



K.M.G. COLLEGE OF ARTS AND SCIENCE **(AUTONOMOUS)**

Approved by the Government of Tamil Nadu
Permanently Affiliated to Thiruvalluvar University, Vellore.
Recognized under Section 2(f) and 12(B) of the UGC Act 1956
Accredited by NAAC (2nd Cycle) with (CGPA of 3.24/4) 'A' Grade

P.G. DEPARTMENT OF COMMERCE (CA)

B.Com – COMPUTER APPLICATIONS

SYLLABUS **(CHOICE BASED CREDIT SYSTEM)**

Under

LEARNING OUTCOMES-BASED CURRICULUM
FRAMEWORK (LOCF)

(Effective for the Batch of Students Admitted from 2024-2025)

PREFACE

The curriculum of postgraduate commerce with computer applications has been designed to explain the concepts in various fields of finance, marketing, management, accounting, law, taxation, entrepreneurship, computer applications, Electronic commerce, web technology, digital marketing etc. The purpose of the outcome-based education is meant to provide an exposure to the fundamental aspects of commerce and business environment, keeping in mind the growing needs for higher education, employability, entrepreneurship and social responsibility. The periodical restructuring of the syllabi is carried out to fulfill the requirements of graduate attributes, qualification descriptors, programme learning outcomes and course outcomes. The outcome-based education enriches the curriculum to deliver the basic principles, synthetic strategies, mechanisms and application-oriented learning for the benefit of students. It also includes self-learning module, minor projects and industrial internship to enable students to get equipped for higher studies and employment. The programme also includes training to students for seminar presentation, preparation of internship reports, hands-on training in lab courses, skills to handle real business world situation, developing leadership qualities, organization and participation in the interdepartmental academic competitions. The elective papers provide a platform to strengthen the understanding of the core subjects. The outcome-based curriculum is intended to enrich the learning pedagogy to global standards. ICT enabled teaching-learning platforms are provided to students along with the interaction of international scientists. The seminars periodically delivered by industrialists, subject experts and academician would certainly help the students to update with latest technology/trends in different fields of commerce. The exposure to the industrial internship and MoUs with industries can open an avenue for a start-up and its progress would be followed regularly. The OBE based evaluation

methods will reflect the true cognitive levels of the students as the curriculum is designed with course outcomes and cognitive level correlations as per BLOOM's Taxonomy.

In pursuit of the Higher Education Department Policy Note 2022-23 Demand 20, Section 1.4, Tamil Nādu State Council for Higher Education took initiative to revamp the curriculum. On 27 July 2022, a meeting was convened by the Member-Secretary Dr. S. Krishnasamy enlightening the need of the hour to restructure the curriculum of both Undergraduate and Post-graduate programmes based on the speeches at the Tamil Nādu Legislative Assembly Budget meeting by the Honourable Higher Education Minister Dr K. Ponmudy and Honourable Finance Minister Dr. P. Thiagarajan. At present there are three different modes of imparting education in most of the educational institutions throughout the globe. Outcome Based Education, Problem Based Education, and Project Based Education.

Briefly, it is aimed to restructure the curriculum as student-oriented, skill-based, and institution industry- interaction curriculum with the various courses under "Outcome Based Education with Problem Based Courses, Project Based Courses, and Industry Aligned Programmes" having revised Bloom's Taxonomy for evaluating students skills. Three domains:

(i)Cognitive Domain

(Lower levels: K1: Remembering ; K2: Understanding ; K3: Applying; Higher levels: K4: Analysing ; K5: Evaluating; K6: Creating)

(ii) Affective Domain

(iii) Psychomotor Domain

ABOUT THE COLLEGE

The College was founded in the new millennium 2000 by the vision of late Shri.K.M.Govindarajan fondly known as Iyah, with a mission to offer higher education in the fields of Arts and Science to the needy and the poor middle class students of this area and make them fully employable and economically self reliant. With a humble beginning of launching an elementary school named Thiruvalluvar Elementary School in the year 1952, Iyah groomed it into a Higher Secondary School and later into a college. Education was his soul & breath. The college has grown into a full fledged educational hub offering 12 graduate programmes, 8 post graduate programmes, 5 M.Phil research programmes and 4 Ph.D programmes. The college has been accredited with A grade by NAAC in 2nd cycle and recognized under section 2(f) & 12(B) of the UGC act 1956. The College is permanently affiliated to Thiruvalluvar University. The College is an associate member of ICT Academy and registered member of NPTEL and Spoken Tutorials of IIT Bombay. The college is also a member of INFLIBNET and NDL.

VISION OF THE COLLEGE

Empower young men and women by educating them in the pursuit of excellence, character building and responsible citizen.

MISSION OF THE COLLEGE

Offer higher education in the fields of Arts, Science & Management to the needy and make them fully self-dependent.

QUALITY POLICY OF THE COLLEGE

KMG Students achieve the best learning results and personal growth with modern education that equip them for working life and a changing society to become deserving citizens.

ABOUT THE DEPARTMENT

The Department is an ever-green favourite of students in the blazing effulgence of job prospects. Among the seven staff members, three are Ph.D holders and four are M.Phil. Two of them have been qualified in SET. The department has programmes at UG and PG levels which are the foremost choice of vast majority of students.

The staff members are regularly presenting papers at several national seminars and conferences, symposia and workshops. Two staff members are recognized as Guide supervisors for Ph.D course and four research scholars are pursuing their research course in the department.

The department maintains its own library to focus students' studies and attention on learning more through book reading.

The year of establishment of various programmes of our department are as follows:

S.No	Courses	Establishment year
1	B.Com (Computer Applications)	2009
2	M.Com - (Computer Applications)	2017

VISION OF THE DEPARTMENT

To impart holistic and quality education in the field of Commerce with Computer Applications and develop a broad knowledge base in core managerial and computer skill with professional excellence and experience.

MISSION OF THE DEPARTMENT

- To provide in-depth knowledge in the course.
- To train and develop the students with the employable skills required for Commerce and IT sectors.
- To impart the ability to use the expertise in computing to meet the ever growing demands of the society.
- To provide technical education to the students through well-equipped Labs.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- 1. Professional Excellence:** Graduates will demonstrate competency and excellence in their chosen fields of study, applying theoretical knowledge to practical situations effectively.
- 2. Character Development:** Graduates will exhibit strong moral and ethical character, upholding values of integrity, honesty, and respect for others in both personal and professional endeavors.
- 3. Leadership and Citizenship:** Graduates will emerge as responsible leaders and active citizens, contributing positively to their communities and society at large through their actions and initiatives.
- 4. Continuous Learning:** Graduates will engage in lifelong learning and professional development activities, adapting to evolving technologies, methodologies, and societal needs.
- 5. Self-Dependency and Entrepreneurship:** Graduates will possess the skills and mindset necessary to be self-reliant and entrepreneurial, capable of creating opportunities for themselves and others through innovation and initiative.
- 6. Effective Communication and Collaboration:** Graduates will demonstrate proficiency in communication skills, both verbal and written, and exhibit the ability to collaborate effectively with diverse teams and stakeholders.
- 7. Global Perspective:** Graduates will have a broad understanding of global issues and perspectives, demonstrating cultural sensitivity and adaptability in multicultural environments.

PROGRAM OUTCOMES (POs)

On successful completion of the programme, the students will be able to:

POs	Graduate Attributes	Statements
PO1	Disciplinary Knowledge	Acquire detailed knowledge and expertise in all the disciplines of the subject.
PO2	Communication Skills	Ability to express thoughts and ideas effectively in writing, listening and confidently Communicate with others using appropriate media
PO3	Critical Thinking	Students will develop aptitude Integrate skills of analysis, critiquing, application and creativity.
PO4	Analytical Reasoning	Familiarize to evaluate the reliability and relevance of evidence, collect, analyze and interpret data.
PO5	Problem Solving	Capacity to extrapolate the learned competencies to solve different kinds of non-familiar problems.
PO6	Employability and Entrepreneurial Skill	Equip the skills in current trends and future expectations for placements and be efficient entrepreneurs by accelerating qualities to facilitate startups in the competitive environment.
PO7	Individual and Team Leadership Skill	Capability to lead themselves and the team to achieve organizational goals and contribute significantly to society.
PO8	Multicultural Competence	Possess knowledge of the values and beliefs of multiple cultures and a global perspective.
PO 9	Moral and Ethical awareness/reasoning	Ability to embrace moral/ethical values in conducting one's life.
PO10	Lifelong Learning	Identify the need for skills necessary to be successful in future at personal development and demands of work place.

PROGRAM SPECIFIC OUTCOMES (PSOs)

On successful completion of the B.Com CA, the students will be able to:

PSOs	Statements
PSO1	To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions.
PSO2	To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations.
PSO3	To produce employable in IT and IT enabled sectors with ethical and innovative professionalism to sustain in the dynamic business world.

Correlation Rubrics:

High	Moderate	Low	No Correlation
3	2	1	-

Mapping of PSOs with POs:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	3	3	3	3	3	3	2	2	2	3
PSO2	3	3	3	3	3	3	3	2	2	2
PSO3	3	3	3	3	3	3	2	2	3	3

K.M.G. COLLEGE OF ARTS AND SCIENCE

(AUTONOMOUS)

Subject and Credit System- B.Com., (Computer Applications)
(Effective for the Batch of Students Admitted from 2024-2025)

Semester	Part	Category	Course Code	Course Title	Ins.Hr s/ Week	Credit	Maximum Marks		
							Internal	External	Total
SEMESTER - I	I	Language	AULT10/ AULU10	General Tamil – I / Urdu - I	6	3	25	75	100
	II	English	AULE10	English – I	6	3	25	75	100
	III	Core – 1	AUCCP11	Financial Accounting I	5	5	25	75	100
			AUCCP12	Principles of Management	5	5	25	75	100
		Elective – I (Any one)	AUEPC13A	Programming in C	2	2	25	75	100
			AUEPC13A	Practical - Programming in C	2	1			
			AUEPC13B	Python Programming	2	2	25	75	100
	AUEPC13B	Practical - Python Programming	2	1					
	IV	SE C - 1	AUSCP 14	Business Organization	2	2	25	75	100
		Foundation Course	AUFCP 15	Fundamentals of Commerce	2	2	25	75	100
Semester Total					30	23			
SEMESTER - II	I	Language	AULT20 / AULU 20	General Tamil – II / Urdu - II	6	3	25	75	100
	II	English	AULE20	English – II	6	3	25	75	100
	III	Core - 3	AUCCP21	Financial Accounting II	5	5	25	75	100
			AUCCP22	Business Laws	5	5	25	75	100
		Elective-II (Any one)	AUECP23A	Office Automation	2	2	25	75	100
			AUEPCP23A	Practical - Office Automation	2	1			
			AUEPCP23B	Programming in C ++	2	2	25	75	100
	AUEPCP23B	Practical - Programming in C ++	2	1					
	IV	SEC - 2	AUSCP24	Industrial Laws	2	2	25	75	100
		SEC -3	AUSCP25	Advertisement	2	2	25	75	100
Semester Total					30	23			
SEMESTER - III	I	Language	AULT30 / AULU 30	General Tamil – III / Urdu - III	6	3	25	75	100
	II	English	AULE30	English – III	6	3	25	75	100
	III	Core - 5	AUCCP31	Corporate Accounting – I	5	5	25	75	100
			AUCCP32	Business Mathematics and statistics	5	5	25	75	100
		Elective-III (Choose any one)	AUECP33A	Programming in Java	2	2	25	75	100
			AUEPCP33A	Practical - Programming in Java	1	1			
			AUECP33B	Web technology (PHP)	2	2	25	75	100
	AUEPCP33B	Practical - Web technology (PHP)	1	1					
	IV	SEC - 4	AUSCP34	Service Marketing	1	1	25	75	100
		SEC - 5	AUSCP35	Everyday Banking	2	2	25	75	100
Compulsory		AUES30	Environmental Studies	2	2	25	75	100	
Semester Total					30	24			

Department of Commerce CA - Syllabus (Effect from 2024-2025)

Semester	Part	Category	Course Code	Course Title	Ins.Hr s/ Week	Credit	Maximum Marks			
							Internal	External	Total	
SEMESTER - IV	I	Language	AULT40 / AULU 40	General Tamil – IV / Urdu - IV	6	3	25	75	100	
	II	English	AULE40	English – IV	6	3	25	75	100	
	III	Core -7	AUCCP41	Corporate Accounting II	5	5	25	75	100	
		Core -8	AUCCP42	Company Law	5	5	25	75	100	
		Elective-IV (Choose any one)	AUECP43A	Relational Data base Management system	2	2	25	75	100	
	AUEPCP43A		Practical - Data base Management system	2	1					
	AUECP43B		Introduction to Data Science	4	3					
	IV	SEC -6	AUSCP44	Professional Skills for Corporate World	2	2	25	75	100	
		SEC -7	AUSPCP45	Practices in Commerce	2	2	25	75	100	
Semester Total					30	23				
SEMESTER - V	III	Core -9	AUCCP51	Cost Accounting – I	5	4	25	75	100	
		Core -10	AUCCP52	Banking Law & Practice	5	4	25	75	100	
		Core -11	AUCCP53	Income Tax Law & Practice I	5	4	25	75	100	
		Core Paper - 12	AUCPCP54	Project with viva voce	5	4	25	75	100	
		Elective-V (Choose any one)	AUECP55A	Financial Management	4	3	25	75	100	
			AUECP55B	Indirect Taxation						
		Elective-VI (Choose any one)	AUECP56A	Software Engineering	2	2	25	75	100	
			AUEPCP56A	Practical - Software Engineering UML	2	1				
	AUECP56B		Object oriented analysis and Design	2	2					
	IV	Compulsory	AUVE50	Value Education	2	2	25	75	100	
		Compulsory	AUICP57	Summer Internship / Industrial Training	-	2	100	-	100	
	Semester Total					30	26			
	SEMESTER - VI	III	Core – 13	AUCCP61	Cost Accounting II	6	4	25	75	100
Core – 14			AUCCP62	Management Accounting	6	4	25	75	100	
Core – 15			AUCCP63	Income Tax Law & Practice –II	6	4	25	75	100	
Elective-VII (Choose any one)			AUECP64A	Entrepreneurial Development	5	3	25	75	100	
			AUECP64B	Human Resource Management						
Elective-VIII (Choose any one)			AUEPCP65A	Practical - R Language	5	3	25	75	100	
		AUEPCP65B	Practical - Tally							
IV		Skill	AUPCCP66	General Awareness for Competitive Examination	2	2	25	75	100	
		Compulsory	AUEA60	Extension Activity	-	1	100	-	100	
Semester Total					30	21				

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Subject and Credit System- B.Com (CA)
(Effective for the Batch of Students Admitted from 2024-2025)

Consolidated Semester wise and Component wise Credit distribution

Parts	Semester-I	Semester-II	Semester-III	Semester-IV	Semester-V	Semester-VI	Total Credits
Part-I	03	03	03	03	-	-	12
Part-II	03	03	03	03	-	-	12
Part-III	13	13	13	13	22	18	92
Part-IV	04	04	05	04	04	3	24
Part-V	-	-	-	-	-	-	-
Total	23	23	24	23	26	21	140

*Part I, II and Part III components will be separately taken into account for CGPA calculation and classification for the under graduate programme and the other components. IV, V has to be completed during the duration of the programme as per the norms, to be eligible for obtaining the UG degree.

COURSE DESCRIPTORS

Title of the Course	FINANCIAL ACCOUNTING I	Hours/Week	05
Course Code	AUCCP11	Credits	05
Category	Core-1	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- 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.

UNITS	Contents	COs	Cognitive Levels
UNIT-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 – Need and Preparation.	CO1	K1 K2 K3
UNIT-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- Bank Reconciliation Statement.	CO1 CO2	K1 K2 K3 K4
UNIT-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.	CO3	K1 K2 K3 K4

UNIT-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.	CO4	K1 K2 K3
UNIT-V	Royalty and Insurance Claims Meaning – Minimum Rent – Short Working – (Excluding Recoupment of Short Working) – Lessor and Lessee – Sublease – Accounting Treatment. Insurance Claims –Calculation of Claim Amount-Average clause (Loss of Stock only)	CO5	K1 K2 K3 K4

THEORY – 20%, PROBLEMS – 80%

Recommended Text Books

1. T.S. Reddy & Murthy Financial Accounting, Margham Publications Chennai.

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.
6. S.N. Maheshwari, Financial Accounting, Vikas Publications, Noida.
7. Shukla Grewal and Gupta, “Advanced Accounts”, volume 1, S. Chand and Sons, New Delhi.
8. Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand, New Delhi.
9. R.L. Gupta and V.K. Gupta, “Financial Accounting”, Sultan Chand, New Delhi

Website and e-learning source

- 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>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Remember the concept of rectification of errors and Bank reconciliation statements	K1,K2,K3
CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns	K1,K2,K3,K4
CO3	Analyze the various methods of providing depreciation	K1,K2,K3,K4
CO4	Evaluate the methods of calculation of profit	K1,K2,K3
CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.	K1,K2,K3,K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	3	2	2	3	3	3	3	3
CO2	3	3	3	3	3	3	2	3	3	3	3	3	3
CO3	3	2	3	2	3	3	2	3	3	3	3	3	3
CO4	3	2	3	2	3	2	2	3	3	3	3	3	3
CO5	3	3	3	3	3	3	2	3	3	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	PRINCIPLES OF MANAGEMENT	Hours/Week	05
Course Code	AUCC12	Credits	05
Category	Core-II	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- 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

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction to Management Meaning- Definitions – Nature and Scope - Levels of Management – Importance - Management Vs. Administration – Management: Science or Art –Evolution of Management Thoughts – F. W. Taylor, Henry Fayol, Peter F. Drucker, Elton Mayo - Functions of Management - Managers – Qualification – Duties & Responsibilities.	CO1	K1 K2 K3
UNIT-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	CO1 CO2	K1 K2 K3 K4
UNIT-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.	CO3	K1 K2 K3 K5

UNIT-IV	<p>Staffing</p> <p>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].</p>	CO4	K1 K2 K3 K4 K5
UNIT-V	<p>Directing</p> <p>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.</p> <p>Co-ordination and Control</p> <p>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] - Trends and Challenges of Management.</p>	CO5	K1 K2 K3 K5

Recommended 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. H.Mintzberg - The Nature of Managerial Work, Harper & Row, New York.
5. Eccles, R. G. & Nohria, N. Beyond the Hype: Rediscovering the Essence of Management. Boston The Harvard Business School Press, India.

Website and e-learning source

1. <http://www.universityofcalicut.info/sy1/management>
2. <https://www.managementstudyguide.com/manpower-planning.htm>
3. <https://www.businessmanagementideas.com/notes/managementnotes/coordination/coordination /21392>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Demonstrate the importance of principles of management.	K1,K2,K3
CO2	Paraphrase the importance of planning and decision making in an organization.	K1,K2,K3,K4
CO3	Comprehend the concept of various authorizes and responsibilities of an organization.	K1,K2,K3,K5
CO4	Enumerate the various methods of Performance appraisal	K1,K2,K3,K4,K5
CO5	Demonstrate the notion of directing, co-coordination and control in the management.	K1,K2,K3,K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2	3	3	3	3	2	2	3
CO2	3	3	3	3	3	3	3	3	3	3	3	3	3
CO3	3	3	2	3	2	3	3	3	3	3	3	3	3
CO4	2	3	2	2	2	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	PROGRAMMING IN C	Hours/Week	02
Course Code	AUECP13A	Credits	02
Category	Elective-I	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- Describe the core syntax and semantics of C programming language.
- Discover the need for working with the strings and functions.
- Illustrate the process of structuring the data using matrix, struct
- Solve the Parameter Passing using Functions.
- Create a Pointer and Structures and Union programs.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction to C Language: C Language Introduction-Features of C Language-Benefits of C over other languages-Compilation of C Program-First Program in C-Pre-processor in C-Pre-processor directives	CO1	K1,K2
UNIT-II	Variables, Data Types & Operators: Variables and Keywords in C-Scope rules in C - Data Types in C-Operators & Its Types - Typecasting in C.	CO2	K1,K2,K3, K4
UNIT-III	Control Flow Statements: Decision Making Statements - Switch Statement in C-C Loops & Control Structure Practice problems- Continue Statement, Break Statement Array & String Handling in C:Arrays in C-Strings in C	CO2 CO3	K1,K2,K3, K4
UNIT-IV	Multidimensional Arrays in C - String functions in C- Practice problems Functions in C: Function Prototype - Parameter Passing Techniques in C- Storage Classes in C-Recursion Concept –Functions in C-Practice problems.	CO2 CO3 CO4	K1,K2,K3
UNIT-V	Pointers, Structures, and Unions: Pointers in C – Structures - Union - Enumeration (or enum) in C - Pointer vs Array in C – C application programs (Sorting, Matrix manipulations, student's mark list preparation)	CO5	K1,K2,K3 K4,K5,K6

Text Books:

1. E. Balaguruswamy, “Programming in ANSI C”, 8th Edition, 2019, McGraw Hill Education, ISBN:978-93-5316-513-0.
2. Pradip Dey, Manas Ghosh, “Programming in C”, 2nd Edition, 2018, Oxford University Press, ISBN: 978-01-9949-147-6.
3. Kernighan B.W and Dennis M. Ritchie, “The C Programming Language”, 2nd Edition, 2015, Pearson Education India, ISBN: 978-93-3254-944-9

Reference Books

1. Yashavant P. Kanetkar, “Let Us C”, 16th Edition, 2019, BPB Publications, ISBN: 978- 93-8728-449-4.
2. Jacqueline A Jones and Keith Harrow, “Problem Solving with C”, Pearson Education. ISBN: 978-93-325-3800-9.
3. Dr. Guruprasad Nagraj, “C Programming for Problem Solving”, Himalaya Publishing House. ISBN-978-93-5299-361-1.

Website and e-learning source

1. <http://elearning.vtu.ac.in/econtent/courses/video/BS/14CPL16.html>
2. <https://nptel.ac.in/courses/106/105/106105171>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Apply the concept of Control Structures to solve any given problem.	K1,K2
CO2	Apply the concept of single and multi-dimensional arrays to solve problems related to searching, sorting and matrix operations.	K1,K2,K3,K4
CO3	Apply the concept of Strings for writing programs related to character array.	K1,K2,K3,K4
CO4	Write programs using concept of user defined and recursive functions.	K1,K2,K3
CO5	Apply concept of structures to write programs.	K1,K2,K3K4,K5,K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	3	3	2	2	3	3	3	3
CO2	3	3	3	3	2	3	3	2	2	3	3	3	3
CO3	3	3	3	3	2	3	3	2	2	3	3	3	3
CO4	3	3	3	3	2	3	3	2	2	3	3	3	3
CO5	3	3	3	3	2	3	3	2	2	3	3	3	3

FIRST YEAR – SEMESTER – I

COURSE DESCRIPTORS

Title of the Course	Programming in C Lab	Hours/Week	02
Course Code	AUEPCP13A	Credits	01
Category	Elective-I	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Programming in C Lab

Learning Objectives: (for teachers: what they have to do in the class/lab/field)

- Understand problem statements and identify appropriate solutions.
- Demonstrate the use of IDE and C Compiler.
- Develop programs using C Programming Language.
- Explain about equations.
- Compare to the program grade wise using C Program.

List of Programs

1. Write a C program to find roots of a Quadratic equation.
2. Write a C program to find the total no. of digits and the sum of individual digits of a positive integer.
3. Write a C program to generate the Fibonacci sequence of first N numbers.
4. Write a C program to sum the series $S=1 - x + (x^2/2!) - (x^3/3!) + \dots - (x^n/n!)$
5. Write a C program to arrange the elements of an integer array using Bubble Sort algorithm.
6. Write a C program to input two matrices and perform matrix multiplication on them
7. Write a C program to check whether the given string is palindrome or not without using Library functions.
8. Write a C program to count the number of lines, words and characters in a given text.

9. Write a C program to generate Prime numbers in a given range using user defined function.
10. Write a C program to find factorial of a given number using recursive function.
11. Write a C program to maintain a record of n student details using an array of structures with four fields - Roll number, Name, Marks and Grade. Calculate the Grade according to the following conditions.

Marks Grade

≥ 80 A

≥ 60 B

≥ 50 C

≥ 40 D

< 40 E

Print the details of the student, given the student Roll number as input.

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.

Text Books:

1.E. Balaguruswamy, “Programming in ANSI C”, 8th Edition, 2019, McGraw Hill Education, ISBN:978-93-5316-513-0.

Reference Books:

1. Pradip Dey, Manas Ghosh, “Programming in C”, 2nd Edition, 2018, Oxford University Press, ISBN: 978-01-9949-147-6.
2. Kernighan B.W and Dennis M. Ritchie, “The C Programming Language”, 2nd Edition, 2015, Pearson Education India, ISBN: 978-93-3254-944-9.
3. Yashavant P. Kanetkar, “Let Us C”, 16th Edition, 2019, BPB Publications, ISBN: 978-93-8728-449-4

4. Jacqueline A Jones and Keith Harrow, “Problem Solving with C”, Pearson Education.
ISBN: 978-93-325-3800-9.
5. Dr. Guruprasad Nagraj, “C Programming for Problem Solving”, Himalaya Publishing House. ISBN-978-93-5299-361-1.

Weblinks and Video Lectures (e-Resources):

1. <http://elearning.vtu.ac.in/econtent/courses/video/BS/14CPL16.html>
2. <https://nptel.ac.in/courses/106/105/106105171/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Apply the concept of Control Structures to solve any given problem.	K1,k2,K3
CO2	Apply the concept of single and multi-dimensional arrays to solve problems related to searching, sorting and matrix operations.	K1,K2,K3,K4
CO3	Apply the concept of Strings for writing programs related to character array.	K1,K2,K3,K4
CO4	Write programs using concept of user defined and recursive functions.	K1,K2,K3,K4
CO5	Apply concept of structures to write programs.	K1,K2,K3,K4,K5,K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	3	3	2	2	2	3	2	3
CO2	3	3	3	2	3	3	3	2	2	2	3	2	3
CO3	3	3	3	2	3	3	3	2	2	2	3	2	3
CO4	3	3	3	2	3	3	3	2	2	2	3	2	3
CO5	3	3	3	2	3	3	3	2	2	2	3	2	3

COURSE DESCRIPTORS

Title of the Course	PYTHON PROGRAMMING	Hours/Week	02
Course Code	AUECP13B	Credits	02
Category	Elective-I	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- Describe the core syntax and semantics of Python programming language.
- Discover the need for working with the strings and functions.
- Illustrate the process of structuring the data using lists, dictionaries, tuples and sets.
- Understand the usage of packages and Dictionaries
- Compare to the Set Data type with Text Files.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction: Computer algorithms - Computer Hardware- Computer Software - Python programming language - Literals - Variables and Identifiers - Operators - Expressions and Data types, Input / output	CO1	K1,K2,K3
UNIT-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.	CO1 CO2	K1,K2,K3, K4
UNIT-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	CO2	K1,K2,K3, K4
UNIT-IV	Objects and their use: Software Objects - Turtle Graphics – Turtle attributes - Modular Design: Modules – Top - Down Design - Python Modules	CO3	K1,K2,K3
UNIT-V	Dictionaries and Sets: Dictionary type in Python - Set Data type. Text Files: Opening, reading and writing text files – Exception Handling	CO4	K1,K2,K3, K4

Text Books:

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, 1st 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

Website and e-learning source

1. https://onlinecourses.swayam2.ac.in/cec22_cs20/preview

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Develop and execute simple Python programs	K1,K2,K3
CO2	Write simple Python using conditionals and looping for solving problems	K1,K2,K3
CO3	Decompose a Python program into functions	K1,K2,K3,K4
CO4	Represent compound data using Python lists, tuples, dictionaries etc.,	K1,K2,K3,K4
CO5	Differentiation Dictionaries & Set	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	3	2	2	2	2	3	2	3
CO2	3	3	3	2	3	3	2	2	2	2	3	2	3
CO3	3	3	3	2	3	3	2	2	2	2	3	2	3
CO4	3	3	3	2	3	3	2	2	2	2	3	2	3
CO5	3	3	3	2	3	3	2	2	2	2	3	2	3

COURSE DESCRIPTORS

Title of the Course	PYTHON PROGRAMMING LAB	Hours/Week	02
Course Code	AUEPCP13B	Credits	01
Category	Elective-I	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Python Programming Lab

Learning Objectives: (for teachers: what they have to do in the class/lab/field)

- 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

List of Programs:

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


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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 Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description (for students: To know what they are going to learn)	COGNITIVE LEVELS
CO1	To understand the problem solving approaches.	K1,K2,K3
CO2	To learn the basic programming constructs in Python.	K1,K2,K3,K4
CO3	To practice various computing strategies for Python-based solutions to real world problems.	K1,K2,K3
CO4	To use Python data structures - lists, tuples, dictionaries.	K1,K2,K3,K4
CO5	Can able to develop simple projects based on Python.	K1,K2,K3,K4,k5,k6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	3	3	2	3	3	3	2	3
CO2	3	3	3	2	3	3	3	2	3	3	3	2	3
CO3	3	3	3	2	3	3	3	2	3	3	3	2	3
CO4	3	3	3	2	3	3	3	2	3	3	3	2	3
CO5	3	3	3	2	3	3	3	2	3	3	3	2	3

COURSE DESCRIPTORS

Title of the Course	BUSINESS ORGANISATION	Hours/Week	02
Course Code	AUSCP14	Credits	02
Category	Skilled Enhancement Course I	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- Understand business, profession, organization, social responsibilities, and business ethics.
- Explore business forms, distinguish public and private sectors.
- Comprehend industry location factors, analyze large-scale operation advantages.
- Familiarize with stock exchanges, understand business combinations.
- Understand trade associations and chambers of commerce in India.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Business - Meaning and types - Profession - meaning and importance of business Organization - Social Responsibilities of Business - Business Ethics.	CO1	K1 K2 K3
UNIT-II	Forms of Business organization - Sole trader - Partnership - Joint Hindu Family - Joint Stock Companies - Co-operative Societies - Public Utilities and Public Enterprises - Public Sector vs. Private Sector.	CO1 CO2	K1 K2 K3
UNIT-III	Location of industry - Factors influencing location - size of industry - optimum firm - advantages of large - scale of operation - limitation of small scale of operation - industrial estates - District Industries Centers.	CO3	K1 K2 K3
UNIT-IV	Stock Exchange - Function - Types - Working - Regulation of Stock Exchanges in India - Business Combination - Causes - Types - Effects of Combination in India.	CO4	K1 K2 K4
UNIT-V	Trade Association - Chamber of Commerce - Functions – Objectives - Working in India	CO5	K1 K2 K3

<p>Recommended Text Books</p> <p>1. C.B. Gupta , Business organization .2022. Sultan Chand & Sons, New Delhi.</p>
<p>Reference Books</p> <p>1. Prakash & Jagedesh, Business organization & Management, Kitab Mahal Publishers (1997). 2. Dinkar Pagare, Business Organisation and Management, Sultan Chand & Sons New Delhi. 3. Vasudevan & Radhasivam, Business Organization, S. Chand Publisher.</p>
<p>Website and e-learning source</p> <p>1. https://www.vedantu.com/commerce/forms-of-business-organizations 2. https://ncert.nic.in/textbook/pdf/kebs102.pdf 3. https://www.teachmint.com/tfile/studymaterial/b-com/BusinessOrganization / Chapter1/46db05e8-ee83-497e-aa56-573a1388f80e</p>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Differentiate business types, evaluate business organization's importance, analyze ethical considerations in business.	K1,K2,K3
CO2	Compare forms of business organizations; assess public and private sector advantages and disadvantages.	K1,K2,K3
CO3	Analyze industry location factors, evaluate advantages of large-scale operations, assess industrial estates and district industries centers.	K1,K2,K3
CO4	Explain stock exchange functions and regulation; analyze business combinations, causes, types, and effects.	K1,K2,K4
CO5	Discuss Trade Associations and chambers of commerce functions and objectives, evaluate their significance in promoting trade and commerce in India.	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	1	1	1	2	3	2	3	3	2	2	2
CO2	3	3	1	2	2	3	2	2	3	3	2	3	3
CO3	3	3	2	2	2	3	3	2	3	3	3	3	3
CO4	3	3	3	3	2	3	2	2	2	3	3	3	3
CO5	3	2	1	1	2	2	3	2	3	3	2	3	2

COURSE DESCRIPTORS

Title of the Course	FUNDAMENTALS OF COMMERCE	Hours/Week	02
Course Code	AUFCP15	Credits	02
Category	Foundation Course I	Year & Semester	I & I
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- Understand the meaning of Commerce and Industry
- Familiarize with Various Accounting methods.
- Explore about Market and Marketing
- Understand the various Acts prevailing in India
- Gain knowledge about Taxation and Filing of Income Tax.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Commerce - Introduction: Definition of Commerce - Importance – Meaning of Barter system - Business – Industry - Trade – Hindrances of Trade - Branches of Commerce.	CO1	K1 K2
UNIT-II	Accounting – Introduction: Bookkeeping – Meaning - Definition- Objectives - Accounting – Meaning Definition – objectives – Branches of Accounting - Financial Accounting – Cost Accounting - Management Accounting - its features and Differences.	CO2	K1 K2 K3 K4
UNIT-III	Introduction to Marketing: Definition of Market – Classification of Markets – Marketing – Meaning and Definition- Characteristics - Difference Between Market and Marketing – Approaches to Study of Marketing.	CO3	K1 K2 K3 K4
UNIT-IV	Introduction to Legal aspects of Business – Meaning of: Indian Contract Act 1872- Negotiable Instruments Act 1881 - Sale of Goods Act 1930- Partnership Act 1932 - Banking Regulation Act 1948 - Income Tax Act 1961 – Insolvency and Bankruptcy Code 2016 – GST Act 2017 - Anti Money Laundering Act 2020.	CO4	K1 K2 K3

UNIT-V	Tax Return Filing: Meaning and Types of Taxation – Registration of GST- Types of Returns - Filing of Income Tax Return- Filing of GST return - Slab rates.	CO5	K1 K2 K3 K5
Recommended Text Books			
<ol style="list-style-type: none"> 1. S.P.Jain and K.L Narang 2023, Financial Accounting-I , Kalyani Publishers, New Delhi 2. N.D .Kapoor, Mercantile Law, Sultan Chand & Sons, New Delhi. 3. Dr. L. Natarajan, Margham Publications, Chennai. 			
Reference Books			
<ol style="list-style-type: none"> 1. Hariharan N, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd.Chennai. 2. R.S.N. Pillai And Bagavathi, Business Law , S. Chand Publishing. 3. T. Srinivasan – Income Tax & Practice –Vijay Nicole Imprints Pvt. Limited,Chennai. 4. T.S. Reddy & Dr Y. Hariprasad Reddy, Management Accounting. Margham Publications, Chennai. 			
Website and e-learning source			
<ol style="list-style-type: none"> 1. https://www.incometaxmanagement.com/Direct-Taxes/AY-2021-22/assessment/1- assessment-of-an-individual.html 2. https://dea.gov.in/sites/default/files/moneylaunderingact.pdf 3. https://www.mca.gov.in/Ministry/pdf/TheInsolvencyandBankruptcyofIndia.pdf 			

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	To make the students familiar with the concepts of Commerce and Industry.	K1,K2
CO2	To encourage and motivate the students for the Accounting Education.	K1,K2,K3,K4
CO3	To Analyze the Various classification of Markets and Marketing.	K1,K2,K3,K4
CO4	To make the students aware towards the various commercial Laws.	K1,K2,K3
CO5	To aware the types of Taxation and slab rates.	K1,K2,K3,K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	1	1	1	2	2	2	3	3	3	2	2
CO2	3	3	3	3	2	3	2	2	3	3	3	3	3
CO3	3	3	2	2	2	3	3	3	3	3	3	3	3
CO4	3	2	2	1	3	3	2	2	3	3	3	3	3
CO5	3	2	3	2	3	3	2	1	3	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	FINANCIAL ACCOUNTING II	Hours/Week	05
Course Code	AUCCP21	Credits	05
Category	Core-III	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- The students are able to prepare different kinds of accounts such higher purchase and Installments System.
- To understand the allocation of expenses under departmental accounts
- To gain an understanding about partnership accounts relating to Admission and retirement
- To provide knowledge to the learners regarding Partnership Accounts relating to dissolution of firm
- To know the requirements of international accounting standards

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Hire Purchase and Installment System (15hr) Hire Purchase System – Accounting Treatment – Calculation of Interest - Default and Repossession - Hire Purchase Trading Account - Installment System - Calculation of Profit	CO1	K1 K2 K3 K4
UNIT-II	Branch and Departmental Accounts (15hr) Branch – Dependent Branches: Accounting Aspects – 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.	CO2	K1 K2 K3 K4
UNIT-III	Partnership Accounts – I (15hr) Partnership Accounts: – Admission of a Partner – Treatment of Goodwill - Calculation of Hidden Goodwill – Retirement of a Partner – Death of a Partner.	CO3	K1 K2 K3
UNIT-IV	Partnership Accounts – II (15hr) 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.	CO4	K1 K2 K3

UNIT-V	Accounting Standards for financial reporting (Theory only) (15hr) 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 IndAS and IFRS.	CO5	K1 K2 K3
THEORY – 20%, PROBLEMS – 80%.			
Recommended Text Books 1 T.S. Reddy& A. Murthy, Financial Accounting, Margam Publishers, Chennai.			
Reference Books 1 Dr. S.N. Maheswari: Financial Accounting, Vikas Publications, Noida. 2 Dr. Venkataraman& others (7 lecturers): Financial Accounting, VBH, Chennai. 3 Dr. Arulanandan and Raman: Advanced Accountancy, Himalaya publications, Mumbai. 4 Tulsian , Advanced Accounting, Tata MC. Graw hills, India. 5 Charumathi and Vinayagam, Financial Accounting, S.Chand and sons, NewDelhi. 6 Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand, New Delhi. 7 M.C. Shukla T.S. Grewal & S.C. Gupta, Advance Accounts, S Chand Publishing, New Delhi. 8 R.L. Gupta and V.K. Gupta, “Financial Accounting”, Sultan Chand, New Delhi. 9 S P Jain and K. L. Narang: Financial Accounting- I, Kalyani Publishers, New Delhi.			
Website and e-learning source 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			

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Evaluate the Hire purchase accounts and Instalment systems	K1,K2,K3,K4
CO2	Prepare Branch accounts and Departmental Accounts.	K1,K2,K3,K4
CO3	Understand the accounting treatment for admission and retirement in partnership.	K1,K2,K3
CO4	Know Settlement of accounts at the time of dissolution of a firm.	K1,K2,K3
CO5	Elaborate the role of IFRS.	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	3	3	3	2	3	3	3	1
CO2	3	3	3	3	2	3	3	3	2	3	3	3	2
CO3	3	3	3	2	2	3	3	3	2	3	3	2	1
CO4	3	3	3	2	2	3	3	3	2	3	3	2	1
CO5	3	3	3	3	2	3	3	3	2	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	BUSINESS LAWS	Hours/Week	05
Course Code	AUCCP22	Credits	05
Category	Core-IV	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

1. To know the nature and objectives of Mercantile law and the essentials of valid contract
2. To gain knowledge on performance contracts
3. To be acquainted with the rules of Indemnity and Guarantee
4. To make aware of the essentials of Bailment and pledge
5. To understand the provisions relating to sale of good.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Elements of Contract (15hr) Indian Contract Act 1872: Definition of Contract, Essentials of Valid Contract, Classification of Contract, Offer and Acceptance – Consideration – Capacity to Contract – Free Consent - Legality of Object – Contingent Contracts – Void Contract	CO1	K1,K2,K3
UNIT-II	Performance of Contract(15 hr) Meaning of Performance, Offer to Perform, Devolution of Joint liabilities & Rights, Time and Place of Performance, Reciprocal Promises, Assignment of Contracts - Remedies for Breach of contract - Termination and Discharge of Contract -Quasi Contract	CO2	K1,K2, K3
UNIT-III	Contract of Indemnity and Guarantee (15hr) Contract of Indemnity and Contract of Guarantee - Extent of Surety's Liability, Kinds of Guarantee, Rights of Surety, Discharge of Surety	CO3	K1,K2, K3, K4
UNIT-IV	Bailment and Pledge(15 hr) Bailment and Pledge – Bailment – Concept – Essentials -Classification of Bailment, Duties and Rights of Bailor and Bailee – Law of Pledge – Meaning – Essentials of Valid Pledge, Pledge and Lien, Rights of Pawner and Pawnee.	CO4	K1,K2, K3

UNIT-V	Sale of Goods Act 1930:(15 hr) Definition of Contract of Sale – Formation - Essentials of Contract of Sale - Conditions and Warranties - Transfer of Property – Contracts involving Sea Routes - Sale by Non owners - Rights and duties of buyer - Rights of an Unpaid Seller	CO3	K1,K2, K3,K4
Recommended Text Books			
1 N.D. Kapoor , Business Laws- Sultan Chand and Sons, New Delhi.			
Reference Books			
1 Preethi Agarwal, Business Law, CA foundation study material, Chennai. 2 Business Law by Saravanavel, Sumathi, Anu, Himalaya Publications, Mumbai. 3 Kavya and Vidhyasagar, Business Law, Nithya Publication, New Delhi. 4 D.Geet, Business Law Nirali Prakashan Publication, Pune. 5 M.R. Sreenivasan , Business Laws, Margham Publications, Chennai. 6 R.S.N. Pillai – Business Law, S.Chand, New Delhi. 7 M C Kuchhal& Vivek Kuchhal, Business law, S Chand Publishing, New Delhi 8 M.V. Dhandapani, Business Laws, Sultan Chand and Sons, New Delhi. 9 Shusma Aurora, Business Law, Taxmann, New Delhi.			
Website and e-learning source			
1 www.cramerz.comwww.digitalbusinesslawgroup.com 2 http://swcu.libguides.com/buslaw 3 http://libguides.slu.edu/businesslaw			

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Explain the Objectives and significance of Mercantile law	K1,K2,K3
CO2	Understand the clauses and exceptions of Indian Contract Act.	K1,K2, K3
CO3	Outline the contract of indemnity and guarantee	K1,K2, K3, K4
CO4	Familiar with the provision relating to Bailment and Pledge	K1,K2, K3
CO5	Explain the various provisions of Sale of Goods Act 1930	K1,K2, K3,K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	2	2	3	3	3	3	3	3	2	3	3	3	2
CO2	2	2	3	3	3	3	3	3	2	3	3	3	2
CO3	2	2	3	3	3	3	3	3	2	3	3	3	2
CO4	2	2	3	3	2	2	2	3	2	3	3	3	2
CO5	3	3	3	3	3	3	3	3	2	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	OFFICE AUTOMATION AND LAB	Hours/Week	02
Course Code	AUECP23A	Credits	02
Category	ELECTIVE– II	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

1. The major objective in introducing the Computer Skills course is to impart Training for students in Microsoft Office which has different components like MS Word, MS Excel and Power point.
2. The course is highly practice oriented rather than regular class room teaching.
3. To acquire knowledge on editor, spread sheet and presentation software

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introductory concepts: Hardware and Software - Memory unit – CPU-Input Devices: Key board, Mouse and Scanner. Output devices: Monitor, Printer. Introduction to Operating systems - Introduction to Programming Languages.	CO1	K1, K2,K3
UNIT-II	Word Processing: File menu operations - Editing text – tools, formatting, bullets and numbering - Spell Checker - Document formatting – Paragraph alignment, indentation, headers and Footers, printing – Preview, options, merge.	CO2	K1,K2,K3
UNIT-III	Spreadsheets: Excel – opening, entering text and data, formatting, navigating; Formulas – entering, handling and copying	CO3	K1,K2,K3
UNIT-IV	Charts – creating, formatting and printing, analysis tables, Preparation of financial statements, introduction to data analytics.	CO4	K1,K2,K3
UNIT-V	Power point: Introduction to Power point - Features – Understanding slide typecasting & viewing slides – creating slide Shows. Applying special object – including objects & pictures – Slide transition – Animation effects, audio inclusion, timers.	CO5	K1,K2,K3

Text Books:

Peter Norton, “Introduction to Computers” –Tata McGraw-Hill.

Reference Books

Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, "Microsoft 2003",
Tata McGraw- Hill.

Website and e-learning source

1. <http://elearning.vtu.ac.in/econtent/courses/video/BS/14CPL16.html>
2. <https://nptel.ac.in/courses/106/105/106105171>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the basics of computer systems and its components.	K1, K2,K3
CO2	Apply the basic concepts of a word processing package.	K1,K2,K3
CO3	Apply the basic concepts of electronic spreadsheet software.	K1,K2,K3
CO4	Apply the basic concepts of database management system.	K1,K2,K3
CO5	Create a presentation using PowerPoint tool.	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	-	-	-	-	-	-	2	3	2	2
CO2	3	3	3	3	2	2	2	-	-	3	3	2	1
CO3	3	3	3	3	-	-	-	-	-	3	3	2	2
CO4	3	3	2	2	-	-	-	-	-	2	3	2	2
CO5	3	3	3	3	3	2	1	1	2	3	3	1	1

COURSE DESCRIPTORS

Title of the Course	OFFICE AUTOMATION LAB	Hours/Week	02
Course Code	AUEPCP23A	Credits	01
Category	ELECTIVE II	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- The major objective in introducing the Computer Skills course is to impart training for students in Microsoft Office which has different components like MS Word, MS Excel and Power point.
- The course is highly practice oriented rather than regular class room teaching
- To acquire knowledge on editor, spread sheet and presentation software.

Office Automation Lab

Learning Objectives: (for teachers: what they have to do in the class/lab/field)

Office tools course would enable the students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools.

To familiarize the students in preparation of documents and presentations with office automation tools.

List of Programs

Word

Word Orientation : The instructor needs to give an overview of Microsoft word &

Importance of MS Word as word Processor, Details of the four tasks and features that would be covered Using word – Accessing, overview of toolbars, saving files, Using help and resources, rulers, format painter.

Task 1 : Using word to create project certificate. Features to be covered:-Formatting Fontsin word, Drop Cap in word, Applying Text effects, Using Character Spacing, Borders andColors, Inserting Header and Footer, Using Date and Time option in Word.

Task 2 : Creating project abstract Features to be covered:-Formatting Styles, Insertingtable, Bullets and Numbering, Changing Text Direction, Cell alignment, Footnote,Hyperlink, Symbols, Spell Check , Track Changes.

Task 3 : Creating a Newsletter : Features to be covered:- Table of Content, Newspapercolumns, Images from files and clipart, Drawing toolbar and Word Art, Formatting Images,Textboxes and ParagraphsExcel

Excel Orientation :The instructor needs to tell the importance of MS Excel as a Spreadsheet tool, give the details of the four tasks and features that would be covered Excel– Accessing, overview of toolbars, saving excel files, Using help and resources { Comdex Information Technology course tool kit Vikas }

Task1: Creating a Scheduler - Features to be covered: Gridlines, Format Cells, Summation, auto fill, Formatting Text

Task 2 : Calculations - Features to be covered:- Cell Referencing, Formulae in excel –average, standard deviation, Charts, Renaming and Inserting worksheets, Hyper linking, Count function, LOOKUP/VLOOKUP

Task 3 : Performance Analysis - Features to be covered:- Split cells, freeze panes, group and outline, Sorting, Boolean and logical operators, Conditional formatting

MS Power Point

Task1 : Students will be working on basic power point utilities and tools which help them create basic power point presentation. Topic covered includes :- PPT Orientation, Slide Layouts, Inserting Text, Word Art, Formatting Text, Bullets and Numbering, Auto Shapes, Lines and Arrows

Task 2: This session helps students in making their presentations interactive. Topics covered includes: Hyperlinks, Inserting –Images, Clip Art, Audio, Video, Objects, Tables and Charts

Task 3: Concentrating on the in and out of Microsoft power point. Helps them learn best practices in designing and preparing power point presentation. Topics covered includes :- Master Layouts (slide, template, and notes), Types of views (basic, presentation, slideslotter, notes etc), Inserting – Background, textures, Design Templates, Hidden slides. Autocontent wizard, Slide Transition, Custom Animation, Auto Rehearsing

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

- Comdex Information Technology course tool kit Vikas Gupta, WILEY Dreamtech, 2005 2.
- The Complete Computer upgrade and repair book, 3rd edition Cheryl A Schmidt, WILEY Dreamtech
- Introduction to Information Technology, ITL Education Solutions limited, Pearson Education PC Hardware and A + Handbook – Kate J. Chas PHI (Microsoft)

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the basics of computer systems and its components.	K1, K2,K3,K4
CO2	Apply the basic concepts of a word processing package.	K1,K2,K3,K4,K5,K6
CO3	Apply the basic concepts of electronic spreadsheet software.	K1,K2,K3,K4,K5
CO4	Apply the basic concepts of database management system.	K1,K2,K3,K4,K5
CO5	Create a presentation using PowerPoint tool.	K1,K2,K3, K4,K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	PROGRAMMING IN C++ LAB	Hours/Week	02
Course Code	AUEPCP23B	Credits	02
Category	ELECTIVE II	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To engender an appreciation for the need and characteristics of Object orientation.
- To impart knowledge of the C++ language grammar in order to design and implement programming solutions to simple problems by applying Object oriented thinking.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Object Oriented Programming Concepts: Complexity in software - The need for object-orientation – Abstraction – Encapsulation – Modularity – Hierarchy. Basic Elements of C++: Classes – Objects – Data members and member functions – private and public access specifies – Static members - Constructors – Singleton class Destructors	CO1	K1,K2,K3
UNIT-II	Friend Functions and Friend Classes - Array of objects – Pointer To objects - this pointer – References – Dynamic memory allocation - Namespaces. Function Overloading: Overloading a function - Default Arguments – Overloading Constructors. Operator Overloading: Overloading an operator as a memberfunction – Overloading an operator as a friend function	CO2	K1,K2,K3, K4
UNIT-III	Overloading the operators [], (), -> and comma operators Conversion Functions. Inheritance: Types of inheritance – protected access specified –Virtual Base Class – Base class and derived class constructors. Run-time Polymorphism: VirtualFunctions	CO3	K1,K2,K3, K4
UNIT-IV	Function overriding - Pure virtual function – Abstract base class. Templates: Function templates – Overloading a function template – Class templates.	CO4	K1,K2,K3, K4
UNIT-V	Exception Handling: Exceptions – try, catch, throw – Ret rowing an exception – Restricting exceptions - Handling exceptions in derived classes - terminate(), abort(), unexpected(), set_terminate(). I/O Streams: Formatted I/O with ios class functions - Manipulators – Creating own manipulator – Overloading << and >> operators.	CO5	K1,K2,K3, K4

Recommended Text Books

1. Herbert Schildt, C++ - The Complete Reference, Third Edition, TMH, 1999.
2. Grady Booch, Object Oriented Analysis and Design, Pearson Education, 2008. (For Unit I)

Reference Books

1. Bjarne Stroustrup, The C++ Programming Language, Addison Wesley, 2000.
2. J. P. Cohoon and J. W. Davidson, C++ Program Design – An Introduction to Programming and Object-Oriented Design, Second Edition, McGraw Hill, 1999.
3. C. J. Lippman, C++ Primer, Third Edition, Addison Wesley, 2000.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Explain the various basic concepts of Object-orientation.	K1,K2,K3
CO2	Write programs to implement static binding	K1,K2,K3,K4
CO3	Write programs to implement inheritance and dynamic binding	K1,K2,K3,K4
CO4	Write programs to exception handling and learn how to use STL class library.	K1,K2,K3,K4
CO5	Write programs implementing File and Stream I/O.	K1,K2,K3,K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	2	-	-	-	-	-	-	3	3	1	-
CO2	3	3	3	2	2	-	-	-	-	3	3	2	1
CO3	3	3	2	2	2	-	-	-	-	3	2	2	2
CO4	3	3	3	2	2	-	-	-	-	3	3	1	1
CO5	3	3	2	2	2	-	-	-	-	3	2	2	1

Learning Objectives: (for teachers:

What they have to do in the class/lab/field) Design classes for the given problems.

- Write programs in C++.
- Code, debug and execute a C++ program to solve the given problems using an IDE.

Course Outcomes: (for students: To know what they are going to learn)

CO1: Design and create classes.Implement Stream I/O as appropriate.

CO2: Design appropriate data members and member functions.

CO3: Implement functions, friend functions, static members, constructors and compile-time polymorphism. CO4:

Implement inheritance, run-time polymorphism and destructors.

CO5: Implement templates and exceptions. Use STL class library.Implement File I/O.

Object Oriented Programming with C++**List of programs**

1. Write a class to represent a complex number which has member functions to do the following
 - a. Set and show the value of the complex number
 - b. Add, subtract and multiply two complex numbers
 - c. Multiplying the complex number with a scalar value

2. Write a Point class that represents a 2-d point in a plane. Write member functions to
 - a. Set and show the value of a point.
 - b. Find the distance between two points.
 - c. Check whether two points are equal or not

3. . Design and implement a class to represent a Solid object.
 - a. Apart from data members to represent dimensions, use a data member to specify the type of solid.
 - b. Use functions to calculate volume and surface area for different solids.

5. Design a class representing time in hh:mm:ss. Write functions to
 - a. Set and show the time
 - b. Find the difference between two time objects
 - c. Adding a given duration to a time d. Conversion of the time object to seconds.

6. Design a 3x3 matrix class and demonstrate the following:
 - a. Addition and multiplication of two matrices using operator overloading.
 - b. Maintaining a count of the number of matrix object created.

7. Design a class called cString to represent a string data type. Create a data member in the class to represent a string using an array of size 100. Write the following functionality as member functions:

- a. Copy Constructor
 - b. Concatenate two strings
 - c. Find the length of the string
 - d. Reversing a string
 - e. Comparing two strings
8. Design a class called cString to represent a string data type. Create a data member in the class to represent a string whose size is dynamically allocated. Write the following as member functions:
- a. Copy Constructor
 - b. Destructor
 - c. Concatenate two strings
 - d. Find the length of the string
 - e. Reversing a string
 - f. Comparing two strings.

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. Herbert Schildt, C++ - The Complete Reference, Third Edition, TMH, 1999.
2. Grady Booch, Object Oriented Analysis and Design, Pearson Education, 2008. (For Unit I)

Reference Books

1. Bjarne Stroustrup, The C++ Programming Language, Addison Wesley, 2000.
2. J. P. Cohoon and J. W. Davidson, C++ Program Design – An Introduction to Programming and Object-Oriented Design, Second Edition, McGraw Hill, 1999. C. J. Lippman, C++ Primer, Third Edition, Addison Wesley, 2000.

COURSE DESCRIPTORS

Title of the Course	INDUSTRIAL LAWS	Hours/Week	02
Course Code	AUSCP24	Credits	02
Category	SKILL ENHANCEMENT– II	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To Understand and apply the concept of Factories Act
- To capable students to comprehend the legal framework governing Industrial Law toSettle industrial disputes.
- To expose students to the principles relating to health and safety laws in theWorkplace.
- To explain the relevant laws governing ESI Act 1948 and EPF Act 1952.
- To know the development and the judicial setup of Payment of Bonus Act.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Factories Act 1948: (6hr) Definitions – Health – Safety – Welfare – Working Hours of Adults – Employment of Women – Employment of Young Persons – Leave with Wages.	CO1	K1,K2,K3
UNIT-II	Industrial Disputes Act, 1947: (6hr) Definition, Authorities, Awards, Settlements, Strikes Lockouts, LayOffs, Retrenchment and Closure.	CO2	K1,K2,K3
UNIT-III	The Workmen’s Compensation Act: (6hr) Nature and Scope - Definitions – Workmen’s Compensations – Employer’s Liability - Meaning of Accident Compensation Permanent -Partial and Temporary - Disablement - Compensation of Half Month Payment (Table NotNecessary).	CO3	K1,K2,K3, K4
UNIT-IV	Employees State Insurance Act 194: (6hr) Objects-definitions - ESI Corporation, functions - contribution and recovery benefits. Employees Provident Fund and Miscellaneous Provision Act, 1952 Objects-Definition - provident fund schemes contribution and recovery.	CO4	K1,K2,K3, K4
UNIT-V	The Payment of Bonus Act 1965: (6hr) Object – Application - Definitions - Methods of Computing Gross Profits - Payment of Bonus - Importance.	CO5	K1,K2,K3, K4,K5

Recommended Text Books

1. N.D.Kapoor – Industrial Laws, Sultan Chand & Sons, New Delhi.
2. P.C.Tripathi - Industrial Laws, Sultan Chand & Sons, New Delhi

Reference Books

1. Dr.M.R.Sreenivasan & C.D.Balaji - Industrial Laws & Public Relations, Margham Publications, Chennai.
2. B.Nandha Kumar, Industrial Laws, Vijay Nichole Prints, Chennai.
3. "Industrial Relations and Labour Laws" - S C Srivastava -Vikas Publishing
4. "Industrial Relations and Labour Laws" - Piyali Ghosh and Shefali Nandan Tata McGrawHill India

Website and e-learning source

1. <https://www.icsi.edu/media/webmodules/publications/7.%20Industrial,%20Labour%20and%20General%20Laws.pdf>
2. https://www.mlsu.ac.in/econtents/1185_Industrial%20Relations%20and%20Labour%20Laws.pdf
3. <https://sbs.ac.in/wp-content/uploads/2021/02/BBA-5th-IRLL-Complete-Notes updated1.pdf>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Remember and recall the various concepts of Factories act 1948.	K1,K2,K3
CO2	Demonstrate the provisions and concepts of Industrial Disputes Act, 1947.	K1,K2,K3
CO3	Analyse the various measures and policies in The Workmen's Compensation Act.	K1,K2,K3,K4
CO4	Examine the different aspects of ESI and EPF Act.	K1,K2,K3,K4
CO5	Critically evaluate the Case studies relating to Bonus Act.	K1,K2,K3,K4,K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	2	2	2	2	3	3	3	2
CO2	3	3	3	3	2	2	2	2	2	3	3	3	2
CO3	3	3	3	3	2	2	2	2	2	3	3	3	2
CO4	3	3	3	3	2	2	2	2	2	3	3	3	2
CO5	3	3	3	3	2	2	2	2	2	3	3	3	2

COURSE DESCRIPTORS

Title of the Course	ADVERTISEMENT	Hours/Week	02
Course Code	AUSCP25	Credits	02
Category	Skill Enhancement – III	Year & Semester	I & II
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To understand the meaning, objectives, and scope of Advertising, as well as the benefits and elements of Advertising.
- To explore the features and types of Advertising Agencies, understand the criteria for selecting an Agency, and learn how to maintain a Client-Agency relationship
- To examine the ethical and social issues in Advertising, and understand the positive and negative influences of Advertising on Indian values and culture
- To understand the communication process and explore the role of Advertising in developing brand image and brand equity, and learn strategies for managing brand crises
- To learn copy writing essentials, copy elements and types, layout principles, execution styles and pre-testing and post-testing methods in Advertising

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction: (6hr) Advertising meaning - Definition – objectives – scope - benefits – Elements - Media in Advertising.	CO1	K1,K2,K3
UNIT -II	Advertising Agency: (6hr) Advertising agency Features - Types of Advertising Agencies - Agency selection criteria - Maintaining Agency client- relationship.	CO2	K1,K2,K3
UNIT-III	Social And Economic Aspects of Advertising:(6hr) Social aspects: Ethical and social issues in Advertising, positive and negative influence of Advertising on Indian values and culture. Economic aspect: Effect of Advertising on consumer demand, monopoly and competition, price.	CO3	K1,K2,K3
UNIT-IV	Brand Building: (6hr) The communication process-AIDA Model, role of advertising in developing brand image and brand equity, and managing brand crises.	CO4	K1,K2,K3
UNIT-V	Fundamentals of Creativity in Advertising: (6hr) Essentials of copywriting, copy - elements – types –layout – principles execution styles - Pretesting and post testing of Advertisements - methods and objectives.	CO5	K1,K2,K3

Recommended Text Books

- Advertising Principles and Practice by Ruchi Gupta-, S.Chand Publishing. New Delhi.

Reference Books

1. Rathor, B.S.-Advertising management-Himalaya Publishing House.
2. Myers-Advertising management-PHI Norms-Advertising-PHI.
3. Sontakki. C.N, Advertising, Kalyani Publishers, Ludhiana.
4. Brand Positioning-Strategies for competitive Advantage by Subroto Sengupta-TataMcGraw Hill Publication.

Website and e-learning source

1. https://archive.mu.ac.in/myweb_test/sybcom-avtg-eng.pdf
2. <https://uascku.ac.in/wp-content/uploads/2020/04/Advertising-B.Com.-VISemester-UnitWise-Notes.pdf>
3. <http://osou.ac.in/eresources/DJMC-06-BLOCK-02.pdf>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Identify media elements used in advertising.	K1,K2,K3
CO2	Demonstrate effective client-agency relationship management.	K1,K2,K3
CO3	Evaluate the impact of advertising on Indian values and culture.	K1,K2,K3
CO4	Analyze advertising's role in brand building and Managing brand crises.	K1,K2,K3
CO5	Utilize layout principles and execution styles post-testing of advertisements.	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	3	3	3	2	3	3	3	2
CO2	3	3	3	3	2	3	3	3	2	3	3	3	2
CO3	3	3	3	3	2	3	3	3	2	3	3	3	2
CO4	3	3	3	3	2	3	3	3	2	3	3	3	2
CO5	3	3	3	3	2	3	3	3	2	3	3	3	2

COURSE DESCRIPTORS

Title of the Course	Corporate Accounting I	Hours/Week	05
Course Code	AUCCP31	Credits	05
Category	Core-5	Year & Semester	II & III
Prerequisites	Higher Secondary Commerce/Computer Applications	Regulation	2024

Objectives of the course:

- To understand about the pro-rata allotment and Underwriting of Shares
- To know the provisions of companies Act regarding Issue and Redemption of Preference shares and debentures
- To learn the form and contents of financial statements as per Schedule III of Companies Act 2013
- To examine the various methods of valuation of Goodwill and shares
- To identify the Significance of International financial reporting standard (IFRS)

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Issue of Shares Issue of Shares – Premium - Discount - Forfeiture - Reissue – Prorata Allotment Issue of Rights and Bonus Shares - Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting.	CO1	K1 K2 K3
UNIT-II	Issue & Redemption of Preference Shares & Debentures Redemption of Preference Shares–Provisions of Companies Act– Capital Redemption Reserve – Minimum Fresh Issue – Redemption at Par, Premium and Discount. Debentures: Issue and Redemption – Meaning – Methods – In-One lot–in Installment – Purchase in the Open Market includes Ex Interest and Cum Interest - Sinking Fund Investment Method	CO2	K1 K2 K3 K4

UNIT-III	Final Accounts Introduction – Final Accounts – Form and Contents of Financial Statements as Per Schedule III of Companies Act 2013 – Part I Form of Balance Sheet – Part II Form of Statement of Profit and Loss – Ascertaining Profit for Managerial Remuneration.	CO3	K1 K2 K3
UNIT-IV	Valuation of Goodwill & Shares Valuation of Goodwill – Meaning – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalization Method. Valuation of Shares – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods.	CO4	K1 K2 K3 K4
UNIT-V	Indian Accounting Standards International Financial Reporting Standard (IFRS)–Meaning and its Applicability in India - Indian Accounting Standards – Meaning – Objectives – Significance – Procedures for Formulation of Standards – Ind AS – 1 Presentation of Financial Statement, Ind AS – 2 Valuation of Inventories, Ind AS – 7 Cash Flow Statement, Ind AS – 8 Accounting Policies, Changes in Accounting Estimate and Errors, Ind AS – 16 – Property, Plant & Equipment, Ind AS 38 – Intangible Assets Ind AS – 103, Business Combinations Ind AS 110, Consolidated Financial Statement. (Theory Only)	CO5	K1 K2 K3
	Theory 20%; Problems 80%		

Recommended Text Books

1. S.P. Jain and N.L. Narang, Advanced Accounting Vol I, Kalyani Publication, New Delhi.
2. R.L. Gupta and M. Radha swamy, Advanced Accounts Vol I, Sultan Chand, New Delhi.
3. Broman, Corporate Accounting, Taxmann, New Delhi.
4. Shukla, Grewal and Gupta- Advanced Accounts Vol I, S.Chand, New Delhi.
M.C.Shukla, Advanced accounting Vol I, S.Chand, New Delhi

Reference Books

1. T.S. Reddy, A. Murthy – Corporate Accounting- Margham Publication, Chennai.
2. D.S.Rawat &Nozer Shroff, Students Guide To Accounting Standards ,Taxmann, New Delhi
3. Prof. Mukeshbramhbutt, Devi, Corporate Accounting I, Ahilya Publication, Madhya Pradesh
4. Anil Kumar, Rajesh kumar, Corporate accounting I, Himalaya Publishing house, Mumbai.
5. Prasanth Athma, Corporate Accounting I, Himalaya Publishing house

Website and e-learning source:

- <https://www.tickertape.in/blog/issue-of-shares/>
- <https://www.taxmann.com/bookstore/bookshop/bookfiles/chapter12valuationofgoodwillandshares.pdf>
- <https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accountingstandards.html>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites	K1, K2, K3
CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures	K1, K2, K3,,K4
CO3	Construct Financial Statements applying relevant accounting treatments	K1, K2, K3
CO4	Compute the value of goodwill and shares under different methods and assess its applicability	K1, K2, K3, K4
CO5	Construct Financial Statements applying relevant accounting treatments	K1, K2, K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2	3	3	1	1	2	2	3
CO2	3	3	3	3	3	3	3	3	1	1	3	3	3
CO3	3	3	2	3	2	3	3	3	1	1	3	2	3
CO4	2	3	2	2	2	3	3	3	1	1	3	3	3
CO5	3	3	3	3	3	3	3	3	1	1	3	3	3

COURSE DESCRIPTORS

Title of the Course	Business Mathematics & Statistics	Hours/Week	05
Course Code	AUCCP32	Credits	05
Category	Core-6	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To impart knowledge on the basics of ratio, proportion, variations, simple and compound interest and arithmetic, geometric and harmonic progressions.
- To familiarize with the measures of central tendency
- To learn about variations
- To conceptualize with correlation coefficient
- To gain knowledge on time series analysis

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Business Mathematics – Ratios Ratio, Proportion and Variations. Banker’s Discount – Simple and Compound Interest - Arithmetic, Geometric and Harmonic Progressions. Annuity - Meaning – Types of Annuity Applications.	CO1	K1 K2 K3
UNIT-II	Business Statistics - Measures of Central Tendency Arithmetic Mean, Geometric Mean - Harmonic Mean - Mode and Median – Quartiles – Deciles - Percentiles.	CO2	K1 K2 K3

UNIT-III	Measures of Variation Range - Quartile Deviation and Mean Deviation - Variance and Standard Deviation & Coefficient.	CO3	K1 K2 K3
UNIT-IV	Correlation and Regression Correlation - Karl Pearson's Coefficient of Correlation – Spearman's Rank Correlation – Regression Lines and Coefficients.	CO4	K1 K2 K3
UNIT-V	Time Series Analysis and Index Numbers Time Series Analysis: Secular Trend – Seasonal Variation – Cyclical variations - Index Numbers – Aggregative and Relative Index – Chain and Fixed Index –Wholesale Index – Cost of Living Index.	CO5	K1 K2 K3

THEORY – 20%, PROBLEMS – 80%

Recommended Text Books

1. S.P.Gupta, Sultan Chand and Sons, New Delhi
2. Dr. B.N. Gupta, Business Mathematics & Statistics, Shashibhawan publishing house, Chennai

Reference Books

1. Asim Kumar Manna, Business Mathematics & Statistics, McGraw hill education, Noida
2. A.V. Rayarikar and Dr. P.G. Dixit, Business Mathematics & Statistics, Nirali Prakashan Publishing, Pune
3. Dr.S. Sachdeva, Business Mathematics & Statistics, Lakshmi NarainAgarwal, Agra
4. P.R. Vittal, Business Mathematics & Statistics, Margham Publications, ChennaiJ.K. Sharma, Fundamentals of business statistics, Vikas publishing, Noida
5. Peter Waxman, Business Mathematics & Statistics, Prentice Hall, New York
6. Andre Francis, Business Mathematics & Statistics, Cengage Learning EMEA, Andover
7. Aggarwal B M, Business Mathematics & Statistics, Ane Book Pvt. Ltd., New Delhi
8. R.S. Bhardwaj, Business Mathematics & Statistics, Excel Books Publisher, New Delhi

Website and e-learning source:

<https://www.britannica.com/biography/Henry-Briggs>

<https://corporatefinanceinstitute.com/resources/data-science/central-tendency/>

<https://www.expressanalytics.com/blog/time-series-analysis/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Learn the basics of ratio, proportion, Familiarize with calculations of simple & compound interest and arithmetic, geometric and harmonic progressions	K1,K2,K3
CO2	Determine the various measures of central tendency	K1,K2,K3
CO3	Determine the various measures of variation and standard deviation & coefficient.	K1,K2,K3
CO4	Calculate the correlation and regression and its coefficient.	K1,K2,K3
CO5	Assess problems on time series analysis and index numbers	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	1	1	1	3	2	2	1	1	3	3	1
CO2	3	3	1	1	1	3	1	3	1	1	3	3	3
CO3	3	3	1	2	1	3	1	3	1	1	3	1	3
CO4	3	3	3	2	3	2	2	3	1	1	2	3	3
CO5	3	3	2	3	3	3	2	3	1	1	3	3	3

COURSE DESCRIPTORS

Title of the Course	Programming In Java	Hours/Week	02
Course Code	AUECP33A	Credits	02
Category	Elective - III	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To provide fundamental knowledge of object-oriented programming.
- To Implement the basic object oriented concepts of Core Java
- To enable the students to use interfaces and packages
- To Implement multithreading and exception handling in Core Java
- To enable AWT controls, Event Handling and Swing for GUI.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction: Review of Object-Oriented concepts - Java buzzwords (Platform independence, Portability, Threads)- JVM architecture – Java Program structure - –Java main method - Java Console output(System out) - simple java program - Data types - Variables - type conversion and casting- Java Console input: Buffered input - operators - control statements - Static Data - Static Method - String and String Buffer Classes	CO1	K1,K2,K3 K4
UNIT-II	Java user defined Classes and Objects – Arrays – constructors - Inheritance: Basic concepts - Types of inheritance - Member access rules - Usage of this and Super keyword - Method Overloading - Method overriding - Abstract classes - Dynamic method dispatch - Usage of final keyword	CO2	K1,K2,K3

UNIT-III	Packages: Definition - Access Protection - Importing Packages - Interfaces: Definition – Implementation – Extending Interfaces Exception Handling: try – catch - throw - throws – finally – Built-in exceptions - Creating own Exception classes - garbage collection, finalize.	CO3	K1,K2,K3, K4,K5
UNIT-IV	Multithreaded Programming: Thread Class - Runnable interface – Synchronization – Using synchronized methods – Using synchronized statement - Inter Thread Communication – Deadlock.	CO4	K1,K2,K3
UNIT-V	Adapter classes - Inner classes -Java Util Package / Collections Framework: Collection & Iterator Interface- Enumeration- List and Array List- Vector- Comparator	CO5	K1,K2,K3, K4,K5,K6

Recommended Text Books

1. Herbert Schildt, The Complete Reference, Tata McGraw Hill, New Delhi, 7th Edition, 2010.
2. Gary Cornell, Core Java 2 Volume I – Fundamentals, Addison Wesley, 1999.

Reference Books

Head First Java, O’Rielly Publications, Y. Daniel Liang, Introduction to Java Programming, 7th Edition, Pearson Education India, 2010.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the basic Object-oriented concepts & Implement the basic constructs of Core Java	K1,K2,K3K4
CO2	Implementing the basic object oriented concepts of Core Java	K1,K2,K3
CO3	Implement packages, interfaces in Core Java	K1,K2,K3,K4,K5
CO4	Implement multithreading and exception handling in Core Java	K1,K2,K3
CO5	Implementing adaptor class and framework	K1,K2,K3,K4,K5,K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	2	3	2	3	3	3	3
CO2	3	2	3	3	3	3	2	3	2	3	3	3	3
CO3	3	2	3	3	3	3	2	3	2	3	3	3	3
CO4	3	3	3	3	3	3	2	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	3	2	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	Programming In Java Lab	Hours/Week	01
Course Code	AUEPCP33A	Credits	01
Category	Elective - III	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To gain practical expertise in coding Core Java programs
- To become proficient in the use of AWT, Event Handling and Swing

List of Programs

1. Write a Java program that prompts the user for an integer and then prints out all the prime numbers up to that Integer?
2. Write a Java program to multiply two given matrices.
3. Write a Java program that displays the number of characters, lines and words in a text?
4. Generate random numbers between two given limits using Random class and print messages according to the range of the value generated.
5. Write a program to do String Manipulation using Character Array and perform the following string operations:
 - a) String length
 - b) Finding a character at a particular position
 - c) Concatenating two strings
6. Write a program to perform the following string operations using String class:
 - a) String Concatenation
 - b) Search a substring
 - c) To extract substring from given string
7. Write a program to perform string operations using String Buffer class:
 - a) Length of a string
 - b) Reverse a string

c) Delete a substring from the given string

COs	CO Description	Cognitive Level
CO1	Execute Java programs	K1,K2,K3
CO2	Create functionality using String in Java programs	K1,K2,K4,K5
CO3	Develop String Buffer classes in Java programs	K2,K3,K4,K5
CO4	Multithreading in Java programs	K1,K2,K3,K4
CO5	Implement exception-handling in Java	K3,K4,K5,K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	2	3	2	3	3	3	3
CO2	3	2	3	3	3	3	2	3	2	3	3	3	3
CO3	3	2	3	3	3	3	2	3	2	3	3	3	3
CO4	3	3	3	3	3	3	2	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	3	2	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	Web Technology (PHP)	Hours/Week	02
Course Code	AUECP33B	Credits	02
Category	Elective III	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To use PHP to develop dynamic web sites for user on the Internet
- To develop web sites ranging from simple online information forms to complex e- commerce sites with MySQL database, building, connectivity, and maintenance
- To create control statements and array in PHP
- To create class and functions in PHP
- To use PHP and MySQL to develop website

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introducing PHP – Basic development Concepts – Creating first PHP Scripts – Using Variable and Operators – Storing Data in variable – Understanding Data types – Setting and Checking variables Data types – Using Constants – Manipulating Variables with Operators.	CO1	K1,K2,K3
UNIT-II	Controlling Program Flow: Writing Simple Conditional Statements Writing More Complex Conditional Statements – Repeating Action with Loops – Working with String and Numeric Functions.	CO2	K1,K2,K4, K5
UNIT-III	Working with Arrays: Storing Data in Arrays – Processing Arrays with Loops and Iterations –Using Arrays with Forms - Working with Array Functions – Working with Dates and Times.	CO3	K2,K3,K4, K5

UNIT-IV	Using Functions and Classes: Creating User-Defined Functions - Creating Classes – Using Advanced OOP Concepts.	CO4	K1,K2,K3, K4
UNIT-V	Working with Database and SQL: Introducing Database and SQL- Using MySQL-Adding and modifying Data-Handling Errors – Using SQLite Extension and PDO Extension. Introduction XML - Simple XML and DOM Extension.	CO5	K3,K4,K5, K6

Recommended Text Books

Vikram Vaswani, “PHP A Beginner's Guide”, Tata McGraw Hill 2008.

Reference Books

1. Steven Holzner , “The PHP Complete Reference”, Tata McGraw Hill, 2007.
2. Steven Holzer , “Spring into PHP”, Tata McGraw Hill 2011, 5thEdition.

Website and e-learning source

<https://www.w3schools.com/php/>

<https://www.phptpoint.com/php-tutorial-pdf/>

<http://www.xmlsoftware.com/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	develop dynamic websites under PHP	K1,K2,K3
CO2	create dynamic websites for user on the Internet by using PHP	K1,K2,K4,K5
CO3	design control statements and array in PHP	K2,K3,K4,K5
CO4	implement class and functions in PHP	K1,K2,K3,K4
CO5	execute PHP and MySQL to develop website	K3,K4,K5,K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	2	2	3	2	3	3	2	3
CO2	3	2	3	3	2	2	3	3	2	3	3	2	3
CO3	3	3	3	3	3	2	3	3	2	3	3	2	3
CO4	3	2	3	3	3	2	3	3	2	3	3	2	3
CO5	3	3	3	3	3	2	3	3	2	3	3	2	3

COURSE DESCRIPTORS

Title of the Course	Web Technology(PHP) Lab	Hours/Week	1
Course Code	AUEPCP33B	Credits	1
Category	ELECTIVE III	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024-2025

Objectives of the course:

- To have a practical understanding about how to write PHP code to solve problems.
- To display and insert data using PHP and MySQL.
- To test, debug, and deploy web pages containing PHP and MySQL.
- To introduce practical sessions to develop simple applications using PHP and MySQL.
- To create connection between web application and MYSQL data base

List of Programmes

1. Write a PHP program which adds up columns and rows of given table
2. Write a PHP program to compute the sum of first n given prime numbers
3. Write a PHP program to find valid an email address
4. Write a PHP program to convert a number written in words to digit.
5. Write a PHP script to delay the program execution for the given number of seconds.
6. Write a PHP script, which changes the colour of the first character of a word
7. Write a PHP program to find a multiplication table of a number.
8. Write a PHP program to calculate the Factorial of a number.
9. Write a PHP code to create a student mark sheet table. Insert, delete and modify records.
10. From a XML document (email.xml), write a program to retrieve and print all the email addresses from the document using XML.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Develop web applications using PHP.	K1,K2,K3,K5,K6
CO2	Create web applications such as ecommerce using PHP	K1,K2,K3,K5,K6
CO3	Create dynamic Web applications such as content management, user registration, using PHP and to understand the ability to post and publish a PHP website.	K1,K2,K3,K5,K6
CO4	Develop a MySQL database for web applications	K1,K2,K3,K5,K6
CO5	Establish connectivity using MySQL with web applications	K1,K2,K3,K5,K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	3	2	2	2	2	3	2	3
CO2	3	3	3	2	3	3	2	2	2	2	3	2	3
CO3	3	3	3	2	3	3	2	2	2	2	3	2	3
CO4	3	3	3	2	3	3	2	2	2	2	3	2	3
CO5	3	3	3	2	3	3	2	2	2	2	3	2	3

COURSE DESCRIPTORS

Title of the Course	Service Marketing	Hours/Week	01
Course Code	AUSCP34	Credits	01
Category	Skill Enhancement - 4	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To know the service concept, its evolution and growth.
- To understand Marketing Mix in service marketing and its effective management.
- To know the service marketing techniques applied in various sectors.
- To emphasize the distinctive aspects of Services Marketing
- To visualize the different Service Marketing Strategies.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction to Services – Service Marketing –Meaning and definition- Nature and Scope Characteristics–Challenges and Issues of service marketing-Service marketing in India– Classifications of services	CO1	K1,K2
UNIT-II	Marketing Mix in Service Marketing: The Seven Ps: Product Decision, Pricing, Strategies and Tactics, Promotion of Service-additional dimension in Services Marketing – People, Physical Evidence and Process.	CO2	K1,K2,K3
UNIT-III	Positioning of services – Designing service delivery System – Pricing of services – objectives – methods –Services on retail sector –Service Level Agreements (SLA) – Service marketing triangle.	CO3	K1,K2,K3, K4
UNIT-IV	Managing service operations-Participants in services-Employees and customer’s role in service delivery- Mass production and delivery-Importance of quality in services - Delivering Quality Service.	CO4	K1,K2,K3

UNIT-V	Service Marketing Strategies for health – Hospitality – Tourism – Financial & Information technique Services–Applying technology to Service settings–e-services.	CO5	K1,K2,K3, K4
Recommended Text Books			
1. Dr.B.Balaji, Services Marketing and Management, S.Chand & Co, New Delhi.			
Reference Books			
1. Dr.L.Natarajan Services Marketing, Margham Publications, Chennai.			
2. S.M. Jha, Services marketing, Himalaya Publishers, India			
3. Baron, Services Marketing, Second Edition. Palgrave Macmillan			
4. Thakur. G.S. Sandhu Supreet & Dogra Babzan, Services Marketing, Kalyani Publishers, Ludhianna.			
5. Zeithaml Valerie A, & Bitner MaryJo., Gremler Dwayne D., Pandit Ajay; Services Marketing, McGraw Hill.			
6. Wirtz Jochen, Lovelock Christopher H, Chatterjee Jayanta. Services Marketing, 8e Edition, Pearson.			
Website and e-learning source			
https://kanchiuniv.ac.in/coursematerials/T5MM1servicesmarketing.pdf			
https://sde.uoc.ac.in/sites/default/files/sde_videos/SLM-MCom-SERVICE%20MARKETING.pdf			
https://www.enotesmba.com/2012/06/service-marketing-and-service-marketing.html			

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the Concept of Services and intangible products	K1,K2
CO2	Discuss the relevance of the services Industry to Industry	K1,K2,K3
CO3	Examine the characteristics of the services industry and the modus operandi	K1,K2,K3,K4
CO4	Analyze the role and relevance of Quality in Services	K1,K2,K3
CO5	Critically Visualize future changes in the Services Industry	K1,K2,K3,K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	3	3	3	3	3	2	2	2
CO2	3	2	3	3	2	2	3	3	3	3	3	3	3
CO3	3	3	3	2	3	2	3	3	2	2	2	2	2
CO4	3	3	2	2	2	2	2	2	3	2	2	2	2
CO5	3	2	3	2	3	2	3	3	3	2	3	3	3

COURSE DESCRIPTORS

Title of the Course	Everyday Banking	Hours/Week	02
Course Code	AUSCP35	Credits	02
Category	Skill Enhancement - 5	Year & Semester	II & III
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To introduce the basic concepts of banking
- To gain knowledge about ATMs and Fund transfer
- To understand online banking processes
- To learn about mobile banking
- To gain knowledge about mobile payment system

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Banking–Definition–passbook–Cheque book–Format of Cheque – Filling up of Cheque–Deposit Challan–Filling up–Clearing Cheque–Transfer Cheque – Collection Cheque– Payable at par – Demand Draft	CO1	K1,K2,K3,
UNIT-II	Application filling – Account Opening form – Filling up – Documents required–Debit Card–Credit Card–ATM Machine–Cash Deposit Machine – Passbook printing machine. MICR- IFSC- Fund transfer through ECS– NEFT–RTGS – Form filling for Fund transfer.	CO2	K1,K2,K3
UNIT-III	Online Banking–Signup–Process–Requirements–Login–Customer ID– User ID– Password – Hints for creating Passwords – change of password – online transactions –Account statements – Fund Transfer – Payment of bills – Utility payments	CO3	K1,K2,K3,

UNIT-IV	Loans–Repayment for Loans–other services. Mobile Banking meaning–importance – Advantages – Mobile Applications (App) WAP (Wireless Application Protocol)- USSD (Unstructured Supplementary Service Data)- Registration process – through Mobiles	CO4	K1,K2,K3,
UNIT-V	Process at Bank Branch-ATM- User ID- PIN- change of MPIN –IMPS D(Immediate Mobile Payment System) - UPI(Unified Payment interface) – BHIM(Bharat Interface for money)- NPCI (National Payment Corporation of India) - Bank account Management – Transfer Funds – paying Bills – Locating ATMs - QR code payments- Alerts and notifications- Tracking Spending habits – Cash back- Safe banking methods.	CO5	K1,K2,K3
Recommended Text Books			
1. B.Santhanam-Banking & Financial systems, Margham Publications			
Reference Books			
1. S.N.Maheshwari Banking Theory, law and Practice, Kalyani Publications 2. Parameswaran-Indian Banking, S. Chand & Co			
Website and e-learning source			
1. https://en.wikipedia.org/wiki/Online_banking 2. https://www.sbi.co.in/portal/web/services/internet-banking 3. https://www.hdfcbank.com/assets/popuppages/netbanking.htm 4. https://www.investopedia.com/terms/m/mobile-banking.asp 5. www.scotiabank.com/mobile/ca/en/0,,5181,00.html			

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Exhibit the skill to perform basic banking operations and distinguish between basic documents	K1,K2,K3
CO2	Fill up of applications and transfer of funds	K1,K2,K3
CO3	Execute Online Banking	K1,K2,K3
CO4	Form Mobile banking and related transactions	K1,K2,K3
CO5	Do to mobile payment system by using various modes	K1,K2,K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	3	3	3	2	3	3	2	3
CO2	3	3	3	2	2	3	3	3	3	3	3	2	3
CO3	3	3	3	3	3	3	3	3	2	3	3	2	3
CO4	3	3	3	2	2	3	3	3	3	3	3	2	3
CO5	3	3	3	3	3	3	3	3	2	2	3	2	3

COURSE DESCRIPTORS

Title of the Course	CORPORATE ACCOUNTING - II	Hours/Week	05
Course Code	AUCCP41	Credits	05
Category	CORE VII	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To know the types of Amalgamation, Internal and external Reconstruction.
- To have an insight on Liquidation of companies
- To know Final statements of banking companies.
- To understand the accounting treatment of Insurance Company accounts.
- To understand the procedure for preparation of consolidated Balance sheet

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Unit I Amalgamation, Internal & External Reconstruction Amalgamation – Meaning - Purchase Consideration - Lump sum Method, Net Assets Method, Net Payment Method, and Intrinsic Value Method - Types of Methods of Accounting for Amalgamation -The Pooling of Interest Method - The Purchase Method (Excluding Inter-Company Holdings). Internal & External Reconstruction Internal Reconstruction – Conversion of Stock – Increase and Decrease of Capital – Reserve Liability - Accounting Treatment of External Reconstruction.	CO1	K1, K2
UNIT-II	Unit II Liquidation of Companies Meaning-Modes of Winding Up – Preparation of Liquidator’s Final Statement of Accounts - Order of Payment – Liquidators Remuneration	CO2	K1, K2 K3, K4 K5
UNIT-III	Unit III Accounting of Banking Companies Final Statements of Banking Companies (As Per New Provisions) - Non-Performing Assets - Rebate on Bills Discounted- Profit and Loss a/c - Balance Sheet as Per Banking Regulation Act 1949.	CO3	K1, K2 K3, K4 K5
UNIT-IV	Unit IV Insurance Company Accounts: Meaning of Insurance – Principles – Types – Preparation of Revenue Account of Life, General Insurance Companies –New Format.	CO4	K1, K2 K3, K4 K5
UNIT - V	Unit V Consolidated Financial Statements Introduction-Holding & Subsidiary Company-Legal Requirements Relating to Preparation of Accounts -Preparation of Consolidated Balance Sheet (Excluding Inter-Company Holdings).	CO5	K1, K2 K3, K4
	THEORY 20% & PROBLEMS 80%		

Recommended Text Books

1. T.S. Reddy and A. Murthy, Corporate Accounting II, Margham Publishers,

Reference Books

- S.P. Jain and K.L Narang. Advanced Accountancy, Kalyani Publishers, New Delhi.
- Dr. K. S. Raman and Dr. M.A. Arulanandam, Advanced Accountancy, Vol. II, Himalaya Publishing House, Mumbai.
- R.L. Gupta and M. Radhaswamy, Advanced Accounts, Sultan Chand, New Delhi.
- M.C. Shukla and T.S. Grewal, Advanced Accounts Vol.II, S Chand & Sons, New Delhi.
- B. Raman, Corporate Accounting, Taxmann, New Delhi
- M. C. Shukla, Advanced Accounting, S.Chand, New Delhi
- Prof. Mukesh Bramhbutt, Devi Ahilya publication, Madhya Pradesh
- Anil Kumar, Rajesh Kumar, Advanced Corporate Accounting, Himalaya Publishing house, Mumbai.
- PrasanthAthma, Corporate Accounting, Himalaya Publishing house, Mumbai.

Website and e-learning source

- <https://www.accountingnotes.net/amalgamation/amalgamation-absorption-andreconstruction-accounting/126>
- <https://www.slideshare.net/debchat123/accounts-of-banking-companies>
- <https://www.accountingnotes.net/liquid>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the accounting treatment of amalgamation, Internal and external reconstruction	K1, K2
CO2	Preparation of liquidator's final statement of account	K1, K2, K3, K4, K5
CO3	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.	K1, K2, K3, K4, K5
CO4	Prepare Revenue accounts of Insurance companies in the prescribed format	K1, K2, K3, K4, K5
CO5	Provide the consolidated accounts of holding and subsidiary companies	K1, K2, K3, K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	2	2	3	3	3	3
CO2	3	2	3	2	3	2	3	2	2	2	3	2	2
CO3	3	2	3	2	3	2	3	2	2	2	3	2	2
CO4	3	2	3	2	2	2	3	2	2	2	3	2	2
CO5	3	2	3	2	2	2	3	2	2	2	3	2	2

COURSE DESCRIPTORS

Title of the Course	COMPANY LAW	Hours/Week	05
Course Code	AUCCP42	Credits	05
Category	Core -VIII	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To know Company Law 1956 and Companies Act 2013
- To have an understanding on the formation of a company
- To understand the requisites of meeting and resolution
- To gain knowledge on the procedure to appoint and remove Directors
- To familiarize with the various modes of winding up

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Unit I Introduction to Company Law Companies Act 2013: Definition of a Company, Characteristics of Company – Lifting or Piercing the Corporate Veil – Company Distinguished from Partnership and Limited Liabilities Partnerships – Classification of Companies – Based on Incorporation, Liability, Number of Members, Control.	CO1	K1, K2
UNIT-II	Unit II Formation of Company: Formation of a Company – Promoter –Incorporation Documents e-filing – Memorandum of Association – Contents – Alteration – Legal Effects – Articles of Association - Certificate of Incorporation – Prospectus – Contents - Kinds – Liabilities – Share Capital – Kinds – Issue – Alteration – Dividend – Debentures.	CO2	K1, K2, K3, K4, K5
UNIT-III	Unit III Meeting: Meeting and Resolution – Types – Requisites – Voting & Poll – Quorum – Proxy - Resolution – Ordinary & Special - Audit & Auditors – Qualification, Disqualification, Appointment and Removal of an Auditor	CO3	K1, K2
UNIT-IV	Unit IV Management & Administration: Management & Administration – Directors – Legal Position – Board of Directors – Appointment/ Removal – Disqualification – Director Identification Number – Directorships – Powers – Duties – Board Committees – Related Party Transactions – Contract by One Person Company – Insider Trading- Managing Director – Manager – Secretarial Audit – Administrative Aspects and Winding Up – National Company Law Tribunal (NCLT) – National Company Law Appellate Tribunal (NCLAT) – Special Courts.	CO4	K1, K2

UNIT-V	Unit V Winding up: Meaning – Modes – Compulsory Winding Up – Voluntary Winding Up – Consequences of Winding Up Order – Powers of Tribunal – Petition for Winding Up – Company Liquidator.	CO5	K1, K2, K3, K4
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Recommended Text Books

- N.D. Kapoor, Business Laws, Sultan Chand and Sons, Chennai

Reference Books

- R.S.N. Pillai – Business Law, S.Chand, New Delhi.
- M.V. Dhandapani, Business Laws Sultan Chand and Sons, Chennai
- Shusma Aurora, Business Law, Taxmann, New Delhi
- M.C.Kuchal, Business Law, Vikas Publication, Noida
- Gaffoor & Thothadri, Company Law, Vijay Nichole Imprints Limited, Chennai
- M.R. Sreenivasan, Business Laws, Margham Publications, Chennai

Website and e-learning source

- <https://www.mca.gov.in/content/mca/global/en/acts-rules/companiesact/companies-act-2013.html>
- <https://vakilsearch.com/blog/explain-procedure-formation-company/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the classification of companies under the act	K1, K2
CO2	Examine the contents of the Memorandum of Association & Articles of Association	K1, K2, K3, K4, K5
CO3	Know the qualification and disqualification of Auditors, procedures for meetings, voting and quorum	K1, K2
CO4	Understand the workings of NCLT, NCLAT	K1, K2
CO5	Analyze the modes of winding up	K1, K2, K3, K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	2	2	3	3	2	2
CO2	3	2	3	2	3	2	3	2	2	3	3	2	2
CO3	3	2	3	2	3	2	3	2	2	3	3	2	2
CO4	3	2	3	2	2	2	3	2	2	3	3	2	2
CO5	3	2	3	2	2	2	3	2	2	3	3	2	2

COURSE DESCRIPTORS

Title of the Course	RELATIONAL DATA BASE MANAGEMENT SYSTEM	Hours/Week	02
Course Code	AUECP43A	Credits	02
Category	Elective-IV	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To gain a good understanding of the architecture and functioning of Database Management Systems.
- To understand the use of Structured Query Language (SQL) and its syntax.
- To apply Normalization techniques to normalize a database.
- To understand the need of transaction processing and learn techniques for controlling the consequences of concurrent data access.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Unit I Introduction to DBMS– Data and Information - Database – Database Management System – Objectives- Advantages – Components - Architecture. ER Model: Building blocks of ER Diagram –	CO1	K1, K2 K3, K4
UNIT-II	Unit II Relationship Degree – Classification – ER diagram to Tables – ISA relationship – Constraints –Aggregation and Composition – Advantages Structure of Relational Database. Introduction to Relational Database Design - Objectives – Tools –Redundancy and Data Anomaly	CO2	K1, K2 K3, K4
UNIT-III	Unit III Functional Dependency - Normalization – 1NF – 2NF – 3NF BCNF. Transaction Processing – Database Security	CO4	K1, K2, K3
UNIT-IV	Unit IV Introduction to SQL: Data Definition Commands – Data Manipulation Commands – SELECT Queries – Additional Data Definition Commands – Additional SELECT Query Keywords – Joining Database Tables - Advanced SQL: Relational SET Operators: UNION – UNION ALL – INTERSECT - MINUS.	CO4	K1, K2, K3, K4, K5
UNIT-V	Unit V SQL Functions: Date and Time Function – Numeric Function – String Function – Conversion Function.	CO5	K1, K2, K3, K4, K5

Recommended Text Books

- S. Sumathi, S. Esakkirajan, “Fundamentals of Relational Database Management System”, Springer International Edition 2007.

Reference Books

- Abraham Silberchatz, Henry F. Korth, S. Sudarshan, “Database System Concepts”, McGrawHill 2019, 7th Edition.
- Alexis Leon & Mathews Leon, “Fundamentals of DBMS”, Vijay Nicole Publications 2014, 2nd Edition

Website and e-learning source

- 1 <https://nptel.ac.in/courses/106106093/>
- 2 <https://nptel.ac.in/courses/106106095/>
- 3 NPTEL & MOOC courses titled Relational Database Management Systems

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Describe basic concepts of database system	K1, K2, K3, K4
CO2	Design a Data model and Schemas in RDBMS	K1, K2, K3, K4
CO3	Applying Normalization techniques to normalize a Database and Functional Dependency	K1, K2, K3
CO4	Competent in use of SQL	K1, K2, K3, K4, K5
CO5	Competent in use of SQL Joins Operations, sub Queries, Correlated Queries and SQL Function	K1, K2, K3, K4, K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	3	2	2	3	3	3	3	3
CO2	3	2	3	3	3	3	3	3	3	2	2	3	3
CO3	3	3	3	3	3	2	3	3	2	3	3	2	2
CO4	3	3	3	3	3	3	3	3	3	2	3	3	3
CO5	3	3	3	3	3	2	3	3	3	2	3	3	3

COURSE DESCRIPTORS

Title of the Course	DATABASE MANAGEMENT SYSTEM LAB	Hours/Week	02
Course Code	AUEPCP43A	Credits	01
Category	Elective - IV	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To enable the students to learn the designing of data base systems, foundation on the relational model of data and normal forms.
- To understand the concepts of data base management system, design simple Database models
- To learn and understand to write queries using SQL, PL/SQL.
- To enable the students to learn the designing of data base systems, foundation on the relational model of data and normal forms.
- To understand the concepts of data base management system, design simple Database models.

List of Exercises:	COs	Cognitive Level
I. SQL 1. DDLCOMMANDS 2. DMLCOMMANDS 3. TCLCOMMANDS 4. AGGREGATE FUNCTION 5. QUERIES AND SUBQUERIES 6. SQL JOINS 7. SQL SETOPERATION	CO1 – CO5	K1, K2, K3, K4, K5, K6
II. PL/SQL 8. FIBONACCI SERIES 9. FACTORIAL 10. PALINDROME		

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Create DBMS and Differentiate data models.	K1, K2, K3, K4, K5, K6
CO2	Develop integrity constraints and Entity Relationship Mode.	K1, K2, K3, K4, K5
CO3	Design database by using SQL and DML	K1, K2, K3, K4
CO4	Classify the join operations and enhance the knowledge of handling multiple tables.	K1, K2, K3, K4, K5
CO5	Design Data base operations and implement using PL/SQL programs. Learn basics of PL/SQL,	K1, K2, K3, K4

COURSE DESCRIPTORS

Title of the Course	INTRODUCTION TO DATA SCIENCE	Hours/Week	04
Course Code	AUECP43B	Credits	03
Category	ELECTIVE - IV	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To introduce the concepts, techniques and tools in Data Science
- To understand the various facets of data science practice, including data collection and integration, exploratory data analysis, predictive modeling, descriptive modeling and effective communication.
- To understand Machine learning algorithms
- To learn about Hadoop framework
- To predict Disease, data retrieval and presentation

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Unit I Introduction: Benefits and uses – Facets of data – Data science process – Big data ecosystem and data science	CO1	K1, K2
UNIT-II	Unit II The Data science process: Overview – research goals - retrieving data - transformation – Exploratory Data Analysis – Model building - Data Visualization	CO2	K1, K2
UNIT-III	Unit III Algorithms: Machine learning algorithms – Modelling process – Types – Supervised – Unsupervised - Semi-supervised	CO3	K1, K2
UNIT-IV	Unit IV Introduction to Hadoop: Hadoop framework – Spark – replacing Map Reduce– No SQL – ACID – CAP – BASE – types	CO4	K1, K2
UNIT-V	Unit V Case Study: Prediction of Disease - Setting research goals - Data retrieval – preparation - exploration - Disease profiling - presentation and automation		K1, K2, K3, K4

Recommended Text Books

- Davy Cielen, Arno D.B. Meysman, Mohamed Ali, “Introducing Data Science”, manning publications 2016.

Reference Books

- Roger Peng, “The Art of Data Science”, lulu.com 2016.
- Murtaza Haider, “Getting Started with Data Science – Making Sense of Data with Analytics”, IBM press, E-book
- Annalyn Ng, Kenneth Soo, “Numsense! Data Science for the Layman: No Math Added”, 2015, 1st Edition
- Cathy O’Neil, Rachel Schutt, “Doing Data Science Straight Talk from the Frontline” O’Reilly Media 2013.
- Lillian Pierson, “Data Science for Dummies”, 2015 II Edition

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the concepts, techniques and tools in Data Science	K1, K2
CO2	Understand the various facets of data science practice, exploratory data analysis, predictive modeling, descriptive modeling and effective communication.	K1, K2
CO3	Understand Machine learning algorithms	K1, K2
CO4	Learn about Hadoop framework	K1, K2
CO5	Predict Disease, data retrieval and presentation	K1, K2, K3, K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	3	3	3	3	2	3	3	3
CO2	3	3	3	3	3	2	3	2	3	2	3	3	3
CO3	3	3	2	3	3	3	3	3	3	3	3	2	2
CO4	3	3	3	2	3	3	2	3	3	2	3	3	3
CO5	3	3	3	3	2	3	3	3	3	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	PROFESSIONAL SKILLS FOR CORPORATE WORLD	Hours/Week	02
Course Code	AUSCP44	Credits	02
Category	Skill Enhancement Course - 6	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To learn about the personal communication skills and Interpersonal skill.
- To gain knowledge about body language and personal grooming.
- To gain knowledge about self image, self confidence, self respect self care.
- To understand and exhibit Business Etiquettes
- To gain knowledge about business correspondence.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Unit I Personal Communication Skills Importance of personal Communication Skills- Conversation Techniques Presentation Skills- Interpersonal skills-	CO1	K1,K2,K3
UNIT-II	Unit II Body Language -Making a First Great Impression- Personal Grooming- Importance of Corporate Dressing-Personal grooming tips for men and women	CO2	K1,K2,K3
UNIT-III	Unit III Building a self-image-need and importance-developing self confidence and self-respect-Self-care.	CO3	K1,K2,K3, K4,K5,K6
UNIT-IV	Unit IV Business Etiquette-meaning-understanding etiquette in work place- elements of business etiquette-working in diversity Professional Behavior and its importance	CO4	K1,K2,K3, K4
UNIT-V	Unit V Business Correspondence - importance of business correspondence- mobile and email etiquettes -Business Card Etiquette – Networking - Dining Etiquette	CO5	K1,K2,K3, K4

Recommended Text Books

1. Communication Skills and Soft Skills: An Integrated Approach E. Suresh Kumar, P. Sreehari, J. Savithri, Pearson India.

Reference Books

- Business Etiquette: A Guide For The Indian Professional Paperback- Shital Kakkar Mehra
- Communication Skills: Sanjay Kumar & Pushp Lata, OUP India.
- Indian Business Etiquette: Raghu Palat, Jaico Books.
- Corporate Grooming and Etiquette: Sarvesh Gulati, Rupa Publications.

Website and e-learning source

- <https://www.pdfdrive.com/business-etiquette-ibskills-international-business-skills-e9959676.html>
- <https://archive.org/details/essentialguideto00chan/page/n1/mode/2up>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Understand the personal communication skills and Interpersonal skill	K1, K2
CO2	Gain knowledge about body language and personal grooming	K1, K2
CO3	Develop self image, self confidence, self respect and self care	K1, K2, K3, K4
CO4	Understand and exhibit Business Etiquettes	K1, K2
CO5	Understand business correspondence styles	K1, K2

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	3	3	2	2	3	3	3	3
CO2	3	3	3	3	3	2	2	3	2	3	3	3	3
CO3	3	3	3	3	3	2	3	2	2	3	3	2	3
CO4	3	3	3	3	2	3	3	2	3	3	3	2	3
CO5	3	3	3	2	2	3	3	3	2	3	3	3	3

COURSE DESCRIPTORS

Title of the Course	PRACTICES IN COMMERCE	Hours/Week	02
Course Code	AUSPCP45	Credits	02
Category	Skill Enhancement Course - 7	Year & Semester	II & IV
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To understand the fundamentals of concepts and applications in Indian Accounting Procedure
- To provide practical knowledge in banking transaction forms
- To train secretarial practices like preparation of agenda and minutes for company meetings.
- To grasp the practical knowledge in Audit Programme
- To provide practical knowledge to fill forms like income tax return forms, PAN.

UNITS	List of Exercises	COs	Cognitive Levels
UNIT-I	Unit I 1. Invoice, Receipts and Vouchers Preparation of Invoice, Receipt, Voucher, Delivery Challan, Entry pass, Gate pass 2. Entries for Receipt, Vouchers, Debit Note and Credit Note Preparation of Journal Entries and Trial Balance from the Receipt Preparation of Journal and Ledger, Trial Balance from the Voucher	CO1	K1
UNIT-II	Unit II 3. Banking Transactions Filing up a Pay-In-Slip and Withdrawal Form Preparation of Demand Draft Account opening form for Saving account, Current account, fixed deposit	CO2	K1, K2, K3
UNIT-III	Unit III 4. Agenda and Minutes Preparation of Agenda and Minutes for Annual General Meeting and Board of Director Meeting	CO3	K1, K2, K3, K4
UNIT-IV	Unit IV 5. Audit Program Preparation of Audit Program Preparation of Audit Report Replies to Audit Objections	CO4	K1, K2, K3
UNIT-V	Unit V 6. Income Tax Returns Filling Up of Income Tax Returns Filling up of Application form for Permanent Account Number (PAN)	CO5	K1, K2, K3, K4, K5

Recommended Text Books

- TS Grewal, DK Goel, And S.C. Gupta

Reference Books

- Accountancy By TS Grewal, DK Goel, Or SC Sharma;
- T.S. Grewal and D.K. Goel for accountancy, Poonam Gandhi and Subhash Dey for business studies, and Sandeep Garg or T.R. Jain & V.K. Ohri for economics

Website and e-learning source

- https://static.careers360.mobi/media/uploads/froala_editor/files/Introduction%20to%20Accounting%20Standards_7iWCuHN.pdf
- <https://blog.hubspot.com/marketing/how-to-make-an-ad>
- <https://clickup.com/blog/meeting-agenda/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Remember the various concepts of Indian Accounting Procedure and its compliances.	K1
CO2	Applying the rules in filling the application form for banking transactions.	K1, K2, K3
CO3	Analyze the previous Agenda and minutes of meetings and explore in preparation of agendas for the new meetings the company.	K1, K2, K3, K4
CO4	Applying the practical knowledge in Audit programme	K1, K2, K3
CO5	Evaluate the Income tax return forms, PAN.	K1, K2, K3, K4, K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	2	3	3	2	3	3	2	2
CO2	3	2	2	3	2	2	2	2	2	3	3	2	2
CO3	3	3	3	2	3	2	3	3	2	3	3	2	2
CO4	3	2	2	2	2	2	2	2	2	2	3	2	2
CO5	3	3	3	3	3	2	3	3	2	2	3	3	3

COURSE DESCRIPTORS

Title of the Course	COST ACCOUNTING - I	Hours/Week	05
Course Code	AUCCP51	Credits	04
Category	CORE IX	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To understand the various concepts of cost accounting.
- To prepare and reconcile Cost accounts.
- To gain knowledge regarding valuation methods of material.
- To familiarize with the different methods of calculating labour cost.
- To know the apportionment of Overheads.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction of Cost Accounting Definition-Nature and Scope – Principles of Cost Accounting – Cost Accounting and Financial Accounting - Cost Accounting Vs Management Accounting – Installation of Costing System - Classification of Costs– Cost Centre– Profit Centre.	CO1	K1, K2
UNIT-II	Cost Sheet and Methods of Costing Preparation of Cost Sheet - Tenders & Quotations - Reconciliation of Cost and Financial Accounts.	CO2	K1, K2, K3, K4
UNIT-III	Material Costing Material Control – Meaning and Objectives – Purchase of Materials – EOQ –Stores Records – Reorder Levels – ABC Analysis - Issue of Materials –Methods of Issue – FIFO – LIFO – Base Stock Method – Specific Price Method – Simple and Weighted Average Method.	CO3	K1, K2, K3, K4
UNIT-IV	Labour Costing Direct Labour and Indirect Labour – Time Keeping – Methods and Calculation of Wage Payments – Time Wages – Piece Wages – Incentives – Different Methods of Incentive Payments - Idle time Overtime – Labour Turnover - Meaning, Causes and Measurement.	CO4	K1, K2, K3, K4, K5
UNIT - V	Overheads Overheads – Definition – Classification – Allocation and Apportionment of Overheads – Basis of Apportionment – Primary and Secondary Distribution - Absorption of Overheads – Methods of absorption. Preparation of Overheads Distribution Statement – Machine Hour Rate – Computation of Machine Hour Rate.	CO5	K1, K2, K3, K4, K5
	THEORY 20% & PROBLEMS 80%		

Recommended Text Books

1. T.S. Reddy and Y. Hari Prasad Reddy, Cost Accounting, Margham publications, Chennai

Reference Books

- Jain S.P. and Narang K.L, Cost Accounting. Kalyani Publishers, New Delhi
- Khanna B.S., Pandey I.M., Ahuja G.K., and Arora M.N., Practical Costing, S. Chand & Co, New Delhi,
- Dr. S.N. Maheswari, Principles of Cost Accounting, Sultan Chand Publications, New Delhi.
- S.P. Iyengar, Cost Accounting, Sultan Chand Publications, New Delhi.
- Polimeni, Cost Accounting: Concepts and Applications for Managerial Decision Making, 1991, McGraw–Hill, New York.
- Jain S.P. and Narang K.L. Cost Accounting, Latest Edition.2013, Kalyani Publishers, New Delhi,
- V.K. Saxena and C.D. Vashist, Cost Accounting, Sultan Chand publications, New Delhi.
- Murthy A & Gurusamy S, Cost Accounting, Vijay Nicole Imprints Pvt. Ltd. Chennai.
- Prasad. N.K and Prasad. V.K, Cost Accounting, Book Syndicate, Kolkata.

Website and e-learning source

<https://study.com/learn/lesson/cost-accounting-principles-examples-what-is-cost-accounting.html>
<https://www.accountingtools.com/articles/what-is-material-costing.html>
<https://www.freshbooks.com/hub/accounting/overhead-cost>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Remember the various concepts of cost accounting	K1, K2
CO2	Demonstrate the preparation and reconciliation of cost sheet.	K1, K2, K3, K4
CO3	Analyze the various valuation methods of issue of materials.	K1, K2, K3, K4
CO4	Examine the different methods of calculating labour cost.	K1, K2, K3, K4, K5
CO5	Critically evaluate the apportionment of Overheads.	K1, K2, K3, K4, K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	3	3	2	3	3	2	3	3
CO2	3	3	3	3	3	3	3	2	3	3	2	3	3
CO3	3	3	3	2	3	3	3	2	3	3	2	3	3
CO4	3	3	3	3	3	2	3	2	3	3	2	3	3
CO5	3	3	3	3	3	3	2	2	3	3	2	3	3

COURSE DESCRIPTORS

Title of the Course	BANKING LAW AND PRACTICE	Hours/Week	05
Course Code	AUCCP52	Credits	04
Category	Core -X	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To help the students understand various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks.
- To trace the evolution of central bank concept and prevalent central banking system around the world and their roles and function.
- To throw light on Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion.
- To understand how capital fund of commercial banks, objectives and process of Asset securitization etc.
- To explore practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction to Banking History of Banking- Provisions of Banking Regulations Act 1949 - Components of Indian Banking - Indian Banking System-Phases of Development - Banking Structure in India – Public Sector Banks, Private Banks, Foreign Banks, RRB, UCB, Payment Banks and Small Finance Banks - Banking System – Branch Banking - Unit Banking - Universal Banking- Financial Inclusion	CO1	K1, K2, K3
UNIT-II	Central Bank and Commercial Bank Central Banking: Definition –Need - Principles- Central Banking Vs Commercial Banking - Functions of Central Bank – Credit Creation. Commercial Banking: Definition - Functions – Personal Banking – Corporate Banking – Digital banking – Core Banking System (CBS) - Role of Banks in Economic Development.	CO2	K1, K2, K3, K4
UNIT-III	Banking Practice Types of Accounts CASA – Types of Deposits - Opening Bank Account- Jan Dhan Yojana - Account Statement vs Passbook vs e-statement - Banker Customer Relationship - Special Types of Customers –KYC norms. Loans & Advances –Lending Sources- Lending Principles-Types of Loans - classification of assets and income recognition / provisioning (NPA) – Repo Rate & Reverse Repo Rate - securities of lending Factors influencing bank lending.	CO3	K1, K2

UNIT-IV	<p>Negotiable Instruments Act Negotiable Instruments – Meaning & Definition – Characteristics -Types of negotiable instruments. Crossing of Cheques– Concept - Objectives – Types of Crossing - - Consequences of Non-Crossing. Endorsement - Meaning-Components-Kinds of Endorsements-Cheques payable to fictitious person Endorsement by legal representative Negotiation bank-Effect of endorsement-Rules regarding Endorsement. Paying banker - Banker’s duty - Dishonouring of Cheques- Discharge by paying banks - Payments of a crossed cheque - Refusal of cheques Payment. Duties of Collecting Banker-Statutory protection under section 131-Collecting bankers’ duty –RBI instruction –Paying Banker Vs Collecting Banker-Customer Grievances Grievance Redressal –Banking Ombudsman.</p>	CO4	K1, K2, K4, K5
UNIT-V	<p>Digital Banking Meaning- Services - e-banking and financial services- Initiatives Opportunities - Internet banking Vs Traditional Banking Mobile banking– Anywhere Banking-Any Time Banking- Electronic Mobile Wallets. ATM – Concept - Features - Types-. Electronic money-Meaning-Categories-Merits of e-money - National Electronic Funds Transfer (NEFT), RTGS, IMPS, UPI and Digital currency – Differences - Safety and Security in Digital Banking.</p>	CO5	K1, K3, K4, K5

Recommended Text Books

- B. Santhanam, Banking & Financial System, Margam Publication, Chennai

Reference Books

- Gurusamy S, Banking Theory: Law and Practice, Vijay Nicole Publication, Chennai.
- Muraleedharan, Modern Banking: Theory and Practice, Prentice Hall India Learning Private Ltd, New Delhi.
- Gupta P.K. Gordon E. Banking and Insurance, Himalaya publication, Kolkata.
- Gajendra, A Text on Banking Theory Law & Practice, Vrinda Publication, Delhi.
- K P Kandasami, S Natarajan & Parameswaran, Banking Law and Practice, S Chand publication, New Delhi.
- Kaitaj Sanjay, Banking Theory and Practice, Lambert Academic Publishing,
- Henry Dunning Macleod, The Theory And Practice Of Banking, Hard Press Publishing, Old New Zealand.
- William Amasa Scott, Money And Banking: An Introduction To The Study Of Modern Currencies, Kesinger publication, USA.
- Nektarios Michail, Money, Credit, and Crises: Understanding the Modern Banking System, Palgrave Macmillan, London

Website and e-learning source

<https://www.rbi.org.in/>

<https://businessjargons.com/e-banking.html>

<https://www.wallstreetmojo.com/endorsement/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Aware of various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks	K1, K2, K3
CO2	Analyze the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function	K1, K2, K3, K4
CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion	K1, K2
CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization.	K1, K2, K4, K5
CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement.	K1, K3, K4, K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	2	3	2	2	3	3	2	2
CO2	3	2	3	2	3	2	3	2	2	3	3	2	2
CO3	3	2	3	2	3	2	3	2	2	3	3	2	2
CO4	3	2	3	2	3	2	3	2	2	3	3	2	2
CO5	3	2	3	2	3	2	3	2	2	3	3	2	2

COURSE DESCRIPTORS

Title of the Course	INCOME TAX LAW AND PRACTICE I	Hours/Week	05
Course Code	AUCCP53	Credits	04
Category	CORE XI	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To understand the basic concepts & definitions under the Income Tax Act, 2025.
- To compute the residential status of an assessee and the incidence of tax.
- To compute income under the head salaries.
- To learn the concepts of Annual value associated deductions and the calculation of income from House property.
- To compute the income from Business & Profession considering its basic principles & specific disallowances.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction to Income Tax Introduction to Income Tax – History – Objectives of Taxation - Features of Income Tax – Meaning of Income – Types – Important Definitions Under the Income Tax Act –Types of Assessee – Income exempted under Section 10.	CO1	K1, K2, K3
UNIT-II	Residential Status Residential Status – Residential Status of an Individual – Company – HUF – Basic Conditions – Additional Conditions – Incidence of Tax and Residential Status – Problems on Residential Status and Incidence of Tax.	CO2	K1, K2, K3, K4
UNIT-III	Income from Salary Salary Income - Definition – Allowances –Taxability - Perquisites – Kinds of Perquisites –Types of Provident Fund - Gratuity – Pension – Commutation of Pension – Deduction of Salary - Profits in Lieu of Salary - Computation of Salary Income.	CO4	K1, K2, K3, K4, K5
UNIT-IV	Income from House Property Income from House Property –Basis of Charge – Annual Value – Gross Annual Value, Net Annual Value - Let-out vs Deemed to be let out Self-Occupied Property – Deductions – Computation of Income from House Property.	CO4	K1, K2, K3, K4, K5
UNIT-V	Profits and Gains from Business or Profession Income from Business or Profession – Allowable Expenses – Expenses Disallowed - General Deductions – Depreciation – Undisclosed Income & Investments, Unexplained expenditure (Sec 69A, 69B, 69C, 69D) – Compulsory Maintenance of Books of Accounts – Audit of Accounts of Certain Persons – Special Provisions for Computing Incomes on Estimated Basis (Deemed Income) – Computation of Income from Business or Profession.	CO5	K1, K2, K3, K4, K5
	THEORY 20% & PROBLEMS 80% (As per Income Tax Act, 2025)		

Recommended Text Books

- T. Srinivasan – Income Tax & Practice –Vijay Nicole Imprints Private Limited, Chennai.

Reference Books

- T.S. Reddy and Hariprasad Reddy, Income Tax Law and Practice, Margham Publications, Chennai.
- V.P. Gaur, Narang, Puja Gaur and Rajeev Puri - Income Tax Law and Practice, Kalyani Publishers, New Delhi.
- DinkarPagare, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.
- H.C. Mehrotra, Dr.Goyal S.P, Income Tax Law and Accounts, Sahitya Bhavan Publications, Agra.
- Hariharan N, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai.
- Bhagwati Prasad, Income Tax Law and Practice, Vishwa Prakasan. New Delhi.
- Vinod K. Singhania, Students Guide to Income Tax.,U.K.Bharghava Taxman.
- Dr.Vinod K Singhania, Dr. Monica Singhania, Taxmann's Students' Guide to Income Tax, New Delhi.
- Mittal Preethi Rani and Bansal Anshika, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.

Website and e-learning source

- 1 <https://cleartax.in/s/residential-status/>
- 2 <https://www.legalraasta.com/itr/income-from-salary/>
- 3 <https://taxguru.in/income-tax/income-house-properties.html>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Demonstrate the basic concepts and definitions under the Income Tax Act.	K1, K2, K3
CO2	Assess the residential status of an assessee & the incidence of tax.	K1, K2, K3, K4
CO3	Compute income of an individual under the head salaries.	K1, K2, K3, K4, K5
CO4	Compute income from house property.	K1, K2, K3, K4, K5
CO5	Evaluate income from a business carried on or from the practice of a Profession.	K1, K2, K3, K4, K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	1	2	2	2	3	3	3	2
CO2	3	3	3	3	3	2	2	2	3	3	3	3	2
CO3	3	3	3	3	3	2	2	2	3	3	3	3	2
CO4	3	3	3	3	3	2	2	2	3	3	3	3	2
CO5	3	3	3	3	3	2	2	2	3	3	3	3	2

COURSE DESCRIPTORS

Title of the Course	PROJECT WITH VIVA VOCE	Hours/Week	05
Course Code	AUPCP54	Credits	04
Category	CORE - XII	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

COURSE DESCRIPTORS

Title of the Course	FINANCIAL MANAGEMENT	Hours/Week	04
Course Code	AUECP55A	Credits	03
Category	ELECTIVE V	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To introduce the concept of financial management.
- To learn the capital structure theories.
- To gain knowledge about techniques in capital budgeting
- To learn about dividend payment models.
- To understand the needs and calculation of working capital in an organization.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction Meaning and Objectives of Financial Management – Functions of Financial Management. Finance - Sources of Finance-Role of Financial Manager - Financial Goals- Profit maximization Vs. Wealth Maximization – Concept of Time Value Money –Risk and Return – Components of Financial Management. (Theory only)	CO1	K1, K2
UNIT-II	Financial Decision Capital Structure – Definition - Meaning- Theories- Factors determining Capital Structure – Various approaches of Capital structure Cost of Capital – Meaning – Factors determining cost of capital - Methods - Cost of Equity Capital – Cost of Preference Capital – Cost of Debt – Cost of Retained Earnings – Weighted Average (or) Composite Cost of Capital (WACC) Leverage – Concept – Operating and Financial Leverage. (Simple problems only)	CO2	K1, K2, K3, K4
UNIT-III	Investment Decision Capital Budgeting - Meaning - Process – Cash Flow Estimation Capital Budgeting Appraisal Methods: Traditional Methods - Payback Period – Accounting Rate of Return (ARR). Discounted Cash-flow Methods: Net Present Value (NPV) – Internal Rate of Return – Profitability Index. (Simple problems only)	CO3	K1, K2, K3, K4
UNIT-IV	Dividend Decision Meaning – Dividend Policies – Factors Affecting Dividend Payment – Provisions on Dividend Payment in Company Law – Dividend Models - Walter’s Model - Gordon’s Model – M&M Model. (Simple problems only)	CO4	K1, K2, K3, K4, K5
UNIT-V	Working Capital Decision Working Capital - Meaning and Importance – Classification - Working Capital Cycle - Factors determining Working Capital (Simple problems only) - Management of Current Assets: Inventories, Accounts Receivables and Cash. (Theory only)	CO5	K1, K2, K3, K4, K5
	THEORY 40 % & PROBLEMS 60 %		

Recommended Text Books

1. A. Murthy, Financial Management, Margham Publications, Chennai.

Reference Books

- R.K. Sharma, Shashi K Gupta, Financial Management, Kalyani Publications, New Delhi.
- I.M. Pandey, Financial Management, Vikas Publications, Noida.
- Dr. S.N. Maheshwari, Elements of Financial Management, Sultan Chand & Sons, New Delhi.
- Dr. Kulkarni and Dr. Sathya Prasad, Financial Management, Himalaya Publishing House, Mumbai.
- Prasana Chandra, Financial Management, Tata McGraw Hill, New Delhi.
- Khan & Jain, Financial Management, Sultan Chand & Sons, New Delhi.
- M.Y. Khan and P.K. Jain, Financial Management, McGraw Hill Education, Noida.
- J. Srinivasan and P. Periyasamy, Financial Management, Vijay Nicole Publishers, Chennai.

Website and e-learning source

<https://efinancemanagement.com/financial-management/types-of-financial-decisions-2>
<https://efinancemanagement.com/dividend-decisions-3>
<https://www.investopedia.com/terms/w/workingcapital.asp>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Recall the concepts in financial management	K1, K2
CO2	Apply the various capital structure theories.	K1, K2, K3, K4
CO3	Apply capital budgeting techniques to evaluate investment proposals.	K1, K2, K3, K4
CO4	Determine dividend pay-outs.	K1, K2, K3, K4, K5
CO5	Estimate the working capital of an organization.	K1, K2, K3, K4, K5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	2	3	3	2	2	3	2	2
CO2	3	2	2	2	3	2	2	2	2	3	3	2	3
CO3	3	3	3	2	3	2	3	3	2	2	3	2	2
CO4	3	2	2	2	3	2	2	2	2	3	3	2	2
CO5	3	3	3	2	3	2	3	3	2	2	3	2	2

COURSE DESCRIPTORS

Title of the Course	INDIRECT TAXATION	Hours/Week	04
Course Code	AUECP55B	Credits	03
Category	ELECTIVE - V	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To get introduced to indirect taxes
- To have an overview of Indirect taxes
- To be familiar the CGST and IGST Act
- To learn procedures under GST
- To gain knowledge about Customs Duty.

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction to Indirect Tax Concept and Features of Indirect Taxes - Difference between Direct and Indirect Taxes –Special Feature of Indirect Tax Levies – Contribution to Government Revenues – Role of Indirect Taxation – Merits and Demerits of Indirect Taxation – Reforms in Indirect Taxation – Introduction to Foreign Trade Policy (FTP) 2023	CO1	K1, K2, K3
UNIT-II	An Overview of Goods & Service Tax (GST) Introduction of Goods and Service Tax in India— Kelkar Committee - Constitutional Amendment - Goods and Service Tax: Concepts, Meaning, Significance, Features and Benefits - Important GST Common Portals – Taxes and Duties not Subsumed in GST – Rates of GST in India - Role of GSTN in Implementation of GST - Challenges in Implementation of GST.	CO2	K1, K2, K3, K4
UNIT-III	CGST & IGST Act 2017 Supply – Meaning – Classification – Time of Supply – Valuation – Voluntary – Compulsory – Input Tax Credit – Eligibility – Reversal – Reverse charge Mechanism – E-Way Bill - Various Provisions Regarding E-way Bill in GST – IGST Act - Export and Import of Goods and Services– Inter State Vs Intra State Supply – Place of Supply– Anti Profiteering Rules – Doctrine of Unjust Enrichment	CO3	K1, K2, K3, K4
UNIT-IV	Procedures under GST Registration under GST Law, Tax Invoice Credit and Debit Notes, Different GST Returns, Electronic Liability Ledger, Electronic Credit Ledger, Electronic Cash Ledger, Different Assessment under GST, Interest Penalty under GST, Mechanism of Tax Deducted at Source (TDS) and Tax Collected at Source (TCS), Audit under GST.	CO4	K1, K2, K3
UNIT-V	Customs Act 1962 Custom Duty: Concepts; Territorial Waters - High Seas - Levy of Customs Duty, Types of Custom Duties – Valuation - Baggage Rules & Exemptions.	CO5	K1, K2, K3
	100% Theory only		

Recommended Text Books

- T.S. Reddy & Y.Hariprasad Reddy, Business Taxation, Margham Publications, Chennai.

Reference Books

- Vinod K Singhania, Indirect Taxes, Taxman’s Publications, New Delhi.
- Dr. H.C. Mehrotra & Prof .V.P Agarwal, Goods and Services Tax (GST), Sahitya Bhawan Publications, Agra.
- Rajat Mohan, Goods & Services Tax, Bharat Law Publications House, New Delhi.
- CA. Pushpendra Sisodia, Indirect Tax Laws, Bharat Publications, New Delhi.
- V.S.Datey, All About GST, Taxmann Publications, New Delhi.

Website and e-learning source

<https://iimskills.com/goodsandservicestax/#:~:text=GST%20an%20acronym%20for%20Goods%20and%20Services%20Tax ,etc.%2C%20to%20stand%20as%20a%20unified%20tax%20regime.>

<https://tax2win.in/guide/gst-procedure>

<https://www.cbic.gov.in/htdocs-cbec/customs/cs-act/cs-act-ch9>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Acquaintance with Indirect tax laws	K1, K2, K3
CO2	Exposed to the overview of GST.	K1, K2, K3, K4
CO3	Apply provisions of CGST and IGST	K1, K2, K3, K4
CO4	Summarize procedures of GST	K1, K2, K3
CO5	Discuss aspects of Customs Duty in India	K1, K2, K3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	2	3	3	2	2	3	2	2
CO2	3	2	2	2	2	2	3	2	2	2	3	2	3
CO3	3	3	3	2	3	2	3	3	3	3	3	2	2
CO4	3	2	2	2	2	2	2	2	2	2	3	2	2
CO5	3	3	3	2	3	2	3	3	3	3	3	2	3

COURSE DESCRIPTORS

Title of the Course	SOFTWARE ENGINEERING	Hours/Week	02
Course Code	AUECP56A	Credits	02
Category	ELECTIVE VI	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To introduce the software development life cycles
- To provide an insight into gathering and analysis of SRS
- To introduce concepts related to structured and objected oriented analysis & design
- To provide an insight into UML
- To provide an insight into software testing techniques

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Introduction – Evolution – Software Development projects – Emergence of Software Engineering. Software Life cycle models – Waterfall model – Rapid Application Development – Agile Model – Spiral Model	CO1	K1, K2
UNIT-II	Requirement Analysis and Specification – Gathering and Analysis – SRS – Formal System Specification	CO2	K1, K2
UNIT-III	Software Design – Overview – Characteristics – Cohesion & Coupling – Layered design – Approaches Function Oriented Design – Structured Analysis – DFD – Structured Design – Detailed design	CO3	K1, K2
UNIT-IV	Object Modeling using UML – OO concepts – UML – Diagrams – Use case, Class, Interaction, Activity, State Chart – Postscript	CO4	K1, K2
UNIT-V	Coding & Testing – coding – Review – Documentation – Testing – Black-box, White-box, Integration, OO Testing, Smoke testing.	CO5	K1, K2

Recommended Text Books

- Rajib Mall, “Fundamentals of Software Engineering”, PHI 2018, 5th Edition.

Reference Books

- Rajib Mall, “Fundamentals of Software Engineering”, PHI 2018, 5th Edition.
- Roger S. Pressman, “Software Engineering - A Practitioner’s Approach”, McGraw Hill 2010, 7th Edition.
- Pankaj Jalote, “An Integrated Approach to Software Engineering”, Narosa Publishing House 2011, 3rd Edition.

Website and e-learning source

1 NPTEL online course – Software Engineering - <https://nptel.ac.in/courses/106105182/>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Know about the software development life cycles	K1, K2
CO2	Gain knowledge on SRSs	K1, K2
CO3	Understand the concepts related to structured and objected oriented analysis & design	K1, K2
CO4	Learn about UML	K1, K2
CO5	Know the software testing techniques	K1, K2

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	-	-	-	3	3	3	3
CO2	3	3	3	2	2	1	-	-	-	3	3	2	2
CO3	3	3	3	3	1	2	-	-	-	3	3	3	2
CO4	3	3	3	3	1	2	-	-	-	3	3	2	1
CO5	3	3	3	3	1	2	-	-	-	3	3	2	1

COURSE DESCRIPTORS

Title of the Course	PRACTICAL-SOFTWARE ENGINEERING UML	Hours/Week	02
Course Code	AUEPCP56A	Credits	01
Category	ELECTIVE VI	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To get familiarized to the usage of UML tool kit.
- To understand the requirements of the software and to map them appropriately to subsequent phases of the software development
- To develop the ability to verify and validate their designs

Contents	Cognitive Levels
<p>LIST OF PRACTICALS</p> <p>Using UML tools produce analysis and design models for</p> <p>a. Library Management System</p> <p>b. Automatic Teller Machine</p> <p>c. Student Information Management</p> <p>d. Matrimony Service</p> <p>e. Stock Management System</p>	<p>K1, K2, K3, K4, K5, K6</p>

Recommended Text Books

- D. Ashok and K.R. Aruna, Software Engineering, Selvam Publications, 2025

Reference Books

- Norman Matloff, The Art of R Programming- A Tour of Statistical Software Design”, 2011
- Garrett Grolemond, Hadley Wickham, Hands-On Programming with R: Write Your Own Functions and Simulations”, 1st Edition, 2014.
- Venables, W.N., and Ripley S programming, Springer, 2000.

Website and e-learning source

https://www.nchsoftware.com/?srsltid=AfmBOooBqge_svbMJWq8hnwnfumEwQ5RLprvRGZTdHmjjkHXmNhttps://nptel.ac.in/courses/106105224Fy5L6

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Analyze and design the problem at hand.	K1, K2, K3, K4, K5, K6
CO2	Use UML tools for the designing the software and test the correctness and soundness of their software through testing tools.	K1, K2, K3, K4, K5, K6
CO3	Verify and validate their designs	K1, K2, K3, K4, K5, K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	-	-	-	3	3	3	3
CO2	3	3	3	3	3	3	-	-	-	3	3	2	1
CO3	3	3	3	3	3	3	-	-	-	3	3	2	2

COURSE DESCRIPTORS

Title of the Course	OBJECT ORIENTED ANALYSIS AND DESIGN	Hours/Week	02
Course Code	AUECP56B	Credits	02
Category	ELECTIVE VI	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To make aware of the software requirements, design the software using tools
- To be acquainted with the writing of test cases using different testing techniques.
- To know about UML models, analyzing and design.
- To learn about classes methods and table
- To learn about packages, state diagram and activity diagrams

UNITS	Contents	COs	Cognitive Levels
UNIT-I	Object Orientation – System development – Review of objects - inheritance - Object relationship – Dynamic binding – OOSD life cycle – Process – Analysis – Design – prototyping – Implementation – Testing- Overview of Methodologies	CO1	K1,K2,K3
UNIT-II	R Rumbaugh methodology, OMT – Booch methodology, Jacobson methodology – patterns – Unified approach – UML – Class diagram – Dynamic modeling.	CO2	K1,K2,K3
UNIT-III	Introduction - UML – Meta model - Analysis and design - more information. Outline Development Process: Overview of the process- Inception - Elaboration-construction-refactoring patterns transmission- iterative development -use cases.	CO3	K1,K2,K3
UNIT-IV	OO Design axioms – Class visibility – refining attributes – Methods Access layer – OODBMS – Table – class mapping view layer	CO4	K1,K2,K3
UNIT-V	Interaction diagram-package diagram-state diagram-activity diagram deployment diagram - UML and programming	CO5	K1,K2,K3, K3,K4

Recommended Text Books

- D. Ashok and K.R. Aruna, Software Engineering, Selvam Publications, 2025

Reference Books

- Ali Bahrami, “Object Oriented System Development”, McGraw-Hill International Edition 2017.
- Martin Fowler, Kendall Scott, "UML Distilled", Addison Wesley
- Eriksson, "UML Tool Kit", Addison Wesley
- Booch G., “Object oriented analysis and design”, Addison- Wesley Publishing Company 3 rd edition.
- Rambaugh J, Blaha.M. Premeriani, W., Eddy F and Loresen W., “Object Oriented Modeling and Design”, PHI

Website and e-learning source

<https://nptel.ac.in/courses/106105153>

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Learn about software requirements, design and software tools	K1, K2, K3
CO2	Write test cases using different testing techniques.	K1, K2, K3
CO3	Learn about UML models, analyzing and design	K1, K2, K3
CO4	Know about class methods and table	K1, K2, K3
CO5	Learn about packages, state diagram and activity diagrams	K1, K2, K3, K4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	-	-	-	3	3	3	3
CO2	3	3	3	3	3	3	-	-	-	3	3	3	2
CO3	3	3	3	3	3	3	-	-	-	3	3	2	1
CO4	3	3	3	3	3	3	-	-	-	3	3	2	1
CO5	3	3	3	3	3	3	-	-	-	3	3	1	1

COURSE DESCRIPTORS

Title of the Course	PRACTICAL-OBJECT ORIENTED ANALYSIS AND DESIGN -UML	Hours/Week	02
Course Code	AUEPCP56B	Credits	01
Category	ELECTIVE VI	Year & Semester	III & V
Prerequisites	Higher secondary commerce/computer applications	Regulation	2024

Objectives of the course:

- To get familiarized to the usage of UML tool kit.
- To understand the requirements of the software and to map them appropriately to subsequent phases of the software development
- To develop the ability to verify and validate their designs

Contents	Cognitive Levels
LIST OF PRACTICALS Using UML tools produce analysis and design models for <ol style="list-style-type: none"> a. Library Management System b. Automatic Teller Machine c. Student Information Management d. Matrimony Service e. Stock Management System 	K1, K2, K3, K4, K5, K6

Recommended Text Books

- Roger D. Peng, "R Programming for Data Science", 2012

Reference Books

- Norman Matloff, "The Art of R Programming- A Tour of Statistical Software Design", 2011
- Garrett Grolemund, Hadley Wickham, "Hands-On Programming with R: Write Your Own Functions and Simulations", 1st Edition, 2014.
- Venables W.N. and Ripley S programming, Springer, 2000.

Website and e-learning source

https://www.nchsoftware.com/?srsltid=AfmBOooBqge_svbMJWq8hnwnfumEwQ5RLprvRGZTdHmjjkHXmNhttps://nptel.ac.in/courses/106105224Fy5L6

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

COs	CO Description	Cognitive Level
CO1	Analyze and design the problem at hand.	K1, K2, K3, K4, K5, K6
CO2	Use UML tools for the designing the software and test the correctness and soundness of their software through testing tools.	K1, K2, K3, K4, K5, K6
CO3	Verify and validate their designs	K1, K2, K3, K4, K5, K6

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	2	-	-	-	3	3	3	3
CO2	3	3	3	3	3	2	-	-	-	3	3	2	2
CO3	3	3	3	3	3	2	-	-	-	3	3	2	2