pedagogy

Lecture, Power Point Presentation, Assignment, Quiz, Seminar, Experience Discussion & Group Discussion.

Course Designer

Ms. Shilpa A. Talreja

Semester IV	Internal Marks: 40		External Marks: 60	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
22UCC4SEC1P	ACCOUNTING PACKAGE (P)	SKILL ENHANCEMENT	2	2

Course Objectives

- To understand the basic concepts of accounting.
- To enable the students to learn basic concepts of accounting packages.
- To access the applications of accounting by using Tally ERP 9.

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	Recall the basic concepts of manual accounting.	K1
CO2	Explain the procedure for creating a company.	K2
CO3	Apply the accounting procedure for grouping of accounts and ledger creation.	K3
CO4	Analyze the financial statement and reports.	K4
CO5	Assess the Estimate of inventory calculations.	K5

Mapping of CO with PO and PSO

COs/ PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	3	2	2	2	2	2
CO2	2	2	3	2	2	2	2	2	2	2
CO3	2	3	3	3	2	3	2	3	3	3
CO4	2	3	3	3	2	3	2	3	2	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	Computerized Accounting – Meaning and Features – Advantages and Disadvantages – Computerized Vs. Manual Accounting.	6	CO1,CO2, CO3,CO4, CO5	K1, K2, K3,K4,K5
II	Starting Tally – Gateway to Tally and exit from Tally- Company Creation in Tally, Saving the company profile - Alteration - Deletion of company, Selection of Company.	6	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
III	Configuration and Features of Group Creation - Multiple Group Creation - Ledger Creation - Multiple Ledger Creation - New Voucher Creation- Advance Ledger Creation.	6	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
IV	Creation of Accounts and inventory – Entering transactions in Vouchers – Types – Numbering– Deleting and Editing vouchers – Opening and closing balances.	6	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
V	Inventory - configuration and features Inventory info - Menu - Stock groups - Stock categories and Stock item - Unit of measurement - Bills of materials – Godowns - Batches - Expiry Inventory voucher types.	6	CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5
VI	Self-Study for Enrichment (Not to be included for External Examination) Hierarchy of account groups and ledgers, reserved account groups, account groups balance sheet.		CO1, CO2,CO3, CO4,CO5	K1, K2, K3,K4,K5

List of Practicals

1. Creation, alteration and deletion of companies.
2. Creation of user defined accounting groups.
3. Creation, alteration and deletion of ledger.
4. Creating of final accounts and balance sheet.
5. Voucher entries in double entry mode.

6. Creation, alteration and deletion of inventory masters.
7. Summary of inventory master.

Text Books

1. VishnuP.Singh. (2021). *Tally ERP 9 with GST*. Revised Edition. Sultan Chand & Sons.
2. Srinivasa vallabhan.V. (2020). *Computer Applications in business*. Revised Edition. Sultan Chand & Sons.
3. Mohan Kumar K, Rajkumar.S.(2019). *Computer applications in business*. Revised Edition. Tata McGraw Hill Education.

Reference Books

1. Parag Joshi. (2017). *Tally ERP 9 with GST*. Revised Edition. Dnyansankul Prakashan.
2. Nadhani.A.K. (2019). *Implementing Tally*, Revised Edition. BPB Publications.
3. Sanjay Satapathy. (2018). *Tally ERP 9 book*. Revised Edition. Advanced usages.

Web Reference

1. <https://gstcentre.in/gst-in-tally-erp-9.php#collapseOne>
2. <http://www.tallysolutions.com>
3. https://help.tallysolutions.com/docs/te9rel66/Job_Work/#gref
4. <https://www.tallyofficialbooks.com/>
5. <https://ncsmindia.com/wp-content/uploads/2012/04/TALLY-9.0-PDF.pdf>.

Pedagogy

Lecture, Power Point Presentation, Lab Demonstration, Group Discussion, Quiz, Assignment and Activity.

Course Designer

Dr.A.Vinodhini