KG COLLEGE OF ARTS AND SCIENCE
Autonomous Institution | Affiliated to Bharathiar University
Accredited with A++ Grade by NAAC
ISO 9001:2015 Certified Institution
KGiSL Campus, Saravanampatti, Coimbatore – 641 035

Regulations 2024 - 25 for Undergraduate Programme

Learning Outcomes Based Curriculum Framework- (LOCF) model with Choice Based Credit System (CBCS)

Programme: B.Com. Computer Applications (B.Com.CA)

Programme Code: BCC

(Applicable for the Students Admitted During the Academic Year 2024 - 25 onwards)

Eligibility

The Student should have passed Higher Secondary Examination.
(As per the eligibility condition given by Bharathiar University Ref.BU/R/B3-B4/Eligibility Condition/2024/9206 dated 24/05/2024)

Program Learning Outcomes (PLOs)

The successful completion of the B.Com. Computer Applications programme shall enable thestudents to:

PLO1	Provide students with specific knowledge and skills relevant to their disciplines andcareers.
PLO2	Make the students acquainted with technical and practical concepts; founders must solve real business problems using different programming languages.
PLO3	Improve accounting and computer skills required to develop lifelong learning through IT-enabled knowledge and practice with value-based add-ons and job-oriented courses that ensure their sustainability at the organization level.
PLO4	Demonstrate leadership traits, communication skills, and innovative thinking for optimal performance in personal, professional, societal, and environmental domains.
PLO5	Demonstrate high standards of ethical conduct in the application of computers in accounting and finance and become socially responsible citizens, contribute to the sustainable growth of the profession and the community.

B.Com. Computer Applications
Distribution of Credits and Hours for all the Semesters

Part	Courses	No. of Courses	Hours		Credits	Total		Semester
I	Language-I	4	4 X 4	16	4 X 3	12	12	1 - 4
II	Language-II	4	4 X 4	16	4 X 3	12	12	1 - 4
III	Core Theory **(6 hrs./Week)**	9	9 X 6	54	9 X 4	36	100	1 - 5
	Core Theory **(5 hrs./Week)**	2	2 X 5	10	2 X 4	8		5 - 6
	Core Theory **(4 hrs./Week)**	1	1 X 4	4	1 X 4	4		1
	Core Theory **(4 hrs./Week)**	2	2 X 4	8	2X 3	6		2,5
	Core Lab **(4 hrs./Week)**	3	3 X 4	12	3 X 2	6		2,4,5
	Core Lab **(4 hrs./Week)**	3	3 X 4	12	3 X 3	9		1,3,4
	Allied	4	4 X 4	16	4 X 3	12		1 - 4
	Electives	2	2 X 5	10	2 X 3	6		5, 6
	Project	1	1 X 6	6	1 X 5	5		6
	Internship (IT)	1	-	-	1 X 2	2		5
	Skill Enhancement (SEC)	3	3 X 2	6	3 X 2	6		3,4,6
IV	Foundation Course (FC)	2	2 X 2	4	2 X 2	4	14	1 - 2
	Foundation Course (FC)	1	-	-	1X2	2		3
	Ability Enhancement Compulsory Course(AECC)	3	3 X 2	6	3 X 2	6		1 - 4
	Ability Enhancement Compulsory Course (AECC) – Online Course - MOOC	1	-	-	1 X 2	2		3
V	Liberal Arts (Extra-Curricular and Co-Curricular)	-	-	-	2	2	2	4
	Total	**46**		**180**		**140**	**140**	

Consolidated Semester wise and Component wise Hours and Credits Distribution

Semester	Part I		Part II		Part III		Part IV		Part V		Total	
	Hrs.	Credits	Hrs.	Credits	Hrs.	Credits	Hrs.	Credits	Hrs.	Credits	**Hrs.**	**Credits**
I	4	3	4	3	18	14	4	4	-	-	**30**	**24**
II	4	3	4	3	18	12	4	4	-	-	**30**	**22**
III	4	3	4	3	22	16	-	4	-	-	**30**	**26**
IV	4	3	4	3	20	14	2	2	-	2	**30**	**24**
V	-	-	-	-	30	22	-	-	-	-	**30**	**22**
VI	-	-	-	-	30	22	-	-	-	-	**30**	**22**
Total	**16**	**12**	**16**	**12**	**138**	**100**	**10**	**14**	**-**	**2**	**180**	**140**

Curriculum
B.Com. Computer Applications

Semester – 1									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM11L	I	Language – I	Tamil – I	4	3	25	75	100	3
24HIN11L	I		Hindi – I						
24MAL11L	I		Malayalam – I						
24FRE11L	I		French – I						
24ENG12L	II	English – I	English – I	4	3	25	75	100	3
24BCC13C	III	Core – I	Financial Accounting - I	6	3	25	75	100	4
24BCC14C	III	Core – II	Programming With C++	4	3	25	75	100	4
24BCC15P	III	Core Lab – I	**Lab:** Advanced Excel & Financial Modelling	4	3	40	60	100	3
24BCC16A	III	Allied – I	Principles of Management	4	3	25	75	100	3
24ENV1FC	IV	FC – I	Environmental Studies	2	2	50	-	50	2
24QUA1AE	IV	AECC – I	Quantitative Aptitude	2	2	-	50	50	2
Total				**30**				**700**	**24**

Semester – 2									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM21L	I	Language – II	Tamil – II	4	3	25	75	100	3
24HIN21L	I		Hindi – II						
24MAL21L	I		Malayalam – II						
24FRE21L	I		French – II						
24ENG22L	II	English – II	English – II	4	3	25	75	100	3
24BCC23C	III	Core – III	Financial Accounting– II	6	3	25	75	100	4
24BCC24C	III	Core – IV	Fintech & Digital Finance Innovation	4	3	25	75	100	3
24BCC25P	III	Core Lab - II	**Lab:** Programming with C++	4	3	40	60	100	2
24BCC26A	III	Allied – II	Business Law	4	3	25	75	100	3
25HUM2FC	IV	FC – II	Human Rights	2	2	50	-	50	2
24SOF2AE	IV	AECC – II	Soft Skills	2	2	-	50	50	2
Total				**30**				**700**	**22**

Semester – 3									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours / Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM31L	I	Language - I	Tamil – III	4	3	25	75	100	3
24HIN31L	I		Hindi – III						
24MAL31L	I		Malayalam – III						
24FRE31L	I		French – III						
24ENG32L	II	Language - II	English – III	4	3	25	75	100	3
24BCC33C	III	Core – V	Corporate Accounting – I	6	3	25	75	100	4
24BCC34C	III	Core - VI	Python Programming	6	3	25	75	100	4
24BCC35P	III	Core Lab- III	**Lab:** Data Analytics for Finance	4	3	40	60	100	3
24BCC36A	III	Allied - III	Company Law	4	3	25	75	100	3
24BCC37P	III	SEC Lab - I	**Lab:** Python Programming	2	3	40	60	100	2
24BAT3FC/	III	FC-III	Basic Tamil	-	2	50	-	50	2
24ADT3FC/			Advanced Tamil						
24IKS3FC			Indian Knowledge Systems(IKS)*						
24MOO3AE	IV	AECC - III	Online Course – MOOC	-	-	50	-	50	2
Total				**30**				**800**	**26**

Semester – 4									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM41L	I	Language - I	Tamil – IV	4	3	25	75	100	3
24HIN41L	I		Hindi– IV						
24MAL41L	I		Malayalam- IV						
24FRE41L	I		French – IV						
24ENG42L	II	Language - II	English - IV	4	3	25	75	100	3
24BCC43C	III	Core - VII	Corporate Accounting – II	6	3	25	75	100	4
24BCC44P	III	Core Lab- IV	**Lab:** Database Management System Lab	4	3	40	60	100	3
24BCC45P	III	Core Lab - V	**Lab**: Advanced Applications of Data Analytics in Fintech Lab	4	3	40	60	100	2
24BCC46A	III	Allied - IV	Business Mathematics and Statistics	4	3	25	75	100	3
24BCC47P	III	SEC Lab - II	**Lab**: Computer Applications :GST with Tally – I	2	3	40	60	100	2
24IDT4AE	IV	AECC - IV	Innovation & Design Thinking/	2	2	-	50	50	2
24IPR4AE			Intellectual Property Rights /						
24END4AE			Entrepreneurship Development						
24EXC4LA	IV	Extra-Curricular and Co-Curricular	Liberal Arts	-	-	50	-	50	2
			Total	**30**				**800**	**24**

Semester – 5									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24BCC51C	III	Core – VIII	Cost Accounting	6	3	25	75	100	4
24BCC52C	III	Core – IX	Banking Theory Law and Practice	5	3	25	75	100	4
24BCC53C	III	Core – X	Income Tax Law and Practice	6	3	25	75	100	4
24BCC54C	III	Core – XI	Executive Business Communication	4	3	25	75	100	3
24BCC55P	III	Core Lab – VI	**Lab:**Computer Applications Practical : MS Word, MS Excel and Tally 9.2 - II	4	3	40	60	100	2
24BCC5AE/	III	Elective – I	Information Systems in Business **(Information Technology &Business Management)**	5	3	25	75	100	3
24BCC5BE/			Fundamentals of Computer Networks **(Networks)/**						
24BCC5CE			Web Design **(Web Development)**						
24BCC56I	III	SEC	Internship	-	2	50	-	50	2
			Total	**30**				**650**	**22**

Semester – 6

Course Code	Part	Course Category	Course Name	Hours/ Week	Examination				Credits
					Duration in Hours	Max Marks			
						CIA	ESE	Total	
	III	Core – XII	Management Accounting	6	3	25	75	100	4
	III	Core – XIII	Principles of Auditing	6	3	25	75	100	4
	III	Core – XIV	Indirect Taxes	6	3	25	75	100	4
	III	Elective– II	E-Commerce Technology	5	3	25	75	100	3
			Cloud Computing						
			PHP Programming						
	III	SEC –IV	HTML Lab	2	3	40	60	100	2
	IV	Core	Project Work	5	4	40	60	100	5
			Total	**30**				**600**	**22**
			Grand Total	**180**				**4250**	**140**

Semester 1

Semester – 1									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM11L	I	Language – I	Tamil – I	4	3	25	75	100	3
24HIN11L	I		Hindi – I						
24MAL11L	I		Malayalam – I						
24FRE11L	I		French – I						
24ENG12L	II	English – I	English – I	4	3	25	75	100	3
24BCC13C	III	Core – I	Financial Accounting - I	6	3	25	75	100	4
24BCC14C	III	Core – II	Programming With C++	4	3	25	75	100	4
24BCC15P	III	Core Lab – I	**Lab:** Advanced Excel & Financial Modelling	4	3	40	60	100	3
24BCC16A	III	Allied – I	Principles of Management	4	3	25	75	100	3
24ENV1FC	IV	FC – I	Environmental Studies	2	2	50	-	50	2
24QUA1AE	IV	AECC – I	Quantitative Aptitude	2	2	-	50	50	2
Total				**30**				**700**	**24**

Part – I : Language I – Tamil-I

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours / Week	Credits
24TAM11L	Tamil - I	Language - I	4	3

Course Objectives

The course intends to cover

- இலக்கிய வளர்ச்சியை அறிந்துகொள்ளுதல்
- இலக்கியம் படைக்கும் திறன்
- இலக்கிய இலக்கண உரைசெய்தல்
- திறனாய்வு முறையினைக் கற்றுத்தேர்தல்

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	புதுக்கவிதையின் மூலம் வாழ்வியல் விழுமியங்களை உணர்ந்து கொள்ளுதல்.	K1, K2
CLO2	சிறந்த மற்றும் வாழும் கவிஞர்களை அறிந்துகொள்ளுதல்.	K2, K3
CLO3	சிறந்த படைப்பாளர்களின் சிறுகதையில் வெளிப்படும் சமூகச்சிந்தனைகளை அறிந்து விழிப்புணர்வைப் பெறுதல்.	K3
CLO4	தற்கால இலக்கியங்களான புதுக்கவிதை, சிறுகதை தோன்றி வளர்ந்த பின்புலத்தை அறிதல்.	K1, K3
CLO5	மொழியைப் பிழையின்றி பேச, எழுத, கற்கத் தேவையான தமிழ் இலக்கணத்தின் இன்றியமையாமையை உணர்தல். நடைமுறை வாழ்வியலுக்குத் தேவைப்படும் ஆங்கிலக் கடிதத்தைத் தமிழாக்கம் செய்தலுக்கான பயிற்சி பெறுதல்.	K2, K3
K1 - Remember; **K2** - Understand; **K3** – Apply		

Part – I: Tamil – I

Unit	Content	No. of Hours
I	**(நாட்டுப்பற்று)** 1. உலகத்தை நோக்கி வினவுதல் - பாரதியார் 2. பாரதிதாசன் கவிதைகள் - பாரதிதாசன் • தமிழ்ப்பேறு 3. ஒற்றுமையே உயிர்நிலை - கவிமணி 4. தேவதேவன் கவிதைகள் - தேவதேவன் • சாலையும் மரங்களும் செருப்பும் • புதிய வீடு 5. ஆலாபனை - கவிக்கோ அப்துல் ரகுமான் • போட்டி • பாதை 6. புத்தகச் சந்தை - கவிஞர் வாலி	14
II	**(சமூகம்)** 1. எட்டாவது சீர்..... - ஈரோடு தமிழன்பன் 2. தொலைந்து போனேன் - கவிஞர் தாமரை 3. திருநங்கைகள் காகிதப் பூக்கள் - நா. காமராசன் 4. மரங்களைப் பாடுவேன் - வைரமுத்து 5. புள்ளிப் பூக்கள் (ஹைக்கூ) - அமுத பாரதி 6. நாட்டுப்புறப் பாடல்கள் • தாலாட்டுப் பாடல், தெம்மாங்கு பாடல், உழவுத்தொழில்	14
III	**(சிறுகதை)** 1. அகல்யை - புதுமைப்பித்தன் 2. சுமைதாங்கி - ஜெயகாந்தன் 3. அம்மா ஒரு கொலை செய்தாள் - அம்பை 4. சோற்றுக் கணக்கு - ஜெயமோகன் 5. தூரத்து உறவு - வைரமுத்து	12

Unit	Content	No. of Hours
IV	**(இலக்கிய வரலாறு)** 1. மரபுக்கவிதையின் தோற்றமும் வளர்ச்சியும் 2. புதுக்கவிதையின் தோற்றமும் வளர்ச்சியும் 3. ஹைக்கூ கவிதையின் தோற்றமும் வளர்ச்சியும் 4. சிறுகதையின் தோற்றமும் வளர்ச்சியும்	10
V	**(இலக்கணம்)** 1. எழுத்துக்கள் (முதல் எழுத்துக்கள், சார்பெழுத்துக்கள்) 2. எழுத்துக்களின் பிறப்பு 3. மாத்திரைகள் 4. பயிற்சிக்குரியன - மொழிப்பெயர்ப்பு (ஆங்கிலத்திலிருந்து தமிழுக்கு மொழிப்பெயர்த்தல்)	10
	Total Hours	**60**

Reference Books	
1	பாரதி பாடல்கள் ஆய்வுப் பதிப்பு, பேரா. ம ரா போ குருசாமி,(2016) தமிழ்ப் பல்கலைக் கழகம், தஞ்சாவூர்
2	ஆலாபனை, அப்துல் ரகுமான்,(2000) கவிக்கோ பதிப்பகம்
3	தாமரை கவிதைகள், தாமரை, (2012) நியூ செஞ்சுரி புக் ஹவுஸ்
4	தமிழ் இலக்கிய வரலாறு, மு வரதராசனார், (2021) சாகித்திய அகாதெமி பதிப்பு
5	புதிய வெளிச்சத்தில் தமிழ் இலக்கிய வரலாறு, முனைவர் க பஞ்சாங்கம், (2017) அன்னம் வெளியீட்டு
6	தமிழ் இலக்கிய வரலாறு, முனைவர் கா கோ வேங்கடராமன்,(2008) கலையக வெளியீடு
7	நல்ல தமிழ் எழுத வேண்டுமா?, அ கி பரந்தாமனார் எம். ஏ., (2002)அல்லி நிலையம்
8	100 சிறந்த சிறுகதைகள் (தொகுதி 1 & 2) தொகுப்பு: எஸ் ராமகிருஷ்ணன் (2006) பதிப்பகம்: தேசாந்திரி பதிப்பகம்
9	தமிழ் இலக்கணம் எளிய அறிமுகம் , கோ குமரன் (2010) சந்தியா பதிப்பகம்
10	நாட்டுப்புற இயல் ஆய்வு, சு சக்திவேல்,(2012) மணிவாசகர் பதிப்பகம்

Part – II : Language II - English -I

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours / Week	Credits
24ENG12L	English - I	Language - II	4	3

Course Objectives

The course intends to cover

- Various genres of literature.
- Active and passive vocabulary.
- Usage of Grammar and Communication.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Identify aesthetic sense and appreciate poetry, enhancing creativity and understanding relevant to professional environments.	K1
CLO2	Understand diverse styles of prose, facilitating versatility in writing and inculcating interpersonal skills.	K2
CLO3	Apply the characters and the narrative techniques in creative writing and content creation ethically.	K3
CLO4	Employ vocabulary and grammatical proficiency in communication to enhance clarity in workplace interactions.	K3
CLO5	Enhance overall communication competence. Practicing these skills in combination reinforces learning and provides students with opportunities to use the language in authentic contexts.	K3
K1 - Remember; **K2** - Understand; **K3** - Apply		

Part - II: English - I

Unit	Content	No. of Hours
I	**Poetry** : Nature 1. I Wandered Lonely as a Cloud - William Wordsworth 2. The Sparrow - Paul Laurence Dunbar 3. Stopping by woods on a snowy Evening – Robert Frost	12
II	**Prose** : Friendship 1. The Man in Black - Oliver Goldsmith 2. Of Friendship - Francis Bacon 3. The Blessing of Friends - Sir John Lubbock	12
III	**Short Stories:** Morality 1. The Necklace – Guy de Maupassant 2. The Lottery - Shirley Jackson 3. The Monkey's Paw - W. W. Jacobs	12
IV	**Language Competency:** Vocabulary 1. Vocabulary : Synonyms, Antonyms, Word Formation 2. Appropriate use of Articles and Parts of Speech 3. Error correction	12
V	**English for Communication** 1. Listening for General and Specific Information. 2. Self - Introduction, Introducing others, Greetings. 3. Reading a prose passage, Reading a poem and Reading a short story 4. Descriptive writing – writing a short descriptive essay of two to three paragraphs.	12
	Total Hours	**60**

Text Books	
1.	Zama, M. (2004). Poetry Down the Ages. Orient Blackswan.
2.	Goldsmith, O. (1869). The Works of Oliver Goldsmith. J. Dicks
3.	Bacon, F., & Montagu, B. (1857). The Works of Francis Bacon (Vol. 1). Parry & McMillan.
Reference Books	
1.	Kumar,V. T. Bhavani, Durga.K. Srinivas.YL. (2018). English in use - A textbook for College Students. (English, Paperback).
2.	Swan, M. (2005). Practical english usage (Vol. 7). Oxford: Oxford university press.
Web Resources (Swayam / NPTEL)	
1.	https://nptel.ac.in/courses/109105205

Course Code	Course Name	Category	Hours/Week	Credits
24BCC13C	Financial Accounting – I	Core - I	6	4

Course Objectives

This course intends to cover

- Basic accounting concepts, rectifying errors and reconcile bank statements.
- Preparation of Statements on ascertaining business profits.
- Methods of accounting treatment in depreciation.
- Various methods of calculating profit for a single-entry system.
- Accounting aspects on royalty and insurance claims

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remember the concepts and ability to rectify the errors in Bank reconciliation statement	K1
CLO2	Apply the knowledge in preparing detailed accounts of sole trading concern	K3
CLO3	Predict the best valuation method for assets.	K2
CLO4	Construct correct financial statements from incomplete records	K3
CLO5	Find out the correct accounting treatments for royalty and value of claims from insurance companies in case of loss of stock	K1
K1- Remember; **K2**- Understand; **K3**- Apply		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	3	3	2
CLO3	3	2	2	3	2
CLO4	3	3	3	3	2
CLO5	3	3	2	2	1
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Core - I: Financial Accounting – I

Unit	Content	No. of Hours
I	**Fundamentals of Financial Accounting**: Accounting Basics, Meaning, Definition, Objectives, Accounting Concepts and Conventions - Journal, Ledger Accounts– Subsidiary Books — Trial Balance - Classification of Errors-– Preparation of Suspense Account – Need and Preparation of Bank Reconciliation Statement.	17
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. Rectification of Errors.	18
III	**Depreciation and Bills of Exchange:** Depreciation - Meaning – Objectives – Accounting Treatments – Types- Straight Line Method – Diminishing Balance method – Conversion method-Annuity Method – Depreciation Fund Method – Insurance Policy Method – Revaluation Method – Depletion Method – Sum of Digits Method – Machine Hour Rate Method . **Bills of Exchange**: Definition – Specimens – Discounting of Bills – Endorsement of Bill – Collection – Noting – Renewal – Retirement of Bill under rebate – Insolvency of Acceptor – Accommodation of Bills.	17
IV	**Accounting from 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. Average Due Date and Account Current.	20
V	**Royalty and Insurance of Claims:** Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment. Insurance Claims –Calculation of Claim Amount-Average clause(Loss of Stock only)	18
	Total Hours	**90**
Theory 20% & Problems 80%		
Text Books		
1.	Jain.S.P., and Narang.K.L., (2022), Advanced Accountancy, Kalyani Publishers, New Delhi, 21st Edition.	
2.	Reddy and Murthy.A, (2015), Financial Accounting, Margham Publications, 7th Edition.	
3.	Radhaswamy L and Gupta.R.L., (2015), Advanced Accounting, Sultan Chand & Sons Publications, Volume II.	
4.	Gupta.R.L., and Gupta.V.K., (2014), Financial Accounting, Sultan Chand & Sons Publications, 3rd Edition.	
5.	Shukla.M.S.,Grewal.T.S., Gupta.S.C., (2016), Advance Accounts, Vol:II, S.Chand & Sons co.Ltd., New Delhi, 19th Edition.	
Reference Books		
1.	Dr. Tulsian P C &TusharTulsian, et al, (2023), Advanced Accounting, Sultan Chand & Sons Publications, 3rd Edition.	
2.	Charumathi B and Vinayagam N, (2004), Financial Accounting, Sultan Chand & Sons Publications	
3.	Maheshwari.S.N., (2010), Financial and Management Accounting, Vikas Publications, Noida.	
Web Resources (Swayam/NPTEL)		
1.	https://onlinecourses.swayam2.ac.in/cec24_mg05/preview	
2.	https://onlinecourses.nptel.ac.in/noc23_mg65/preview	

Course Code	Course Name	Category	Hours/Week	Credits
24BCC14C	Programming with C++	Core – II	4	4

Course Objectives

This course intends to cover

- Object-oriented languages and their applications.
- Basic concepts of the C++ language.
- Concepts about various conversions.
- Various inheritance systems.
- Knowledge on files and exception handling.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remember various concepts relating to languages and applications	K1
CLO2	Understanding various functions of C++ language	K2
CLO3	Applying various classes and objects	K3
CLO4	Analyzing different types of inheritance system	K4
CLO5	Understanding working bout files and exception handling	K2
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** – Understand		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	2	3	2	2
CLO2	3	2	3	2	2
CLO3	3	2	3	2	2
CLO4	3	2	3	2	2
CLO5	3	2	3	2	2
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core - II: Programming with C++

Unit	Content	No. of Hours
I	**Introduction to C++:** Tokens, Keywords, Identifiers, Variables, Operators, Manipulators, Data types -Expressions and Control Structures in C++; Simple C++ Programs.	12
II	**Functions in C++:** Main Function - Function Prototyping -Parameters Passing in Functions - Values Return by Functions – Inline Functions - Friend and Virtual Functions	12
III	**Classes and Objects:** Constructors and Destructors; Operator Overloading And Type Conversions - Type of Constructors – Function Definition – Function overloading – Function Overriding.	12
IV	**Inheritance:** Single Inheritance - Multilevel Inheritance - Multiple Inheritance -Hierarchical Inheritance - Hybrid Inheritance - Pointers, Virtu Functions and Polymorphism; Managing Console I/O operations.	12
V	**Working with Files:** Classes for File Stream Operations -Opening and Closing a File – End of-File Deduction - File Pointers - Updating a File - Error Handling during File Operations - Command-line Arguments.	12
	Total Hours	**60**

Text Books	
1.	Balagurusamy. E., (1995) Object Oriented Programming with C++, Tata McGraw-Hill Publishing Company Ltd
2..	Ulla Kirh-Prinz, Peter Prinz, (2002), A Complete guide to Programming in C++, Jones and Bartlett Publications,
3.	BjarneStroustrap, (2000), The C++ Programming, Pearson Education,
4.	Herbert Schilt., (1999), C++ -The Complete Reference:, Tata McGraw Hill, Pub–Ltd, 3rd Edition.
5.	John R.Hubbard., Schaum's., (1996), Programming with C++ - outline series.
Reference Books	
1.	Robert Lafore, Object Oriented Programming in Microsoft C++, Galgotia publication
2.	Schildt.H, (1998), C++, The Complete Reference., TMH Edition.
3.	YeswantKanetkar, (1999), Let us C++ — BPB Publications,.
Web Resources (Swayam / NPTEL)	
1.	https://onlinecourses.nptel.ac.in/noc24_cs30/preview
2.	https://onlinecourses.swayam2.ac.in/nou24_cs06/preview
3.	https://onlinecourses.nptel.ac.in/noc24_cs02/preview
4.	https://onlinecourses.nptel.ac.in/noc24_cs44/
5.	https://onlinecourses.swayam2.ac.in/aic20_sp01/preview

Course Code	Course Name	Category	Hours/Week	Credits
24BCC15P	Advanced Excel and Financial Modelling	Core Lab - I	4	3

Course Objectives

This course intends to cover

- Advanced features and functions of spreadsheet for data analysis and financial modelling
- Basic finance concepts and their application in Excel-based financial analysis and modelling
- Use of Generative AI tools to enhance productivity and insights in Excel

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Demonstrate proficiency in using advanced Excel features and functions for data analysis and manipulation	K3
CLO2	Understand and apply basic finance concepts and terminology in the context of financial analysis and modelling	K2
CLO3	Build basic financial models in Excel, incorporating assumptions, inputs, and forecasting techniques	K3
CLO4	Use Generative AI tools in Excel to automate tasks, gain insights, and enhance productivity	K3
CLO5	Analyze and interpret financial data, perform sensitivity analysis, and make data-driven decisions using Excel	K4
K2 - Understand; **K3** - Apply; **K4** - Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	2	1	2
CLO2	3	2	1	2	3
CLO3	3	3	3	2	2
CLO4	3	3	3	2	2
CLO5	3	3	2	2	3
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core Lab - I: Advanced Excel and Financial Modelling

Unit	Content
I	**Introduction to Excel**: Interface, Navigation, and Basic Functions – Data Types and Formatting – Formulas and Functions – Relative and Absolute Cell Referencing – Conditional Formatting – Data Validation – Charts and Graphs. Advanced Functions (VLOOKUP, HLOOKUP, INDEX, MATCH) – Data Manipulation (Sort, Filter, Subtotal, Pivot Tables) – Data Analysis (Goal Seek, Scenario Manager, Data Tables) – Excel Shortcuts and Productivity Tips
II	**Advanced Excel:** Array Formulas – Named Ranges and Dynamic Named Ranges – Excel Tables – Recording and Running Macros – Introduction to Excel VBA – User Forms and Controls – Excel Add-ins and Customization. **Generative AI Tools in Excel**: Introduction to Generative AI – AI-powered Data Analysis and Insights – Automating Tasks with AI-driven Macros – Best Practices and Limitations of AI in Excel Power Query in Excel.
III	**Introduction to Finance**: Basic Financial Concepts and Terminology – Understanding Financial Statements (Balance Sheet, Income Statement, Cash Flow Statement) – Ratios and Financial Analysis – Time Value of Money Concepts.
IV	**Excel for Financial Analysis**: Financial Functions (PV, FV, NPV, IRR) – Loan and Investment Calculations – Depreciation Schedules – Sensitivity Analysis (Goal Seek, Data Tables)
V	**Basic Financial Modelling**: Purpose and Structure of Financial Models – Building a Basic Financial Model in Excel – Assumptions and Inputs – Forecasting Techniques – Scenario Analysis and Sensitivity Testing.
Text Books	
1.	Paul McFedries, Greg Harvey, (2021), Excel 2021 All-in-One For Dummies, Wiley Publishers.
2.	Alexander, M., Walkenbach, J., Kusleika, D., & Cox, C. (2018). Microsoft Excel 2019 Bible. Wiley.
Reference Books	
1.	Winston, W. L. (2019). Microsoft Excel Data Analysis and Business Modeling (6th ed.). Microsoft Press.
2.	Mayes, T. R., & Shank, T. M. (2020). Financial Analysis with Microsoft Excel (9th ed.). Cengage Learning.
3.	Day, A. (2012). Mastering Financial Modelling in Microsoft Excel: A Practitioner's Guide to Applied Corporate Finance (3rd ed.). FT Press.
Web Resources (Swayam/NPTEL)	
1.	https://onlinecourses.nptel.ac.in/noc22_mg35/preview

S.No.	Programs
1.	**Interface Navigation and Basic Functions** **Exercise:** Explore Excel's interface, navigate through menus and ribbons, and understand basic navigation. Create a worksheet, apply various formatting techniques (font styles, sizes, cell colors), and use basic functions like SUM and AVERAGE.
2.	**Formulas and Functions** **Exercise:** Calculate total sales for a week using SUM, average daily sales using AVERAGE, and highest sales using MAX. Use formulas to calculate simple arithmetic operations. Include more complex functions like IF, COUNTIF, and nested functions.
3.	**Relative and Absolute Cell Referencing** **Exercise:** Create a budget spreadsheet: use relative and absolute references to calculate total costs by applying discounts/taxes to different items. Include exercises on using named ranges and dynamic references in complex formulas.
4.	**Conditional Formatting and Data Validation** **Exercise:** Highlight cells in a sales report that meet certain criteria (e.g., sales > $1000). Use color scales and data bars to visually represent data trends. Set up data validation rules for a data entry form: restrict entries to certain dates, create drop-down lists, and validate numeric ranges.
5.	**Charts and Graphs Creation** **Exercise:** Create a sales performance chart: use different types of charts (bar, line, pie) to represent data visually. Customize chart elements like titles, legends, and data labels. Create advanced chart types like combo charts and use sparklines for data visualization.
6.	**Advanced Functions: VLOOKUP, HLOOKUP, INDEX** **Exercise:** Use VLOOKUP to find prices of products in a list and HLOOKUP to retrieve student grades from a table based on different criteria. Practice using INDEX and MATCH functions to create a more dynamic and flexible lookup solution for a dataset.
7.	**Data Manipulation: Sorting, Filtering, Pivot** **Exercise:** Sort and filter a list of employees based on department and salary. Use subtotals to summarize data. Create pivot tables for detailed analysis. Include exercises on grouping data, creating calculated fields/items, and using slicers for interactive analysis.
8.	**Power Query Data Transformation** **Exercise:** Open Excel and navigate to the Power Query editor. Familiarize with the Power Query interface: ribbon, query pane, and data preview area. Importing Data: Import data from various sources such as an Excel file, CSV file, and a web page. Combine multiple data sources into a single query. **Data Cleaning and Transformation:** Remove unnecessary columns and rows. Filter data based on specific criteria (e.g., date ranges, text values). Split columns by delimiter and merge columns. **Data Aggregation:** Group data by specific columns and perform aggregation functions like sum, average, count, etc. Unpivot data to transform it into a more suitable format for analysis. **Data Merging and Appending**: Merge queries to combine related data from different sources. Append queries to stack data from multiple tables or files.

S.No.	Programs	
9.	**Excel Macros and VBA Basics** **Exercise:** Record and run macros to automate repetitive tasks. Introduction to VBA: create simple VBA scripts to enhance Excel functionality. Include exercises on using VBA to automate data cleaning, report generation, and interactive user forms.	
10.	**Financial Analysis and Functions** **Exercise:** Use financial functions (PV, FV, NPV, IRR) to perform loan and investment calculations. Create depreciation schedules and perform sensitivity analysis using Goal Seek and Data Tables. Include exercises on creating financial models and using Excel for financial forecasting.	
11.	**Basic Financial Modelling** **Exercise:** Build a basic financial model in Excel: define assumptions, inputs, and outputs. Perform scenario analysis and sensitivity testing. Include exercises on creating dynamic models with linked inputs and automated summary reports.	
	Total Hours	**60**

Course Code	Course Name	Category	Hours/Week	Credits
24BCC16A	Principles of Management	Allied - I	4	3

Course Objectives

This course intends to cover

- Evolution, Fundamentals and theories of management.
- Elements of planning and steps in decision making
- Concepts of organization structure and the roles of authority and responsibility.
- Recruitment process and employee appraisal.
- Leadership styles and controlling techniques.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Exhibit Awareness of ideas that shaped management thinking by the Gurus of management.	K1
CLO2	Understand the importance of planning and decision making in an organization.	K2
CLO3	Comprehend the concept of various authorizes and responsibilities of an organization.	K2
CLO4	Recruit employees and tabulate performance appraisal	K3
CLO5	Demonstrate the knowledge of leading and controlling an Organisation	K2
K1- Remember; **K2**- Understand; **K3**- Apply		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	2	2	3
CLO2	3	2	-	-	3
CLO3	2	3	-	2	3
CLO4	1	3	2	3	3
CLO5	3	3	3	3	3
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Allied – I: Principles of Management

Unit	Content	No. of Hours
I	**Introduction to Management:** Meaning- Definition – 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 - Trends and Challenges of Management. Managers – Qualification – Duties & Responsibilities.	12
II	**Planning:** Planning – Meaning – Definition – 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.	12
III	**Organizing:** Meaning - Definition - 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.	12
IV	**Staffing:** Introduction - Concept of Staffing- Staffing Process – Recruitment – Sources of Recruitment – Modern Recruitment Methods – Selection Procedure – Test-Interview– Training: Need - Types– Promotion –Management Games – Performance Appraisal - Meaning and Methods – 360 Performance Appraisal – Work from Home - Managing Work from Home [WFH].	12
V	**Directing:** Motivation –Meaning - Theories – Communication – Types – Barriers to Communications – Measures to Overcome the Barriers. Leadership – Nature - Types and Theories of Leadership – Styles of Leadership - Qualities of a Good Leader – Successful Women Leaders. Supervision. Co-ordination and Control 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].	12
	Total Hours	**60**

Text Books	
1.	Dr. Gupta.C.B., (2013), Business Management, Sultan Chand & Sons Publications, 2nd Edition.
2.	DinkarPagare. (2018), Principles of Management, Sultan Chand & Sons Publications,2nd Edition.
3.	Tripathi.P.C.,Reddy.P.N., AshishBajpai, Mark V Cannice, (2022), Principles of Management, Tata McGraw Hill, Noida,11th Edition.
4.	Prasad.L.M., (2019), Principles of Management, S.Chand& Sons Co. Ltd., NewDelhi, 7th Edition.
Reference Books	
1.	Harold Koontz., Heinz Weihrich.,(2020), Essentials of Management, McGraw Hill, Noida,11th Edition.
2.	Ramasamy.T, (2010), Principles of Management, Himalaya Publishing House.
3.	Dr.Balaji. C.D (2019), Principles of Management, Margham Publications.
Web Resources(Swayam/NPTEL)	
1.	https://onlinecourses.swayam2.ac.in/aic22_ge19/preview
2.	https://onlinecourses.swayam2.ac.in/aic20_sp07/preview
3.	https://onlinecourses.swayam2.ac.in/nou24_hs27/preview
4.	https://onlinecourses.swayam2.ac.in/aic20_sp27/preview

Components for Internal Assessment and Distribution of Marks for CIA and ESE (Theory)

Max Marks	Marks for		Components for CIA									
	CIA	ESE	CIA – I		CIA – II		Best of CIA-I & CIA-II	Model		Attendance	Active Engagement	Total
100	25	75	Actual	Weightage	Actual	Weightage	Weightage	Actual	Weightage	5	5	25
			50	**5**	50	**5**	**5**	75	**10**			

Question Paper Pattern

Component	Duration in Hrs.	Section A			Section B			Section C			Total
		Type of question	No. of questions	Marks	Type of question	No. of questions	Marks	Type of question	No. of questions	Marks	
CIA – I &II	2	MCQ	8	8x1=8	Either or	3	3x6=18	Either or	3	3x8=24	50
Model Exam /ESE	3	MCQ	10	10x1=10	Either or	5	5x5=25	Either or	5	5x8=40	75

Components for Internal Assessment and Distribution of Marks for CIA (Lab)

Max Marks	Marks for		Components for CIA							
	CIA	ESE	Test – I		Test - II		Model		Observation	Total
100	40	60	Actual	Weightage	Actual	Weightage	Actual	Weightage	5	40
			50	**10**	50	**10**	60	**15**		

Examination Pattern

Component	Duration in Hrs.	Marks			Weightage
		Practical	Record	Total Marks	
Test – I	2	50	-	50	10
Test – II	2	50	-	50	10
Model	3	60	-	60	15
ESE	3	50	10	60	-

Part – IV : Foundation Courses

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours / Week	Credits
24ENV1FC	Environmental Studies	FC- I	2	2

Unit	Content
I	The Multidisciplinary nature of environmental studies Definition; Scope and importance, Need for public awareness.
II	**Natural Resources:** Renewable and non-renewable resources: Natural resources and associated problems. - Forest resources: Use and Over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. - Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems. - Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. - Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. - Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, Case studies. - Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.
III	**Ecosystems** - Concept of an ecosystem. - Structure and function of an ecosystem. - Producers, consumers and decomposers. - Energy flow in the ecosystem. - Ecological succession. - Food chains, food webs and ecological pyramids. - Introduction, types, characteristic features, structure and function of the following ecosystem: - a. Forest ecosystem b. Grassland ecosystem c. Desert ecosystem d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

Unit	Content
IV	**Biodiversity and its Conservation** - Introduction-Definition: genetic, species and ecosystem diversity. - Bio geographical classification of India. - Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values. - Biodiversity at global, National and local levels. - India as a mega-diversity nation. - Hot-spots of biodiversity. - Threats to biodiversity: habital loss, poaching of wildlife, man-wildlife conflicts. - Endangered and endemic species of India. - Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
V	**Environmental Pollution Definition** - Causes, effects and control measures of: - a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear hazards - Solid waste Management: Causes, effects and control measures of urban and industrial wastes. - Role of an individual in prevention of pollution. - Pollution case studies. - Disaster management: floods, earthquake, cyclone and landslides.
VI	**Social Issues and the Environment** - From Unsustainable to Sustainable development. - Urban problems related to energy. - Water conservation, rain water harvesting, watershed management. - Resettlement and rehabilitation of people; its problems and concerns. Case studies. - Environmental ethics: Issues and possible solutions. - Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. - Wasteland reclamation. - Consumerism and waste products. - Environment Protection Act. - Air (Prevention and Control of Pollution) Act. - Water (Prevention and Control of Pollution) Act. - Wildlife Protection Act. - Forest Conservation Act. - Issues involved in enforcement of environmental legislation. - Public awareness.

Unit	Content
VII	**Human Population and the Environment** - Population growth, variation among nations. - Population explosion-Family welfare Programme. - Environment and human health. - Human Rights. - Value Education. - HIV/AIDS. - Women and Child Welfare. - Role of information Technology in Environment and human health. - Case Studies.
VIII	**Field Work (Practical).** - Visit to a local area to document environmental assets-river/forest/grassland/ hill/mountain. - Visit to a local polluted site-Urban/Rural/Industrial/Agricultural. - Study of common plants, insects, birds. - Study of simple ecosystems-pond, river, hill slopes, etc.
	Total Hours. 30

Web Resources	
1.	https://www.ugc.gov.in/oldpdf/modelcurriculum/env.pdf

Components for Internal Assessment and Distribution of Marks for CIA (Theory)

Max Marks	Marks for		Components for CIA							
	CIA	ESE	CIA – I		CIA – II		Best of CIA-I & CIA-II	Model		Total (Best + Model)
50	50	-	Actual	Weightage	Actual	Weightage	Weightage	Actual	Weightage	50
			50	**25**	50	**25**	**25**	50	**25**	

Question Paper Pattern

Duration in Hrs.	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Offline	Open Choice	5 (Out of 8)	5 x 10=50

Part – IV : Ability Enhancement Compulsory Courses

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours	Credits
24QUA1AE	Quantitative Aptitude	AECC - I	2	2

Course Objectives

The course intends to cover

- Basic concepts of numbers, time and work, interests, data representation and graphs
- Concepts of permutation, probability, discounts, percentage & profit loss.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remember and Understand the concepts of numbers and average	K1, K2
CLO2	Understand about percentage and apply profit & loss related processing.	K2, K3
CLO3	To understand the concepts of time and work and interest calculations.	K2
CLO4	To understand about the concepts of permutation, combination and probability.	K2
CLO5	Understand , Apply and analyze the concept of problem solving involved in graphs and age.	K2,,K3,K4
K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** -Analyze		

Ability Enhancement Compulsory Course - I: Quantitative Aptitude

Unit	Content	No. of Hours
I	Numbers - Simplification - BODMAS rule - Algebraic formulas - Decimal fractions - Square root and cube roots - Surds and indices - Divisibility rules - HCF and LCM - same remainder - different remainder - application problems – average – equation - mistaken value – replacement - including/excluding.	6
II	Percentage - increase/decrease – netchange – salary – election – marks – consumption - population / machine - profit and loss - profit and loss % - finding cp and sp - profit=loss - same product cp and sp with percentage – discount - ratio and proportion - divided into parts - based on numbers - increase/decrease/ income / expenditure – coins – partnership.	6
III	Time-and-work - individual/combined - alternative days - remaining work - efficiency based - amount split - chain rule - group of male and female or boys - pipes and cistern - finding time - efficiency based – alternative - remaining part - capacity of the tank - simple interest - finding principal - rate of interest – amount -time period - doubles or triples - compound interest - finding rate - finding time, principal - doubles or triples - difference between SI and CI.	6
IV	Permutation - finding value - vowels come together - vowel never comes together - some letters come together - no two vowels come together - vowels in odd/even places - based on repetition - circular permutation – application – combination - finding value and application – probability – coins - dice-cards - balls and miscellaneous problems - odd man out and number series.	6
V	Clock - finding angle - reflex angle - gain or loss – calendars - finding particularday - data interpretation - bar chart - line chart - pie chart – table – combined –ages ratio-twice or thrice - addition /subtraction - family based - problems on numbers - equations.	6
	Total Hours	**30**
Text Book		
1.	R.S. Aggarwal , Quantitative Aptitude, S.Chand & Company Ltd.,	
Reference Book		
1.	Ashish Arora, Quantitative Aptitude.	
Web Resources		
1.	https://www.javatpoint.com/aptitude/quantitative	
2.	https://www.indiabix.com/aptitude/questions-and-answers/	

Components for and Distribution of Marks for ESE (Theory)

Ability Enhancement Compulsory Course(AECC)

Duration in Hours	Mode of exam	Type of Questions	No. of Questions	Marks
2	Online	MCQ	50	50x1=50

Semester 2

Semester – 2									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM21L	I	Language – II	Tamil – II	4	3	25	75	100	3
24HIN21L	I		Hindi – II						
24MAL21L	I		Malayalam – II						
24FRE21L	I		French – II						
24ENG22L	II	English – II	English – II	4	3	25	75	100	3
24BCC23C	III	Core – III	Financial Accounting– II	6	3	25	75	100	4
24BCC24C	III	Core – IV	Fintech & Digital Finance Innovation	4	3	25	75	100	3
24BCC25P	III	Core Lab - II	**Lab:** Programming with C++	4	3	40	60	100	2
24BCC26A	III	Allied – II	Business Law	4	3	25	75	100	3
25HUM2FC	IV	FC – II	Human Rights	2	2	50	-	50	2
24SOF2AE	IV	AECC – II	Soft Skills	2	2	-	50	50	2
Total				**30**				**700**	**22**

Part – I: Language-I - Tamil – II

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours/ Week	Credits
24TAM21L	Tamil – II	Language - I	4	3

Course Objectives

The Course intends to cover

- தமிழ் இலக்கியம் கற்பதன் மூலம் நாகரிகம் மற்றும் பண்பாட்டைப் புரிந்துகொள்ளுதல்.
- தனிப்பட்ட வளர்ச்சி, படைப்பாற்றல் திறனை வளர்த்தல்.
- வாழ்வியல் அறங்களைக் கற்றல் மற்றும் வாழ்வைச் செழுமையாக்க உதவும் நன்னெறிகளை அறிதல்.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	அற இலக்கியங்கள் வழி வாழ்வியல் ஒழுக்கங்களைக் கற்றுத் தருதல்.	K1, K2
CLO2	பக்தி இலக்கியங்கள் வழி பக்தி நெறிகளை உணர்த்துதல்.	K2
CLO3	தமிழில் உரைநடை இலக்கியப் படைப்பாளர்களின் சிந்தனைகளை எடுத்துரைத்தல்.	K3
CLO4	தமிழ் இலக்கிய வரலாற்றில் அற இலக்கியம் மற்றும் உரைநடையின் தாக்கம் குறித்து அறிதல்.	K1, K3
CLO5	பிழையின்றி எழுத இலக்கணங்களைக் கற்றுத் தருதல்.	K2, K3
K1 - Remember; **K2** - Understand; **K3** – Apply		

Part – I: Language-I - Tamil – II

Unit	Content	No. of Hours
I	**(அறம்)** 1. திருக்குறள் • புகழ் • வினை செயல்வகை • நெஞ்சொடு கிளத்தல் 2. திரிகடுகம்(தேர்ந்தெடுக்கப்பட்ட 10 பாடல்கள்) 3. பழமொழி நானூறு(தேர்ந்தெடுக்கப்பட்ட 10 பாடல்கள்)	**14**
II	**(பக்தி)** 1. அபிராமி அந்தாதி(10 பாடல்கள்) - அபிராமி பட்டர் 2. உமர்கயாம் பாடல்கள் (தனிப்பாடல்கள்) - கவிமணி தேசிய விநாயகம் பிள்ளை 3. முத்துக்குமாரசாமி பிள்ளைத்தமிழ்(தாலப் பருவம்) – குமரகுருபரர் 4. இயேசுகாவியம் - மலைப்பொழிவு - கண்ணதாசன் 5. சித்தர் பாடல்கள் - சிவவாக்கியர் பாடல்	**14**
III	**(கலை மற்றும் பண்பாடு)** 1. அறம் எனப்படுவது - அமுதன் 2. ஏட்டில் எழுதா இலக்கியம் - ஔவை துரைச்சாமி 3. கீழடி - தொல்லியல் துறை, வெளியீடு 4. மனம் எனும் சொர்க்கவாசல் - டாக்டர் எம்.எஸ்.உதயமூர்த்தி 5. ஆளுமைத் திறன் - அறிவுக்கதிர் (அரசுப்பணி சிறப்பிதழ்)	**12**
IV	**(இலக்கிய வரலாறு)** 1. பதினெண் கீழ்க்கணக்கு நூல்கள் 2. உரைநடையின் தோற்றமும் வளர்ச்சியும்	**10**
V	**(இலக்கணம்)** 1. சொல்லின் வகைகள் 2. வேற்றுமைத் தொகைகள் 3. பயிற்சிக்குரியன:(விண்ணப்பங்கள், மடல்கள் எழுதச் செய்தல்)	**10**
	Total Hours	**60**

Reference Books	
1	முத்துக்குமாரசாமி பிள்ளைத்தமிழ்,(2021) கமலா முருகன், சாரதா பதிப்பகம்
2	இயேசு காவியம், கவிஞர் கண்ணதாசன்,(2006) கலைக்காவிரி பதிப்பகம்
3	உரைகளும் உரையாசிரியர்களும்,(2013) தி சு நடராசன் நியூ செஞ்சுரி புக் ஹவுஸ்
4	அபிராமி அந்தாதி, முனைவர் சி சேதுராமன்,(2010) நியூ செஞ்சுரி புக் ஹவுஸ்
5	புதிய வெளிச்சத்தில் தமிழ் இலக்கிய வரலாறு, முனைவர் க பஞ்சாங்கம், (2017) அன்னம் வெளியீட்டு
6	தமிழ் இலக்கிய வரலாறு, மு வரதராசனார்,(2021) சாகித்ய அகாடமி பதிப்பு
7	தமிழ் உரைநடை வரலாறு, வி செல்வநாயகம்,(2003) அடையாளம் பதிப்பகம்
8	தமிழ் இலக்கிய வரலாறு, முனைவர் கா கோ வேங்கடராமன்,(2010) கலையக வெளியீடு
9	எண்ணங்கள் - டாக்டர் எம் எஸ் உதயமூர்த்தி,(2016) வெளியீடு: கங்கை புத்தக நிலையம், சென்னை
10	அடோன் தமிழ் இலக்கணம், புலவர் பொன்மணிமாறன்,(2011) அருண் பப்ளிஷிங்

Part – II : Language-II - English - II

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours/ Week	Credits
24ENG22L	English-II	Language - II	4	3

Course Objectives

The course intends to cover

- The literary elements in poetry.
- The critical contemplation and writing in styles of prose texts.
- The modernist techniques and ethics in the narratives of short stories.
- The interpersonal skills essential in the work environment.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Identify the common techniques underlying free verse and traditional forms of poetry for crafting poems.	K1
CLO2	Understand humour in prose texts psychologically to master the oratory skills.	K2
CLO3	Employ empathy and morale in diplomatic Day-to-day circumstances.	K3
CLO4	Strengthen the writing skills for documentation.	K3
CLO5	Persist flexibility and mobility in the sequel LSRW.	K3
K1 - Remember; **K2** - Understand; **K3** - Apply		

Part - II: Language-II - English - II

Unit	Content	No. of Hours
I	**Poetry**: Motherhood 1. My Grand Mother's House – Kamala Das 2. Of mother, among others things – A.K Ramanujam 3. Night of the Scorpion – Nissim Ezekiel	12
II	**Prose**: Humour 1. With The Photographer – Stephen Leacock 2. Travel by Train – J.B.Priestley 3. On Forgetting – Robert Lynd	12
III	**Short Stories:** Integrity 1. The taxi driver – K.S. Duggal 2. A Retrieved Reformation- O Henry 3. Kabuliwala - Rabindranath Tagore	12
IV	**Language Competency:**Vocabulary 1. Homonyms, Homophones, Homographs Portmanteau words 2. Verbs and Tenses, Subject Verb Agreement 3. Error correction Vocabulary : Synonyms, Antonyms, Word Formation	12
V	**English for Communication** 1. Listening with courtesy and adding ideas and giving opinions during the meeting and making concluding remarks 2. Participating in a meeting: face to face and online 3. Reading news and weather reports 4. Preparing first drafts of short assignments	12
	Total Hours	**60**

Text Books	
1.	Ezekiel Nissim, 1989 .Collected Poems 1952-1988. Oxford University Press.
2.	Hewings, M. (2000). Advanced English Grammar. Cambridge. University Press.
Reference Books	
1.	Bakshi, S.P. & Sharma, R. (2019). Descriptive English. Arihant Publications (India) Ltd.
2.	Cameron S & Dempsey L. (2019). The Reading Book: A Complete Guide to Teaching Reading. S & L. Publishing.
3.	Sherman B. (2014) Skimming and Scanning Techniques. Liberty University Press.
Web Resources (Swayam / NPTEL)	
1.	https://nptel.ac.in/courses/109103020

Course Code	Course Name	Category	Hours/Week	Credits
24BCC23C	Financial Accounting - II	Core – III	6	4

Course Objectives

This course intends to cover

- Various methods of accounting, such as Hire purchase and Installments System.
- Branch accounts and allocation of expenses under departmental accounts.
- Partnership accounts relating to admission, retirement, and death.
- Knowledge regarding partnership accounts relating to the dissolution of the firm.
- Requirements of International Accounting Standards for financial reporting.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Find out the accounting treatment in Hire purchase accounts and Instalment systems.	K1
CLO2	Apply the knowledge in preparing Branch and Departmental Accounts.	K3
CLO3	Understand the accounting treatment for admission and retirement in partnership	K2
CLO4	Identify the settlement of accounts at the time of dissolution of a firm.	K3
CLO5	Recognize the need and development of accounting standards and the role of IFRS.	K1
K1- Remember; **K2**- Understand; **K3**- Apply		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	2	3	3	2
CLO2	3	2	3	3	3
CLO3	3	2	2	3	3
CLO4	3	2	3	3	2
CLO5	3	3	3	3	3
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Core – IV: Financial Accounting – II

Unit	Content	No. of Hours
I	**Hire Purchase and Instalment System:** Hire Purchase System – Accounting Treatment – Calculation of Interest - Default and Repossession - Hire Purchase Trading Account. **Instalment System:** Calculation of Profit	18
II	**Branch and Departmental Accounts:** Branch – Dependent Branches: Accounting Aspects - Debtors system -Stock and Debtors system – Distinction between Wholesale Profit and Retail Profit – Independent Branches - Foreign Branches. **Departmental Accounts:** Basis of Allocation of Expenses – Inter- Departmental Transfer at Cost or Selling Price.	18
III	**Partnership Accounts – I:** Partnership Accounts: –Admission of a Partner – Treatment of Goodwill- Calculation of Hidden Goodwill –Retirement of a Partner – Death of a Partner.	20
IV	**Partnership Accounts – II:** Dissolution of Partnership - Methods – Settlement of Accounts Regarding Losses and Assets – Realization account – Treatment of Goodwill – Preparation of Balance Sheet - Insolvency of a Partner – One or more Partners insolvent – All Partners insolvent - Garner Vs Murray – Accounting Treatment - Piecemeal Distribution – Surplus Capital Method – Maximum Loss Method.	20
V	**Accounting Standards for financial reporting:** Objectives and Uses of Financial Statements for Users-Role of Accounting Standards - Development of Accounting Standards in India- Requirements of International Accounting Standards - Role of Developing IFRS- IFRS Adoption or Convergence in India- Implementation Plan in India- Ind AS- An Introduction- AS 1, AS 4, AS 5, AS 19 and AS 21 – Difference between Ind AS and IFRS.	14
	Total Hours	**90**

Text Books	
1.	Radhaswamy L and Gupta.R.L., (2015), Advanced Accounting, Sultan Chand & Sons Publications, Volume II.
2.	Shukla.M.S., Grewal.T.S., Gupta.S.C., (2016), Advanced Accounts, S. Chand &Sons co.Ltd., New Delhi, Vol:II, 19th Edition.
3.	Gupta.R.L., and Gupta.V.K., (2014), Financial Accounting, Sultan Chand & Sons Publications, 3rd Edition.
4.	Jain S.P, Narang.K.L, Simmi Agarwal, Monika Sehgal, (2021), Advanced Accountancy, Kalyani publisher, Volume – II.
5.	Reddy.T.S and Murthy.A (2015), Financial Accounting, Margham Publications, 7th Edition.
Reference Books	
1.	CA Sharad K Maheshwari, Dr. Suneel K Maheshwari, Dr. S. N. Maheshwari, (2022), Financial Accounting, Vikas Publishing, 7th Edition.
2.	Dr. Tulsian P C &Tushar Tulsian, et al, (2023), Advanced Accounting, Sultan Chand & Sons Publications, 3rd Edition.
3.	Charumathi B and Vinayagam N, (2004), Financial Accounting, Sultan Chand & Sons Publications.
Web Resources (Swayam /NPTEL)	
1.	https://onlinecourses.swayam2.ac.in/nou24_cm02/preview
2.	https://onlinecourses.swayam2.ac.in/imb24_mg08/preview
3.	https://onlinecourses.swayam2.ac.in/cec24_mg05/preview
4.	https://onlinecourses.swayam2.ac.in/aic20_sp60/preview

Course Code	Course Name	Category	Hours/Week	Credits
24BCC24C	Fintech & Digital Finance Innovation	Core – IV	4	3

Course Objectives

This course intends to cover

- The historical development, current trends, and future prospects of the fintech industry, including the key drivers and enablers of fintech innovation.
- Various digital payment methods and block chain technology, including their applications, benefits, challenges, and the impact on traditional financial systems.
- The applications of artificial intelligence and machine learning in finance, such as fraud detection, credit scoring, robo-advisory, algorithmic trading and to discuss the associated ethical considerations and challenges.
- Insurtech landscape and the latest innovations in insurance distribution, underwriting, claims management, and peer-to-peer insurance, emphasizing the role of technology in transforming the insurance industry.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the evolution, landscape, and key drivers of fintech and digital finance innovations.	K2
CLO2	Analyze the functionality and applications of digital payment systems, including mobile payments, contactless payments, and crypto currency transactions.	K4
CLO3	Demonstrate knowledge of block chain technology and its financial applications, including smart contracts and distributed ledger technology.	K3
CLO4	Apply artificial intelligence (AI) and machine learning (ML) techniques in various financial services contexts, such as fraud detection, credit scoring, and robo-advisory	K3
CLO5	Evaluate the innovations and impact of insurtech on insurance distribution, underwriting, and claims management.	K4
K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** – Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	2	3	3	2
CLO2	3	2	3	3	3
CLO3	3	2	2	3	3
CLO4	3	2	3	3	2
CLO5	3	3	3	3	3
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core – IV: Fintech and Digital Finance Innovations

Unit	Content	No. of Hours
I	**Introduction to Fintech and Digital Finance:** Overview of Fintech Landscape – Evolution of Digital Finance – Key Drivers and Enablers of Fintech Innovation – Impact of Fintech on Traditional Financial Services.	10
II	**Digital Payments and Transactions:** Mobile Payments and Wallets – Contactless Payments (NFC, QR Codes) – Peer-to-Peer (P2P) Payments – Cryptocurrency and Blockchain in Payments.	10
III	**Blockchain and Distributed Ledger Technology (DLT):** Introduction to Blockchain and DLT – How Blockchain Works – Smart Contracts – Blockchain Applications in Finance (Trade Finance, Clearing and Settlement, Identity Management) **Artificial Intelligence (AI) and Machine Learning (ML) in Finance:** Overview of AI and ML – Applications in Financial Services (Fraud Detection, Credit Scoring, Robo-Advisory, Algorithmic Trading) – Challenges and Ethical Considerations	14
IV	**Insurtech and Digital Insurance:** Insurtech Landscape – Innovations in Insurance Distribution, Underwriting, and Claims Management – Usage-Based Insurance (UBI) – Peer-to-Peer (P2P) Insurance. Crowdfunding and Alternative Lending: Peer-to-Peer (P2P) Lending – Equity Crowdfunding – Invoice Trading – Impact of Alternative Lending on Traditional Banking.	9
V	**Cloud accounting, Forensic Accounting and Insurance applications:** Overview of Cloud Accounting – Benefits over Traditional Accounting – Key Cloud Accounting Software, Setting Up Systems – Data Migration – Customization – Security and Data Protection. Real-time Reporting – Automated Bank Feeds – Expense Management – Invoice Processing – Inventory Management. Multi-User Access – Mobile Accessibility – Integration with Business Tools. Overview – Role of Forensic Accountants – Key Skills. Types of Fraud (Financial Statement Fraud, Asset Misappropriation, Corruption) – Detection Techniques (Data Analysis, Red Flags, Ratio Analysis) – Internal Controls. Evidence Gathering – Interviewing – Document Analysis – Digital Forensics. Understanding Legal Standards and Regulations – Preparing Forensic Reports – Expert Witness Testimony – Ethical Considerations. Overview of Insurance Industry – Types of Insurance (Life, Health, Property, Casualty). Role of AI and ML – Predictive Analytics – Claims Processing Automation – Fraud Detection. Understanding Risk Assessment – Actuarial Analysis – Underwriting Processes. Compliance and Regulations – Legal Requirements – Reporting Standards.	17
	Total Hours	**60**

Text Books	
1.	Niels Pedersen, (2020), Financial Technology, Kogan Page.
2.	Dr. Nisha Sharma, Dr. Vishal Dattana, Dr. Srihari Rajesh Rao (2024), Introduction to Fintech, Independently published.
Reference Books	
1.	Ms. Anshu Gauba, Dr. Pooja Maharajan, Mr. Ajeet Singh Sindhu (2024), Fintech Innovation AI in Commerce and Management, Redshine Publication.
2.	Jaspal Singn, (2022) Financial Technology and Digital Banking, New Century Publication.
Web Resources	
1.	https://www.coursera.org/specializations/wharton-fintech
2.	https://www.coursera.org/learn/bcg-uva-darden-digital-transformation

Course Code	Course Name	Category	Hours/Week	Credits
24BCC25P	Programming with C++ Lab	Core Lab – II	4	2

Course Objectives

This course intends to cover

- Object oriented technology.
- Information on codes and arrays.
- User functions and member function
- Analyze classes and objects.
- Reusability features using the concept of inheritance.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remember the basics of Building any programming language	K1
CLO2	Explain about Arrays with illustration	K2
CLO3	Analyze the benefits of using Friend Function	K4
CLO4	Develop programs for overloading Unary and Binary Operators	K4
CLO5	Access the memory Address of any variable using pointers	K3
K1 – Remember**; K2 -** Understand; K**3** – Apply; **K4** – Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	2	2	3
CLO3	3	2	3	3	2
CLO4	3	3	3	2	3
CLO5	3	3	3	3	3
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core Lab – II: Programming with C++ Lab

S. No.	Programs
1.	Illustrate the concept of classes and objects
2.	Implement a program to calculate factorial of a given number
3.	Program to check whether a number is prime or not
4.	Illustrate the concept of console I/O operations
5.	Develop a program to print odd numbers using Looping Structure
6.	Given that an EMPLOYEE class contain the following members:Emp number,Emp Name,Basic,DA,IT,Net pay and print data members
7.	Program to calculate simple & compound interest
8.	Construct a program for Function Overloading
9.	Illustrate the concept of multi-level inheritance.
10.	Implement the concept of Arrays
11.	Program to print the length of a Box using Friend Function
12.	Implement a program for bank transaction using Constructor & Destructor
13.	Construct a program for implementation of files
	Total Hours **60**

Text Book

1.	Balagurusamy.E (2013) Object-Oriented Programming with C++, 7th Edition.

Reference Books

1.	Ashok N Kamthane (2003) Object-Oriented Programming with ANSI and TurboC++
2.	Maria Litvin & Gray Litvin (2002) , C++ for you, Vikas publication.

Web Resources (Swayam / NPTEL)

1.	https://nptel.ac.in/courses/106101208
2.	https://onlinecourses.nptel.ac.in/noc24_cs44/preview
3.	https://onlinecourses.swayam2.ac.in/aic20_sp06/preview

Course Code	Course Name	Category	Hours/Week	Credits
24BCC26A	Business Law	Allied – II	4	3

Course Objectives

This course intends to cover

- Basics of Commercial law and terms of a valid contract.
- Knowledge of performance contracts.
- Requirements of bailment and pledge.
- Duties of a seller and rights of unpaid seller.
- Understand the terms of negotiable instruments and types.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Demonstrate awareness about basic legal framework governing business.	K2
CLO2	Summarize the rules related to the contracts and issues related to termination and breach of contracts.	K2
CLO3	Identify the rules related to indemnity and guarantee, bailment and pledge	K3
CLO4	Explain the various laws to safeguard the rights and duties of a buyer and seller.	K2
CLO5	Enhance knowledge about negotiable instruments and parties involved in it.	K1
K1- Remember; **K2**- Understand; **K3**- Apply		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	3	3	3
CLO3	3	3	3	3	3
CLO4	3	3	3	3	2
CLO5	3	3	3	3	2
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Allied – II: Business Law

Unit	Content	No. of Hours
I	**Introduction:** Mercantile Law: Meaning – Definition – Nature – Objectives – Sources of Mercantile Law. Definition of Contract - Essentials of Valid Contract - Classification of Contract - Offer and Acceptance - Consideration - Capacity of Contract - Free Consent - Legality of Object - Contingent Contracts - Void Contract	12
II	**Performance Contract:** 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	11
III	**Contract of Indemnity and Guarantee:** Contract of Indemnity and Contract of Guarantee - Extent of Surety's Liability - Kinds of Guarantee - Rights of Surety - Discharge of Surety - Bailment and Pledge - Bailment - Concept - Essentials and Kind - Classification of Bailments, Duties and Rights of Bailor and Bailee - Law of Pledge - Meaning - Essentials of Valid Pledge - Pledge and Lien - Rights of Pawner and Pawnee.	13
IV	**Elements of Law relating to Sale of Goods:** 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 – Consumer Protection Act 2019.	12
V	**Elements of Law relating to Negotiable Instruments:** Definition of a Negotiable Instrument; Instruments Negotiable by Law and by Custom; Types of Negotiable Instruments; Parties to a Negotiable Instrument- Duties, Rights, Liabilities and Discharge; Material Alteration; Crossing of Cheques; Payment and Collection of Cheques and Demand Drafts; Presumption of Law as to Negotiable Instruments.	12
	Total Hours	**60**

Text Books	
1.	Gulshan,S.S., (2007), Mercantile Law, Excel books, 3rd edition,
2.	Kapoor,N.D., (2022), Elements of Mercantile Law, Sultan Chand & sons, 38th edition,
3.	Shukla,M.C., (2021), Mercantile Law, S.Chand & Company.
Reference Books	
1.	Kuchhal,M.C., (2006), Mercantile Law, Vikas Publishing House Pvt.Ltd, 6th edition,
2.	Gogna,P.P.S., (2016), Mercantile Law, S.Chand & sons Company, 7th revised edition
Web Resources (Swayam/NPTEL)	
1.	https://onlinecourses.swayam2.ac.in/nou24_cm11/preview
2.	https://onlinecourses.swayam2.ac.in/cec24_cm02/preview
3.	https://onlinecourses.nptel.ac.in/noc24_mg11/preview
4.	https://onlinecourses.swayam2.ac.in/nce24_sc06/preview
5.	https://onlinecourses.swayam2.ac.in/nce24_sc05/preview

Components for Internal Assessment and Distribution of Marks for CIA and ESE (Theory)

Max Marks	Marks for		Components for CIA									
	CIA	ESE	CIA – I		CIA – II		Best of CIA-I & CIA-II	Model		Attendance	Active Engagement	Total
100	25	75	Actual	Weightage	Actual	Weightage	Weightage	Actual	Weightage	5	5	25
			50	5	50	5	5	75	10			

Question Paper Pattern

Component	Duration in Hrs.	Section A			Section B			Section C			Total
		Type of question	No. of questions	Marks	Type of question	No. of questions	Marks	Type of question	No. of questions	Marks	
CIA – I &II	2	MCQ	8	8x1=8	Either or	3	3x6=18	Either or	3	3x8=24	50
Model Exam /ESE	3	MCQ	10	10x1=10	Either or	5	5x5=25	Either or	5	5x8=40	75

Components for Internal Assessment and Distribution of Marks for CIA (Lab)

Max Marks	Marks for		Components for CIA							
	CIA	ESE	Test – I		Test - II		Model		Observation	Total
100	40	60	Actual	Weightage	Actual	Weightage	Actual	Weightage	5	40
			50	10	50	10	60	15		

Examination Pattern

Component	Duration in Hrs.	Marks			Weightage
		Practical	Record	Total Marks	
Test – I	2	50	-	50	10
Test – II	2	50	-	50	10
Model	3	60	-	60	15
ESE	3	50	10	60	-

Part – IV : Foundation Courses

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours / Week	Credits
24HUM2FC	Human Rights	FC - II	2	2

Unit	Content
I	**Concept of Human Values, Value Education Towards Personal Development** Aim of Education and Value Education; Evolution of Value Oriented Education; Concept of Human Values; Types of Values; Components of Value Education. **Personal Development:** Self-analysis and Introspection; Sensitization towards Gender Equality, Physically Challenged, Intellectually Challenged. Respect to - Age, Experience, Maturity, Family Members, Neighbors, Co-workers. Character Formation towards Positive Personality: Truthfulness, Constructively, Sacrifice, Sincerity, Self-Control, Altruism, Tolerance, Scientific Vision.
II	**Value Education Towards National and Global Development** **National and International Values:** Constitutional or National Values - Democracy, Socialism, Secularism, Equality, Justice, Liberty, Freedom, and Fraternity. Social Values - Pity and Probity, Self-Control, Universal Brotherhood. Professional Values - Knowledge Thirst, Sincerity in Profession, Regularity, Punctuality, and Faith. Religious Values - Tolerance, Wisdom, Character. Aesthetic Values - Love and Appreciation of Literature and Fine Arts and Respect for the Same. National Integration and International Understanding.
III	**Impact of Global Development on Ethics and Values** Conflict of Cross-Cultural Influences, Mass Media, Cross-Border Education, Materialistic Values, Professional Challenges, and Compromise. Modern Challenges of Adolescent Emotions and Behavior; Sex and Spirituality: Comparison and Competition; Positive and Negative Thoughts. Adolescent Emotions, Arrogance, Anger, Sexual Instability, Selfishness, Defiance
IV	**Therapeutic Measures** Control of the Mind through a. Simplified Physical Exercise b. Meditation – Objectives, Types, Effect on Body, Mind and Soul c. Yoga – Objectives, Types, Asanas d. Activities: (i) Moralisation of Desires (ii) Neutralisation of Anger (iii) Eradication of Worries (iv) Benefits of Blessings

Unit	Content
V	**Human Rights** 1. Concept of Human Rights – Indian and International Perspectives a. Evolution of Human Rights b. Definitions under Indian and International Documents 2. Broad Classification of Human Rights and Relevant Constitutional Provisions. a. Right to Life, Liberty and Dignity b. Right to Equality c. Right against Exploitation d. Cultural and Educational Rights e. Economic Rights f. Political Rights g. Social Rights 3. Human Rights of Women and Children a. Social Practice and Constitutional Safeguards (i) Female Feticide and Infanticide (ii) Physical Assault and harassment (iii) Domestic Violence (iv) Conditions of Working Women 4. Institutions for Implementation a. Human Rights Commission b. Judiciary 5. Violations and Redressal a. Violation by State b. Violation by Individuals c. Nuclear Weapons and terrorism d. Safeguards

Web Resources	
1.	https://syllabus.b-u.ac.in/syl_college/ug_ve.pdf

Components for Internal Assessment and Distribution of Marks for CIA (Theory)

Max Marks	Marks for		Components for CIA							
	CIA	ESE	CIA – I		CIA – II		Best of CIA-I & CIA-II	Model		Total (Best + Model)
50	50	-	Actual	Weightage	Actual	Weightage	Weightage	Actual	Weightage	50
			50	**25**	50	**25**	**25**	50	**25**	

Question Paper Pattern

Duration in Hrs.	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Offline	Open Choice	5 (Out of 8)	5 x 10=50

Part – IV : Ability Enhancement Compulsory Courses

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours / week	Credits
24SOF2AE	Soft Skills	AECC – II	2	2

Course Objectives

The course intends to cover

- The essential soft skills that is crucial for success in today's dynamic and interconnected workplace.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the comprehensive skills to participate actively in conversation, writing short texts with expression	K1, K2, K3
CLO2	Infer the cohesive devices to describe and discuss any objects, pictures using compound, complex sentence forms.	K2, K3
CLO3	Comprehend the logic in the given situation to organize the ideas to write formal and informal letters.	K2, K3
CLO4	Understand the given material to organize it in a logical sequence to present a paragraph with main and supporting ideas with concluding sentences.	K3
CLO5	Present valuable ideas in conversation to emulate the main ideas and key points in short essays.	K3
K1 - Remember; **K2** - Understand; **K3** - Apply;		

Ability Enhancement Compulsory Course - II : Soft Skills

Unit	Details	No. of Hours
I	**Presentation Skills : Getting to Know You:** Grammar: Introduction to Tenses; Listening: Fill in the blanks; Speaking: Self Introduction, Everyday English, Role-Play; Reading: Different ways of communication. **My Day:** Grammar: Present simple positive & negative / Adverbs of Frequency; Vocabulary & Speaking: Daily Activities; Listening: Observe and Answer / Telling the time; Reading & Writing: Describe where you live. **Your World:** Grammar: Possessive determiners; Vocabulary & Speaking: Talk about countries, nationalities; Listening: Positive & negative contractions; Reading & Writing: Personal profile. **The World Of Work:** Grammar: Yes/No & Wh Questions; Vocabulary & Speaking: Jobs; Listening: Recognize the schwa sound; Reading & Writing: Opening and closing an email. .**Places And Things:** Grammar: There is / there are, articles; Vocabulary & Speaking: Talk about rooms & furniture; Listening: Directions; Reading & Writing: Imperatives.**24 Hours:** Grammar: Likes & Dislikes; Vocabulary & Speaking: Speak about hobbies and interests; Listening: Observe & answer; Reading: Match the photos with descriptions; Writing: Write complete sentence using prompts;	6
II	**Confidence : Clothes and Shopping:** Grammar: Modal verbs / Adverbs of Frequency / Adjectives and Adverbs; Vocabulary & Speaking: Shopping; Listening: Observe and Answer; Reading & Writing: Product Review. **Travel & Transport:** Grammar: Past simple questions; Vocabulary & Speaking: Talk about holidays; Listening: At the train station; Reading & Writing: Email - A perfect holiday. **Health & Fitness:** Grammar: Past simple irregular verbs; Vocabulary & Speaking: Talk about a healthy lifestyle; Listening: Listen & Answer; Reading & Writing: Time sequencers. **Music:** Grammar: Present perfect simple; Vocabulary & Speaking: Survey about music; Listening: Listen two people talk about music; Reading: Use adjectives and create sentences. **Let's go shopping:** Grammar: Countable & Uncountable; Vocabulary & Speaking: Town Survey; Listening: Listen and answer; Reading & Writing: Read and match	6
III	**Creativity :Cooking & Eating:** Grammar: Some & Any, Quantifiers; Vocabulary & Speaking: Food & Drink; Listening: Kitchen conversation; Reading & Writing: Article reading & answering. **Survival:** Grammar: Comparison of adjectives; Vocabulary & Speaking: Describing people; Listening: Listen & Answer; Reading & Writing: Read and Answer. **Working Together:** Grammar: Verb + Noun phrases; Vocabulary & Speaking: Talk about technology; Listening: Listen & Answer; Reading & Writing: Notice. **Music:** Grammar: Present perfect simple; Vocabulary & Speaking: Survey about music; Listening: Listen two people talk about music; Reading: Use adjectives and create sentences. **Culture and Arts:** Grammar: Present perfect; Vocabulary & Speaking: Speak on the phone; Listening: Listen and answer; Reading & Writing: Review	6

Unit	Content	
IV	**Problem-Solving :Do's and Don'ts:** Grammar: Modal verbs; Vocabulary & Speaking: Role play; Listening: Holidays in January; Reading & Writing: Article reading & answering. **Body:** Grammar: First conditional; Vocabulary & Speaking: Personality & Appearance; Listening: Listen to conversations about personality; Reading & Writing: Read and Answer about your skills. **Speed:** Grammar: Present simple passive; Vocabulary & Speaking: Talk about relationships; Listening: Listen & Answer; Reading & Writing: Error spotting. **Work:** Grammar: Adverbs of manner; Vocabulary & Speaking: Talk about work advice; Listening: Observe & Answer; Reading: Read & check your ideas	6
V	**Critical Thinking : Influence:** Grammar: would / past habits; Listening: Sentence Correction; Speaking & Vocabulary: Your inspiration; Reading: Picture description; Writing: Rewrite the sentences. **Money:** Grammar: Second conditional; Listening: radio programme; Speaking & Vocabulary: Talk about games; Reading & Writing: Fill in the blanks. **Things that changed the world:** Grammar: articles; Speaking & Listening: Talk about chewing gum; Reading & Writing: Read and write a book review	6
	Total Hours	**30**

Components for and Distribution of Marks for ESE (Theory)

Ability Enhancement Compulsory Course(AECC)

Duration in Hrs.	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Online	MCQ	50	50x1=50

Semester 3

Semester – 3									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours /Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM31L	I	Language - I	Tamil – III	4	3	25	75	100	3
24HIN31L	I		Hindi – III						
24MAL31L	I		Malayalam – III						
24FRE31L	I		French – III						
24ENG32L	II	Language - II	English – III	4	3	25	75	100	3
24BCC33C	III	Core – V	Corporate Accounting – I	6	3	25	75	100	4
24BCC34C	III	Core – VI	Python Programming	6	3	25	75	100	4
24BCC35P	III	Core Lab- III	**Lab:** Data Analytics for Finance	4	3	40	60	100	3
24BCC36A	III	Allied – III	Company Law	4	3	25	75	100	3
24BCC37P	III	SEC Lab – I	**Lab:** Python Programming	2	3	40	60	100	2
24BAT3FC/	III	FC-III	Basic Tamil	-	2	50	-	50	2
24ADT3FC/			Advanced Tamil						
24IKS3FC			Indian Knowledge Systems(IKS)*						
24MOO3AE	IV	AECC – III	Online Course - MOOC	-	-	50	-	50	2
Total				**30**				**800**	**26**

Part –I : Language-I-Tamil –III

(All the Undergraduate Programmes)

Course Code	Course Name	Category	Hours / Week	Credits
24TAM31L	Tamil - III	Language - I	4	3

Course Objectives

- தமிழரின் பிற துறை சார்ந்த சிந்தனைகளைக் கற்றுத் தேர்தல்
- இன்றைய அறிவியல் வளர்ச்சி மற்றும் கணினியின் பயன்பாட்டுத் தேவையை உணர்த்துதல்
- இயற்கை பாதுகாப்பு குறித்த விழிப்புணர்வை வளர்த்தல்

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	வணிகத் தமிழ் - கணினித் தமிழின் நுட்பங்கள் மற்றும் பயன்பாடுகளை அறிதல்.	K1, K2
CLO2	ஊடகம் மற்றும் உளவியல் தன்மை குறித்த சிந்தனைகளை வளர்த்தல்.	K2
CLO3	சுற்றுலா - சுற்றுச்சூழலியல் தேவை மற்றும் மீட்டுருவாக்கம் குறித்து உணர்த்துதல்.	K3
CLO4	மேலாண்மை பற்றி அறிதல் மற்றும் சுயக்கற்றல் திறனை வளர்த்தல்.	K1, K3
CLO5	கொங்கு ஆளுமைகள் குறித்து அறியச் செய்தல்.	K2, K3
K1 - Remember; **K2** - Understand; **K3** – Apply		

Part – I: Language-I-Tamil – III

பயன்பாட்டுத் தமிழ்

Unit	Content	No. of Hours
I	**வணிகம் மற்றும் கணினித் தமிழ்** தமிழரின் வணிகம் - வணிகக் கடிதங்கள் – உலகமயமாக்கல் - செயற்கை நுண்ணறிவு கற்றல் - இணைய நூலகம் - இணையத் தமிழ் பயன்பாடு	12
II	**ஊடகம் மற்றும் உளவியல் தமிழ்** ஊடகத்தின் இன்றியமையாமை - நிகழ்வுகளைச் செய்திகளாக வடிவமைத்தல் - ஊடகத் துறையில் மொழியின் பங்கு - உளவியல் வரையறை - உளவியல் பிரிவுகள் - வகுப்பறை உளவியல் (ஆசிரியர், மாணவர்)	12
III	**சுற்றுச்சூழலியல் மற்றும் சுற்றுலாவியல்** தமிழரின் சூழலியல் அறிவு - சுற்றுச்சூழல் மாசுபாடு - சுற்றுச்சூழல் பாதுகாப்பு - சுற்றுலா வகைகள் - உலகப் புகழ்பெற்ற சுற்றுலாத் தலங்கள் - சுற்றுலா வளர்ச்சி மற்றும் பயன்கள்	12
IV	**மேலாண்மைத் தமிழ் மற்றும் மொழிப்பயிற்சி** மேலாண்மையும் அணுகுமுறைகளும் - மேலாண்மை செயல்பாடுகள் மற்றும் வகைகள் - வகுப்பறை மேலாண்மை – நேர்காணல் - நூல் திறனாய்வு மற்றும் மதிப்பீடு - படிவங்கள் பூர்த்தி செய்தல் மற்றும் விண்ணப்பங்கள்	12
V	**பன்முக ஆளுமைகள்** ஜி.டி.நாயுடு(அறிவியல்) – பத்மஸ்ரீ டாக்டர் பக்தவத்சலம்(மருத்துவம்) - நா மகாலிங்கம்(தொழில்) - மயில்சாமி அண்ணாதுரை(விஞ்ஞானம்) - என் ஜி ராமசாமி(சமூகம்) - நம்மாழ்வார்(விவசாயம்)	12
	Total Hours	60

Reference Books

1	சுந்தரம்.இல, (2022) கணினித் தமிழ், விகடன் பிரசுரம்
2	மணியரசன்.துரை, (2019), இணையமும் இனியத் தமிழும், இசை பதிப்பகம்
3	பொன்னவைக்கோ.மு, (2015) இணையத் தமிழ் வரலாறு, பாரதிதாசன் பல்கலைக் கழகம்.
4	தங்கமணி இரா.ம, (2018) சுற்றுலாவியல், கொங்கு பதிப்பகம்
5	இலக்கியா க.வி, நந்தினி சா.சு,(2022), விடியல் பதிப்பகம்
6	சின்னத்தம்பி முருகேசன்.பொன்(2016) சுற்றுச் சூழலியல்(உலகம் தழுவிய வரலாறு), எதிர் வெளியீடு
7	இறையன்பு.வெ (2018) இலக்கியத்தில் மேலாண்மை, நியூ செஞ்சுரி புக் ஹவுஸ்

Reference Books	
8	ஸ்ரீனிவாசன்.வி, (2009), திருக்குறளில் மேலாண்மை, விகடன் பிரசுரம்
9	பட்டனத்தி மைந்தன், (2018), ஜி.டி நாயுடு, ராமையா பதிப்பகம்
10	டாக்டர் பக்தவத்சலம்.ஜி (2009) இதயம் ஒரு கோவில், விஜயா பதிப்பகம்

Question Pattern	
காலம் : 3 மணி நேரம்	மொத்த மதிப்பெண்கள் : 75
பிரிவு – அ 10x1=10 • சரியான விடையைத் தேர்ந்தெடுத்து எழுதுக.	
பிரிவு – ஆ 5x5=25 • வணிகம் மற்றும் கணினித் தமிழ் - 1 வினா • ஊடகம் மற்றும் உளவியல் தமிழ் - 1 வினா • சுற்றுலாவியல் மற்றும் சுற்றுச்சூழலியல் - 1 வினா • மேலாண்மைத் தமிழ் மற்றும் மொழிப்பயிற்சி- 1 வினா • கொங்கு ஆளுமைகள் - 1 வினா	
பிரிவு – இ 5x8=40 • வணிகம் மற்றும் கணினித் தமிழ் - 1 வினா • ஊடகம் மற்றும் உளவியல் தமிழ் - 1 வினா • சுற்றுலாவியல் மற்றும் சுற்றுச்சூழலியல் - 1 வினா • மேலாண்மைத் தமிழ் மற்றும் மொழிப்பயிற்சி- 1 வினா • கொங்கு ஆளுமைகள் - 1 வினா	

குறிப்பு : ஆ, இ பிரிவுகளில் வினாக்கள் "இது" அல்லது "அது" என்ற வகையில் அந்தந்த அலகுகளிலிருந்து அமைத்தல் வேண்டும்.

Course Code	Course Name	Category	Hours / Week	Credits
24HIN31L	Hindi - III	Language - I	4	3

Course Objectives

The course intends to

- Have knowledge of the contents of primitive poetry
- Learn about contemporary poetry and its techniques.
- Interest in reading poetry and the ability to express social thoughts will improve
- Understand the basics of Hindi literature and to understand Hindi literature properly
- Have Knowledge of the elements of poetry and the knowledge of subtle translation will improve

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	May have knowledge of the contents of primitive poetry	K1, K2
CLO2	Learn about contemporary poetry and its techniques.	K2
CLO3	Interest in reading poetry and the ability to express social thoughts will improve	K3
CLO4	This will help you to understand the basics of Hindi literature and to understand Hindi literature properly	K1, K3
CLO5	Knowledge of the elements of poetry and the knowledge of subtle translation will improve.	K2, K3
K1 - Remember; **K2** - Understand; **K3** - Apply		

Part – I: Hindi – III

Unit	Content	No. of Hours
I	**Poetry: Kavya Lehar – By Dr. V. Baskhar Pracheen Kavitha** 1. Mahatma Kaber – Saki 2. Goswamy Tulasidas – Ram-Van-Aman 3. Mahatma Soordas – Baal – Leela 4. Kavivar Rahim – Dohe	14
II	**Poetry: Kavya Lehar – By Dr. V. Baskhar Aadhunik Kavitha** 1. Mythili Sharn Gupth – Vikaral Bijali 2. Sumithranandan Panth – Parivarthan 3. Suryakanth Thripati Nirala – Sandhayasundarai 4. Ramdhari Sing Dinkar – Bhagavan Ke Dakkiya 5. Harivansray Bachchan – Kota Sikka 6. Agyeya – Anubhav Paripakva 7. Naresh Mehtha – Ullangan 8. Dharmaveer Bharathi – Tum Mere Koun Ho	14
III	**History of Hindi Literature:** (Sahithyik Tippanian) 1. Ammer Kusro 2. Vidhyapathi 3. Chandbardhayi 4. Pruthiviraj Raso 5. Ramacharitha Manas 6. Vinaya Patrika	12
IV	**Alankar:** 1.Anupras 2. Yamak 3. Slesh 4.Vakrokthi 5.Upama, 6. Roopak 7. Virodhabas	10
V	**Translation**: **English - Hindi only** Anuvadh abhyas – III (16-30 Lessons Only)	10
	Total Hours	**60**

Text Books	
1	Dr Baskhar V., (2006), Kavya lehar –Jawahar Pusthakalay, Sadar Bazaar,Mathura-U.P.281001.
2	Anuvadh abyas-III,Dakshin Bharath Hindi Prachar Sabha Chennai – 17.
Reference Books	
1	Rajnath sharma,(2010) Hindi sahithya ka saral ithihaas, Vinod Pustak Mandir, Agra-282
2	Kavya pradeep rambadri shukla,(2008) hindi bhavan, 36, tagore town, allahabad – 211 002.

Course Code	Course Name	Category	Hours/Week	Credits
24MAL31L	Malayalam - III	Language - I	4	3

Course Objectives

The course intends to

- Have knowledge of the contents of primitive poetry
- Learn about contemporary poetry and its techniques.
- Interest in reading poetry and the ability to express social thoughts will improve
- Understand the basics of Malayalam Poetry and to understand Malayalam literature properly
- Provide knowledge of the elements of poetry.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Get a basic knowledge of the history of Malayalam literature.	K1
CLO2	Enhances the art and taste of Malayalam literary works	K1
CLO3	Literary genres can be learned	K2
CLO4	Create more to read and enjoy Malayalam poetry	K3
CLO5	Get the basic Knowledge of poetry techniques	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4**-Analyse		

Part – I: Malayalam – III

Unit	Content	No. of Hours
I	Poetry – Chinthavishtayaya Seetha	14
II	Poetry – Chinthavishtayaya Seetha	14
III	Poetry – Mrugasikshakan - (Murgasikshakan, Kausalya, Varavu, Vittupoku Ekalavyan, Mazha) 6 poetries	12
IV	Poetry – Mrugasikshakan - (Kayal, Karkkadakam, Bhagavatham, Vazhivakkile naikutty, Edavelayil oru nimisham, Verumoru kathu) 6 poetries	10
V	Poetry – Aayisha	10
Total Hours		**60**

Text Books	
1	Kumaranasan, (2012), Chinthavishtayaya Seetha, Kerala Book Store Publishers.
2	Vijayalakshmi, (2010), Mrugasikshakan, DC Books, Kottayam.
3	VayalarRamavarma,(2014), Aayisha, Kerala Book Store Publishers.
Reference Books	
1	Dr.Leelavathi M, (2015) Kavitha SahithyaCharitram, Kerala Sahithya Academy, Trichur.
2	Dr.Leelavathi M, (2015) Kavitha Dwani, D.C.Books, Kottayam.
3	Dr.George K.M, (2014) Aadhunika Sahithyacharithram Prasthanangalilude, D.C.Books, Kottayam.
4	Chummar T.M. (2009) Padya Sahithya Charithram, Kerala Sahithya Academy, Trichur.

Course Code	Course Name	Category	Hours/Week	Credits
24FRE31L	French - III	Language - I	4	3

Course Objective

The course intends

To interact in a simple way, ask and answer simple questions about themselves, where they live, people they know, and things they have, initiate and respond to simple statements in areas of immediate need or on very familiar topics, rather than relying purely on a very finite rehearsed, lexically-organized repertoire of situation-specific phrases.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Comprehend a repertoire of vocabulary	K1
CLO2	Understand tenses and intermediary level of grammar	K2
CLO3	Try to converse in unknown situation	K3
CLO4	Translate unknown texts on familiar topics	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** - Analyse		

Part – I: French – III

Unit	Content	No. of Hours
I	Etape 1 (Lecons 1 - 3)	14
II	Etape2 (Lecons 1 - 3)	14
III	Etape 3 - Leçons 1 – 2	12
IV	Etape 3 – Leçon 3	10
V	Etape 4 – Leçon 1	10
	Total Hours	**60**

Text Book	
1.	Céline Himber, Corina Brillant, Sophie Erlich, (2014), Adomania2 – Methode Defrancais, Publisher : Hachette Fle
Reference Book	
1.	Yves Loiseau, Régine Merieux (2009), Latitudes 1, Publisher: French and European Publications Inc.

Course Code	Course Name	Category	Hours/ Week	Credits
24ENG32L	English-III	Language- II	4	3

Course Objectives

The course intends to cover

- Various genres of literature
- Inter personal skills essential at work environment

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	List out the connotations and denotations to pen poems.	K1
CLO2	Identify complex characters to navigate philosophical and intellectual learning and employ it in work place.	K2
CLO3	Interpret various prose styles to enhance creative writing	K3
CLO4	Compute vocabulary and grammatical proficiency in communication to enhance clarity in content creation.	K3
CLO5	Practice communication skills to be effective in lifelong learning.	K3
K1 – Remember; **K2**-Understand; **K3**- Apply		

Part-II: English-III

Unit	Content	No. of Hours
I	**Poetry** 1. Nothing Will Die – Alfred Lord Tennyson 2. Porphyria's Lover – Robert Browning 3. Obituary – A K Ramanujan	12
II	**Scenes from William Shakespeare's Plays** 1. Romeo and Juliet – The Balcony Scene 2. Merchant of Venice - Court Scene 3. Julius Caesar - Murder Scene	12
III	**Famous Speeches** 1. You've Got to Find What You Love-Steve Jobs 2. You Will Prevail -Sundar Pichai 3. I am Malala – Malala Yousafzai	12
IV	**Language Competency** 1. Identifying types of Sentences 2. Sentence Structure 3. Active Voice and Passive Voice 4. Direct and Indirect Speech	12
V	**English for Communication Listening and Speaking** Participating in a Group Discussion 1. Group discussion as a selection process 2. Different kinds of Group Discussion 3. Structure of Group Discussion 4. Successful Group Discussion Techniques 5. Group Discussion – Do's and Don'ts **Reading and Writing** 1. Reading diagrammatic information-interpretations maps, graphs and pie charts 2. Narrative writing– Two to three paragraphs 3. Dramatizing everyday situations/social issues through skits. (Writing scripts and performing)	12
	Total Hours	**60**
Reference Book		
1.	Wren, P.C. (1973). High school English grammar and composition.	
Web Resources (Swayam/NPTEL)		
1.	https://nptel.ac.in/courses/109106129	
2.	https://nptel.ac.in/courses/109104031	

Course Code	Course Name	Category	Hours/Week	Credits
24BCC33C	Corporate Accounting - I	Core – V	6	4

Course Objectives

This course intends to cover

- Basic accounting transactions relating to shares and debentures.
- Preparation of final accounts of companies, and the valuation of shares and goodwill
- Accounting treatment of assets and liabilities during the liquidation process.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remember the concepts related to issue of shares	K1
CLO2	Understand the provisions of companies Act under Redemption of Preference shares and Debentures	K2
CLO3	Apply the concept of final accounts and managerial remuneration	K3
CLO4	Examine the various methods of shares and goodwill of a company	K4
CLO5	Analyze the accounting of statements of liquidation	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** – Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	1	3	2	2
CLO2	3	1	2	3	2
CLO3	2	2	3	2	2
CLO4	2	2	2	2	1
CLO5	2	3	2	3	1
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core - V: Corporate Accounting - I

Unit	Content	No. of Hours
I	**Share Capital:** Meaning – Types of shares – Issue of shares at Par, Premium and Discount – Forfeiture and Reissue of shares – Surrender of Shares – Right Issue – Meaning and concept of Bonus Issue. **Underwriting of Shares and Debentures:** Meaning – Types of Underwriting – Underwriting Commission.	18
II	**Redemption of Preference Shares:** Definition, legal provisions and Accounting Treatment. **Debentures:** Meaning – Definition – Issue of debentures at par, premium and discount. **Redemption of debentures:** Sinking Fund Method – Purchase of the debentures in the Open Market – Ex Interest and Cum Interest transactions.	18
III	**Final Accounts:** Introduction – Preparation of Final accounts as per schedule III of Companies Act 2013 – Profit and Loss Account and Balance Sheet (including problems with adjustments) – Profit for Managerial remuneration.	18
IV	**Valuation of Goodwill:** Meaning – Needs – Circumstances of valuation of goodwill – factors influencing the valuation of goodwill – Methods of valuation: Average Profits Method, Super Profits Method and Capitalisation Method. **Valuation of shares:** Meaning – Needs – Methods of Valuation: Net Asset Value Method, Yield Method and Fair Value Method.	18
V	**Liquidation of Companies:** Overview – Statement of Affairs and Deficiency Accounts – Liquidator's Final Statement of Accounts.	18
	Total Hours	**90**
	Theory 20% & Problems 80%	
Text Books		
1	Jain.S.P, and Narang.K.L., (2022), Advanced Accountancy, Kalyani Publishers.	
2	Gupta R.L. and Radhaswamy M, (2021), Corporate Accounting, Sultan Chand & Co.	
3	Tulsian.P.C, (2018), Corporate Accounting, Sultan Chand & Co.	
Reference Books		
1	Reddy.T.S. and Murthy.A, (2022), Corporate Accounting, Margham Publications.	
2	Singol.A.K, and Sharma J.P., (2013), Corporate Accounts – I, Vayu Education of India.	
3	Arulanandam.M.A. & Raman.K.S. (2019), Advanced Accountancy (Vol.II), Himalaya Publishing house.	
Web Resources (Swayam/NPTEL)		
1	https://onlinecourses.swayam2.ac.in/cec24_mg11/preview	

Course Code	Course Name	Category	Hours/Week	Credit
24BCC34C	Python Programming	Core - VI	6	4

Course Objectives

This course intends to cover

- Fundamentals of Python Programming.
- Concept of Functions in Python.
- Knowledge of Lists, Tuples, Files and Directories.
- Learn about dictionaries in python.
- Explores the object-oriented programming, Graphical programming aspects of python with help of built in modules.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remembering the concept of operators, data types, looping statements in Python programming.	K1
CLO2	Understanding the concepts of Input / Output operations	K2
CLO3	Applying the concept of functions	K3
CLO4	Analyzing the structures of list, tuples and maintaining dictionaries	K4
CLO5	Demonstrate significant experience with python program development environment	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** – Analyze;		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	1	1	1
CLO2	3	3	1	1	1
CLO3	3	2	1	1	1
CLO4	3	2	2	2	1
CLO5	3	2	2	2	1
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core – VI: Python Programming

Unit	Content	No. of Hours
I	**Basics of Python**: Basics Python - Variables - Executing Python from the command Line - Editing Python Files - Python Reserved Words - Basic Syntax- comments - Standard Data Types – Relational Operators - Logical Operators - Bit Wise Operators - Simple Input and Output.	18
II	**Control Statements:** Control Flow and Syntax - Indenting - if Statement - statements and expressions- string operations- Boolean Expressions -while Loop - break and continue - for Loop. LISTS: List-list slices - list methods - list loop – mutability – aliasing - cloning lists - list parameters. TUPLES: Tuple assignment, tuple as return value -Sets – Dictionaries	18
III	**Functions:** Definition - Passing parameters to a Function - Built-in functions- Variable Number of Arguments - Scope – Type Conversion-Type Coercion- Passing Functions to a Function - Mapping Functions in a Dictionary	18
IV	**File Handling:** Data Streams - Access Modes Writing - Data to a File Reading - Data From a File - Additional File Methods - Using Pipes as Data Streams - Handling IO Exceptions - Working with Directories. **Integrating Python with SQ Lite:** Introduction to SQ Lite and its use cases, Using the built – in SQ Lite 3 module in Python, Creating and Connecting to an SQ Lite database file	18
V	**Object Oriented Features:** Classes Principles of Object Orientation - Creating Classes - Instance Methods - File Organization - Special Methods - Class Variables – Inheritance – Polymorphism	18
Total Hours		**90**
Text Books		
1.	Mark Summerfield, Programming in Python 3: (2009), A Complete introduction to the Python Language, Addison-Wesley Professional,	
2.	Martin C. Brown, Python: (2001), The Complete Reference, McGraw-Hill.	
3.	E. Balagurusamy (2017), “Problem Solving and Python Programming”, McGraw-Hill, First Edition.	
Reference Books		
1.	Allen B. Downey, (2016),Think Python: How to Think Like a Computer Scientist, 2nd edition, Updated for Python 3, Shroff/O‘Reilly Publishers.	
2.	Guido van Rossum and Fred L. Drake Jr, (2011), An Introduction to Python – Revised and updated for Python 3.2, Network Theory Ltd.	
3.	Wesley J Chun, (2012), Core Python Applications Programming‖, Prentice Hall,	
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.swayam2.ac.in/cec24_cs01/course	
2.	https://onlinecourses.nptel.ac.in/noc24_cs57/preview	

Course Code	Course Name	Category	Hours / Week	Credits
24BCC35P	Data Analytics for Finance	Core Lab – III	4	3

Course Objectives

This course intends to cover

- Applied understanding of data analytics and business intelligence (BI) tools used in decision-making across industries.
- Focus on data collection, visualization, predictive analysis and business intelligence reporting. Hands-on exposure to real-world datasets and tools like Power BI, Tableau, and Excel.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the fundamentals of data analytics and business intelligence.	K1 - K2
CLO2	Apply data cleaning, transformation, and visualization techniques.	K3
CLO3	Analyze business data using dashboards and visualization tools.	K4
CLO4	Perform predictive analytics for business decision-making.	K3
CLO5	Develop and present business intelligence solutions using real-world datasets.	K3
K1 – Remember; **K2** – Understand; **K3** – Apply; **K4** – Analyze.		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	2	1	2
CLO2	3	2	1	2	3
CLO3	3	3	3	2	2
CLO4	3	3	3	2	2
CLO5	3	3	2	2	3
3 – Substantial (high)		**2** – Moderate (medium)		**1** – Slight (low)	

Core Lab – III: Data Analytics for Finance

Unit	Content	No. of Hours (T + P)
I	**Introduction to Data Analytics and Business Intelligence:** Fundamentals of Data Analytics and BI - Role of BI in Business Decision-Making - Overview of BI tools (Excel, Power BI, Tableau). **Introduction to Power BI, Tableau, and Excel for Data Analysis:** 1. Introduction to cloud-based accounting tools (Zoho Books, Tally Prime). 2. Setting up a basic cloud-based financial workflow. 3. Configuring financial reports and dashboard templates.	6 + 4
II	**Data Cleaning and Preprocessing**: Understanding structured vs. unstructured data - Data preparation and transformation techniques - Handling missing data, outliers, and normalization. **Data cleaning and transformation using Excel and Power BI:** 1. Simulating UPI and wallet-based transactions. 2. Setting up and testing a payment gateway (Razorpay, PayU). 3. Automating invoice generation and reconciliation in accounting software.	6 + 6
III	**Data Visualization and Dashboards**: Principles of effective data visualization - Creating dashboards using Power BI and Tableau - Advanced charting techniques **Build interactive dashboards for business cases** 1. Creating bar charts, histograms, and heatmaps in Power BI. 2. Designing an interactive dashboard using Tableau. 3. Using slicers, filters, and KPIs in business reports.	6 + 6
IV	**Predictive Analytics and Business Forecasting**: Introduction to predictive analytics concepts - Time series forecasting for business trends - Basic statistical and regression models. **Forecasting and predictive modeling using Power BI:** 1. Introduction to regression analysis for sales forecasting. 2. Using time-series analysis for financial predictions. 3. Performing customer segmentation using clustering techniques.	6+ 6
V	**Capstone Project & Case Studies**: Real-world applications of BI in industries - Case studies on retail, finance, and healthcare analytics. **Final project - Business Intelligence Implementation for Decision-Making:** **1.** Group project: Developing a business intelligence solution for a company. **2.** Case study discussion on data-driven decision-making in organizations. **3.** Final project presentations and feedback session	6 + 8
	Total Hours	**60**

Text Books	
1.	Foster Provost & Tom Fawcett, "Data Science for Business", O'Reilly Media.
2.	Cindi Howson, "Successful Business Intelligence", McGraw-Hill.
Web Resources (Swayam/NPTEL)	
1.	https://nptel.ac.in/courses/110106072

Course Code	Course Name	Category	Hours/Week	Credits
24BCC36A	Company Law	Allied - III	4	3

Course Objectives

This course intends to cover

- Basic concept of company and Companies Act, 2013.
- Documents required for the formation of a company.
- Types of Meetings, Resolutions, and the procedure for the appointment and removal of an auditor.
- Management and administration of a company, along with the different modes of winding up.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the key aspects / fundamentals of company law.	K1 - K2
CLO2	Describe the contents of the Memorandum of Association & Articles of Association.	K3
CLO3	Familiarize the qualification and disqualification of Auditors.	K2
CLO4	Gain insight into the workings of the National Company Law Appellate Tribunal (NCLAT).	K2
CLO5	Analyzing various winding up procedures, regulations and formalities under law.	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** - Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	2	3	2	3
CLO2	3	2	3	2	3
CLO3	3	2	3	2	3
CLO4	3	2	3	3	3
CLO5	3	2	3	2	3
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Allied – III: Company Law

Unit	Content	No. of Hours
I	**Introduction to Company law:** Companies Act 2013 – Definition & Characteristics of a Company – Lifting or Piercing the Corporate Veil – Distinction between a Company, Partnership, and Limited Liability Partnerships – Classification of Companies – Based on Incorporation, Liability, Number of Members, and Control.	12
II	**Formation of Company**: Promoter – Fundamental Documents– Memorandum of Association: Contents – Alteration – Legal Effects – Articles of Association - Certificate of Incorporation – Prospectus: Contents - Kinds – Liabilities – Share Capital: Kinds – Issue – Alteration – Dividend – Debentures.	12
III	**Meeting, Resolution and Auditors:** Meaning – Types of Meetings – Requisites for meetings – Voting and Polls. **Resolutions:** Ordinary and Special. **Auditors:** Qualification – Disqualification – Appointment and Removal of an Auditor	12
IV	**Management & Administration of the Company:** Directors: Legal position and Directorships. Board of Directors: Appointment, Removal and Disqualification – Director Identification Number (DIN) – Powers and Duties of Directors – Board Committees – Related Party Transactions – Contract by One Person Company – Insider Trading. Managing Director and Manager – Secretarial Audit – Administrative aspects and Winding Up – National Company Law Tribunal (NCLT) – National Company Law Appellate Tribunal (NCLAT) – Special Courts.	12
V	**Winding up of the Company**: Meaning – Modes: Compulsory Winding Up – Voluntary Winding Up – Consequences of a Winding Up Order – Powers of the Tribunal – Petition for Winding Up – Company Liquidator.	12
	Total Hours	**60**
Text Books		
1.	Kapoor, N D. (2014). Company Law, Sultan Chand and Sons.	
2.	Bagrial. A.K. Company Law, Vikas Publishing House, New Delhi.	
3.	Kuchhal M.C and Alok Kuchhal, (2021), Company Law, (6th Revised ed.), A Mahavir Publication.	
Reference Books		
1.	Dr.Divyesh Shah, (2023) Company Law, Himalaya Publishing House Pvt Ltd.	
2.	Abdul Gafoor, P. M. S., & Thothadri, S. (2017). Company law and secretarial practice (2nd revised ed.). Vijay Nicole Imprints Limited	
3.	Gower L.C.B, Principles of Modern Company Law, Steven & Sons, London.	
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.nptel.ac.in/noc24_mg11/preview	
2.	https://onlinecourses.nptel.ac.in/noc24_hs08/preview	

Course Code	Course Name	Category	Hours/Week	Credits
24BCC37P	Python Programming	SEC Lab – I	2	2

Course Objectives

This course intends to cover

- Gain Knowledge in Object oriented technology.
- Understanding on Source codes and arrays.
- Apply user functions and member function
- Applications of classes and objects.
- Apply reusability features using the concept of inheritance

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Remember the basics of Building any programming language	K1
CLO2	State about Arrays with illustration	K2
CLO3	Analyze the benefits of using Function	K4
CLO4	Develop programs for Operators	K4
CLO5	Access the memory Address of any variable	K3
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** – Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	2	2	3
CLO3	3	2	3	3	2
CLO4	3	3	3	2	3
CLO5	3	3	3	3	3
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

SEC Lab – I: Python Programming

S.No	List of Programs	No. of Hours
1	Program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon user's choice.	4
2	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
3	Program, to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user.	3
4	Write a Python script that prints prime numbers less than 20.	4
5	Program to find factorial of the given number using recursive function.	4
6	Write a Python program to count the number of even and odd numbers from array of N numbers.	4
7	Write a Python class to reverse a string word by word.	3
8	Create a simple calculator to do all the arithmetic operations.	4
	Total Hours	**30**
Text Books		
1	Charles Dierbach,(2015), Introduction to Computer Science using Python - A Computational Problem-Solving Focus, Wiley India Edition.	
2	Wesley J. Chun, (2016), Core Python Applications Programming, 3rd Edition, Pearson Education.	
Reference Books		
1	Mark Lutz, (2018), Learning Python Powerful Object-Oriented Programming, O'reilly Media, 25th Edition.	
2	Timothy A. Budd, (2011, Exploring Python, Tata MCGraw Hill Education Private Limited, 1st Edition.	
3	John Zelle, (2013), Python Programming: An Introduction to Computer Science", Second edition, Course Technology Cengage Learning Publications, ISBN 978- 1590282410.	
4	Michel Dawson, (2013), Python Programming for Absolute Beginners, Third Edition, Course Technology,Cengage Learning Publications, ISBN 978-1435455009	
Web Resources (Swayam / NPTEL)		
1	https://onlinecourses.swayam2.ac.in/cec22_cs20/preview	
2	https://onlinecourses.swayam2.ac.in/aic20_sp33/preview	
3	https://onlinecourses.nptel.ac.in/noc24_cs45/preview	

FC III - Indian Knowledge Systems (IKS)

Course Code	Course Name	Category	Hours/Week	Credits
24IKS3FC	Indian Knowledge Systems	FC - III	-	2

Unit	Content
1	**Indian Knowledge Systems (IKS) Basic Concepts** - Introduction - Journey of Indian Culture and Civilization - Hindu Philosophical System - Contribution of Indian Knowledge System in Science and Arts - Indian Knowledge System and Way of Life - The Implicit Concepts in Indian Knowledge System - Social Viewpoint in Indian Knowledge system - Idea of Vasudhaiva Kutumbakam.
2	**Indian Culture, Art & Architecture** - Introduction - Concept of Culture - Culture and Heritage - General Characteristics of Culture - Indian Culture - Indian Culture during the Modern and Contemporary Period -The Factors of Unity in Diversity - Aspects of Indian culture - Indian Architecture - Architecture of Tamil Nadu.
3	**Vedic Mathematics** - Introduction - History of Vedic Mathematics - Addition - Subtraction - Base Method - Sub Base Method - Multiplication by numbers consisting of all 9s - Division - Special Methods of Division - Straight Division.
4	**Science and Technology in Indian Knowledge System(IKS)**- Introduction - The Indian S & T Heritage - Metals and Metalworking Technology - Lost wax casting of Idols and Artefacts - Literary sources for Science and Technology - Technology in Ancient India - Significant Science and Technology Discovery in Ancient India - Council of Scientific and Industrial Research - Animal Science in Ancient India - Biodiversity and folk traditions.
5	**History of Trade and Commerce in Ancient India** - Introduction - Indigenous Banking System - Rise of Intermediaries - Transport - Major Trade Centres - Major Exports and Imports - Position of Indian Subcontinent in World Economy.
6	**Indigenous Agriculture and IKS** - Introduction - History of Indian Agriculture - Indigenous Knowledge - Organic Farming and Natural Fertilization - Mixed Cropping and Crop Rotation - Ecological and Socioeconomic Impacts of Indigenous Farming - Challenges and Future Directions.
7	**Traditional Water Management Systems of India** - Introduction - Methodology - Traditional Water Management Systems - Northern Region - North Western Region - North Eastern Region - Central Indian Region - Southern Indian Region.

Unit	Content
8	**Traditional Foods and Festival of India** - History - Introduction - Foods Consumed in Different Regions of India - Eating Styles of India - Traditional Equipment's used for Cooking - Changes in Consumption of Traditional Foods - Traditional Foods/Modern Functions - The Future of Traditional Foods - Traditional Festivals of India.
9	**Sports in India-From Ancient Period to Modern Period** - Introduction - Indus Valley Civilization - Early Hindu Period/ Epic Period - Traditional Indoor and Outdoor Games - British Period - Post Independence - Modern period.
10	**Nobel Laureates of Indian Origin & Inspiring Scientists of India and their Contributions** - History of the Nobel Prize - Nobel Prize Insignia - Indian Nobel Prize winners and their Biography - Inspiring Scientists and their Contributions.

Reference Resources	
1.	https://www.education.gov.in/shikshakparv/docs/background_note_Stimulating_Indian_Knowledge_Systems_Arts_Culture.pdf
2.	Singh, R. K., King, C. A., & Barrett, D. A. (2010). Traditional ecological knowledge and agricultural sustainability in India. Indian Journal of Traditional Knowledge, 9(2), 231- 243

Components for Internal Assessment and Distribution of Marks for CIA and ESE (Theory)

Max Marks	Marks for		Components for CIA						
	CIA	ESE	CIA		Model		Attendance	Active Engagement	Total
100	25	75	Actual	Weightage	Actual	Weightage	5	5	25
			50	**5**	75	**10**			

Question Paper Pattern

Component	Duration in Hours	Section A			Section B			Section C			Total
		Type of Question	No. of Questions	Marks	Type of Question	No. of Questions	Marks	Type of Question	No. of Questions	Marks	
CIA	2	MCQ	8	8x1=8	Either or	3	3x6=18	Either or	3	3x8=24	50
Model Exam / **ESE**	3	MCQ	10	10x1=10	Either or	5	5x5=25	Either or	5	5x8=40	75

Components for Internal Assessment and Distribution of Marks for CIA (Lab)

Max Marks	Marks for		Components for CIA						
	CIA	ESE	Test		Model		Experiments / Programs	Observation	Total
100	40	60	Actual	Weightage	Actual	Weightage	Marks	5	40
			50	**10**	60	**15**	**10**		

Examination Pattern

Component	Duration in Hours	Marks			Total Marks
		Practical Exam	Record	Weightage	
Test	2	50	-	**10**	50
Model	3	60	-	**15**	60
Experiments	-	-	-	**10**	10
Observation	-	-	-	**05**	05
Total Marks - CIA				**40**	**40**
ESE	3	50	10	-	**60**

Components for Internal Assessment and Distribution of Marks for CIA (Foundation Course -Theory)*

Max Marks	Marks for		Components for CIA				
50	CIA	ESE	CIA		Model		Total
	50	-	Actual	Weightage	Actual	Weightage	
			50	25	50	25	50

* FC – III - Indian Knowledge Systems(IKS) – A self-study course with open book assessment

Question Paper Pattern

Duration in Hours	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Offline	Open Choice	5 (Out of 8)	5 x 10=50

Components for and Distribution of Marks for ESE (Theory) Ability Enhancement Compulsory Courses (AECC) & Question Paper Pattern

Duration in Hours	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Online	MCQ	50	50x1=50

Semester 4

Semester – 4									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24TAM41L	I	Language - I	Tamil – IV	4	3	25	75	100	3
24HIN41L	I		Hindi– IV						
24MAL41L	I		Malayalam- IV						
24FRE41L	I		French – IV						
24ENG42L	II	Language - II	English - IV	4	3	25	75	100	3
24BCC43C	III	Core - VII	Corporate Accounting – II	6	3	25	75	100	4
24BCC44P	III	Core Lab- IV	**Lab:** Database Management System Lab	4	3	40	60	100	3
24BCC45P	III	Core Lab - V	**Lab**: Advanced Applications of Data Analytics in Fintech Lab	4	3	40	60	100	2
24BCC46A	III	Allied - IV	Business Mathematics and Statistics	4	3	25	75	100	3
24BCC47P	III	SEC Lab - II	**Lab**: Computer Applications :GST with Tally – I	2	3	40	60	100	2
24IDT4AE	IV	AECC - IV	Innovation & Design Thinking/	2	2	-	50	50	2
24IPR4AE			Intellectual Property Rights /						
24END4AE			Entrepreneurship Development						
24EXC4LA	IV	Extra-Curricular and Co-Curricular	Liberal Arts	-	-	50	-	50	2
Total				**30**				**800**	**24**

Part – I: Language – I – Tamil – IV

(All the Undergraduate Programmes)

தமிழ் – IV

Course Code	Course Name	Category	Hours / Week	Credits
24TAM41L	Tamil - IV	Language - I	4	3

Course Objectives

The Course intends to cover

- தமிழ் இலக்கிய வளர்ச்சிப் போக்குகள் மற்றும் நுட்பங்களை அறியச்செய்தல்.
- தமிழ்நாடு அரசுப் பணியாளர் தேர்வாணையம் நடத்தும் போட்டித்தேர்வுகளை எதிர்கொண்டு வேலைவாய்ப்பினைப் பெறும் வகையில் மாணவர்களைத் தயார்படுத்துதல்.
- கேட்டல், பேசுதல், படித்தல் மற்றும் எழுதுதல் முதலான திறன்களை(LSRW Skills) அறியச்செய்தல்.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	இலக்கியங்கள் மூலம் பண்டைய தமிழக மக்களின் வாழ்க்கை முறை, சமூக மதிப்பீடுகள், கலை, கலாச்சாரம் போன்றவற்றை ஆழமாகப் புரிந்துகொள்ளுதல்.	K1- K3
CLO2	தமிழறிஞர்களின் தமிழ்த்தொண்டை அறிவதன் மூலம் தமிழ் மொழியின் செழுமை, அதன் இலக்கிய வளம் மற்றும் பண்பாட்டு அடையாளம் ஆகியவற்றை அறிந்துகொள்ளுதல்.	K1- K3
CLO3	பிழையின்றி பேசுவதற்கும் எழுதுவதற்கும் இலக்கணத்தை பயன்படுத்துதல்.	K1 - K3
CLO4	தமிழ்நாடு அரசு நடத்தும் அனைத்து தேர்வுகளுக்கும் கல்வி மற்றும் மொழி வளர்ச்சிக்கும் கலைச்சொற்கள் ஒரு முக்கியத் தேவையாக உள்ளன என்பதனை உணர்தல்.	K1- K3
CLO5	உரைநடை பத்தியை வாசித்து கேட்கப்படும் வினாக்களுக்கு ஏற்ற பதில்களைத் தேடுவதன் மூலம் ஆழமான புரிதல் ஏற்படும் என்பதை உணர்தல்.	K2, K3
K1 - Remember; **K2** - Understand; **K3** – Apply		

Unit	Content	No. of Hours
I	**(இலக்கிய வரலாறு)** • திருக்குறள் • நாலடியார் • நான்மணிக்கடிகை • பழமொழி நானூறு • முதுமொழிக்காஞ்சி • திரிகடுகம் • இன்னா நாற்பது • சிறுபஞ்சமூலம் • ஏலாதி • ஔவையார் பாடல்கள்	12
II	**(தமிழ் அறிஞர்களும், தமிழ்த்தொண்டும்)** **திராவிட மொழிகள் தொடர்பான செய்திகள்:** • உ.வே.சாமிநாத ஐயர் • தெ.பொ.மீனாட்சி சுந்தரம் • சி.இலக்குவனார். **தமிழ்ப்பணி தொடர்பான செய்திகள்:** • தேவநேய பாவாணர் • பெருஞ்சித்திரனார் • ஜி.யு.போப் • வீரமாமுனிவர். **தமிழ்த்தொண்டு மற்றும் சான்றோர் தொடர்பான செய்திகள்:** • பாவேந்தர் • டி.கே.சிதம்பரனாதர் • தவத்திரு குன்றக்குடி அடிகளார் • கண்ணதாசன் • வேலுநாச்சியார் • முடியரசன் • தமிழ் ஒளி • கி.வா.ஜகந்நாதர் • நாமக்கல் கவிஞர்	12

Unit	Content	No. of Hours
III	**(இலக்கணம்)** • குறில், நெடில் வேறுபாடு • லகர, ளகர, ழகர வேறுபாடு • னகர, ணகர வேறுபாடு • ரகர, றகர வேறுபாடு • சுட்டெழுத்துக்கள் • வினா எழுத்துக்கள் • இனவெழுத்துக்கள் • ஒருமைப் பன்மை அறிதல் • எழுத்துப்பிழை, ஒற்றுப்பிழை அறிதல் • ஓரெழுத்து ஒருமொழி • ஒருபொருள் பன்மொழி • இருபொருள் குறிக்கும் சொற்கள்	12
IV	**(எழுத்துத்திறன் மற்றும் கலைச்சொற்கள்)** • சொற்றொடர் அமைத்தல் • தொடர் வகைகள் • செய்வினை, செயப்பாட்டு வினை • தன்வினை, பிறவினை. **திணைமரபு:** • உயர்திணை, • அஃறிணை. **பால் மரபு:** • ஆண்பால், • பெண்பால், • பலர்பால். • வினைமரபு • தொகை மரபு • நிறுத்தல் குறியீடுகள். **பல்துறை சார்ந்த கலைச்சொல்லுக்கு நேரான தமிழ்ச்சொல் அறிதல்:** • அறிவியல், கல்வி, மருத்துவம், மேலாண்மை, சட்டம், புவியியல், தொழில்நுட்பம், ஊடகம், தகவல் தொழில்நுட்பம்.	12

Unit	Content	No. of Hours
V	**வாசித்தல், புரிந்து கொள்ளும் திறன் மற்றும் எளிய மொழி பெயர்ப்பு** **வாசித்தல்** : கொடுக்கப்பட்ட பத்தியை வாசித்து கேட்கப்பட்ட வினாக்களுக்கு சரியான விடையைத் தேர்ந்தெடுத்தல். **புரிந்துகொள்ளும் திறன்:** உவமைத் தொடரின் பொருளறிதல், மரபுத்தொடரின் பொருளறிதல், பழமொழிகள் பொருளறிதல். **எளிய மொழி பெயர்ப்பு:** ஆங்கிலம் மற்றும் பிறமொழிச் சொற்களுக்கு இணையான தமிழ்ச் சொற்கள் அறிதல், பயன்பாட்டில் உள்ள ஆங்கிலச் சொற்களை மொழிபெயர்த்தல்.	12
	Total Hours	**60**

Reference Books

1	வரதராசன் மு. (2021, 34-வது பதிப்பு), தமிழ் இலக்கிய வரலாறு, சாகித்திய அகாதமி பதிப்பு.
2	டாக்டர் தமிழண்ணல், (2010, 26-ம் பதிப்பு), புதிய நோக்கில் தமிழ் இலக்கிய வரலாறு, மீனாட்சி புத்தக நிலையம்.
3	பேரா. முனைவர் பாக்கியமேரி, (2022, 6-ம் பதிப்பு), வகைமை நோக்கில் தமிழ் இலக்கிய வரலாறு, நியூசெஞ்சுரி புக் ஹவுஸ்(பி). லிட்.
4	பாலசுப்பிரமணியம் சி. (2016, 27-ம் பதிப்பு), தமிழ் இலக்கிய வரலாறு, சாரதா பதிப்பகம்.
5	டாக்டர் பூவண்ணன், (2019, முதல் பதிப்பு), தமிழ் இலக்கிய வரலாறு, வர்த்தமான் பதிப்பகம்
6	பேராசிரியர்.விமலானந்தம் மது.ச. (2017, முதல் பதிப்பு), தமிழ் இலக்கிய வரலாறு, பாரி நிலையம்
7	விஜயராகவன், முனைவர் கண்ணன் கு. (2018, முதல் பதிப்பு), தமிழ் இலக்கியம் இலக்கணம் வரலாறு, பாவை பப்ளிக்கேஷன்.
8	முனைவர் இராசா கி. (2019, 4-ம் பதிப்பு), தமிழ் இலக்கிய வரலாறு, நியூ செஞ்சுரி புக் ஹவுஸ் (பி). லிட்.
9	முனைவர் அருணாச்சலம் மு. (2017 6-ம் பதிப்பு), தமிழ் இலக்கிய வரலாறு, அருண் பதிப்பகம்.
10	குமரன் கோ (2010, முதல் பதிப்பு), தமிழ் இலக்கணம் எளிய அறிமுகம், சந்தியா பதிப்பகம்.

Part – I: Language – I-Hindi – IV

Course Code	Course Name	Category	Hours / Week	Credits
24HIN41L	Hindi – IV	Language - I	4	3

Course Objectives

The Course intends to cover

- Knowledge of contemporary drama contents of Hindi literature.
- Novels and its techniques. The ability to read novels and express criticism about it and the ability to express social thoughts will improve.
- Litigation messages in Hindi and news on speech techniques.
- The Ability to write articles on their own and improve their sophisticated translation skills.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the text styles and grammatical elements.	K1
CLO2	Discuss the content of a reading passage.	K2
CLO3	Develop an interest in the appreciation of short stories.	K3
CLO4	Comprehend the grammatical structures and sentence making.	K4
CLO5	Understand the language and developing English to Hindi translation skill.	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4**-Analyse.		

Unit	Contents	No. of Hours
I	Drama: Dhuvasaminy By Jayashankar Prasad	12
II	Novel - Nirmala – Premchand	12
III	Lokkothi & Muhavare - Naveen Hindi Vyakaran (Selected Lokkokthi -10 & Muhavare-10)	12
IV	General Essay :Aadarsh Nibandh	12
V	Translation : Hindi-English Only Anuvadh Abhyas – III (16-30 Lessons Only)	12
	Total Hours	**60**

Text Books

1.	Jayashankar Prasad (2015), Dhuvasaminy, Drama, , Publisher : Dakshin Bharath Hindi Prachar Sabha, Chennai-17.
2	Premchand(2015),Nirmala,Novel , Rajkamal Prakashan,1B Nethaji Subash Marg,New Delhi

Reference Books

1.	Rajnath Sharma , Hindi Sahithya Ka Saral Ithihaas, , Vinod Pustak Mandir,Agra-282
2.	Kavya Pradeep Rambadri Shukla, Hindi Bhavan, 36, Tagore Town, Allahabad – 211 002.

Part – I: Language – I -Malayalam – IV

Course Code	Course Name	Category	Hours / Week	Credits
24MAL41L	Malayalam - IV	Language - I	4	3

Course Objectives

The Course intends to cover

- Knowledge of contemporary drama contents of Malayalam literature.
- Screen play and its techniques. The ability to read drama and express criticism about it and the ability to express social thoughts will improve.
- Litigation messages in Malayalam and news on speech techniques.
- Ability to write articles on their own and improve their creative skills.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Get a basic knowledge of drama	K1
CLO2	Can read and critique Screenplay	K1
CLO3	Create interest in art literature courses	K2
CLO4	The hope of writing a Drama or a Screen Play.	K3
CLO5	The idea of creating new works and critique knowledge will improve.	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4**-Analyse.		

Unit	Content	No. of Hours
I	Screen Play – Perumthachan	12
II	Screenplay – Perumthachan	12
III	Drama – Saketham	12
IV	Drama – Saketham	12
V	Drama – Saaketham	12
	Total Hours	**60**

Text Books

1. Perumthachan – M.T.Vasudevan Nair, DC Books
2. Saketham – C.N.Sreekandan Nair, DC Books.

Reference Books

1. Malayala Nataka Sahithya Charithram. G Sankara Pillai (Kerala SahithyaAkademi, Trissur)
2. Malayala NatakaSahithya Charithram, Vayala Vasudevan Pillai (Kerala SahithyaAkademi Thrissur).
3. Natakam- Oru Patanam (C.J. SmarakaPrasanga Samithi, Koothattukulam)
4. Natakaroopacharcha, Kattumadam Narayanan (NBS, Kottayam)
5. Chalachithra sameeksha – Vijayakrishanan.
6. Cinemayude Paadangal Visakalanavum Veekshanavum – Jose-K.Manual

Part – I: Language – I-French – IV

Course Code	Course Name	Category	Hours / Week	Credits
24FRE41L	French – IV	Language - I	4	3

Course Objective

The Course intends

To communicate during easy or habitual tasks requiring a basic and direct information exchange on familiar subjects to use simple words to describe his or her surroundings and communicate immediate needs

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Comprehend the grammatical structures in various genres.	K1
CLO2	Understand the text styles and poetical elements.	K2
CLO3	Develop an interest in the appreciation of literature.	K3
CLO4	Discuss and respond to content of a reading passage.	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** - Analyse		

Unit	Contents	No. of Hours
I	Etape 5 (Lecons 1 - 3)	12
II	Etape 6 (Lecons 1 - 3)	12
III	Etape 7 - Leçons 1 – 2	12
IV	Etape 7 – Leçon 3, Etape 8 – Leçon 1	12
V	Etape 8 – Leçons 2 – 3	12
Etapes 5 to 8, Pages 63 to 114		
	Total Hours	**60**
Text Book		
1	Adomania 2 , Methode de francais , Céline Himber, Corina Brillant, Sophie Erlich Publisher: HACHETTE FLE, Goyal Publishers and Distributors Pvt Ltd, New Delhi (9810322459)	
Reference Book		
1	Latitudes 1 , Yves Loiseau, Régine Merieux Publisher: French and European Publications Inc, Goyal publishers and distributors Pvt Ltd, New Delhi (9810322459).	

Part – II: Language-II - English –IV

(All the Undergraduate Programmes)

English for Competitive Examinations

Course Code	Course Name	Category	Hours / Week	Credits
24ENG42L	English-IV	Language-II	4	3

Course Objectives

The course intends to cover

- Essential Language Skills for Competitive Exams.
- Grammatical Mastery and Writing Skills for confident formal communication.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Identify grammatical errors with precision and write with clarity and accuracy.	K1
CLO2	Identify, comprehend and use a wide range of vocabulary to enhance verbal expression.	K2, K3
CLO3	Construct structured essays, reports, and formal letters with clarity and coherence.	K3
CLO4	Interpret diverse texts using strategic reading techniques to analyze content and answer comprehension questions effectively	K3
CLO5	Understand and employ the technical and administrative terms to excel in the career.	K2, K3
K1 - Remember; **K2** - Understand; **K3** - Apply		

Part-II: English-IV

Unit	Content	No. of Hours
I	**Grammar** Parts of Speech, Concord, Tenses, Active Voice and Passive Voice, Types of Sentences – Statement, Interrogative, Imperative, Exclamatory, Transformation of Statements into imperatives, Interrogatives into Statements, Assertive into Negatives, Exclamatory Sentences into Statements, Imperatives into Inquisitive Interrogatives, Imperatives into Appreciative Statements, Verbs, Main Verbs and Auxiliary Verbs, Regular and Irregular Verbs	12
II	**Grammar** Infinitives, Gerunds, Participles, Question Tags, Sentence Patterns, Types of Sentences – Simple, Compound and Complex, Phrases and Clauses, Degrees of Comparison – Positive, Comparative & Superlative, Direct into Indirect and Indirect to Direct, Synthesis of Sentences, Punctuations,	12
III	**Vocabulary and Writing Skills** Synonyms, Antonyms, Homonyms, Homophones, Collocations, Idioms & Phrases, Phrasal verbs, Spelling of words, Correct usage of words, One word substitution, Word Creation, Singular and plural (including Zero plural), Derivatives, Abbreviations, British and American English, Compound words and Figures of speech. Letter writing (formal and informal) – Types of Letters, Precis Writing, Jumbled sentences, Finding out the right order of sentences, Making queries, Inferences, Blanks, Substitutions.	12
IV	**Reading Comprehension** Types of Passages (Narrative, Argumentative, Factual, Descriptive),Unseen passages (News Paper, Headlines, Editorials, Government related News), Question Types - Strong question, Weak question, Match the following, Sentence Completion, Ascertainment of facts	12
V	**Administrative Vocabulary & Translation** Marketing and Sales, Human Resource, Finance and Operation, Organization and Management, Office Procedures and Document Word Translation, Sentence Translation, Tense related translation tasks, Tense / Voice related tasks. (**Simple words - Basic Level**)	12
	Total Hours	**60**

Reference Books

1.	Bhatnagar, R. P., & Bhargava, R. (2017). English for Competitive Examinations (3rd ed.). New Delhi: Laxmi Publications.
2.	Wren, P. C., & Martin, H. (2007). High School English Grammar & Composition (11th ed.). New Delhi: S. Chand & Company
3.	Gupta, S. C. (2014). English Grammar & Composition (2nd ed.). Meerut: Arihant Publications
4.	Aggarwal, R. S., & Aggarwal, V. (2022). Quick Learning Objective General English (Revised ed.) New Delhi, S. Chand Publishing.

Web Resources (Swayam/NPTEL)

1.	https://onlinecourses.nptel.ac.in/noc24_hs73/preview

Course Code	Course Name	Category	Hours/Week	Credits
24BCC43C	Corporate Accounting II	Core - VII	6	4

Course Objectives

The course intends to Cover

- Amalgamation, absorption and reconstruction.
- Final statements of banking companies.
- Accounts of public sector companies.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the accounting treatment of amalgamation, absorption and external reconstruction	K1-K2
CLO2	Apply and alter the share capital and internal reconstruction	K3
CLO3	Understand the accounting procedure of non-performing assets	K1-K2
CLO4	Prepare consolidated accounts of holding companies	K3
CLO5	Analyze the accounting statements of Public sector companies (electricity companies)	K4
K1- Remember; **K2**- Understand; **K3-** Apply; **K4** – Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	1	3	2	2
CLO2	3	1	2	3	2
CLO3	2	2	3	2	2
CLO4	2	2	2	2	1
CLO5	2	3	2	3	1
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Core - VII: Corporate Accounting - II

Unit	Content	No. of Hours
I	**Amalgamation, Absorption & External Reconstruction** Methods of Purchase Consideration: Lump sum Method, Net Assets Method, Net Payment Method, Intrinsic Value Method - Types of Amalgamation (Excluding Inter-Company Holdings).	18
II	**Alteration of Share Capital – Internal Reconstruction** Modes of Alteration – Internal Reconstruction – Conversion of Stock – Increase and Decrease of Capital – Reserve Liability..	18
III	**Accounting of Banking Companies** Balance Sheet as Per Banking Regulation Act 1949. Final Statements of Banking Companies (As Per New Provisions) - Non- Performing Assets - Rebate on Bills Discounted- Profit and Loss a/c.	18
IV	**Consolidated Financial Statements** Holding and Subsidiary Company: Introduction - Legal Requirements Relating to Presentation of Accounts - Preparation of Consolidated Balance Sheet (Excluding Inter-Company Holdings).	18
V	**Double Accounts System** Statement of Accounts for Electricity Companies -Treatment of Repairs and Renewals - Indian Accounting Standards (upto AS 20) - Financial Reporting Practice (Theory only)	18
Theory – 20% & Problems – 80%		
	Total Hours	**90**
Text Books		
1.	Jain S.P and Narang.K.L, (2021), Advanced Accountancy (Vol I), Kalyani Publishers, New Delhi.	
2.	Dr. Raman K. S and Dr. Arulanandam M. A, (2023), Advanced Accountancy, (Vol. II), Himalaya Publishing House, Mumbai.	
3.	Gupta.R.L and Radhaswamy.M, (2015), Advanced Accountancy (Vol I), Sultan Chand & Sons, New Delhi.	
4.	Shukla.M.C and Grewal.T.S, (2018), Advanced Accounts (Vol.II), Sultan Chand & Sons, New Delhi.	
5.	Reddy.T.S and Murthy.A, (2023), Corporate Accounting II, Margham Publishers, Chennai.	
Reference Books		
1.	Bhusan Kumar Goyal, (2024), Corporate Accounting, (4th ed.) Taxmann Publications, New Delhi.	
2.	Shukla M.C, (2017), Advanced Accounting, Sultan Chand & Sons, New Delhi.	
3.	Anil kumar.S, Rajesh kumar.V, Mariyappa.B, (2017), Advanced Corporate Accounting, Himalaya Publishing House, New Delhi.	
4.	Prasantha Athma, Financial Accounting II, (2016), Himalaya Publishing House, New Delhi.	
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.nptel.ac.in/noc21_mg93/preview	
2.	https://onlinecourses.swayam2.ac.in/cec24_mg11/preview	
3.	https://onlinecourses.nptel.ac.in/noc25_mg69/preview	

Core Lab – IV: Database Management System Lab

Course Code	Course Name	Category	Hours/Week	Credits
24BCC44P	Lab : Database Management System Lab	Core Lab - IV	4	2

<table>
<tr><th>Unit</th><th>Content</th><th>No. of Hours</th></tr>
<tr><td>I</td><td>
Program 1:
Create a table “Company” with the following fields and insert the values for 10 Employees.
<table>
<tr><th>Field Name</th><th>Field Type</th><th>Field Size</th><th>Description</th></tr>
<tr><td>CompanyID</td><td>Varchar</td><td>10</td><td>Primary Key</td></tr>
<tr><td>CompanyName</td><td>Varchar</td><td>15</td><td>Not Null</td></tr>
<tr><td>Proprietor</td><td>Varchar</td><td>15</td><td>_</td></tr>
<tr><td>Address</td><td>Varchar</td><td>20</td><td>_</td></tr>
<tr><td>SupplierName</td><td>Varchar</td><td>15</td><td>_</td></tr>
<tr><td>No_of_Employees</td><td>Number</td><td>6</td><td>_</td></tr>
<tr><td>GP_percent</td><td>Number(6,2)</td><td>6 with 2 decimal places</td><td>_</td></tr>
</table>
Perform the following queries.
a) Display all the records of the company which are in the ascending order of GP percent.
b) Display the name of the company whose supplier name is ‘Telco’.
c) Display the details of the company whose GP percent is greater than 20 and order by GP Percent.
d) Display the detail of the company having the employee ranging from 300 to 1000.
e) Display the name of the company whose supplier is same as the Tata’s.
</td><td>8</td></tr>
<tr><td>II</td><td>
Program-2:
Create a table “Employee” with the following fields and insert the values.
<table>
<tr><th>Field Name</th><th>Field Type</th><th>Field Size</th><th>Description</th></tr>
<tr><td>Employee_Code</td><td>Number</td><td>6</td><td>Primary Key</td></tr>
<tr><td>Employee_Name</td><td>Varchar</td><td>15</td><td>Not Null</td></tr>
<tr><td>Address</td><td>Varchar</td><td>20</td><td>-</td></tr>
<tr><td>Designation</td><td>Varchar</td><td>15</td><td>Not Null</td></tr>
<tr><td>Grade</td><td>Varchar</td><td>1</td><td>Not Null</td></tr>
<tr><td>Date_of_join</td><td>Date</td><td>-</td><td>-</td></tr>
</table>
Perform the following queries:
a) Display the name of the employee whose salary is greater than Rs.10,000
b) Display the details of employees in ascending order according to Employee Code.
c) Display the total salary of the employees whose grade is “A”.
d) Display the details of the employee earning the highest salary.
e) Display the names of the employees who earn more than ‘Ravi’.
</td><td>8</td></tr>
</table>

<table>
<tr><th>Unit</th><th>Content</th><th>No. of Hours</th></tr>
<tr><td>III</td><td>
Program 3:
Create a table “Product” with the following fields and insert the values:
<table>
<tr><th>Field Name</th><th>Field Type</th><th>Field Size</th><th>Description</th></tr>
<tr><td>Product_No</td><td>Number</td><td>6</td><td>Primary Key</td></tr>
<tr><td>Product_Name</td><td>Varchar</td><td>15</td><td>Not Null</td></tr>
<tr><td>Unit_of_Measure</td><td>Varchar</td><td>15</td><td>-</td></tr>
<tr><td>Unit_price</td><td>Number(6,2)</td><td>6 with 2 decimal places</td><td>–</td></tr>
<tr><td>Quantity</td><td>Number(6,2)</td><td>6 with 2 decimal places</td><td>–</td></tr>
<tr><td>Total_Amount</td><td>Number(6,2)</td><td>6 with 2 decimal places</td><td>–</td></tr>
</table>
Perform the following queries:
a) Using update statements calculate the total amount and then select the record.
b) Select the records whose unit of measure is ‘Kg’;.
c) Select the records whose quantity is greater than 10 and less than or equal to 20.
d) Calculate the entire total amount by using sum operation.
e) Calculate the number of records whose unit price is greater than 50 with count operation
</td><td>8</td></tr>
<tr><td>IV</td><td>
Program 4:
Create a table Student with the following fields and insert the values:
<table>
<tr><th>Field Name</th><th>Field Type</th><th>Field Size</th><th>Description</th></tr>
<tr><td>RollNo</td><td>Varchar</td><td>10</td><td>Primary Key</td></tr>
<tr><td>StudentName</td><td>Varchar</td><td>15</td><td>Not Null</td></tr>
<tr><td>Gender</td><td>Varchar</td><td>6</td><td>Check (M/F)</td></tr>
<tr><td>DepartmentName</td><td>Varchar</td><td>15</td><td>_</td></tr>
<tr><td>Address</td><td>Varchar</td><td>25</td><td>_</td></tr>
<tr><td>Percentage</td><td>Number(4,2)</td><td>4 with 2 decimal places</td><td>_</td></tr>
</table>
Perform the following queries:
a) Calculate the average percentage of students.
b) Display the names of the students whose percentage is greater than 80.
c) Display the details of the student who got the highest percentage.
d) Display the details of the students whose percentage is between 50 and 70.
e) Display the details of the students whose percentage is greater than the percentage of the roll no=12CA01
</td><td>8</td></tr>
</table>

<table>
<tr><th>Unit</th><th>Content</th><th>No. of Hours</th></tr>
<tr><td>V</td><td>Program 5: Create a Table Publisher and Book with the following fields:
<table>
<tr><th>Field Name</th><th>Field Type</th><th>Field Size</th><th>Description</th></tr>
<tr><td>Publisher Code</td><td>Varchar</td><td>5</td><td>Primary Key</td></tr>
<tr><td>Publisher Name</td><td>Varchar</td><td>10</td><td>Not Null</td></tr>
<tr><td>Publisher city</td><td>Varchar</td><td>12</td><td>_</td></tr>
<tr><td>Publisher State</td><td>Varchar</td><td>10</td><td>_</td></tr>
<tr><td>Title of book</td><td>Varchar</td><td>15</td><td>_</td></tr>
<tr><td>Book Code</td><td>Varchar</td><td>5</td><td>_</td></tr>
<tr><td>Book Price</td><td>Number(5,2)</td><td>5 with 2 decimal places</td><td>_</td></tr>
</table>
Perform the following queries:
a) Insert the records into the table publisher and book.
b) Describe the structure of the tables.
c) Show the details of the book with the title “DBMS”.
d) Show the details of the book with price>300.
e) Show the details of the book with publisher name ‘Kalyani’.
f) Select the book code, book title, publisher city is ‘delhi’.
g) Select the book code, book title and sort by book price.
h) Count the number of books of publisher starts with Sultan chand;.
i) Find the name of the publisher starting with S;</td><td>8</td></tr>
<tr><td colspan="3">Text Books</td></tr>
<tr><td>1.</td><td colspan="2">Abraham Silberschatz, Henry F. Korth, S. Sudarshan(2013), Database System Concepts 6th Edition,McGraw-Hill</td></tr>
<tr><td>2.</td><td colspan="2">R. Elmasri and S. Navathe,(2015) ,Fundamentals of Database Systems, 7th Edition ,Pearson Education</td></tr>
<tr><td>3</td><td colspan="2">C J Date, An introduction to Database Systems, Pearson Education.</td></tr>
<tr><td colspan="3">Reference Books</td></tr>
<tr><td>1.</td><td colspan="2">Hoffer,Ramesh, Topi,Modern Database Management, Pearson Education</td></tr>
<tr><td>2.</td><td colspan="2">J. D. Ullman ,Principles of Database and Knowledge – Base Systems, Computer Science Press</td></tr>
<tr><td>3.</td><td colspan="2">C.J.Date,Addision (2000), An Introduction to Database Systems, Wesley Publications.</td></tr>
<tr><td colspan="3">Web Resources (Swayam / NPTEL)</td></tr>
<tr><td>1.</td><td colspan="2">https://onlinecourses.nptel.ac.in/noc22_cs91/preview</td></tr>
<tr><td>2.</td><td colspan="2">https://onlinecourses.swayam2.ac.in/ini25_cs03/preview</td></tr>
<tr><td>3.</td><td colspan="2">https://onlinecourses.swayam2.ac.in/aic20_sp36/preview</td></tr>
</table>

Core Lab - V: Advanced Application for Data Analytics in Fintech Lab

Course Code	Course Name	Category	Hours/Week	Credits
24BCC45P	Lab : Advanced Applications of Data Analytics in Fintech	Core Lab - V	4	3

S.No.	List of Programs
1.	**Interface Navigation & Tooling Basics Exercise**: Open the starter kit;navigate Jupyter/Colab, Power BI (Model/Data/Report), DB Browser for SQLite, and AutoML tool (Google AutoML/Alteryx). Load sample financial CSVs into Python and Power BI. Run a test notebook cell to confirm readiness. **Deliverables**: readiness checklist ≥70%, dataset profiling notes
2.	**Data Cleaning & Audit Exercise**: Import messy financial datasets (transactions, credit history). Handle missing values, outliers, duplicates, and inconsistent IDs. Standardize date formats and numeric fields. **Deliverables**: Cleaned_Fintech.csv + cleaning_steps.md.
3.	**Visual Analytics & KPIs Exercise**: Load cleaned datasets into Power BI. Create KPIs – default rate, fraud %, and average transaction size. Add trend charts and card visuals. **Deliverables**: KPI_Dashboard.pbix + snapshot image.
4.	**Fraud Detection via Clustering Exercise**: Apply k-means clustering on transaction data to flag anomalies. Build a table of suspicious transactions with cluster labels. **Deliverables**: Suspicious_Txns.csv + cluster_report.md.
5.	**Credit Risk Scoring (Log Reg & Trees) Exercise:** Train Logistic Regression and Decision Tree models for credit scoring. Compare ROC/AUC and confusion matrices. **Deliverables:** CreditRisk_Report.md + model_comparison.png.
6.	**Rules vs ML Fraud Engine Exercise:** Implement rule-based fraud detection (thresholds, blacklists) and benchmark vs ML model output. **Deliverables:** Fraud Rules_vs_ML.csv + performance_chart.png.
7.	**Back testing Trading Strategy Exercise:** Back test a moving-average crossover strategy on stock data. Compute Sharpe ratio, win/loss %, and max drawdown. **Deliverables:** Backtest_Log.csv + StrategyReport.md.
8.	**Sentiment Analysis in Finance Exercise:** Use stock market news headlines dataset. Apply sentiment model and correlate sentiment with next-day returns. **Deliverables:** Sentiment_Scores.csv + Correlation_Report.md.
9.	**Portfolio Optimization Exercise:** Implement Modern Portfolio Theory in Python Generate efficient frontier and optimal portfolio weights by risk level. **Deliverables:** Portfolio_Weights.csv + FrontierPlot.png.
10.	**Time-Series Forecasting Exercise:** Build ARIMA and LSTM models to forecast stock prices. Compare RMSE/MAE metrics across models. **Deliverables:** Forecast_Results.csv + Forecast_Plot.png.

S.No	List of Programs
11.	**AI/AutoML Experiment Exercise:** Use Google AutoML/Alteryx to train predictive models on financial datasets. Compare results with manual Python models. **Deliverables:** AutoML_Output.csv + Comparison_Report.md.
12.	**Robo-Advisory Simulation Exercise:** Build a simple robo-advisor to recommend portfolio allocations based on user profile (age, income, risk appetite). **Deliverables:** RoboAdvisor_Output.csv + Demo_Notebook.ipynb.
13.	**Capstone Build & Showcase Exercise:** Choose track (Fraud Engine / Credit Risk Dashboard / Algo Trading Bot). Implement pipeline (data prep → models → dashboard → forecast). Package outputs with SOP and demo. **Deliverables:** Final project kit (CSV/SQL/Notebook/PBIX) + 3–5 min demo recording.
	Total Hours **60**

Text Books

1.	Marcos López de Prado, (2018), Advances in Financial Machine Learning, Wiley Publisher.
2.	David Aronson, (2011), Evidence-Based Technical Analysis, Wiley Publisher.
3.	Foster Provost & Tom Fawcett, (2018), Data Science for Business, O'Reilly Media
4.	Cindi Howson, (2013), Successful Business Intelligence, McGraw-Hill.

Web Resources

1.	https://www.coursera.org/learn/introduction-to-data-analytics
2.	https://www.coursera.org/specializations/modern-data-analytics-with-python-excel-and-genai
3.	https://www.coursera.org/learn/alteryx-mastery-data-analytics--workflow-automation

Course Code	Course Name	Category	Hours / Week	Credits
24BCC46A	Business Mathematics & Statistics	Allied -IV	4	3

Course Objectives:

The course intends to cover

- Understanding of series and statistical methods for organizing and summarizing data.
- Equipping learners with skills in applying measures of dispersion, correlation, regression, and financial mathematics for problem-solving and decision-making.
-

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Recall the basic laws of ratio, proportion, variation, indices, and logarithms.	K1
CLO2	Understand the concept of arithmetic and geometric series, interest, and annuities with types.	K2
CLO3	Determine the various measures of central tendency	K2
CLO4	Apply measures of dispersion and Index numbers to summarize data variability	K3
CLO5	Apply correlation, regression and time series to analyze variable relationships.	K3
K1 - Remember; **K2 -** Understand; **K3 -** Apply		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	2	2	3	1	2
CLO2	1	1	2	1	2
CLO3	2	2	3	1	2
CLO4	2	2	3	1	2
CLO5	2	2	3	1	2
3 - Substantial (high)		**2 - Moderate (medium)**		**1 - Slight (low)**	

Allied IV: Business Mathematics and Statistics

Unit	Content	No. of Hours
I	**Ratio:** Introduction-inverse–types, **Proportion:** difference between ratio and proportion – continued proportion – common value techniques –properties **variations**: Direct, indirect and joint variation. **Indices:** Theory of indices-laws of indices and **Logarithms:** Introduction - properties.	12
II	**Interest and Annuity:** Arithmetic series – geometric series – simple interest-compound interest – annuity – meaning- types of annuity.	12
III	**Measures of Central Tendency**: Arithmetic mean, geometric mean, harmonic mean, median, mode.	12
IV	**Measures of Dispersion:** Range – quartile deviation – standard deviation – coefficient of variance. Index number – weighted and unweighted	12
V	**Correlation:** Introduction- Karl Pearson's co-efficient of correlation - Spearman's Rank Correlation – simple linear regression – two regression lines. Analysis of Time Series – secular trend.	12
	Total Hours	**60**
Text Books		
1.	Navnitham.P.A, Lakshmi.M.S.V (2025), Business Mathematics, Statistics & OR, Jai ublishers. Unit I: Pg. No. 622 – 665	
2.	Navnitham.P.A, Lakshmi.M.S.V (2022), Business Mathematics and statistics, Jai publishers. Unit II - Pg. No.1-15, 17-29, 43-61, 65-75. Unit III - Pg. No. 159-183,196-271. Unit IV- Pg. No. 301-311,325-340,360-368,444-456. Unit V - Pg. No. 503-522,540-554,579 – 601.	
Reference Books		
1.	Sharma.J.K (2014), Fundamentals of Business Statistics, Vikas Publishing House, Noida.	
2.	Bhardwaj.R.S (2019), Business Mathematics & Statistics, Scholar Tech Press, New Delhi.	
Web Resources (Swayam / NPTEL)		
1.	https://nptel.ac.in/courses/111106164	

SEC Lab – II: Computer Applications: Tally with GST - I

Course Code	Course Name	Category	Hours/Week	Credits
24BCC47P	Lab:Computer Applications: Tally with GST – I	SEC Lab - II	2	2

<table>
<tr><th>S.No.</th><th>Programs</th></tr>
<tr><td>1.</td><td>Create the company ABC LTD with relevant information using tally prime
Address : 15/A, Rams garden , V.O.C nagar, R.S Puram, Coimbatore-641002,
Tamil Nadu, India, PH.NO :0422-6587325,91658-66872
EMAIL: abccocbe@gmail.com</td></tr>
<tr><td>2.</td><td>Create the following Ledger
<table>
<tr><th>Ledger Name</th><th>Group</th><th>Dr.</th><th>Cr.</th></tr>
<tr><td>Ms. Tara</td><td>Capital Account</td><td></td><td>5,22,500</td></tr>
<tr><td>Ms. Sara</td><td>Capital Account</td><td></td><td>5,22,500</td></tr>
<tr><td>Bus (TN-38-A-8992)</td><td>Fixed Assets</td><td>4,80,000</td><td></td></tr>
<tr><td>Bus (TN-38-A-7198)</td><td>Fixed Assets</td><td>4,80,000</td><td></td></tr>
<tr><td>Bus (TN-38-A-0768)</td><td>Fixed Assets</td><td>6,00,000</td><td></td></tr>
<tr><td>Indian Bank OD A/C (754321)</td><td>Secured Loan</td><td></td><td>5,60,000</td></tr>
<tr><td>Indian Bank (654321)</td><td>Bank Account</td><td>32,000</td><td></td></tr>
<tr><td>Axis Bank (987654)</td><td>Bank Account</td><td>13,000</td><td></td></tr>
<tr><td>Bus Fare Collection</td><td>Income (Indirect)</td><td>---</td><td>---</td></tr>
<tr><td>Diesel Expenses</td><td>Expenses Indirect</td><td>---</td><td>---</td></tr>
</table></td></tr>
<tr><td>3.</td><td>Post the voucher entries of the following transactions in the Tally Prime. Daily Bus Fare Collection TN-38-A-8992
<table>
<tr><th>DATE</th><th>AMOUNT</th><th>DATE</th><th>AMOUNT</th></tr>
<tr><td>02-04-2010</td><td>9,750</td><td>10-04-2010</td><td>9,444</td></tr>
<tr><td>03-04-2010</td><td>8,888</td><td>11-04-2010</td><td>9,887</td></tr>
<tr><td>04-04-2010</td><td>7,567</td><td>12-04-2010</td><td>8,856</td></tr>
<tr><td>05-04-2010</td><td>8,790</td><td>13-04-2010</td><td>7,809</td></tr>
<tr><td>06-04-2010</td><td>9,432</td><td>14-04-2010</td><td>8,765</td></tr>
<tr><td>07-04-2010</td><td>9,234</td><td>15-04-2010</td><td>10,000</td></tr>
<tr><td>08-04-2010</td><td>8,213</td><td></td><td></td></tr>
</table></td></tr>
</table>

<table>
<tr><th>S. No</th><th>Programs</th></tr>
<tr><td>4.</td><td>Diesel Expenses for the bus TN-38-A-8992
<table>
<tr><th>DATE</th><th>AMOUNT</th><th>P.MODE</th><th>BANK</th></tr>
<tr><td>01-04-2010</td><td>6200</td><td>Chq</td><td>Indian Bank</td></tr>
<tr><td>04-04-2010</td><td>3,100</td><td>Cash</td><td></td></tr>
<tr><td>06-04-2010</td><td>3,300</td><td>Chq</td><td>Indian Bank</td></tr>
<tr><td>09-04-2010</td><td>2,900</td><td>Chq</td><td>Axis bank</td></tr>
<tr><td>13-04-2010</td><td>4,440</td><td>Chq</td><td>Axis bank</td></tr>
<tr><td>15-04-2010</td><td>2900</td><td>Cash</td><td></td></tr>
</table></td></tr>
<tr><td>5.</td><td>Create the following items in tally prime inventory masters Activity- Stock Group Creation
<table>
<tr><th>Stock tem Name</th><th>Stock Group</th><th>Stock Category</th><th>Units of Measure</th></tr>
<tr><td>HP pavilion series</td><td>Hp computer</td><td>300 GB Storage</td><td>Nos</td></tr>
<tr><td>HP Elitebook series</td><td>Hp computer</td><td>512 GB Storage</td><td>Nos</td></tr>
<tr><td>SamsungT5 External hardware</td><td>Hardware</td><td>250 GB Storage</td><td>Nos</td></tr>
<tr><td>Sony micro vault Pen drive</td><td>Pen drive</td><td>80 GB Storage</td><td>Nos</td></tr>
<tr><td>Epison perfection series Scanner</td><td>scanner</td><td>64 GB Storage</td><td>Nos</td></tr>
</table></td></tr>
<tr><td>6.</td><td>Calculate total GST payable by the XYZ firm for the Following transactions
GST (Feature 28%)
(i)Purchase from Mr.Ajay Local (Delhi) GST No: 07AADCB2230MIZV
• 20 PCS, DELL LED ,22 Inch @Rs 9500 each on 1st may
• 10 PCS ,HP LED ,21 Inch @ Rs .9200each on 2nd may
(ii)Purchase from Mr.Sunil, Inter-state (Kerala) GST no: 32AAACC417 5D 1Z7
• 10 PCS HCL Lap Top, i3 @ Rs .19500 each on 1st may
• 15 PCS Lenovo LapTop i7@ Rs 24500 each on 2nd May</td></tr>
<tr><td>7.</td><td>A Shop Keeper is selling a TV for taxable value of Rs. 30,000 GST Charged is 28 %.Calculate SGST, CGST & GST.</td></tr>
</table>

S. No	Programs	
8.	Generate Trial Balance , profit and loss account and balance sheet of ABC PVT LTD for the following financial year of 1.4.2020 to 31.3.2021.	
	Total Hours	**30**
Text Books		
1	Tally Education Pvt. Ltd, (2018), Official Guide To Financial Accounting Using Tally. ERP 9, BPB Publications, 2018	
2	Shraddha Singh, (2015), Tally ERP 9 (Power of Simplicity), V&S Publishers	
3	Nadhani, (2009), Tally. ERP 9 Training Guide, BPB Publications.	
Web Resources(Swayam/NPTEL)		
1	https://onlinecourses.swayam2.ac.in/imb25_mg220/preview	
2	https://onlinecourses.nptel.ac.in/noc25_mg109/preview	

Course Code	Course Name	Category	Hours / Week	Credits
24IDT4AE	**Innovation & Design Thinking**	**AECC - IV**	**2**	2

Course Objectives

The Course intends to cover

- The principles and practices of innovation and design thinking.
- Creative problem-solving skills, and impactful solutions across diverse contexts.
- The user-centered research techniques, and practical tools to generate, prototype.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the design thinking methodology for solving real-world problems.	K2
CLO2	Generate, prototype, and test innovative ideas.	K3
CLO3	Frame human-centered solutions and present them effectively.	K3
CLO4	Enhance their confidence in collaborative approaches to problem solving.	K3
CLO5	Integrate innovation strategies into business, social, and creative contexts to drive sustainable impact.	K4
K2 - Understand; **K3** – Apply ; **K4** - Evaluate		

Ability Enhancement Compulsory Courses (AECC)-IV : Innovation & Design Thinking

Unit	Content	No. of Hours
I	**Principles of Design Thinking:** Usability, Human-centeredness, Empathy, Iteration. **Types of Innovation:** Product, Process, Business Model, Social Innovation.	6
II	**Empathy & Defining The Problem:** Understanding users - observation - ethnographic research - interviews - Empathy maps and personas - Identifying user pain points - Problem framing vs. problem solving.	6
III	**Ideation & Creativity Tools:** Divergent vs. Convergent Thinking - Brainstorming and mind mapping techniques – SCAMPER. Idea selection and prioritization frameworks.	6
IV	**Prototyping & Experimentation:** Low-fidelity vs. High-fidelity prototyping - Storyboarding, sketching, mock-ups, and role-playing - Rapid prototyping with simple materials.	6
V	**Testing & Feedback:** Testing prototypes with users - Iteration and learning from feedback. **Innovation Strategy & Implementation :** Scaling ideas into innovations - Measuring innovation impact - Barriers - Design Thinking for social change and sustainability.	6
	Total Hours	**30**
Text Books		
1	Kelley, T., & Kelley, D. (2013). Creative Confidence: Unleashing the Creative Potential Within Us All. Crown Business.	
2	Dan Saffer, Designing for Interaction, New Riders Publications, 2010.	
Reference Books		
1	Plattner, H., Meinel, C., & Leifer, L. (Eds.). (2018). Design Thinking Research: Making Distinctions: Collaboration versus Cooperation. Springer.	
2	Liedtka, J., & Ogilvie, T. (2011). Designing for Growth: A Design Thinking Tool Kit for Managers. Columbia University Press.	
3	Martin, R. (2009). The Design of Business: Why Design Thinking Is the Next Competitive Advantage. Harvard Business Press.	
Web Resources (Swayam / NPTEL)		
1	https://onlinecourses.nptel.ac.in/noc22_mg32/preview	
2	https://onlinecourses.swayam2.ac.in/imb23_mg65/preview	
3	https://onlinecourses.nptel.ac.in/noc20_hs08/preview	

Course Code	Course Name	Category	Hours/Week	Credits
24IPR4AE	Intellectual Property Rights	AECC - IV	2	2

Course Objectives

This course intends to cover

- Identify the objectives, forms, duration, and scope of protection for different types of intellectual property.
- Understand the global IP framework and India's compliance challenges.
- Recognize the role of IP as a policy tool for national, economic, social, and cultural growth.
- Gain knowledge of substantive laws and procedural mechanisms of IP in India.
- Analyze recent national and global trends in intellectual property rights.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the core principles of intellectual property protection.	K1,K2
CLO2	Identify the key concepts and principles of trademarks.	K2
CLO3	Comprehend the legal implications and rights under copyright law.	K3
CLO4	Understand the legal consequences of patents and trade secrets.	K2
CLO5	Comprehend IP rights for plant varieties and farmers, along with their legal and social aspects.	K4
K1 - Remember; **K2** - Understand; **K3** – Apply; **K4** – Analyze		

Ability Enhancement Compulsory Courses(AECC)-IV : Intellectual Property Rights

Unit	Content	No. of Hours
I	**Introduction to Intellectual Property:** Introduction, types of intellectual property, international organizations, agencies and treaties, importance of intellectual property rights.	6
II	**Trade Marks:** Purpose and function of trademarks, acquisition of trade mark rights, protectable matter, selecting, and evaluating trade mark, trade mark registration processes.	6
III	**Law of Copy Rights:** Fundamental of copy right law, originality of material, rights of reproduction, rights to perform the work publicly, copy right ownership issues, copy right registration, notice of copy right, international copy right law**.**	6
IV	**Law of Patents, Trade Secrets:** Foundation of patent law, patent searching process, ownership rights and transfer. Trade Secrets: Trade secrete law, determination of trade secrete status, liability for misappropriations of trade secrets, protection for submission, trade secrete litigation.	6
V	**Protection of Plant Varieties and Farmers' Rights:** Introduction -Meaning and Definition - Registrable Varieties of Plants - Procedure for Registration - Plant Varieties Protection.	6
	Total Hours	**30**
Text Books		
1	V K Ahuja - Law Relating To Intellectual Property Rights - Lexis Nexis; Third Edition , 2017.	
2	Elizabeth Verkey - Intellectual Property Law and Practice – Eastern Book Company – 2018.	
3	S R Myneni - Law of Intellectual Property - Asia Law House – 2021.	
Reference Books		
1	B.L. Wadehra - Law Relating To Intellectual Property – Universal Law Publishing House, New Delhi , 2011.	
2	Avtar Singh - Intellectual Property Law - Eastern Book Company – 2015.	
Web Resources (Swayam/NPTEL)		
1	https://onlinecourses.nptel.ac.in/noc22_hs59/preview	

Course Code	Course Name	Category	Hours / Week	Credits
24END4AE	Entrepreneurship Development	AECC – IV	2	2

Course Objectives

This course intends to cover

- Basics of starting and managing entrepreneurial ventures.
- Tools for planning, funding, and entrepreneurial growth.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the concept of entrepreneurship.	K1,K2
CLO2	Gain knowledge on entrepreneurial motivation	K2
CLO3	Apply business idea evaluation	K3
CLO4	Create systematic Business plan	K3
CLO5	Analyse business finance and support	K4
K1 - Remember; **K2 -** Understand; **K3 -** Apply; **K4 -** Analyse		

Ability Enhancement Compulsory Course – IV : Entrepreneurship Development

Unit	Content	No. of Hours
I	**Entrepreneurship:** Meaning of Entrepreneurship - Characteristics, Functions and Types of entrepreneurs - Intrapreneur vs. Entrepreneur - Need for Entrepreneurship in economic development - Contribution to GDP, Employment, Innovation.	5
II	**Entrepreneurial Motivation:** Meaning - Need for Achievement Theory - Risk-taking Behaviour - Innovation and Entrepreneur – Economic & non-economic factors affecting entrepreneurial growth.	5
III	**Business Ideas:** Sources of Business Ideas & Opportunity Identification – Idea generation techniques (Brainstorming, Design Thinking). Business incubation - Technical Assistance for small business – Preparation of Feasibility Reports, Legal Formalities and Documentation	7
IV	**Business Plan:** Meaning and importance of Business Plan – Structure and components – Market Study.	7
V	**Entrepreneurial finance:** Sources of finance (Bank, Angel investors, Venture Capital, Crowdfunding, Mudra Loans) - Institutional support to entrepreneurs (DIC, KVIC, EDII and MSME).	6
	Total Hours	**30**
Text Books		
1	C.B. Gupta and N.P. Srinivasan (2020), Entrepreneurship Development, Sultan Chand and Sons.	
2	Dr. Vasant Desai and Dr. Kulveer Kaur (2021), Entrepreneurship Development and Management, Himalaya Publications.	
Reference Books		
1	Dr. Jayashree Suresh (2021), Entrepreneurial Publications, Margham Publications	
2	S S Khanka (2020), Entrepreneurial Development, Sultan Chand and Sons, New Delhi.	
Web Resources (Swayam/NPTEL)		
1	https://onlinecourses.nptel.ac.in/noc25_mg95/preview	

Components for Internal Assessment and Distribution of Marks for CIA and ESE (Theory)

Max Marks	Marks for		Components for CIA						
100	CIA	ESE	CIA		Model		Attendance	Active Engagement	Total
	25	75	Actual	Weightage	Actual	Weightage	5	5	25
			50	**5**	75	**10**			

Question Paper Pattern

Component	Duration in Hours	Section A			Section B			Section C			Total
		Type of Question	No. of Questions	Marks	Type of Question	No. of Questions	Marks	Type of Question	No. of Questions	Marks	
CIA	2	MCQ	8	8x1=8	Either or	3	3x6=18	Either or	3	3x8=24	50
Model Exam / **ESE**	3	MCQ	10	10x1=10	Either or	5	5x5=25	Either or	5	5x8=40	75

Components for Internal Assessment and Distribution of Marks for CIA (Lab)

Max Marks	Marks for		Components for CIA						
	CIA	ESE	Test		Model		Experiments / Programs	Observation	Total
100	40	60	Actual	Weightage	Actual	Weightage	Marks	5	40
			50	**10**	60	**15**	**10**		

Examination Pattern

Component	Duration in Hours	Marks			Total Marks
		Practical Exam	Record	Weightage	
Test	2	50	-	**10**	50
Model	3	60	-	**15**	60
Experiments	-	-	-	**10**	10
Observation	-	-	-	**05**	05
		Total Marks - CIA		**40**	**40**
ESE	3	50	10	-	**60**

Components for and Distribution of Marks for ESE (Theory) Ability Enhancement Compulsory Courses (AECC) & Question Paper Pattern

Duration in Hours	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Online	MCQ	50	50x1=50

Semester 5

Semester – 5									
Course Code	**Part**	**Course Category**	**Course Name**	**Hours/ Week**	**Examination**				**Credits**
					Duration in Hours	**Max Marks**			
						CIA	**ESE**	**Total**	
24BCC51C	III	Core – VIII	Cost Accounting	6	3	25	75	100	4
24BCC52C	III	Core – IX	Banking Law and Practice	5	3	25	75	100	4
24BCC53C	III	Core – X	Income Tax Law and Practice	6	3	25	75	100	4
24BCC54C	III	Core – XI	Executive Business Communication	4	3	25	75	100	3
24BCC55P	III	Core Lab – VI	**Lab:**Computer Applications Practical : MS Word, MS Excel and Tally 9.2 - II	4	3	40	60	100	2
24BCC5AE/	III	Elective – I	Information Systems in Business **(Information Technology &Business Management)**	5	3	25	75	100	3
24BCC5BE/			Fundamentals of Computer Networks **(Networks)/**						
24BCC5CE			Web Design **(Web Development)**						
24BCC56I	III	Internship	Internship	-	2	50	-	50	2
			Total	**30**				**650**	**22**

Course Code	Course Name	Category	Hours / Week	Credits
24BCC51C	Cost Accounting	Core – VIII	6	4

Course Objectives

The course intends to cover

- Concepts and various components of costing.
- Preparation of accounts under process costing.
- Techniques of operating costing.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Recall the concepts of cost accounting and costing methods.	K1
CLO2	Understand the various elements of cost	K2
CLO3	Apply wage payment systems in labour cost calculations.	K3
CLO4	Apply costing procedures under process costing.	K3
CLO5	Analyze operational costing, contract costing, and reconcile cost and financial accounts.	K4
K1 – Remember; **K2** – Understand; **K3** – Apply; **K4** – Analyze.		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	3	3	3
CLO3	3	3	3	2	2
CLO4	3	3	2	2	2
CLO5	3	3	3	2	2
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core – VIII: Cost Accounting

Unit	Content	No. of Hours
I	**Cost Accounting:**Definition – Meaning and Scope – Objectives of Cost Accounting – Advantages and Limitations – Types and Classification of Costs – Elements of Cost (Material, Labour and Overheads) – Cost Centre and Cost Unit – Costing as an Aid to Management – Methods of Costing – Techniques of Costing (Absorption Costing and Marginal Costing – basic idea) – Preparation of Cost Sheet – Tender and Quotation.	15
II	**Material Control:** Meaning and Objectives of Material Control – Need for Material Control – Levels of Material Control – Economic Order Quantity (EOQ) – ABC Analysis – Perpetual Inventory System. **Purchase and Stores Control**: Purchasing of Materials – Purchase Procedure and Documentation – Requisition for Stores – Stores Control –Methods of Valuing Material Issues.	20
III	**Labour & Overheads:**Meaning and Classification of Labour Cost (Direct and Indirect Labour) – Time Keeping and Time Booking. **Methods of Wage Payment**: Time Rate System, Piece Rate System. **Incentive Schemes**: Halsey and Rowan Plans. **Idle Time:** Causes and Treatment Control over Idle Time. Overtime – Labour Turnover. **Overheads:** Meaning and Classification of Overheads – Allocation and Apportionment of Overheads – Absorption of Overheads. **Methods of Absorption**: Labour Hour Rate, Machine Hour Rate.	17
IV	**Process Costing:**Meaning – Features of Process Costing – Applicability of Process Costing – **Process Losses** (Normal Loss and Abnormal Loss) – Abnormal Gain. **Treatment of Process Losses**: Wastage and Scrap. Distinction between Waste, Scrap, Defectives and Spoilage. **Preparation of Process Accounts**. (Excluding Inter-Process Profits and Equivalent Production).	18
V	**Operating Costing:** Meaning and Definition – Features of Operating Costing- Transport costing – Power house Costing – Costing for Cinema Theatres – Costing for lodging houses. **Contract Costing:** Meaning and Definition – Features of Contract Costing - Contract Account – Work Certified and Work Uncertified – Profit on Incomplete Contracts (Simple Problems). **Reconciliation of Cost and Financial Accounts:** Meaning – Need for reconciliation – Causes for Disagreement in Profits – Preparation of Reconciliation Statement.	20
Theory – 40% & Problems – 60%		
	Total Hours	**90**

Text Books

1.	Jain.S.P. and Narang.K.L., (2025), Cost Accounting Principles and Practice,(Revised ed.), Kalyani Publishers, New Delhi.
2.	Pillai. R.S.N. and Bagavathi. V. (2023), Cost Accounting, Sultan Chand, New Delhi.
3.	Reddy.T.S. and Hari Prasad Reddy, (2013), Cost Accounting, Margham Publications, Chennai.

Reference Books

1.	Saxena.V.K, (2024),Cost Accounting, (8th ed.), Sultan Chand, New Delhi.
2.	Arora M.N., (2024),Cost Accounting Principles and Practice,(14th ed.), Sultan Chand, New Delhi.
3.	Iyyangar.S.P., (2023),Cost Accounting (11th ed.), Sultan Chand, New Delhi.

Web Resources (Swayam / NPTEL)

1.	https://onlinecourses.swayam2.ac.in/e-learning/preview/imb26_mg146
2.	https://onlinecourses.nptel.ac.in/noc19_mg38/preview
3.	https://onlinecourses.nptel.ac.in/noc25_mg108/preview

Course Code	Course Name	Category	Hours / Week	Credits
24BCC52C	Banking Theory Law and Practice	Core – IX	5	4

Course Objectives

The course intends to cover

- Meaning, types and functions of Bank.
- Banking Regulation Act, Central Bank and State Bank of India.
- Relationship between banker and customer.
- Concept and operation of cheques, procedures relating to loans and advances.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the concept of banking and banking system	K1- K2
CLO2	Outline the functions of different types of banks	K2
CLO3	Analyze the relationship between banker and customer	K3
CLO4	Describe the features and types of cheques	K3
CLO5	Analyse the process of loans and advances in banks	K3
K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** – Analyze;		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	2	3	3
CLO3	3	3	3	3	3
CLO4	3	3	2	2	2
CLO5	3	3	3	2	2
3 – Substantial (high)		**2** – Moderate (medium)		**1** – Slight (low)	

Core – IX: Banking Theory Law and Practice

Unit	Content	No. of Hours
I	**Introduction to Banking:** Origin of Banking – Definition and Functions Banks – Classification of Indian Banking System. **Banking Systems:** Unit Banking – Branch Banking – Universal Banking – Commercial Banks – Functions of Commercial Banks – Balance Sheet of Commercial Banks – Credit Creation by Commercial Banks – Banking Markets.	15
II	**Central Bank:** Meaning – Functions of Central Bank – Credit Control Measures – Quantitative and Selective Credit Control Measures – Role of Reserve Bank of India in regulating and controlling banks. **State Bank of India**: Significance and Functions. **Commercial Banks and Rural Financing**: Role of Commercial Banks – Regional Rural Banks – Co-operative Banks.	15
III	**Banking Regulation Act 1949**: Meaning – Important Provisions – Secrecy of Customer Accounts – Opening of Bank Accounts – Special Types of Customers (Minor, Joint Account, Partnership, Companies) – Types of Deposits – Bank Pass Book. **Banker and Customer**: Definition of Banker and Customer – General and Special Relationship – Rights and Duties of Banker and Customer – Banker's Lien – Collecting Banker and Paying Banker – **Digital Payment Systems**: Online Account Opening – Internet Banking – Mobile Banking – Online Fund Transfer	15
IV	**Cheque and Negotiable Instruments:**Meaning and Definition – Essentials of a Valid Cheque – Types of Cheques – Crossing of Cheques – Endorsement of Cheques. **Payment of Cheques**: Duties of Paying Banker – Statutory Protection to Paying Banker – Refusal of Payment (Dishonour of Cheques). **Collecting Banker**: Duties and Statutory Protection – Holder and Holder in Due Course: Meaning, Rights and Duties.	15
V	**Loans and Advances:**Meaning and Types of Loans and Advances – Principles of Lending – Lending Policies of Commercial Banks**. Forms of Securities**: Lien, Pledge, Hypothecation, Mortgage. Advance against Documents of Title to Goods – Position of Surety. **Banking Instruments and Services**: Letter of Credit – Bills of Exchange and Supply Bills – Purchase and Discounting of Bills – Travellers Cheque – Credit Cards.	15
	Total Hours	**75**

Text Books	
1.	Gordon, E & Natarajan.K,(2023). Banking: Theory, Law and Practice (29th rev. ed.). Himalaya Publishing House Pvt. Ltd..
2.	Shekhar K. C., & Lekshmy Shekhar. (2022). Banking Theory and Practice (21st ed.). Sultan Chand & Sons.
3.	K. P. M. Sundharam, & P. N. Varshney. (2014). Banking Theory, Law and Practice. Sultan Chand & Sons.
Reference Books	
1.	Indian Institute of Banking and Finance. (2023). Banking Regulations & Business Laws. Macmillan Publishers.
2.	Kandasami K.P. (2010), "Banking theory Law & Practice", Sultan Chand & Sons.
Web Resources (Swayam/NPTEL)	
1.	https://online-degree.swayam2.ac.in/ncu25_01_c01_s1_el13/preview
2.	https://onlinecourses.swayam2.ac.in/e-learning/preview/cec26_mg04
3.	https://onlinecourses.swayam2.ac.in/e-learning/preview/imb26_mg06

Course Code	Course Name	Category	Hours / Week	Credits
24BCC53C	Income Tax Law and Practice	Core – X	6	4

Course Objectives

The course intends to cover

- Basic concepts of Income Tax and related terminologies.
- Method of computing income under various heads of income
- Procedure for calculating tax liability under Income Tax provisions.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Recall various terminologies related to income tax.	K1
CLO2	Understand the method of calculating and levy of tax.	K2
CLO3	Apply tax laws and relevant provisions in tax computation.	K3
CLO4	Apply provisions relating to set-off and carry forward of losses in computation personal income.	K3
CLO5	Compute income and compute tax liability.	K3
K1 – Remember; **K2** – Understand; **K3** – Apply;		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	2	3	2	3
CLO3	3	3	3	3	3
CLO4	3	3	3	3	3
CLO5	3	3	3	3	3
3 - Substantial (high)		**2** - Moderate (medium)		**1** - Slight (low)	

Core – X: Income Tax Law and Practice

Unit	Content	No. of Hours
I	**Income Tax Act**: Basic Concepts - Definitions – Assessment year – Previous Year – Assesse – Scope of Income – Charge of Tax – Residential Status – Exempted Income.	18
II	**Heads of Income:** **Income from Salaries:** Components of Salary – Allowances and Perquisites – Deductions from Salary – Computation of Salary Income **Income from House Property:** Types of Property – Annual Value determination – Deductions under section 24 – Computation of House Property Income.	18
III	**Business and Other Income:** Profit and Gains of Business or Profession – Allowable and Disallowable Expenses – Computation of Business Income. **Income from Other Sources:** Types of Incomes covered – Deductions and Exemptions under other sources.	18
IV	**Capital Gains**: Meaning and types – Short-term and Long-term capital gains – Transfer of capital assets – Cost of acquisition and cost of improvement – Indexation – Computation of capital gains – Exemptions under capital gains **Deductions from Gross Total Income:** Meaning and scope – Deductions under Chapter VI-A – Section 80C deductions – Section 80D (medical insurance) – Section 80G (donations) – Other eligible deductions – Conditions and limits for deductions.	18
V	**Computations of tax liability:** Set-off and Carry forward of losses – Aggregation of Income - Computation of Tax liability – Integrating Artificial Intelligence in Tax Administration - Assessment of Individuals.	18
Theory – 20% & Problems – 80%		
	Total Hours	**90**
Text Books		
1.	Gaur. V. P., Narang D. B., Puja Gaur, Rajeev Puri (2025), Income Tax Law and Practice – Assessment Year 2025-26, (53rd ed.), Kalyani Publishers.	
2.	Mehrotra. H.C., Goyal. S.P, (2024), "Income Tax Law and Accounts - Assessment Year 2025 -26", (66th ed.), Sahitya Bhavan Publications.	
3.	Dinkar Pagare, "Income Tax Law and Practice – Assessment Year 20255-26", Sultan & Chand Sons.	
Reference Books		
1.	Reddy.T.S. and Hari Prasad Reddy, (2025), "Income Tax Law and Practice, Assessment Year 2025 -26", Margham Publications.	
2.	Vinod K. Singhania, (2025), "Students Guide to Income Tax", (73rd ed.), Taxmann Publications.	
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.swayam2.ac.in/e-learning/preview/ini25_cm01	
2.	https://onlinecourses.swayam2.ac.in/e-learning/preview/cec25_cm15	
3.	https://online-degree.swayam2.ac.in/ncu25_01_c01_s1_el11/preview	

Course Code	Course Name	Category	Hours/Week	Credits
24BCC54C	Executive Business Communication	Core-XI	4	3

Course Objectives

The course intends to cover

- The knowledge on effective business communication.
- Techniques to respond to queries related to business.
- Banking Correspondence and Company Secretarial Correspondence.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the importance of effective business Communication	K1 - K2
CLO2	Understand the intricacies of effective business communication.	K2
CLO3	Effectively communicate with banks,insurance and trade related agencies.	K3
CLO4	Prepare effective company secretarial correspondence.	K3
CLO5	Develop a suitable resume and prepare to face the interview.	K3 -K4
K1- Remember; **K2**- Understand; **K3**- Apply; **K4**-Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	3	3	3	2	2
CLO3	3	3	2	3	3
CLO4	3	3	3	3	3
CLO5	3	3	3	2	2
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Core-XI: Executive Business Communication

Unit	Content	No. of Hours
I	**Business Communication:** Meaning – Importance of Effective Business Communication. **Ethics in Communication:** Definition , Dilemma and solution and Guidelines in ethical choice - Modern Communication Methods. **Business Letters** : Need – Functions - Kinds - Essentials of Effective Business Letters - Layout.	12
II	**Business Correspondence:** Trade Enquiries and Replies (Offers & Quotations,Tenders with specimen letters) - Orders and their Execution - Credit and Status Enquiries – Complaints and Adjustments - Settlement of Claims- Collection Letters – Sales Letters – Circular Letters.	12
III	Banking Correspondence - Insurance Correspondence - Agency Correspondence.(With Specimen Letters).	12
IV	**Company Secretarial Correspondence**: Introduction to Company Secretary , Duties, Category and Types - Preparation of Agenda, Minutes and Reports. (AGM, EAGM,BOD,Creditors Meeting, Debenture holders Meeting).	12
V	**Application Letters:** General Guidelines – Preparation of Resume (Specimen) Testimonials - Letter of Appointment. **Interview:** Meaning – Objectives and Techniques of various types of Interviews – Public Speech – Characteristics of a good speech – Business Report Presentations.	12
	Total Hours	**60**

Text Books	
1.	Rajendra Pal, Korahilli J.S., (2012), Essentials of Business Communication, (1st ed) Sultan Chand & Sons, New Delhi.
2.	Pooja Khanna,(2022), Business Communication, (1st ed) Vikas Publishing House Private Limited, New Delhi.
3.	N.S Raghunathan & B.Santhanam (2022), Business Communication, (4th ed), Margham Publication, Chennai.
Reference Books	
1.	Rodriquez M V.,(2013) Effective Business Communication Concept, (2nd ed) Vikas Publishing Company, New Delhi.
2.	K.Sundar A & Kumara Raj (2012), Business Communication, (2nd ed) Vijay Nicole Imprints Private Limited, Chennai.
Web Resources (Swayam/NPTEL)	
1.	https://nptel.ac.in/courses/109106129
2.	https://nptel.ac.in/courses/110105052

Course Code	Course Name	Category	Hours / Week	Credits
24BCC55P	Computer Applications Practical: MS Word, MS Excel and Tally 9.2 – II	Core Lab - VI	4	2

Core Lab - VI: Computer Applications: MS Word MS Excel and Tally 9.2 - II

S.No.	List of Programs	No. of Hours
	MS Word:	
1.	Create the front page of a Newspaper.	3
2.	Type a document and perform the following: • Change a paragraph into a Two Column Cashbook. • Change a paragraph using Bullets (or) Numbering Format. • Find any word and replace it with another word in the document.	4
3.	Prepare a Class Timetable using a table menu.	4
4.	Prepare a Mail Merge for an Interview Call Letter.	4
5.	**MS Excel:** Develop the Students Mark List worksheet and calculate Total, Average and save it. Specify the Result also (Field names: S.NO, Name of the student, course, mark1, mark2, mark3, total, average and result).	5
6.	Design a Chart Projecting the Cash Estimate of a Concern in the Forthcoming Years.	4
7.	Create a Pivot Table Showing the Performance of the Salesmen's	5
8.	**Tally 9.2:** Company Creation and Alteration	3
9.	Creating and Displaying Ledger	3
10.	Voucher Creation,	5
11.	Voucher Alteration and Deletion.	5
12.	Inventory Information– Stock Summary with GST – 18%	5
13.	Inventory Information – Godown Creation and alteration with GST – 18%	5
14.	Final Accounts	5
	Total Hours	**60**
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.swayam2.ac.in/aic20_sp60/preview	

Course Code	Course Name	Category	Hours/Week	Credits
24BCC5AE	Information Systems in Business	Elective - I	5	3

Course Objectives

The course intends to cover

- Conceptualize the need and use of Management Information Systems.
- Types of System concepts.
- Applications of information systems in business.
- Functional Management Information Systems.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Acquire basic knowledge on MIS.	K1
CLO2	Know the different types of System concepts.	K1
CLO3	Understand about Information Systems in Business.	K2
CLO4	Acquire the knowledge on Database Management System	K2
CLO5	Conceptualize the Functional Management Information System	K2
K1- Remember; **K2**- Understand		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	3	3	3	3
CLO2	2	2	3	3	3
CLO3	3	3	3	2	3
CLO4	3	3	2	3	3
CLO5	3	2	3	3	2
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Elective I: Information Systems in Business

Unit	Content	No. of Hours
I	**Management Information System:** Meaning – Features – Requisites of an effective MIS – MIS Model – Components –Subsystems of an MIS – Role and Importance – Corporate Planning for MIS – Growth of MIS in an Organization - Centralization Vs. Decentralization of MIS. Support – Limitations of MIS.	17
II	**System Concepts:** System Concepts – Elements of a System- Characteristics of a system - Types of System– Categories of Information System – System Development Life Cycle – System Enhancement.	15
III	**Business and Management:** Information Systems in Business and Management: Transaction Processing System: Information Repeating and Executive Information System.	15
IV	**Database Management Systems:** Conceptual Presentation – Client Server Architectures Networks – Business Process Re–Engineering [BPR].	13
V	**Functional Management Information System:** Financial – Accounting – Marketing Production – Human resource – Business Process Outsourcing.	15
	Total Hours	**75**
Text Books		
1.	Gorden B. Davis., and Margrethe H. Olson., Management Information System, Mc Graw – Hill Publishing, New Delhi.	
2.	Aman Jindal., (2003), Management Information System, Kalyani Publishers, New Delhi.	
3.	Samrat Bose., (2025), Management Information System, Taurean Publications, Kolkata, West Bengal.	
Reference Books		
1.	Dr. S.P. Rajagopalan., (2006), Management Information System, Margham Publications, Chennai.	
2.	C. S. V. Murthy., (2025), Management Information Systems, Himalaya Publishing House Mumbai, Maharashtra.	
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.nptel.ac.in/noc20_mg60/preview	
2.	https://onlinecourses.swayam2.ac.in/cec21_ge05/preview	

Course Code	Course Name	Category	Hours/Week	Credits
24BCC5BE	Fundamentals of Computer Networks	Elective - I	5	3

Course Objectives

The course intends to Cover

- Fundamental concepts and Structure of Computer Networks.
- Basic understanding of network communication, transmission media, and data transfer.
- Functions of different layers in Networking Models .
- Internet technologies and real-world Networking Applications.
- Network security, Cloud services, and safe Internet usage.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Recall the basic concepts, components, and types of computer networks.	K1
CLO2	Explain the functions of the OSI and TCP/IP models and the different network layers.	K2
CLO3	Describe transmission media, switching techniques, and basic data communication concepts.	K2
CLO4	Apply knowledge of IP addressing, Internet services, and networking concepts in real-life scenarios.	K3
CLO5	Use basic Internet applications such as email, cloud services, and web technologies effectively.	K3
K1- Remember; **K2**- Understand; **K3**- Apply;		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	2	3	2	2
CLO2	3	2	2	2	3
CLO3	3	2	3	2	3
CLO4	3	2	2	2	2
CLO5	3	2	3	2	2
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Elective – I: Fundamentals of Computer Networks

Unit	Content	No. of Hours
I	Introduction to Computer Networks - Uses of Computer Networks (Business, Banking, E-commerce) - Network Hardware – Basic Devices (Router, Switch, Hub, Modem) - Network Software - Types of Networks – LAN, MAN, WAN - Network Topologies – Bus, Star, Ring, Mesh - Client-Server vs Peer-to-Peer Networks - Basics of Internet and Intranet – Overview of OSI Reference Model – Overview of TCP/IP Reference Model.	15
II	Physical Layer – Basic Concepts - Guided Transmission Media – Twisted Pair, Coaxial, Fiber Optic (Basics) - Wireless Transmission – Wi-Fi, Mobile Networks (4G/5G Overview) - Public Switched Telephone Network (PSTN) - Local Loop and Trunks - Multiplexing – Basic Idea - Switching – Circuit & Packet Switching - Bandwidth and Data Speed (Mbps, Gbps) – Basic Concepts of Bluetooth and Hotspot..	15
III	Data Link Layer – Overview - Design Issues – Frames and Frame Structure Basics - Error Detection and Correction – Parity, Checksum - Simplex Stop and Wait Protocol – Sliding Window Protocol Basics - MAC Address – Concept and Importance - Ethernet Basics - Switching Basics.	15
IV	Network Layer – Overview - Design Issues - Routing Algorithm – Basic Idea - IP Protocol - IP Addresses – IPv4 Basics - Types of IP Addresses – Public and Private - Introduction to Subnetting - Internet Control Protocols - Introduction to Routers and Routing - Basics of Network Security – Firewall, Antivirus.	15
V	Transport Layer – Overview - Addressing and Ports Basics - Connection Establishment and Release - Internet Transport Protocols – UDP and TCP - Application Layer – Overview - Domain Name System (DNS) - Electronic Mail - World Wide Web (WWW) - HTTP vs HTTPS - Basics of Cloud Computing Google Drive, Dropbox - Web Browsers and Search Engines - Online Security Basics – Phishing, Password Safety.	15
	Total Hours	**75**

Text Books	
1.	Andrew S. Tanenbaum, “Computer Networks”, Fourth Edition, 2008, PHI
2.	Behrouz and Forouzan, “Data Communication and Networking”, Third Edition, 2006, TMH
3.	Tanenbaum, A. S. (2004). Computer Networks. Pearson Education
Reference Books	
1.	Couch Digital and Analog communication systems, MacMillan publishing Co, 1990.
2.	William Stallings , Data and Computer Communications, MacMillan Publishing Co, second edition 1989
3.	Prokis, J.Q, Digital Communications, Mcgraw Hill , 1983
Web Resources (Swayam / NPTEL)	
1.	https://onlinecourses.nptel.ac.in/noc26_cs60/preview
2.	https://onlinecourses.nptel.ac.in/noc26_cs35/preview
3.	https://onlinecourses.nptel.ac.in/noc26_ee43/preview

Course Code	Course Name	Category	Hours/Week	Credits
24BCC5CE	Web Design	Elective - I	5	3

Course Objectives

The course intends to cover

- Concepts and applications of Web Design.
- Internet Domains and Connectivity.
- HTML Structure and Elements.
- DHTML & Style Sheets. JavaScript, DOM, and Cookies.

Course Learning Outcomes

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

CLO	CLO Statements	Knowledge Level
CLO1	Understand the basic concepts of Internet ,domains, and connectivity	K1 - K2
CLO2	Apply lists, frames, and tables to forms and form elements	K3
CLO3	Apply CSS and DHTML techniques to design and enhance web pages	K3
CLO4	Analyze dynamic and interactive web pages using JavaScript concepts..	K4
CLO5	Analyze DOM manipulation and build responsive web applications	K4
K1- Remember; **K2**- Understand; **K3-** Apply;**K4-** Analyze		

CLO – PLO Mapping

CLOs/PLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	3	2	3	2	3
CLO2	3	2	2	2	2
CLO3	3	3	2	2	3
CLO4	3	2	2	2	2
CLO5	3	3	3	2	3
3-Substantial(high)		**2**-Moderate (medium)		**1**-Slight (low)	

Elective - I: Web Design

Unit	Content	No. of Hours
I	**Internet**: Basic Concepts – Communicating on Internet – Internet Domains – Internet Server Identities – Establishing Connectivity on the Internet.	15
II	**Introduction to HTML:** Anchor Tag – Hyperlink - Head and Body Section – Heading - Horizontal Ruler – Paragraphs – Tags - Images and Picture – Lists – Tables – Frames - Forms and forms elements.	15
III	**DHTML and Style sheets:** Defining styles - Elements of style - Linking a style sheet to a html document - Inline style - External style sheets - Multiple styles- Web page designing.	15
IV	**Introduction to Java script:** Advantage of JavaScript - Data type - Variable – Array - Operator and Expression - Control and looping Constructs - Functions - Dialog Boxes.	15
V	**JavaScript Document Object Model:** Event Handling - Form Object - Built in Object - User Defined Object-Cookies.	15
	Total Hours	**75**
Text Books		
1.	Ivan Bayross., (2010), Web Enabled Commercial Application Development using HTML, JavaScript, DHTML and PHP, BPB Publications, 4th Edition.	
2.	Harvey M. Deitel, Paul J. Deitel and Tem R. Nieto., (2002), Internet & World Wide Web – How to program, Prentice Hall ,3rd Edition.	
3.	Eric Ladd and Jim O'Donell., Using HTML 4, XML & JAVA, Platinum Edition, PHI.	
4	Jennifer Niederst Robbins., (2025), Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Images, Sebastopol, O'Reilly Media ,6thedition.	
Reference Books		
1.	Hirdesh Bharadwaj., (2016), Web designing, Paper Back.	
2.	Brain D Miller., (2022), Principles of web design, Allworth Publications.	
3.	Ray, Rishi., (2025), HTML, CSS and JavaScript Mastery: The All-in-One Frontend Developer's Handbook, Independently Published.	
Web Resources (Swayam / NPTEL)		
1.	https://onlinecourses.swayam2.ac.in/e-learning/preview/imb26_mg155	
2.	https://onlinecourses.swayam2.ac.in/e-learning/preview/nou26_cs08	

Components for Internal Assessment and Distribution of Marks for CIA and ESE (Theory)

Max Marks	Marks for		Components for CIA						
	CIA	ESE	CIA		Model		Attendance	Active Engagement	Total
100	25	75	Actual	Weightage	Actual	Weightage	5	5	25
			50	5	75	10			

Question Paper Pattern

Component	Duration in Hours	Section A			Section B			Section C			Total
		Type of Question	No. of Questions	Marks	Type of Question	No. of Questions	Marks	Type of Question	No. of Questions	Marks	
CIA	2	MCQ	8	8x1=8	Either or	3	3x6=18	Either or	3	3x8=24	50
Model Exam / **ESE**	3	MCQ	10	10x1=10	Either or	5	5x5=25	Either or	5	5x8=40	75

Components for Internal Assessment and Distribution of Marks for CIA (Lab)

Max Marks	Marks for		Components for CIA						
	CIA	ESE	Test		Model		Experiments / Programs	Observation	Total
100	40	60	Actual	Weightage	Actual	Weightage	Marks	5	40
			50	10	60	15	10		

Examination Pattern

Component	Duration in Hours	Marks			Weightage
		Practical Exam	Record	Total Marks	
Test	2	50	-	**50**	10
Model	3	60	-	**60**	15
Experiments Completed	-	-	-	**10**	10
Observation Note	-	-	-	**05**	05
				Total Marks - CIA	**40**
ESE	3	50	10	-	**60**

Components for Internal Assessment and Distribution of Marks for CIA (Foundation Course -Theory)

Max Marks	Marks for		Components for CIA				
50	CIA	ESE	CIA		Model		Total
	50	-	Actual	Weightage	Actual	Weightage	
			50	**25**	50	**25**	**50**

Question Paper Pattern

Duration in Hours	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Offline	Open Choice	5 (Out of 8)	5 x 10=50

Components for and Distribution of Marks for ESE (Theory) Ability Enhancement Compulsory Courses (AECC) & Question Paper Pattern

Duration in Hours	Mode of Exam	Type of Questions	No. of Questions	Marks
2	Online	MCQ	50	50x1=50

Components of Internship (Internal Assessment Only)

Components	Marks
Submission of Internship Report	20
Performance in viva-voce	30
Total Marks	**50**

***Certification of Completion is Mandatory for the award of Internal Marks and to avail the credits**