Sadakathullah Appa College

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(Autonomous)

(Reaccredited by NAAC at an'A⁺⁺' Grade.An ISO 9001:2015 Certified Institution) Rahmath Nagar,Tirunelveli-11.

TamilNadu.

DEPARTMENT OF INFORMATION TECHNOLOGY



CBCS SYLLABUS

Learning Outcome-Based Curriculum Framework For

Information Technology (B.Sc.)

(Applicable for students admitted in June 2024 and onwards)

(As per the Resolutions of the Academic Council Meeting held on 01.06.2024)

CONTENTS

S.	Course Title	Course Code
No.		
1	Prose	24ULAR11
2	பொதுத் தமிழ் 1 - தமிழ் இலக்கிய வரலாறு - 1	24ULTA11
3	General English - I	24ULEN11
4	C Programming	24UCIT11
5	C Programming Practical	24UCIT1P
6	Discrete Mathematics and Graph Theory	24UAMA14
7	Introduction to HTML	24UNIT11
8	Fundamentals of Computers	24UFIT11
9	Grammar	24ULAR21
10	பொதுத் தமிழ் 2 - தமிழ் இலக்கிய வரலாறு - 2	24ULTA21
11	General English - II	24ULEN21
12	Object Oriented Programming with C++	24UCIT21
13	Object Oriented Programming with C++ Practical	24UCIT2P
14	Optimization Techniques	24UAMA24
15	Foundation of IT	24UNIT21
16	Value Education –I	24USVE2A
17	Value Education –II	24USVE2B

Sadakathullah Appa College, Rahmath Nagar, Tirunelveli – 627 011. Programme Structure & Credits – UG (Sciences)* - 2024 – 2027 INFORMATION TECHNOLOGY

Sem	Part	Course	Title of the Course	COURSE	H/W	C		Marl	ζS
		Туре		CODE			Ι	E	Т
	Ι	Lang-I	Prose	24ULAR11	6	3	25	75	100
				24ULTA11					
I	ITypeILang-IProseQurrajā sublip 1 - sub @wāsblu aurwnīg - 1IILang-IIGeneral English - IIIICore-IC ProgrammingIIICore-IC ProgrammingIIICore-IProseIIICore-IProgrammingIIIEC-T-IDiscrete(GE)Mathematics and Graph TheoryIVSEC-IIntroduction toIVFCFundamentals of ComputersILang-IGrammar Qurajā sublip 2 - sub @wāsblu aurwnīg - 2		24ULEN11	6	3	25	75	100	
-	III	Core-I	C Programming	24UCIT11	5	5	25	75	100
	Type CODE I I E I Lang-I Prose 24ULAR11 6 3 25 75 II Lang-II General English - 1 24ULTA11 6 3 25 75 III Core-I C Programming 24UCIT11 5 5 25 75 III Core-I C Programming 24UCIT11 5 5 25 75 III Core-I C Programming 24UCIT1P 3 40 60 P-1 Practical 1 1 1 1 25 75 III EC-T-I Discrete 24UAMA14 6 5 25 75 IV SEC-I Introduction to 24UNIT11 2 2 15 35 IV FC Fundamentals of Computers 24ULAR21 6 3 25 75 II Lang-II General English - II 24ULAR21 6 3 2	60	100						
	III		Mathematics and	24UAMA14	6	5	25	75	100
	IV			uction to 24UNIT11 2 2 15					50
	IV	FC		24UFIT11	2	2	15	35	50
					30	23			600
	Ι	Lang-I		24ULAR21	6	3	25	75	100
II				24ULTA21					
		Lang-II	ě					75	100
п	III	Core-II	Programming with	24UCIT21	5	5	25	75	100
	Programming with	24UCIT2P	3	3	40	60	100		
	III		-	24UAMA24	6	5	25	75	100
								35	50
	IV	SEC-III	Value Education –I	24USVE2A	2	2	15	35	50
			Value Education –II	24USVE2B					
					30	23			600

Department of Information Technology Programme: B.Sc Programme Outcomes

РО	Upon completion of B.Sc. Degree Programme, the students will be able to:
PO 1	Disciplinary Knowledge
	• Acquire scientific knowledge and an understanding of major concepts and theoretical principles.
PO 2	
FU Z	Creative Thinking and Practical Skills / Problem-Solving Skills
	 Enrich skills of observation/research-related skills to draw logical inferences from scientific experiments/ programming and skills of creative thinking to develop novel ideas. Hone problem-solving skills in theoretical, experimental, and computational areas and apply them in research fields and real-life situations.
PO 3	Sense of inquiry and Skilled Communicator
	• Develop the capability to raise appropriate questions relating to the current/emerging issues encountered in the scientific field and plan, execute, and express the results of experiments / investigations through technical writings and oral presentations
PO 4	Ethical Awareness / Team Work / Environmental
	 Conservation and Sustainability Equip them for conducting work as an individual / as a member, or as a leader in diverse teams upholding values such as honesty and precision and thus preventing unethical behaviors such as fabrication, falsification, misrepresentation of data, plagiarism, etc. To ensure academic integrity. Realize that environment and humans are dependent on one another and know about the responsible management of our ecosystem for survival and the well-being of the future generation.
PO 5	Usage of ICT/ Lifelong Learning / Self-Directed Learning
	• Inculcate the habit of learning continuously through the effective adoption of ICT to update knowledge in the emerging areas in Sciences for inventions/discoveries and engage in remote/independent learning.
PO 6	Research-related skills:
	• A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesizing and articulating; Ability to recognise cause- and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause- and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.

Programme Specific Outcomes

PSO	Upon completion of B.Sc. Degree Programme, the students will be able to:	POs Mapped
PSO1	Understand the basic concepts, working process of hardware, software and networking aspects of computer system besides analyzing the principles and methodologies to implement the Software system for real time problems.	1,3,4
PSO2	Analyze and develop solution based programs in the areas related to Operating System, Mobile applications and software projects using programming environment such as Python, Java, C, C++,C#, UNIX by applying the principles and strategies of software engineering.	1,2,5
PSO3	Apply the basic concepts of computer components, software, data structures, designing tools that include HTML, CSS, Java script and PHP to analyze the recent trends such as Virtual Reality, Data Mining, and Internet of Things.	1,2,3
PSO4	Design software, documents, photo edit, graphics using applications and tools.	1,2,3, 5
PSO5	Analyze the networking, operating system and memory management operations besides applying the programming concept.	1,2,3, 4

Semester - I	PROSE	24ULAR11						
LANG – I			L	T	Р	C		
Hrs./Week: 6	Hrs./Semester : 60	Marks :100	6	-	-	3		

General Objective: To make the students to understand the structure of Arabic language and impove the reading and writing skills.

Learning Objectives

LO	The learners will be able to:
LO-1	Understand basic Arabic grammar.
LO-2	Understand the structure of Arabic language.
LO-3	Employ sentence making.
LO-4	Enhance vocabulary.
LO-5	Improve reading and writing skills.

- من الدرس الأول إلى الدرس الرابع UNIT I
- من الدرس الخامس إلى الدرس الثامن UNIT II
- من الدرس التاسع إلى الدرس الثالث عشر UNIT III
- من الدرس الرابع عشر إلى الدرس الثامن عشر UNIT IV
- من الدرس التاسع عشر إلى الدرس الثالث و العشرون UNIT V

Textbooks:

دروس اللغة العربية لغير الناطقين بها، الجزء الأول، الدكتور ف. عبد الرحيم. 1

Reference Books:

- معجم الكلمات الواردة في دروس اللغة العربية لغير الناطقين بها
 - مفتاح دروس اللغة العربية لغير الناطقين بها
 - القراءة الراشدة للشيخ أبي الحسن علي الحسني الندوي.
 - القراءة المفيدة للدكتور محمد يوسف كوكن العمري
 - منهاج العربية -السيد النبي حيدر آبادي

www.alnahw.com

Course Outcomes

CO	Upon completion of this course, students would have learned to:	PSOs Addressed	Cognitive Level
CO-1	Understand the correct pronunciation of Arabic letters	PSO 1	К2
CO-2	Apply the structure-based composition	PSO 1,2	К3
CO-3	List out the new vocabulary in Arabic	PSO 1	K4
CO-4	Evaluate and read the Arabic sentences without diacritical marks	PSO 1,2	К5
CO-5	Able to create the simple sentences in Arabic without errors.	PSO 1	K6

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	de	Title of the Course						ours	Credits			
I	24 U	LAR1	1	PROSE						90	3	
Course Outcomes (COs)	Prog	ramm	e Ou	tcom	es (P	'Os)	Programme Specific Outcomes (PSOs)					
(003)	РО 1	PO 2	PO 3	PO 4	РО 5	PO 6	PSO1	PSO2	PSO3	PSO4	PSO5	
CO-1	3	3	1	2	1	1	3	2	2	1	1	
CO-2	3	3	1	2	1	1	3	2	2	1	1	
CO-3	3	3	1	2	1	1	3	2	2	1	1	
CO-4	3	3	1	2	1	1	3	2	2	1	1	
CO-5	3	3	1	2	1	1	3	2	2	1	1	
		0777	ONC	<u> </u>	3.61	FDII		IOW	_ 1			

STRONG – 3, MEDIUM – 2, LOW – 1

Prepared by : Dr. S.A.Mohamed Rafeek C

Checked by: Dr. J. Ubaiyathulla Head of the Department

Semester - I	பொதுத்தமிழ்	24ULTA11					
LANG – I	தமிழ் இலக்கிய வ	L	Т	Р	С		
Hrs./Week: 6	Hrs./Semester : 90	Marks :100	6	-	-	3	

 தமிழ் இலக்கியம் சார்ந்த போட்டித் தேர்வுகளுக்கு ஏற்ப கற்பித்தல் நடைமுறைகளை மேற்கொள்ளுதல்.

Learning Objectives:

LO	The learners will be able to:
LO - 1	தமிழ் இலக்கண, இலக்கியங்களை மாணவர்கள் அறியுமாறு
LU-I	செய்து அவர்களின் படைப்பாற்றலைத் தூண்டுதல்.
LO - 2	சங்க இலக்கியத்தில் காணப்பெறும் வாழ்வியல் சிந்தனைகளை அறிந்து
LO - 2	கொள்வர்.
LO - 3	அற இலக்கியங்களை அறியச் செய்து வாழ்வின் விழுமியங்களை
LO - 3	பயிற்றுவித்தல்.
LO - 4	காப்பியங்களை அறிமுகம் செய்து அதன் வழி வாழ்வியலை புரியச்
LU - 4	செய்தல்.
LO - 5	பக்தி இலக்கியங்களின் மூலம் பக்தியுணர்வை ஊட்டுதல்.

அலகு 1 இலக்கணம்

- தொல்காப்பியம், இறையனார் களவியல் உரை, நம்பியகப் பொருள், புறப்பொருள் வெண்பா மாலை, நன்னூல், தண்டியலங்காரம், யாப்பருங்கலக்காரிகை - நூல்கள்
- 2. மொழிப் பயிற்சி ஒற்றுப்பிழை தவிர்த்தல்
 - வல்லினம் மிகும் இடங்கள்
 - வல்லினம் மிகா இடங்கள்
 - ஈரொற்று வரும் இடங்கள்
 - ஒரு, ஓர் வரும் இடங்கள்
 - அது, அ∴து வரும் இடங்கள்
 - தான், தாம் வரும் இடங்கள்
- சங்க இலக்கியம் எட்டுத் தொகை, பத்துப்பாட்டு.
 அற இலக்கியம் பதினெண்கீழ்க்கணக்கு நூல்கள்.
- காப்பிய இலக்கியம் ஐம்பெருங் காப்பியங்கள், ஐஞ்சிறு காப்பியங்கள், சமயக் காப்பியங்கள்.

- 4. பக்தி இலக்கியமும் (பன்னிரு திருமுறைகள் நாலாயிர திவ்வியப் பிரபந்தம்), பகுத்தறிவு இலக்கியமும் (சித்தர் இலக்கியங்கள், புலவர் குழந்தையின் இராவண காவியம்) அலகு 2 சங்க இலக்கியம் - எட்டுத்தொகை, பத்துப்பாட்டு எட்டுத்தொகை 1. நற்றிணை - முதல் பாடல் - நின்ற சொல்லர் 2. குறுந்தொகை 3 ஆம் பாடல் - நிலத்தினும் பெரிதே - "நெல் பல பொலிக! பொன் 3. ஐங்குறுநூறு பெரிது சிறக்க!"(முதல் பாடல்) வேட்கைப் பத்து. 4. கலித்தொகை - 51- சுடர்த்தொடீஇக் கேளாய் -குறிஞ்சிக் கலி. - 189 தெண்கடல் வளாகம் 5. புறநானூறு பொதுமையின்றி, நாடா கொன்றோ -187 பத்துப்பாட்டு 1. முல்லைப்பாட்டு (முழுவதும்) அலகு 3 அந இலக்கியம் பதினெண்கீழக்கணக்கு நூல்கள் 1. திருக்குறள் - அறன் வலியுறுத்தல் அதிகாரம் 2. நாலடியார் - பாடல் : 131 (குஞ்சியழகும்) - நிலத்துக்கு அணியென்ப 3. நான்மணிக்கடிகை 4. பழமொழி நானூறு - தம் நடை நோக்கர் 5. இனியவை நாற்பது - 37 இளமையை மூப்பு என்று அலகு 4 காப்பிய இலக்கியம் (ஐம்பெருங் காப்பியங்கள், ஐஞ்சிறு காப்பியங்கள், சமயக் காப்பியங்கள்) 1. சிலப்பதிகாரம் - வழக்குரைகாதை 2. ഗത്തിഗേക്കരം - பாத்திரம் பெற்ற காதை 3. பெரியபுராணம் - பூசலார் நாயனார் புராணம் 4. கம்பராமாயணம் - குகப் படலம் 5. சீறாப்புராணம் - மானுக்குப் பிணை நின்ற படலம் 6. இயேசு காவியம் - ஊதாரிப்பிள்ளை அலகு 5 பக்தி இலக்கியமும், பகுத்தறிவு இலக்கியமும் (பக்தி இலக்கியம் பன்னிரு திருமுறைகள், நாலாயிர திவ்வியப் பிரபந்தம் - பகுத்தறிவு இலக்கியம் (சித்தர் இலக்கியங்கள், புலவர் குழந்தையின் இராவண காவியம்) பக்தி இலக்கியம்: 1. திருநாவுக்கரசர் தேவாரம் - "நாமார்க்கும் குடியல்லோம்" எனத் தொடங்கும் பாடல் மட்டும்
- 2. மாணிக்கவாசகர் திருவாசகம் "நமச்சிவாய வாழ்க நாதன் தாள் வாழ்க" முதல் "சிரம்குவிவார் ஓங்குவிக்கும் சீரோன் கழல் வெல்க" வரை.

- 3. பொய்கையாழ்வார் வையந் தகளியா வார்கடலே
 - அன்பே தகளியா
 - திருக்கண்டேன் பொன்மேனி கண்டேன்
 - திருப்பாவை மார்கழித் திங்கள் (முதல் பாடல்)

பகுத்தறிவு இலக்கியம்

பூதத்தாழ்வார்
 பேயாழ்வார்

6. ஆண்டாள்

- திருமற்திரம் (270, 271, 274, 275 285) பட்டினத்தார் திருவிடை மருதூர் (காடே திரிந்து – எனத் தொடங்கும் பாடல் பா.எண். 279, 280)
 கடுவெளிச் சித்தர் - பாபஞ்செய் யாதிரு மனமே (பாடல்
 - முழுவதும்) 3. இராவண காவியம் - தாய்மொழிப் படலம் - 18, ஏடுகையில்லா ரில்லை முதல்- 22 செந்தமிழ் வளர்த்தார் வரை.

பாட நூல்:

பதிப்பாசிரியர் முனைவர் ச.மகாதேவன், பொதுத்தமிழ் 1,

சதக்கத்துல்லாஹ் அப்பா கல்லூரி வெளியீடு,2024 – 2025(முதற் பதிப்பு).

பார்வை நூல்கள் :

- 1. மு. வரதராசன், தமிழ் இலக்கிய வரலாறு, சாகித்ய அகாதெமி, புதுடெல்லி.
- மது. ச. விமலானந்தன், தமிழ் இலக்கிய வரலாறு, மீனாட்சி புத்தக நிலையம், மதுரை.
- தமிழண்ணல், புதிய நோக்கில் தமிழ் இலக்கிய வரலாறு, மீனாட்சி புத்தக நிலையம், மதுரை.
- தமிழ் இலக்கிய வரலாறு முனைவர்.சிற்பி பாலசுப்ரமணியம், முனைவர்.சொ.சேதுபதி
- புதிய தமிழ் இலக்கிய வரலாறு முனைவர்.சிற்பி பாலசுப்ரமணியம், நீல.பத்மநாபன்
- 6. தமிழ் இலக்கிய வரலாறு டாக்டர்.அ.கா.பெருமாள்
- 7. தமிழ் இலக்கிய வரலாறு முனைவர். ப.ச.ஏசுதாசன்
- 8. தமிழ் இலக்கிய வரலாறு ஸ்ரீகுமார்
- 9. வகைமை நோக்கில் தமிழ் இலக்கிய வரலாறு பாக்கியமேரி
- 10. தமிழ் பயிற்றும் முறை, பேராசிரியர் ந. சுப்புரெட்டியார் மணிவாசகர் பதிப்பகம், சிதம்பரம்
 - https://www.chennailibrary.com/
 - https://www.sirukathaigal.com
 - https://www.tamilvirtualuniversity.org
 - https://www.noolulagam.com
 - https://www.katuraitamilblogspot.com

CO	Upon completion of this course,	PSO	Cognitive	
	students will be able to	Addressed	Level	
CO-1	மொழியறிவோடு சிந்தனைத் திறனைப்	1, 2, 3	K4	
	பெறுவர்.			
CO-2	சங்க இலக்கியத்தில் காணப்பெறும்	1, 4	K3, K4	
	வாழ்வியல் சிந்தனைகளை அறிந்து கொள்வர்.			
CO-3	அற இலக்கியம் தமிழ்க் காப்பியங்களின் வழி	2.3,4	K3, K4,	
	வாழ்வியல் சிந்தனையைப் பெறுவர்.			
CO-4	பக்தி இலக்கியங்களைக் கற்பதன் மூலம்	4,5	K3, K6	
	பக்தி நெறியினை அறிவர்.			
CO-5	பகுத்தறிவு இலக்கியங்களைக் கற்பதன் வழி	2,3,4	K5, K6	
	சமய நல்லிணக்கத்தைப் பின்பற்றுவர்.			

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester Course Code			Title of the Course					Hou	rs	Credits	
Ι	24 UI	LTA11		தமிழ்	இலக்க	ிய வர	்லாறு -	1	90		3
Course	P	rogram	me O	utcome	es (PO	s)	Prog	gramm	e Spec	ific O	utcomes
Outcomes									(PSO	s)	
(COs)	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO	PSO
	1	2	3	4	5	6	1	2	3	4	5
CO-1	3	2	3	3	3	2	2	2	3	2	3
CO-2	3	3	2	2	2	3	2	3	3	2	2
CO-3	3	2	3	3	2	2	2	3	2	3	2
CO-4	-	3	3	2	2	2	3	2	3	2	2
CO-5	-	3	2	2	2	3	3	2	2	2	2

3 - STRONG, 2 - MEDIUM, 1- LOW

Prepared by : Dr. A.S. Shaik Sindha

Checked by: Dr.S.Mahadevan Head of the Department

Semester - I	General Engl	24ULEN11				
LANG- II			L	T	Р	С
Hrs./Week: 6	Hrs./Semester : 90	Marks :100	6	-	-	3

To train learners to communicate effectively, think critically, and express themselves creatively.

Learning Objectives (LO)

LO	The learners will be able to :
LO – 1	Acquire self-awareness and develop positive thinking which are
	required in various situations.
LO – 2	Develop the attribute of empathy
LO – 3	Acquire creative and critical thinking skills
LO – 4	Learn the basics of grammar
LO – 5	Develop Listening, Speaking, Reading and Writing (LSRW) skills

Unit - I

The Skill-focused: Self-Awareness and Positive Thinking Autobiography

- 1. I am Malala (Chapter 1) by Malala Yousafzai.
- 2. *The Story of My Experiments with Truth* (Chapters 1, 2 and 3) by M.K.Gandhi.

Poetry

- 1. "Where the Mind is Without Fear" (*Gitanjali*, Verse 35) by Rabindranath Tagore
- 2. "Love Cycle by Chinua Achebe"

Unit – II

The Skill Focused: Empathy

Poetry

- 1. "Nine Gold Medals" David Roth
- 2. "Alice Fell or Poverty" William Wordsworth

Short Story

- 1. The School for Sympathy E.V. Lucas
- 2. Barn Burning William Faulkner

Unit – III

The Skills Focused:Critical and Creative Thinking Poetry

- 1. "The Things That Haven't Been Done Before" Edgar Guest
- 2. "Stopping by the Woods on a Snowy Evening" Robert Frost

Readers Theatre

- 1. The Magic Brocade A Tale of China
- 2. "Three Sideway Stories from Wayside School" by Louis Sachar adapted from the book *Stories on Stage* by Aaron Shepard.

Unit – IV

Parts of Speech

- 1. Articles
- 2. Noun
- 3. Pronoun
- 4. Verb
- 5. Adverb
- 6. Adjective
- 7. Preposition

Unit – V

Paragraph and Essay Writing

- 1. Descriptive
- 2. Expository
- 3. Persuasive
- 4. Narrative

Reading Comprehension

Types of Reading: Extensive and Intensive Reading

Vocabulary Building

Critical text analysis

Deep reading (Pages 72 to 84 from TANSCHE Syllabus - 2022)

Textbooks

- 1. Malala Yousafzai. I am Malala, Little, Brown and Company, 2013.
- 2. M.K. Gandhi. An Autobiography or The Story of My Experiments with Truth (Chapter – I), Rupa Publications, 2011.
- 3. Rabindranath Tagore. "Gitanjali 35" from *Gitanjali* (Song Offerings): A Collection of Prose Translations made by the Author from the Original Bengali. Mac Millan, 1913.
- 4. N. Krishnasamy, *Modern English: A Book of Grammar, Usage and Composition*, Macmillan, 1975.
- 5. Aaron Shepard. Stories on Stage, Shepard Publications, 2017.
- 6. J.C. Nesfield. *English Grammar, Composition and Usage*, Macmillan, 2019.

Web Sources

- 1. Malala Yousafzai. I am Malala (Chapter 1) https://archive.org/details/i-am-malala.
- 2. M.K Gandhi. An Autobiography or The Story of My Experiments with Truth (Chapter-1)-Rupa Publication, 2011. https://www.indiastudychannel.com/resources/146521-Book-

Review-An-Autobiography-or-The-story-of-my-experiments-with-Truth.aspx

- 3. Rabindranath Tagore. "Gitanjali 35" from Gitanjali (Song Offerings) https://www.poetryfoundation.org/poems/45668/gitanjali-35
- 4. Aaron Shepard.Stories on Stage, Shepard Publications, 2017. https://amzn.eu/d/9rVzlNv
- 5. J C Nesfield. Manual of English Grammar and Composition.<u>https://archive.org/details/in.ernet.dli.2015.44179</u>

CO	Upon completion of this course,	PSOs	Cognitive
	students would have learned to:	Addressed	Level
CO-1	Understand self- awareness and	1,2,3	K1, K2
	positive thinking required in		
	various life situations		
CO-2	Acquire the attribute of empathy.	1,2,3,4	K2, K3
CO-3	Develop creative and critical	1,2,3,4	K3, K4
	thinking abilities.		
CO-4	Explain basic grammar, develop	2, 3	K4, K5
	and integrate the use of four		
	language skills (LSRW)		
CO-5	Compose original poems and	1,2,3,4	K5, K6
	personal narratives.		

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 - Creating

Relationship Matrix

Semester	Cours	e Cod	e 1	litle of	the C	ourse	H	Iours		Credi	its																														
1	24U	LEN1	L	Genera	l Eng	lish 1		90		3																															
Course	Pr	ogram	me (Outcon	nes (P	Os)		Progra	amme	Specifi	с																														
Outcomes								Oute	comes	(PSOs)																															
(COs)	РО	PO	PO PO PO PO PO PSO PSO PSO		PO PO PO PSO PSO PSO PSO		POPOPOPSOPSO	PO PO PO PO PSO PSO PSO		PO PO PO PO PSO PSO PSO		PO PO PO PO PSO PSO PSO		PO PO PO PO PSO PSO PS		O PO PO PO PSO PSO PSO P		PO PO PO PO PSO PSO P		PO PO PSO PSO PSO	PO PO PO PO PSO PSO PS		PO PO PO PO PSO PSO PSO		PO PO PO PO PSO PSO P		POPOPOPSOPSOPSOF		O PO PO PO PSO PSO PSO		PO PO PO PO PSO PSO P		PSO PSO PS		PO PO PSO PSO PSO		PSO PSO PSO PSO		PSO PSO		PSO
	1	2	3	4	5	6	1	2	3	4	5																														
CO1	3	3	3	1	2	3	3	3	3	3	3																														
CO2	3	3	3	1	2	3	3	3	3	1	1																														
CO3	3	3	1	3	3	2	3	3	3	1	1																														
CO4	3	3 3 1 2 1 3					3	3	3	3	3																														
CO5	3	3	3	3	3	2	3	3	3	3	3																														
	•	STD(2110		TITI	10 0		0.111	1																																

STRONG - 3, MEDIUM - 2 AND LOW - 1

Prepared by: Dr.L.Faustina Leo

Checked by Dr.S.Mohamed Haneef

Head of the Department

Semester – I	C Program	24UCIT11					
Core-I		L	Т	P	C		
Hrs./Week: 5	Hrs./Semester: 75	Marks :100	5	-	-	5	

Train the students in C Programming language and its basic concepts to provide exposure to problem-solving through hands-on experience.

Learning Objectives:

LO No.	The learners will be able to											
LO-1	Understand the fundamentals of C programming.											
LO-2	Develop programming code, compile and test C programs.											
LO-3	Comprehensive understanding of to effectively define, declare, and use user-defined functions and nested functions.											
LO-4	Sketch reusable modules such as function, structure and union.											
LO-5	Proficiently use of pointers and file management.											

Unit I Studying Concepts of Programming Languages

Language Evaluation Criteria-Language design-Language Categories-Implementation Methods – Programming Environments - Overview of C: History of C- Importance of C- Basic Structure of C Programs-Executing a C Program-Constants, Variables and Data types - Operators and Expressions -Managing Input and Output Operations

Unit II Decision Making and Branching:

Decision Making and Looping - Arrays - Character Arrays and Strings

Unit III User Defined Functions:

Elements of User Defined Functions- Definition of Functions- Return Values and their Types- Function Call- Function Declaration- Categories of Functions-Nesting of Functions-Recursion

Unit IV Structures and Unions:

Introduction- Defining a Structure- Declaring Structure Variables Accessing Structure Members- Structure Initialization-Arrays of Structures-Arrays within Structures-Unions-Size of Structures. **Unit V Pointers:** Understanding Pointers- Accessing the Address of a Variable- Declaring Pointer Variables- Initializing of Pointer Variables-Accessing a Variable through its Pointer-Chain of Pointers- Pointer Expressions- Pointer and Scale Factor- Pointer and Arrays- Pointers and Character Strings- Array of Pointers- Pointer as Function Arguments-Functions Returning Pointers- Pointers to Functions- **File Management**

in C

Textbooks

- 1. Robert W. Sebesta, (2012), Concepts of Programming Languages, Fourth Edition, Addison Wesley (UnitI:Chapter-1)
- 2. E. Balaguruswamy, (2010), —Programming in ANSI CI, Fifth Edition, Tata McGraw Hill Publications

Reference Books

- 1. Ashok Kamthane, (2009), —Programming with ANSI & Turbo C I, Pearson Education
- 2. Byron Gottfried, (2010), —Programming with CI, Schaums Outline Series, Tata McGraw Hill Publications

СО	Upon completion of the course, the	PSO	Cognitive
No.	students will be able to:	Addressed	Level
CO-1	Classifythe different types of	1,2	K2
	operators and expressions to bring out		
	the essentials of decision making		
CO-2	Apply their knowledge to design and	1,2	K3
	develop the concept of user defined		кэ
	functions.		
CO-3	Apply an object-oriented approach to	1,2	K3
	develop applications in various		KO
	complications.		
CO-4	Students will be able to define, declare,	1,2,6	K3
	and manipulate structures and unions,		
	including arrays within structures and		
	understand their memory implications.		
CO-5	Apply their knowledge to design and	1,2,6	K3
	develop the concept of pointers and		
	functions.		

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	C	Course Code				Title of the Course			ours	Credits		
I		24UC	CIT11		C PR	OGRA	MMIN	IG	75	5		
Course Outcomes	Pr	Programme Outcomes (POs) Outcomes (PSOs										
(COs)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	
CO -1	3	2	1	1	3	2	2	3	3	1	3	
CO -2	3	3	2	1	3	3	2	2	1	1	3	
CO -3	3	3	2	1	3	3	3	3	2	2	3	
CO -4	3	3	2	1	3	3	3	3	3	2	3	
CO -5	3	3	2	2	3	3	3	3	3	2	3	
			STI	RONG	i (3), I	IEDIU	M (2)	and L	OW (1)			

Prepared by: Mr. M.H.Ibrahim

Checked by: Mr. M.H.Ibrahim Head of the Department

Semester – I	C PROGRAMMING	24UCIT1P				
Core-IP			L	T	P	C
Hrs./Week: 3	Hrs./Semester : 45	Marks :100	-	-	3	3

Train the students to develop code in C Programming language by exposing them to solve real-time problems.

Learning Objectives:

LO	The learners will be able to:											
LO -1	Learn to effectively handle user input and display output using											
	standard I/O functions in C programming.											
LO -2	Understand and apply conditional statements to control program											
	flow and make decisions based on specific conditions.											
LO -3	Gain the ability to use command line arguments to pass inputs to											
	programs and manage them effectively within their code.											
LO -4	learn to create, manipulate, and perform operations on arrays and											
	strings, including advanced string manipulation techniques											
LO-5	develop the skills to write modular code using functions,											
10 0	implement recursive algorithms, utilize pointers, manage files, and											
	work with structures and unions for efficient data handling.											

- 1. Programs using Input/output functions
- 2. Programs on conditional structures
- 3. Command Line Arguments
- 4. Programs using Arrays
- 5. String Manipulations
- 6. Programs using Functions
- 7. Recursive Functions
- 8. Programs using Pointers
- 9. Files
- 10. Programs using Structures & Unions

Text books

- 1. Robert W. Sebesta, (2012),-Concepts of Programming Languages, Fourth Edition, Addison Wesley (UnitI:Chapter-1)
- 2. E. Balaguruswamy, (2010), --Programming in ANSICI, Fifth Edition, Tata McGraw Hill Publications.

Reference Books

1. Ashok Kamthane, (2009), —Programming with ANSI & Turbo C I,Pearson Education 2. Byron Gottfried, (2010), -Programming with CI, Schaums Outline Series, Tata McGraw Hill Publications

Co.No	Upon completion of the course, the	PSO	Cognitive
00.110	students will be able to:	Addressed	level
CO- 1	Recall the syntax and usage of	1,2	K2
	input/output functions and conditional		
	structure in programming languages		
	Utilize command-line arguments to	1,2	
CO- 2	enhance program functionality		K3
	implement algorithms using arrays to		
	manipulate data efficiently in programs.		
CO- 3	Assess and optimize algorithms for string	1,2	K4
	manipulations and improve performance		
	of user defined function		
CO- 4	Develop programs using functions and	1,2	K6
	recursions.		
CO- 5	Build knowledge to construct structure	1,2	K6
	and union in C.		

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	-	Course Code		T	itle o	f the c	course		Hours	; Cre	edits
I	24U	CIT1P		Progr	amm	ing P	ractica	ls	45		3
Course Outcomes	Prog	gramn	ne O	utcor	nes (l	POs)	P	-		Specifi (PSOs)	
(COs)	PO 1	PO 2	PO 3	РО 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO-1	3	2	1	1	3	2	2	3	3	1	3
CO-2	3	3	2	1	3	3	2	2	1	1	3
CO-3	3	3	2	1	3	3	3	3	2	2	3
CO-4	3	3	2	1	3	3	3	3	3	2	3
CO-5	3	3	2	2	3	3	3	3	3	2	3
			STE	RONG	(3), I	MEDIU	JM (2) a	and LO	OW (1)	1	

Prepared by: Mr. M.H.Ibrahim

Checked by: Mr. M.H.Ibrahim

Head of the Department

Semester – I		Mathematics and Graph					
EC-I (Allied)	Theory	L	Т	P	C		
Hrs./Week: 6	Hrs./Semester : 90	Marks :100	5	1	-	5	

To apply logical reasoning to solve a variety of real life problems and analyze the basic discrete structures and algorithms.

Learning Objectives:

LO	The learners will be able to:
LO-1	Recall the basic concepts of relations.
LO-2	Know the concept of functions
LO-3	Use logical reasoning to solve a variety of problems.
LO-4	Interpret the various types of matrices
LO-5	Analyze the operations on graphs

UNIT I: Introduction to Relations – Binary relation – Classification of Relations – Composition of Relations – Inverse of Relation – Closure operation on Relations – Matrix representation of Relation.

UNIT II: Introduction to Functions – Addition and Multiplication of Functions - Classifications of Functions – Composition of Function– Inverse Function.

UNIT III: Introduction – Statement (Propositions) – Laws of Formal Logic – Basic Set of Logical operators/operations - Propositions and Truth Tables – Algebra Propositions – Tautologies and Contradictions.

UNIT IV : Introduction – Definition of a Matrix - Types of Matrices – Operations on Matrices – Related Matrices–Transpose of a Matrix – Symmetric and Skew-symmetric Matrices – Determinant of a Matrix – Typical Square Matrices – Adjoint and Inverse of a Matrix – Singular and Non-singular Matrices – Adjoint of a Square Matrix–Properties of Adjoint of a Matrix–Properties of Inverse of a Matrix.

UNIT V: Introduction – Graph and Basic Terminologies – Types of Graphs – Sub Graph and Isomorphic Graph –Operations on Graphs –Representation of Graph.

Text Book:

Discrete Mathematics, Swapan Kumar Chakrabory and Bikash Kanti Sarkar, Oxford University Press 2011.

Unit I : Chapter 1 (Section 1.11-1.15, 1.17,1.18)

Unit II : Chapter 1 (Section 1.23-1.27)

Unit III : Chapter 3 (Section 3.1-3.6, 3.8)

Unit IV: Chapter 5 (Section 5.1-5.4, 5.5(5.5.1,5.5.2), 5.6-5.9)

Unit V : Chapter 9 (Section 9.1 - 9.6)

Reference Books:

- 1. Discrete Mathematics, Seymour Lipschutz and Marc Lars Lipson, Third Edition Tata McGraw Hill Education Private Limited.
- 2. Discrete Mathematical Structures with Applications to Computer Sciece, J.P. Tremblay, R. Manohar, TMH Edition.

Course Outcomes

со	Upon completion of the course, the students will be able to:	PSOs Addressed	Cognitive Level
CO-1	Understand the concept of relations and their types	3,5	K2
CO-2	Understand the concept of functions	3,5	K2
CO-3	Apply logical reasoning to solve a variety of problems.	3,5	K3
CO-4	Analyze the various types of matrices and its properties	3,5	K4
CO-5	Identify the isomorphic graphs and represent the graphs	3,5	K3

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing;

K5 – Evaluating; K6 – Creating

SemesterCourse CodeI24UAMA14		Di	screte	e of th e Matl raph (ıd	Hours 90	s Cre	Credits 5			
Course		Progr		e Outo Os)			P	-	mme S omes (-	
Outcomes (COS)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO-1	3	3	3	2	-	-	_	-	3	_	3
CO-2	3	3	3	1	-	-	-	-	3	-	3
CO-3	3	3	3	3	-	-	-	-	3	-	3
CO-4	3	3	3	2	-	-	-	-	3	-	3
CO-5	3	3	3	3	-	-	-	-	3	_	3

Relationship Matrix

STRONG (3), MEDIUM (2) and LOW (1)

Prepared by: Mr. V.P. Asan Nagoor Meeran Verified by: Dr. S. Firthous Fatima Head of the Department

Semester – I	INTRODUCTION	24UNIT11				
SEC-I (NME)			L	T	P	C
Hrs./Week: 2	Hrs./Semester : 30	Marks :50	2	-	-	2

The Objective of the course is to orient students about internet, WWW and gain proficiency in using basic HTML tags and attributes.

Learning Objectives:

LO	The learners will be able to:
LO-1	Understand the fundamentals of the Internet and web browsing
LO-2	Learn to structure HTML documents using the basic tags.
LO-3	Develop proficiency in creating various types of lists and visually appealing web pages.
LO-4	Learn advanced table formatting techniques, including table and cell
	alignment
LO-5	Understand the concept and usage of frames and forms in HTML

Unit- I

Introduction : Web Basics: What is Internet–Web browsers–What is Webpage –HTML Basics: Understanding tags

Unit- II

Tags for Document structure (HTML, Head, Body Tag). Block level text elements: Headings paragraph(tag)–Font style elements:(bold, italic, font,small, strong, strike, big tags).

Unit- III

Lists: Types of lists: Ordered, Unordered – Nesting Lists–Other tags:Marquee, HR, BR – Using Images – Creating Hyperlinks.

Unit- IV

Tables: Creating basic Table, Table elements, Caption–Table and cell alignment – Rowspan, Colspan – Cell padding.

Unit- V

Frames: Frameset–Targeted Links–Noframe–Forms: Input, Text area, Select, Option.

Textbooks

1. "Mastering HTML5 and CSS3 Made Easy", Teach UComp Inc., 2014.

2. Thomas Michaud, "Foundations of Web Design: Introduction to HTML & CSS"

Web Resources

1. <u>https://www.teachucomp.com/samples/html/5/manuals/Mastering-</u> <u>HTML5-CSS3.pdf</u>

2. <u>https://www.w3schools.com/html/default.asp</u>

Course Outcomes

CO No.	Upon completion of the course, the students will be able to:	PSOs Addressed	Cogniti ve Level
CO-1	Understand the fundamentals of the Internet, functionality of web browsers, significance of HTML tags and web pages.	3,5	K2
CO-2	Explain the structure and purpose of HTML tags and elements in web document creation.	3,5	K2
CO-3	Use HTML tags to create structured web pages with headings, paragraphs, lists, tables, and forms.	3,5	K3
CO-4	Analyze the role of different HTML elements in enhancing the presentation and functionality of web pages.	3,5	K4
CO-5	Design and implement a multi-frame web layout and an interactive form using HTML.	3,5	K6:

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Semester	C	ode	,	Title o	of th	e cou	Hour		rs Credits		
Ι	24U	UNIT1	.1	INTR	ODU	JCTIC	ON TO	HTML	, 30)	2
Course Outcomes	Р	rogra		ne Out POs)	com	es	Progr	amme	Specif (PSOs)		comes
(COs)	PO 1	PO 2	РО 3	PO 4	РО 5	PO 6	PSO1	PSO2	PSO3	PSO4	PSO5
CO-1	3	2	1	1	3	1	3	1	2	1	1
CO-2	3	2	1	1	3	1	3	1	3	1	1
CO-3	3	3	2	1	3	1	3	2	3	2	1
CO-4	3	3	2	1	3	1	3	2	3	2	1
CO-5	3	3	2	1	3	1	3	2	3	2	1

Prepared by: Mrs.W.Fathima Farsana

Checked by: Mr. M.H.Ibrahim

Head of the Department

Semester – I	Fundamentals of	2	L			
FC	-	L	T	Ρ	C	
Hrs./Week: 2	Hrs./Semester : 30	Marks :50	2	-	-	2

To understand the fundamentals of computer system, software, languages, and problem solving techniques

Course Objectives

	5
LO	The learners will be able to:
LO-1	Understand the anatomy and architecture of digital computer.
LO-2	Comprehend computer software and languages
LO-3	To analyze a problem with appropriate problem solving techniques
LO-4	To understand the main principles of imperative, functional and logic
LO-4	oriented programming languages
LO-5	To increase the ability to learn new programming languages

UNIT I - Introduction: Characteristics of Computers-Evolution of Computers - **Basic Computer Organization:** I/O Unit - Storage Unit-Arithmetic Logic Unit - Control Unit - Central Processing Unit

UNIT II - Computer Software: Types of Software - System Architecture **Computer Languages:** Machine Language - Assembly Language - High Level Language - Object Oriented Languages

UNIT III – Problem Solving Concepts: Problem Solving in Everyday life - Types of Problems - Problem solving with computers - Difficulties with Problem Solving

UNIT IV – Problem Solving concepts for the computer: Constant Variables - Data Types - Functions -Operators - Expressions and Equations

- **Organizing the Solution:** Analyzing the problem - Algorithm -Flowchart - Pseudo code

UNIT V – Programming Structure: Structuring a solution - Modules and their function - Local and Global variables - Parameters - Return values - Sequential Logic Structure - Problem solving with Decision- Problem Solving with Loops

Textbooks:

- Pradeep K.Sinha and Priti Sinha, —Computer Fundamentals, Sixth Edition, BPB Publications. (2004) (Unit I : Chapter 1 & 2, Unit II : Chapter 10 & 12).
- Maureen Sprankle and Jim Hubbard, —Problem Solving and Programming Concept, Ninth Edition, Prentice Hall. (2009) (Unit III: Chapter 1,2 &3) Unit IV : Chapter 3, Unit V : Chapter 4,5 ,6,7 & 8)

Reference Books:

1. R.G. Dromey, -How to Solve it by Computer^{||}, Prentice Hall International Series in Computer Science. (2007),

2. C. S. V. Murthy, –Fundamentals of Computers, Third Edition, Himalaya Publishing House. (2009).

CO	Upon completion of this course, students would have learned to:	PSOs Addressed	Cognitive Level
CO-1	Outline the Computer fundamentals and		K2
	various problem solving concepts in Computers	3,2	
CO-2	Describe the basic computer organization, software, computer languages, software development life cycle and the need of structured programming in solving a computer problem	3,2	K2
CO-3	Identify the types of computer languages, software, computer problems and examine how to set up expressions and equations to solve the problem.	3,2	K2
CO-4	Choose most appropriate programming languages, constructs and features to solve the problems in diversified domains.	3,2,5	K4
CO-5	Analyze the design of modules and functions in structuring the solution and various Organizing tools in problem solving.	3,2	K4

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	Cou	rse Co	de	Ti	tle o	f the	Cours	se	Hours		redits
I	FUNDAMENTALS OF COMPUTER							2			
								nme Specific mes (PSOs)			
(COs)	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO	PSO
	1	2	3	4	5	6	1	2	3	4	5
CO-1	3	2	1	2	3	3	3	1	3	1	3
CO-2	3	3	2	2	3	3	3	2	2	3	3
CO-3	3	3	2	2	3	3	3	3	2	1	3
CO-4	3	3	2	2	3	3	3	3	2	1	3
CO-5	3 3 3			2 3 2		3 3		2	1	3	
			STRO	DNG (3), ME	DIU	M (2) a	and LC	DW (1)		•

Prepared by: Mrs.L.S.Subbu Lakshmi

Checked by: Mr. M.H.Ibrahim

Head of the Department

Semester – II	GRAMMA	AR	2	4UL	AR2	1
LANG – I			L	T	Р	С
Hrs./Week: 6	Hrs./Semester : 90	Marks :100	6	-	-	3

General Objective: To make the students to develop the skill of basic Arabic Grammar and Translation skills from Arabic to English vice-versa.

Learning Objectives

LO	The learners will be able to:
LO 1	Understand basic Arabic grammar.
LO 2	Understand the correct usage of Arabic grammar.
LO 3	Employ sentence making.
LO 4	Enhance vocabulary.
LO 5	Improve reading and writing skills.

الغة العربية الأساسية، الدكتور سيد رحمة الله، رئيس سابق لقسم اللغة العربية، الكلية الجديدة،
 شنائي

Basic Arabic Grammar, By Dr. Syed Rahmathullah

Reference Books:

النحو الواضح – علي الجارم ومصطفى أمين دليل النحو الواضح – الدكتور بشير أحمد جمالي سهل العوامل _ الدكتور تاج الدين المناني النحو الميسر للكبار والصغار – علي محمود عقيلي القواعد التطبيقية في اللغة العربية – الدكتور نديم دعكور

www.alnahw.com

Course Outcomes

CO	Upon completion of this course, students would have learned to:	PSOs Addressed	Cognitive Level
CO-1	Able to use basic grammatical structure.	PSO-1,2,4	K2
CO-2	Develop reading skills and reading speed	PSO-1,2	К2
CO-3	Acquire new vocabulary in Arabic	PSO-1,2,3	КЗ
CO-4	Understand the different types of sentences.	PSO-1,2,3	K4
CO-5	Able to construct simple sentences in Arabic	PSO-1,2,5	K5

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Semester	Cour	se Co	de		Title of the Course				Ho	ours	Credits
II	24Ŭ	LAR2	AR21 GRAMMAR 90							3	
Course Outcomes (COs)	Prog	ramm	e Ou	tcom	es (P	s (POs) Programme Specific Outcomes (PSOs)					omes
(COS)	РО 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO1	PSO2	PSO3	PSO4	PSO5
CO-1	3	2	2	2	2	2	3	2	2	2	1
CO-2	2	2	2	3	1	3	2	2	2	3	1
CO-3	3	3	3	2	2	1	3	3	3	2	2
CO-4	3	3	2	3	3	2	3	3	2	3	3
CO-5	2	2	1	2	3	2	2	2	1	2	3

Relationship Matrix

STRONG - 3, MEDIUM - 2, LOW - 1

Prepared by : Dr. J. Ubaiyathulla

Checked by: Dr. J. Ubaiyathulla Head of the Department

Semester - II	பொதுத்தமிழ்	24ULTA21				
LANG – I	தமிழ் இலக்கிய எ	L	Т	Р	С	
Hrs./Week: 6	Hrs./Semester : 90	6	-	-	3	

- தமிழ் இலக்கியப் போக்குகளையும் இலக்கணங்களையும் மாணவர் .
- அறியுமாறு செய்து அவர்களின் படைப்பாற்றலைத் தூண்டுதல்
- தமிழ் இலக்கியம் சார்ந்த போட்டித் தேர்வுகளுக்கு ஏற்ப கற்பித்தல்.
- நடைமுறைகளை மேற்கொள்ளுதல்

Learning Objectives:

LO	The Learners will be able to:				
LO - 1	சிற்றிலக்கியங்களின் வழி இலக்கியச் சுவையினையும் பண்பாட்டு				
LO - 1	அறிவினையும் பெறுதல்				
LO - 2	LO - 2 புதுக்கவிதை வரலாற்றினை அறிந்து கொள்வர்				
	திராவிட இயக்க இலக்கியங்களைக் கற்பதன் மூலம் மொழி				
LO - 3	உணர்வு , இன உணர்வு, சமத்துவம் சார்ந்த சிந்தனைகளை				
	ஊட்டுதல்				
LO - 4	தமிழ்மொழியைப் பிழையின்றி எழுதவும், புதிய கலைச்சொற்களை				
LO - 4	உருவாக்கவும் அறிந்து கொள்ளுதல்				
	போட்டித் தேர்வுகளில் வெற்றி பெறுவதற்குத் தமிழ்ப் பாடத்தினைப்				
LO - 5	பயன்கொள்ளும் வகையில் மேடைப்பேச்சு மற்றும் கட்டுரை, கதை				
	எழுதுவதற்கு பயிற்சி பெறுதல்.				

அலகு 1 தமிழ் இலக்கிய வரலாறு அறிமுகம்

- சிற்றிலக்கியம் குறவஞ்சி, கலம்பகம், உலா, பரணி, பள்ளு, பிள்ளைத்தமிழ், தூது, அந்தாதி.
- 2. தனிப்பாடல் அறிமுகம்.
- இக்கால இலக்கியம், கவிதை, சிறுகதை, நாடகம், உரைநடை, திராவிட இயக்கம் வளர்த்த தமிழ்

அலகு 2 சிற்றிலக்கியமும் தனிப்பாடலும் சிற்றிலக்கியம்

- கலிங்கத்துப் பரணி- விருந்தினரும் வறியவரு நெருங்கி யுண்ணரும் -முதல் - கேட்பாரைக் காண்மின் காண்மின் வரை.
- 2. திருக்குற்றாலக் குறவஞ்சி வானரங்கள் கனிகொடுத்து.
- 3. முக்கூடற் பள்ளு ஆற்று வெள்ளம் நாளை வரத்.

- அபிராமி அந்தாதி- கலையாத கல்வியும் குறையாத வயதும் (பதினாறு செல்வங்கள்).
- திருவரங்கக் கலம்பகம் மறம் -பிள்ளைப் பெருமாள் ஐயங்கார்-பேசவந்த தூத செல்லரித்த ஒலை செல்லுமோ.
- 6. தமிழ்விடு தூது முதல் பத்து கண்ணிகள்

தனிப்பாடல்

- 1. வான்குருவியின் கூடு ஒளவையார்
- ஆமணக்குக்கும் யானைக்கும் சிலேடை முத்திருக்கும் கொம்பசைக்கும் மூரித்தண்டே - காளமேகப் புலவர்
- 3. இம்பர் வான் எல்லை இராமனையே பாடி வீரராகவர்
- 4. நாராய் நாராய் சத்தி முத்தப் புலவர்

அலகு 3 இக்கால இலக்கியம் - 1

- 1. பாரதியார் பாரத சமுதாயம் வாழ்கவே
- 2. பாரதிதாசன் சிறுத்தையே வெளியில் வா
- 3. நாமக்கல் கவிஞர்- கத்தியின்றி
- 4. தமிழ் ஒளி மீன்கள் (அந்தி நிலா பார்க்க வா)
- 5. ஈரோடு தமிழன்பன் எட்டாவது சீர் (வணக்கம் வள்ளுவ)

சிறுகதைகள்

- 1. புதுமைப்பித்தன் கடிதம்
- 2. ஜெயகாந்தன் வாய்ச் சொற்கள் (மாலை மயக்கம் தொகுப்பு)
- 3. ஆர். சூடாமணி அந்நியர்கள்

உரைநடை

1. மு வ கடிதங்கள் - தம்பிக்கு நூலில் முதல் இரண்டு கடிதங்கள்

அலகு 4 இக்கால இலக்கியம் - 2

- 1. தந்தை பெரியார் திருக்குறள்(மாநாட்டு) உரை
- 2. பேரறிஞர் அண்ணா இரண்டாம் உலகத் தமிழ் மாநாட்டு உரை
- கலைஞர் மு. கருணாநிதி தொல்காப்பிய பூங்கா –எழுத்து -முதல் நூற்பா கட்டுரை

நாடகம் - திரைத்தமிழ்

- 1. வேலைக்காரி –திரைப்படம்
- 2. ராஜா ராணி -சாக்ரடீஸ் -ஒரங்க நாடகம்

இதழியல் தமிழ்:

முரசொலி கடிதம்

1. செம்மொழி வரலாற்றில் சில செப்பேடுகள்

அலகு 5 மொழிப் பயிற்சி

சொல் வேறுபாடு / பிழை தவிர்த்தல் ரகர – றகர வேறுபாடுகள் நகர – ணகர – னகர வேறுபாடுகள் லகர – ளகர – ழகர வேறுபாடுகள்

பாட நூல்:

பதிப்பாசிரியர் முனைவர் ச.மகாதேவன், பொதுத்தமிழ் 2,

சதக்கத்துல்லாஹ் அப்பா கல்லூரி வெளியீடு 2024 — 2025(முதற் பதிப்பு). பார்வை நூல்கள் :

1. மு. வரதராசன், தமிழ் இலக்கிய வரலாறு, சாகித்ய அகாதெமி,

புதுடெல்லி.

2. மது. ச. விமலானந்தன், தமிழ் இலக்கிய வரலாறு, மீனாட்சி புத்தக

நிலையம், மதுரை.

3. தமிழண்ணல், புதிய நோக்கில் தமிழ் இலக்கிய வரலாறு, மீனாட்சி

புத்தக நிலையம், மதுரை.

4. தமிழ் இலக்கிய வரலாறு – முனைவர்.சிற்பி பாலசுப்ரமணியம்,

முனைவர்.சொ.சேதுபதி

5. புதிய தமிழ் இலக்கிய வரலாறு – முனைவர்.சிற்பி பாலசுப்ரமணியம்,

நீல.பத்மநாபன்

- 6. தமிழ் இலக்கிய வரலாறு டாக்டர்.அ.கா.பெருமாள்
- 7. தமிழ் இலக்கிய வரலாறு முனைவர். ப.ச.ஏசுதாசன்
- 8. தமிழ் இலக்கிய வரலாறு றீகுமார்
- 9. வகைமை நோக்கில் தமிழ் இலக்கிய வரலாறு பாக்கியமேரி.
- 10. தமிழ் பயிற்றும் முறை, பேராசிரியர் ந. சுப்புரெட்டியார் மணிவாசகர் பதிப்பகம், சிதம்பரம்
 - <u>https://www.chennailibrary.com/</u>
 - https://www.sirukathaigal.com
 - https://www.tamilvirtualuniversity.org
 - https://www.noolulagam.com
 - https://www.katuraitamilblogspot.com

CO	Upon completion of this course, students	PSO	Cognitive
	will be able to	Addressed	Level
CO-1	சிற்றிலக்கியங்களின்வழி இலக்கியச்	2,4	K2, K3
	சுவையினையும் பண்பாட்டு அறிவினையும்		
	பெறுவர்		
CO-2	புதுக்கவிதை வரலாற்றினை அறிந்து கொள்வர்	1,4	K2
CO-3	திராவிட இயக்க இலக்கியங்களைக் கற்பதன்	2,4,5	K4,K5
	மூலம் மொழி உணர்வு, இன உணர்வு,		
	சமத்துவம் சார்ந்த சிந்தனைகளைப் பெறுவர்		
CO-4	தமிழ்மொழியைப் பிழையின்றி எழுதவும், புதிய	1,3	K3,K6
	கலைச்சொற்களை		
	உருவாக்கவும் அறிந்து கொள்வர்		
CO-5	போட்டித் தேர்வுகளில் வெற்றி பெறுவதற்குத்	1,2,3,4	K4, K6
	தமிழ்ப் பாடத்தினைப் பயன்கொள்ளும்		
	வகையில் மேடைப்பேச்சு மற்றும் கட்டுரை,		
	கதை எழுதுவதற்கு பயிற்சி பெறுவர் பயிற்சி		
	பெறுவர்.		
	K1-Remembering: K2 – Understanding: K3 - Applyir	ng. K4 Analyz	ing

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

			-		ionsi.	- I					
Semester		ourse ode		Title of the Course					Hou	rs C	redits
II	24UI	LTA21	த	ந்றிழ்	இலக்	കിധ ര	வரலாற	J - 2	90		3
Course	Pro	gramn	ne Ou	tcom	es (P	Os)	Prog	ramme	Specifi	ic Out	comes
Outcomes		-					_	((PSOs)		
(COs)	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO	PSO
	1	2	3	4	5	6	1	2	3	4	5
CO-1	3	2	3	3	3	2	2	2	3	2	3
CO-2	3	3	2	2	2	3	2	3	3	2	2
CO-3	3	2	3	3	2	2	2	3	2	3	3
CO-4	3	3	3	2	2	2	3	2	3	2	2
CO-5	3	3	2	2	2	3	3	2	2	2	2
	3 STRONC 2 MEDIUM 1 LOW										

Relationship Matrix

3 - STRONG, 2 - MEDIUM, 1- LOW

Prepared by : Dr. A.S. Shaik Sindha

Checked by: Dr.S.Mahadevan Head of the Department

Semester - II	General Eng	24ULEN21				
LANG – II			L	Т	Р	С
Hrs./Week: 6	Hrs./Semester : 90	Marks :100	6	-	-	3

To teach the four skills viz. Listening, Speaking, Reading and Writing to train the students the skills necessary for social and academic interactions.

LO	The learners will be able to:
LO-1	To make students realize the importance of resilience
LO-2	To enable them to become good decision makers
LO-3	To enable them to develop problem-solving skills
LO-4	To enable them to use tenses appropriately
LO-5	To help them use English effectively at workplace.

Learning Objectives (LO)

Unit – I

The Skill Focussed: Resilience

Poetry

1. "Don't Quit" – Edgar A. Guest

2. "Still Here" - Langston Hughes

Short Story

3 Engine Trouble – R.K. Narayan

4 Rip Van Winkle – Washington Irving

Unit – II

The Skill Focussed: Decision Making

Short Story

- 1. The Scribe Kristin Hunter
- 2. The Lady or the Tiger Frank Stockton

Poetry

- 3. "The Road not Taken" Robert Frost
- 4. "Snake" D. H Lawrence

Unit – III

The Skill Focussed: Problem Solving

Autobiography

- 1. How I taught My Grandmother to Read Sudha Murthy
- 2. How Frog Went to Heaven A Tale of Angolo
- 3. Wings of Fire (Chapters 1,2,3) by A.P.J Abdul Kalam

Unit – IV

Grammar

Tenses

- 1. Present
- 2. Past
- 3. Future
- 4. Concord

Unit - V

English in the Workplace

- 1.e-mail Invitation, Enquiry, Seeking Clarification
- 2. Circular
- 3. Memo
- 4. Minutes of the Meeting

Textbook:

1. Board of Editors. General English – II. Tamil Nadu State Council for Higher Education (TANSCHE). Chennai: 2024.

Reference Books:

- 1. Martin Hewings, *Advanced English Grammar*, Cambridge University Press, 2000.
- 2. SP Bakshi, Richa Sharma, *Descriptive English*, Arihant Publications (India) Ltd., 2019.
- 3. Sheena Cameron, Louise Dempsey, *The Reading Book: A Complete Guide to Teaching Reading*, S&L. Publishing, 2019.
- 4. Barbara Sherman, *Skimming and Scanning Techniques*, Liberty University Press, 2014.
- 5. ShaikhMoula, Communication Skills: A Practical Approached.
- 6. Ramendra Kumar, Stories of Resilience, Blue Rose Publications, 2020.

CO	Upon completion of this course,	PSO	Cognitive
	students will be able to	Addressed	Level
CO-1	Understand the importance of resilience	1, 2, 4	K1, K2
CO-2	Acquire knowledge to make good decisions	1, 2, 3, 4	K2, K3
CO-3	Develop problem-solving skills	1, 2, 3, 4	K3, K4
CO-4	Evaluate the uses of tenses in English	1, 2, 3	K4, K5
CO-5	Use English effectively at the workplace.	2, 4, 5	K5, K6

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	Cou	ırse (Code	1	fitle o	of the	e Cours	se	Hours	Cr	edits
II	24	24ULEN21 General English - II 90 3									
Course Outcome	Prog	Programme Outcomes (POs) Programme Spec Outcomes (PSO								_	ic
s (COs)	PO	PO	PO	PO	PO	PO	PSO	PS	PSO	PSO	PSO
	1	2	3	4	5	6	1	0	3	4	5
								2			
CO-1	3	3	1	3	1		1	3	3	3	1
CO-2	3	3	3	3	2		3	3	3	3	2
CO-3	3	3	3	3	1		3	3	3	3	1
CO-4	3	3	3	2	1		3	3	3	1	2
CO-5	1	3	2	3	3		3	3	3	3	3
		STRONG – 3, MEDIUM – 2, LOW – 1									

Prepared by : Dr.L.Faustina Leo

Checked by: Dr. S. Mohamed Haneef Head of the Department

Semester – II	Object Oriented Programming using 240					L
Core-II	C++	L	Т	P	C	
Hrs./Week: 5	Hrs./Semester: 75	Marks :100	5	-	-	5

General Objective

To introduce the fundamental concepts and principles of Object-Oriented Programming (OOP) using C++, enabling students to design, develop, and manage software solutions effectively through understanding key OOP paradigms, using UML, and mastering advanced features like inheritance, polymorphism, templates, and exception handling.

Learning Objectives:

LO	The learners will be able to:
LO 1	Students will understand the basic concepts and benefits of Object-Oriented Programming (OOP) and learn to use UML for designing OOP-based applications in C++.
LO 2	Students will be able to understand C++ tokens, expressions, control structures, functions, including function overloading and classes and objects.
LO 3	Students will know about the use of constructors, destructors, and operator overloading in C++, and understand type conversions.
LO 4	Students will grasp different types of inheritance, use of virtual base and abstract classes, pointers, virtual functions, and the concept of polymorphism in C++.
LO 5	Students will be able to use templates for classes and functions, handle exceptions effectively, and understand the overloading of template functions in C++.

Unit I

OOP Paradigm – Concepts of OOP – Benefits of OOP - Object Oriented Languages – Applications of OOP – OOP Design: Using UML as a Design Tool Beginning with C++.

Unit II

Tokens, Expressions and Control Structures - Functions in C++ : Function Prototyping – Call by Reference - Return by Reference – Inline Function – Default Arguments – Const Arguments – Recursion – Function Overloading – Classes and Objects.

Unit III

Constructors and Destructors: Constructors – Parameterized Constructors – Multiple Constructors – Constructor with default Arguments – Copy Constructors – Dynamic Constructor – Destructors – Operator Overloading and Type Conversions: Operator Overloading – Overloading Unary Operators – Overloading Binary operators – Rules for Operator Overloading – Type Conversions.

Unit IV

Inheritance: Introduction – Types of Inheritance – Virtual Base Classes – Abstract Classes – Pointers - Virtual Function - Polymorphism

Unit V

Templates: Class Templates – Function Templates – Overloading of template Function – Exception Handling.

Textbook:

• E. Balaguruswamy, (2013), "Object Oriented Programming using C++", 6th Edition, Tata McGraw Hill.

Reference Books:

- Bjarne Stroustrup, "The C++ Programming Language", Fourth Edition, Pearson Education.
- Hilbert Schildt, (2009), "C++ The Complete Reference", 4th Edition, Tata McGraw Hill

СО	Upon Completion of the course, the students will be able to:	PSOs addressed	Cognitive level
CO 1	Understand and apply the fundamental principles and advantages of Object- Oriented Programming (OOP), and use UML for designing C++ applications.	1,3	K2
CO 2	Defining C++ tokens, expressions, control structures, functions, classes and objects, with proficiency in function Overloading.	1,3	K2
CO 3	Describe the concept of objects, constructors, destructors, operator overloading, and type conversions in C++.	1,3	K2
CO 4	Understand the various types of inheritance, use virtual and abstract classes, and apply pointers and polymorphism in C++ programs.	1,3	K2
CO 5	Use templates for classes and functions, handle exceptions in C++ programs, and overload template functions efficiently.	1,3	K3

Course Outcomes

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	Co	urse (Code	T	itle o	of the	Cours	se	Hour	s C1	redits
II	24	UCI	[21]		Obje	ct Or	iented		75		5
				Prog	gram	ming	using	C++			
Course		Progr	amm	e Ou	ltcon	nes]]	Progra	amme	Specif	ĩc
Outcomes			(F	Os)				Outo	comes	(PSOs)
(COs)	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO	PSO
	1	2	3	4	5	6	1	2	3	4	5
CO -1	3	2	1	1	3	2	2	3	3	1	3
CO -2	3	3	2	1	3	3	2	2	1	1	3
CO -3	3	3	2	1	3	3	3	3	2	2	3
CO -4	3	3	2	1	3	3	3	3	3	2	3
CO -5	3	3	2	2	3	3	3	3	3	2	3
		STRONG (3), MEDIUM (2) and LOW (1)									

Prepared by: Mr. M.H.Ibrahim

Checked by: Mr. M.H.Ibrahim Head of the Department

Semester – II	Object Oriented Prog	• •	2	24UC	IT2	P
Core-II-P	C++ Pract	ical	L	Т	P	С
Hrs./Week: 3	Hrs./Semester: 45	Marks :100	-	-	3	3

General Objective

To inculcate knowledge on Object-oriented concepts and programming using C++. Demonstrate the use of various OOPs concepts with the help of programs.

Learning Objectives:

LO	The learners will be able to:
LO 1	Understand the fundamentals of C++ programming structure
LO 2	Identify the basic features of OOPS such as classes, objects, polymorphism, inheritance
LO 3	Analyze the concept of inheritance with the understanding of early and late binding, usage of exception handling, constructors, destructors, generic programming and type conversions
LO 4	Determine the use of various data structures such as stacks, queues and lists to solve various computing problems in C++ by incorporating OOPS concepts.
LO 5	Develop a program in C++ with the concepts of object oriented programming to solve real-world problems.

Exercises

- 1. Working with Classes and Objects
- 2. Using Constructors and Destructors
- 3. Using Function Overloading
- 4. Using Operator Overloading
- 5. Using Type Conversions
- 6. Using Inheritance
- 7. Using Polymorphism
- 8. Using Console I/O
- 9. Using Templates
- 10. Using Exceptions

Course Outcomes

	Upon Completion of the course,	PSOs	
СО	the students will be able to:	addressed	Cognitive level
CO 1	Students will Understand the fundamentals of C++ programming structure	1,2	K2
CO 2	Students will be Identify the basic features of OOPS such as classes, objects, polymorphism,	1,2,5	K2
CO 3	inheritance Students will Analyze the concept of inheritance with the understanding of early and late binding, usage of exception handling, constructors, destructors, generic programming and	1,2	K4
CO 4	type conversions Determine the use of various data structures such as stacks, queues and lists to solve various computing problems in C++ by incorporating OOPS concepts.	1,2	K3, K4
CO 5	Develop a program in C++ with the concepts of object oriented programming to solve real-world problems.	1,2,5	K6

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating Relationship Matrix

Semester	Cour	se Co	ode	Title	e of t	he Co	urse		Ηοι	ırs (Credits	
II	241	UCIT2	2P	-	Object Oriented Programming using C++ Practicals					5	3	
Course Outcomes	Pro	ogran	ıme	Outco	omes	(POs)	Pro	gramn		e Specific utcomes (PSOs)		
(COs)	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSC	PSO	
	1	2	3	4	5	6	1	2	3	4	5	
CO -1	3	2	1	1	3	2	2	3	3	1	3	
CO -2	3	3	2	1	3	3	2	2	1	1	3	
CO -3	3	3	2	1	3	3	3	3	2	2	3	
CO -4	3	3	2	1	3	3	3	3	3	2	3	
CO -5	3	3	2	2	3	3	3	3	3	2	3	
		STRONG (3), MEDIUM (2) and LOW (1)										

Prepared by: Mr. M.H.Ibrahim

Checked by: Mr. M.H.Ibrahim

Head of the Department

Semester – II	Optimization T	24UAMA24				
EC-II (Allied)			L	Т	Ρ	C
Hrs./Week: 6	Hrs./Semester : 90	Marks :100	5	1	-	5

General Objectives:

- 1. To apply various optimization techniques for decision making.
- 2. To introduce the use of variables for formulating complex mathematical models in management, science and industrial applications

Learning Objectives:

LO	The learners will be able to:
LO-1	Understand the techniques of linear programming problems using the graphical method
LO-2	Evaluate optimal solution of Assignment problems using Hungarian method
LO-3	Explain the algorithm for Transportation problem and find the solution of Transportation Problems
LO-4	Understand the basic elements of queueing models.
LO-5	Identify the shortest distance and evaluating projects using CPM & PERT.

UNIT I : Introduction – Role of OR – Classification of Models – Principles of Modeling –Management – Applications of OR modeling in OR – General methods for solving OR models – Scope of OR. Linear Programming Problem: Formulation of LP problems – Graphical solution of LP problems – General formulation of LPP – Slack and Surplus variables – Standard form of LPP – Some important forms of LPP.

UNIT II: Assignment Problem: Mathematical formulation – Hungarian method – Unbalanced assignment problem – Various types

UNIT III: Transportation Model: Mathematical formulation – Matrix form – Methods for finding initial Basic Feasible solution and optimal solution – Degeneracy in Transportation Problems – Unbalanced Transportation Problem.

UNIT IV: Sequencing Problems: Assumptions – Solutions to Sequencing Problems: Processing n jobs through 2 machines – Processing n jobs through 3 machines – Processing n jobs on m

machines. Queuing Models: Queuing System – Transient and Steady States– Kendal's Notation for representing Queuing Models – Various Models in Queuing System – Birth and Death Model.

UNIT V: PERT and CPM Techniques: Basic Steps – Network Diagram representation– Rules for drawing Network Diagram – Labeling Fulkerson's I–J Rule – Time Estimates and Critical Path in Network Analysis – Examples on optimum duration and minimum duration cost – PERT.

Text book:

V.Sundaresan, K.S.Ganapathy Subramanian, K.Ganesan, "Resource Management Techniques", Ninth Edition, A. R.Publications, 2015.

Unit I : Chapter 1 & Chapter 2

Unit II : Chapter 8

Unit III : Chapter 7 (Section 7.1-7.4)

Unit IV: Chapter 13 & Chapter 14 (Section 14.1-14.6)

Unit V : Chapter 15

Reference Books:

- 1. Hamdy A Taha, "Operations Research", Ninth Edition, 2016.
- 2. Operations Research, S.D. Sharma, Tenth Edition, Pearson, 2017,

	Course Outcomes								
со	Upon completion of the course, the students will be able to:	PSOs Addressed	Cognitive Level						
CO-1	Illustrate the LPP with two variable using graphical methods	1,2,5	K2						
CO-2	Determine the optimal solution of the Assignment problem using Hungarian method	1,2,5	K3						
CO-3	Explain the mathematical formulation of Transportation problem	1,2,5	K4						
CO-4	Discuss the single and multi servers model	1,2,3,5	K6						
CO-5	Calculate the single models of CPM	1,2,5	K5						

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing; K5 – Evaluating; K6 – Creating

Semester	Course Code			Title of the Course					Hours		Credits	
II	24U	AMA:	24	Optimization Techniques				es	90		5	
Course Outcomes	Pro	ogramme Outcomes (POs) Programme Specific Outcomes (PSOs)								с		
(COS)	PO 1	PO 2	PO 3	PO 4	РО 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	
CO-1	3	3	3	1	2	-	3	3	-	-	3	
CO-2	3	3	3	3	3	-	3	3	-	-	3	
CO-3	3	1	3	3	3	-	3	3	-	-	3	
CO-4	3	3	3	3	3	-	3	3	3	-	3	
CO-5	3	3	1	3	3	-	3	3	-	-	3	
		STRONG (3), MEDIUM (2) and LOW (1)										

Relationship Matrix

Prepared by: Mr. V.P. Asan Nagoor Meeran Verified by: Dr. S. Firthous Fatima Head of the Department

Semester – II	FOUNDATIO	24UNIT21				
SEC-II (NME)	1		L	Т	P	C
Hrs./Week: 2	Hrs./Semester : 30	Marks :50	2	-	-	2

General Objective:

To understand the fundamentals of computer system, Input/output devices, software, storage device, and operating system

Learning Objectives

LO	The learners will be able to:									
LO-1	Understand basic concepts and terminology of information									
	technology									
LO-2	Have a basic understanding of personal computers and their									
LO-2	operation									
LO-3	Be able to identify data storage and its usage									
LO-4	Be able to identify data storage and its usage									
LO-5	Understand about operating system and their uses									

UNIT I - Introduction to Computers:

Introduction, Definition, Characteristics of computer, Evolution of Computer, Block Diagram of a computer, Generations of Computer, Classification Of Computers, Applications of Computer, Capabilities and limitations of computer

UNIT II - Basic Computer Organization:

Role of I/O devices in a computer system. Input Units: Keyboard, Terminals and its types. Pointing Devices, Scanners and its types, Voice Recognition Systems, Vision Input System, Touch Screen, Output Units: Monitors and its types. Printers: Impact Printers and its types. Non Impact Printers and its types, Plotters, types of plotters, Sound cards,Speakers.

UNIT III – Storage Fundamentals:

Primary Vs Secondary Storage, Data storage & retrieval methods. Primary Storage: RAM ROM, PROM, EPROM, EEPROM. Secondary Storage: Magnetic Tapes, Magnetic Disks. Cartridge tape, hard disks, Floppy disks Optical Disks, Compact Disks, Zip Drive, Flash Drives.

UNIT IV – Software:

Software and its needs, Types of S/W. System Software: Operating System, Utility Programs Programming Language: Machine Language, Assembly Language, High Level Language their advantages & disadvantages. Application S/W and its types: Word Processing, Spread Sheets Presentation,Graphics, DBMS s/w

UNIT V – Operating System:

Functions, Measuring System Performance, Assemblers, Compilers and Interpreters. Batch Processing, Multiprogramming, Multi Tasking, Multiprocessing, Time Sharing, DOS, Windows, Unix/Linux.

Textbooks:

- Anoop Mathew, S. Kavitha Murugeshan ," Fundamental of Information Technology", Majestic Books (2009)
- Alexis Leon, Mathews Leon," Fundamental of Information Technology", 2nd Edition.
- 3. S. K Bansal, "Fundamental of Information Technology".

Reference Books:

1. Bhardwaj Sushil Puneet Kumar, "Fundamental of Information Technology"

2. GG WILKINSON, "Fundamentals of Information Technology", Wiley- Blackwell

3. <u>A Ravichandran</u>, "Fundamentals of Information Technology", Khanna Book Publishing

Course Outcomes

СО	Upon completion of this course, students would have learned to:	PSOs Addressed	Cognitive Level
CO-1	Learn the basics of computer, Construct the structure of the required things in computer, learn how to use it.	3,2	K2
CO-2	Describe organizational structure using for the devices present currently under input or output unit.	3,2	K2
CO-3	Concept of storing data in computer using two header namely RAM and ROM with different types of ROM with advancement in storage basis	3,2	K2
CO-4	Demonstrate with different software, Write program in the software and applications of software.	3,2,5	K3
CO-5	Usage of Operating system in information technology which really acts as a interpreter between software and hardware.	3,2	K3

K1-Remembering; K2 – Understanding; K3 - Applying; K4 - Analyzing;

K5 – Evaluating; K6 – Creating

Relationship Matrix

Semester	Course Code			Title of the Course					Hou	rs C	Credits	
II	24U	NIT2	1	F	OUND	ATION	I OF I	ſ	30)	2	
Course Outcomes	Programme Outcomes (POs) Programme Specific Outcomes (PSOs)									ic		
(COs)	РО	PO	PO	РО	PO	РО	PSO	PSO	PSO	PSOSJ PSO	PSO	
	1	2	3	4	5	6	1	2	3	4	5	
CO-1	3	3	2	1	2	1	3	1	2	1	2	
CO-2	3	3	2	1	2	1	3	1	3	1	3	
CO-3	3	3	2	1	2	1	3	1	1	1	3	
CO-4	3	3	2	1	2	1	3	3	3	3	2	
CO-5	3	3	2	1	2	1	3	3	3	2	3	
		STRONG (3), MEDIUM (2) and LOW (1)										

Prepared by: Mrs.W.Fathima Farsana

Verified by: Mr.M.H. Ibrahim Head of the Department

Semester – II	Value Educa	24USVE2A				
SEC-III					P	C
Hrs./Week: 2	Hrs./Semester: 30	Marks :50	2	-	-	2

General Objective: To make students inculcate moral values, leading to faith and righteous action in their life.

Unit – I:Islam – Meaning – Importance – A complete Religion – The religion accepted by God – Five Pillars of Islam – Kalima – Prayers – Fasting – Zakat – Haj.

Iman – Monotheism – Angels – Books – Prophets – Dooms Day – Life after death – Heaven and Hell.

Unit – II:Quran – The Book of Allah – Wahi – Revelation to Prophet Muhammad(sal) – Compilation – Preservance – Structure – Content – Purpose – Source of Islamic Law– SuraFathiha, Kafirun, Iqlas, Falakh and Nas.

Unit – III:Hadith – Siha Sitha – Buhari – Muslim – Tirmithi – Abu Dawood – Nasai – Ibn Maja – Collection of Hadith – Meaning of 40 Hadith.

Unit – IV:Life History of Prophet Muhammad (sal) – AiamulJahiliya – Prophet's Childhood and Marriage – Prophethood – Life at Mecca – Life at Medinah – Farewell Address – Seal of Prophethood.

Unit – V:Good character – Etiquettes – Halal and Haram – Duties towards Allah – Duties towards fellow beings – MasnoonDuas.

Textbooks:

Publication of SadakathullahAppa College

Reference Books:

1. V.A. Moahmed Ashrof – Islamic Dimensions – Reflection and Review on Quranic Themes.

2. The Presidency of Islamic Researchers – Revised & Edited – The Holy Quran.

3. M. Manzoor Nomani – Islamic Faith & Practice.

4. Ali Nadawi, Abul Hasan– Muhammad Rasulullah., Muassasathus Sahafawa Nashr publication Lucknow, India, 1999.

5. K. Ali – A Study of Islamic History.

6. Abdul Rahuman Abdulla

h – Islamic Dress code for Women.

7. Dr. MunirAhamed Mughal – Code For Believers.

8. Abdul Malik Mujahid - Gems and Jewels.

Semester – II	emester – II Value Education-II					В
SEC-III		L	Т	P	C	
Hrs./Week: 2	Hrs./Semester : 30	2	-	-	2	

UNIT I

Individual Morality – Objective of Moral life – Living in accordance with the code of Morality – the goodness of Morality – Morality and *Thirukural*- The need for faith.

UNIT II

Adherence to higher code of Morality – Fear of God – Good Moral Values – Duty to Parents – Teacher, respecting elders – Moral Etiquettes – Right-minded Principle – High Principles for Proper conduct.

UNIT III

Inculcating good attitudes – Open mindedness – Morale – analysing the pros and cons of good and bad – Service to others – Mind Power, tolerance, respecting others, showing love to others, patience – tranquility – Modesty, kindness and forgiveness.

UNIT IV

Quotations and moral Stories expressing Good characters of Great personalities – Life History of Great people: Mahatma Gandhi, Abraham Lincoln, Dr. A.P.J. Abdul Kalam.

UNIT V

Truth, the importance of uprightness, integrity, friendship – Health awareness on Alcohol and drug abuse – inculcating reading habit – reading good books – Hygiene – Dowry – Corruption.

Textbooks:

Publication of Sadakathullah Appa College.